2004 SAE emissions technology collection: technical papers

12th SAE Brazil Congress and Exposition

2003-01-3554 Title: New mounting materials for catalytic converters to meet stricter emission requirements
2003-01-3708 Title: Corporate responsibility: Example of local environment public-private partnership project
2003-01-3735 Title: Influence of phosphorous poisoning on TWC catalysts
2003-01-3746 Title: Investigation into the performance of an on-board emissions measurement system using a vehicle exhaust emissions simulator
2003-01-3753 Title: Developments in diesel emission aftertreatment technology

2003 JSAE/SAE International Spring Fuels and Lubricants Meeting

2003-01-1770 Title: Combustion chamber deposits and PAH formation in SI engines fueled by producer gas from biomass gasification
2003-01-1771 Title: The influence of injector deposits on mixture formation in a DISC SI engine
2003-01-1783 Title: Experimental study of the combustion process in a heavy-duty DI diesel engine for different injection scenarios
2003-01-1786 Title: Significant NOx formation at the tip of diesel spray flames and its reduction by enhanced mixing in the tip region
2003-01-1789 Title: Soot kinetic modelling and empirical validation on smokeless diesel combustion with oxygenated fuels
2003-01-1791 Title: Effects of oxygenates on soot processes in DI diesel engines: Experiments and numerical simulations
2003-01-1792 Title: Experimental study on combustion characteristics and emissions reduction of emulsified fuels in diesel combustion using a rapid compression machine
2003-01-1793 Title: The effect of intake, injection parameters and fuel properties on diesel combustion and emissions
2003-01-1794 Title: Effect of injection timing on detailed chemical composition and particulate size distributions of diesel exhaust
2003-01-1797 Title: Spectroscopic analysis of combustion flame fueled with dimethyl ether (DME)
2003-01-1815 Title: Effects of fuel properties on premixed charge compression ignition combustion in a direct injection diesel engine
2003-01-1819 Title: Simplified oxidation mechanism of DME applicable for compression ignition
2003-01-1821 Title: Effect of mixing on hydrocarbon and carbon monoxide emissions prediction for isoctane HCCI engine combustion using a multi-zone detailed kinetics solver
2003-01-1850 Title: Experimental and numerical studies on soot formation in fuel rich mixture
2003-01-1851 Title: Application of Surovikin's carbon black model for simulating soot emission from diesel engine using a three-dimensional KIVA code
2003-01-1853 Title: Genetic algorithms optimization of diesel engine emissions and fuel efficiency with air swirl, EGR, injection timing and multiple injections
2003-01-1855 Title: Development of a new HC-adsorption three-way catalyst system for partial-ZEV performance
2003-01-1862 Title: Advanced emission control technologies for PM reduction in heavy-duty applications
2003-01-1863 Title: NOx reduction by urea in the presence of NO, on metal substrated SCR catalysts for heavy-duty vehicles
Title: Catalyst aging evaluation with exposure to 0.06 and 0.11 percent phosphorus oils using the FOCAS® burner system

Title: Measurement of nitrogen compounds in diesel particulate matter

Title: Statistical design and analysis methods for evaluating the effects of lubricant formulations on diesel engine emissions

2003 SAE/JSIE Small Engine Technology Conference and Exhibition

Title: Non-constant variance—Emission modelling methods for offline optimization and calibration of engine management systems

Title: Investigating combustion enhancement and emissions reduction with the addition of 2H⁺+ O₂ to a SI engine

Title: Investigation of the source of increased hydrocarbon emissions over the life cycle of small utility engines

Title: Summer cold start and nanoparticulates of 4-stroke motorcycles

Title: An experimental survey on the emissions characteristics of non-road small S.I. engines in China

Title: A method to determine total PM emissions from marine outboard engines

Title: Investigation of internal thermal impact effect on motorcycle catalytic converter activity and microstructure

Title: Development and validation of an oxygen storage model for three-way catalysts

Title: Improving the University of Idaho clean snowmobile

Title: Kettering University’s 2003 design for the Clean Snowmobile Challenge

27th Intersociety Energy Conversion Engineering Conference


33rd Annual Earthmoving Industry Conference

Title: A review of recent progress in exhaust system design

34th Intersociety Energy Conversion Engineering Conference

Title: The influence of a particulate trap on the in vitro lung toxicity response to continuous exposure to diesel exhaust emissions

1999-01-2710

41st Annual Earthmoving Industry Conference

Title: Simulation of high altitude effects on heavy-duty diesel emissions

Title: Emission testing of two heavy duty diesel engines equipped with exhaust aftertreatment

43rd Earthmoving Industry Conference

Title: Application of on-highway emissions technology to a backhoe

Title: Application of on-highway emissions technology on a scraper engine
44th Annual Earthmoving Industry Conference
Title: Save the diesel fueled engine: a clean diesel engine with catalytic aftertreatment—The alternative to alternate fuels

931182
Title: Application of catalytic converters to the Caterpillar 785 off-highway truck

931183
Title: Development of a miniaturized, dilution-based diesel engine particulate sampling system for gravimetric measurement of particulates

5th International Pacific Conference on Automotive Engineering
891245
Title: Catalytic control of automotive exhaust emission: some lower cost noble metal options

891271
Title: Catalytic emission control for two-stroke engines used in small motorcycles

Automobile Engineering Meeting
760753
Title: Cycle by cycle variations of HC, CO, and NOx

760759
Title: Two-stage combustion for low emissions without catalytic convertors

760783
Title: Development of canistering systems for monolithic catalysts

Automotive and Transportation Technology Congress and Exhibition
2001-01-3172
Title: The aluminum fuel tank, a lightweight solution

2001-01-3199
Title: An active regeneration aid as a key element for safe particulate trap use

2001-01-3200
Title: Non-thermal plasma-enhanced urea-SCR treatment of diesel exhaust for low-temperature NOx reduction

2001-01-3201
Title: Large-scale particulate filter demonstration project in Odense

2001-01-3204
Title: Aftertreatment for reduction of diesel exhaust particulate

2001-01-3238
Title: Application of V,05 catalysts to diesel NOx emission control

2001-01-3241
Title: Numerical analysis of transient thermal and conversion characteristics of multisection catalytic converters

2001-01-3246
Title: A new approach to acidification in LCA

2001-01-3259
Title: Reduction of diesel engine emissions by water injection

2001-01-3281
Title: Electrochemical NOx sensors for emission control of automotive exhaust gas

2001-01-3281
Title: Co-acting of fuel supply cut-off technique and oxidation catalyst in order to emission reduction from diesel engine

2001-01-3282
Title: A method of reducing the exhaust emissions from DI diesel engines by the introduction of a fuel cut-off system during cold start

2001-01-3283
Title: Determination of polyaromatic hydrocarbons in particulate matter with HPLC and 3D detector

2001-01-3320
Title: A novel interface for linear oxygen sensors

2001-01-3329
Title: A new sealing material for automotive exhaust application
Title: Correlation between agricultural tractor's diesel engine on-road service load and regulations for exhaust emission testing

Title: In-car modeling of emissions with dynamic artificial neural networks

Title: Type effect of fuel properties on unburned HC and particulate matter emissions in a small DI diesel engine

Title: The effect of rape oil-diesel oil mixture composition on particulate matter emission level in diesel engine

Title: Improvement of SOx durability and heat resistance for lean NOx catalyst

Title: Control of SI engine exhaust emission using ZSM-5 supported Cu-Pt bimetals as a catalyst

Title: Gold—A future role in automotive pollution control?

Title: A Ti/Pt hot film anemometer for CR-injection systems

Title: Effect of waste-gate turbocharging on the exhaust particulate matter of an off-road diesel engine

Title: Multidimensional modelling and spectroscopic analysis of the soot formation process in a diesel engine

Title: Reduction of exhaust gas emission in a two-stroke engine with pneumatic fuel injection

Title: Air toxic emission inventory for mobile source and fuel quality modelling

Title: Study regarding the necessity of vehicle calibration according to the peculiarities of the central and east European markets

Title: Simulation with a torque dynamometer of pollutants emission from vehicles near urban cross-road

Title: Electric scooter evaluation in real conditions

Title: Analysis of the influence of fuel sulfur content on diesel engine particulate emissions

Title: Development of a burner with variable stoichiometry to evaluate exhaust gas sensors

Automotive Engineering Congress and Exposition

Title: Dual catalytic converters

Title: The effects of exhaust gas recirculation and residual gas on engine emissions and fuel economy

Title: Trade-offs between engine emission control variables, fuel economy, and octane

Title: The role of fuel injection equipment in reducing 4-stroke diesel engine emissions

Title: Honeycomb auto exhaust catalysts containing copper chromite and palladium

Title: A spark ignition, lean-homogeneous combustion, engine emission control system for a small vehicle

Title: Emission control with lean mixtures

Title: Copper-chromium-nickel alloys for NOx reduction automotive emission control catalysts

Title: An IIEC-2 low-emission concept car

Title: An exhaust gas recirculation system for diesel engines

Title: Catalyst systems with an emphasis on three-way conversion and novel concepts
Title: Effects of a prechamber on NOx formation process in the SI engine
Title: Emissions and economy potential of prechamber stratified charge engines
Title: Diesel precombustion chamber design and its influence on the engine performance and exhaust pollutants
Title: The role of oxygen in intake and exhaust on NO emission, smoke and BMEP of a diesel engine with EGR system
Title: Development of more active and durable automotive exhaust catalysts
Title: Improved pelleted catalyst substrates for automotive emissions control
Title: The development of a high efficiency diesel exhaust particulate filter

Automotive Industry in Expanding Countries
Title: Commercial vehicles emission control for Latin America
Title: Ceramic converter technology for automotive emissions control

Computer Graphics Conference and Exposition
Title: Computer based instruction on spark ignition engine combustion, NOx emission and knock

Conference and Exposition on Future Transportation Technology
Title: A new exhaust emissions concept
Title: Analysis of the performance and exhaust gas emissions of four HD gaseous fuelled engines, using engine test data and computer simulation

Environmental Sustainability Conference and Exhibition
Title: 60 g/km CO2 without performance loss
Title: An environmental-economic evaluation of hybrid electric and other advanced vehicles

Title: Comparison of CO2 emission levels for internal combustion engine and fuel cell automotive propulsion systems
Title: Contribution of passenger cars and trucks to CO2, CH4, N2O, CFC and HFC emissions
Title: Quantification of local ozone production attributable to automobile hydrocarbon emissions
Title: Regional trade and emission gas in Asian automobile industry
Title: Innovative testing device for ultra-low fuel permeation systems
Title: Are lightweight materials really environmentally friendly? A software tool for the assessment of the best alternative technologies in the next generation of vehicles

Fuels and Lubricants/Powerplant Meeting
Title: Computer simulation of emission inspection procedures—assessment of effectiveness

Future Car Congress
Title: Nissan's gasoline SULEV technology
Title: Diesel passenger vehicles—Can they meet air quality needs and climate change goals?
2000-01-1601  Title: Non-thermal plasma system development for CIDI exhaust aftertreatment
2002-01-1867  Title: Development of diesel exhaust aftertreatment system for Tier II emissions
2002-01-1868  Title: Using diesel aftertreatment models to guide system design for Tier II emission standards
2002-01-1879  Title: Intra-channel mass and heat-transfer modelling in diesel oxidation catalysts
2002-01-1894  Title: Strategies for gasoline particulate emission control-A "foresight vehicle" project
2002-01-1899  Title: What FutureCar MPG levels and technology will be necessary?
2002-01-1942  Title: Isotopic tracing of fuel component carbon in the emissions from diesel engines
2002-01-1943  Title: Comparative environmental performance of two diesel-fuel oxygenates: Dibutyl maleate (DBM) and tripropylene glycol monomethyl ether (TGME)

Future Transportation Technology Conference

Title: Evaluation of the effects of air conditioning operation and associated environmental conditions on vehicle emissions and fuel economy
2003-01-2247  Title: Modelling particulate matter emission from diesel engines
2003-01-2291  Title: NOx trap model for lean-burn engine control
2003-01-2292  Title: A review of diesel particulate filter technologies
2003-01-2303  Title: Selective catalytic reduction—Europe's NOx reduction technology
2003-01-2304  Title: Four-flow path high-efficiency NOx and PM exhaust emission control system for heavy-duty, on-highway diesel engines
2003-01-2305  Title: A framework for evaluating aftertreatment PM control strategies
2003-01-2306  Title: Limited emissions and nanoparticulates of a scooter with 2-stroke direct injection (TSDI)

International Automotive Engineering Congress and Exposition

770059  Title: Trapping of lead particulates in automotive exhaust
770224  Title: Exhaust emission control of S.I. engines by engine modification—the SEEC-T system
770298  Title: A three-way catalytic muffler using progressive air injection for automotive exhaust gas purification
770299  Title: Metal supported catalysts for automotive applications
770301  Title: A characterization of exhaust emissions from lean burn, rotary, and stratified charge engines
770365  Title: Three-way conversion catalysts part of the new emission control system
770430  Title: A low NOX lightweight car diesel engine

International Body Engineering Conference and Exhibition

2001-01-3077  Title: Effect of solar reflective glazing on Ford Explorer climate control, fuel economy, and emissions

International Conference on Automotive Electronics

780843  Title: Emission control at GM

International Mobility Technology Conference and Exhibit

2001-01-3814  Title: Aftertreatment systems for two-wheeled vehicles
2001-01-3840  Title: Pushing the envelope to near-zero emissions on light-duty gasoline vehicles
2001-01-3944  Title: Measurement of vehicle noise emissions for fleet control
2001-01-3946  Title: Full flow and partial flow dilution systems for emission measurement—A comparison regarding to SULEV levels
2001-01-3979  Title: Automotive emissions regulation: A comparison between European and American methodologies and limits

International Pacific Conference on Automotive Engineering and High Temperature Engineering Conference
931940  Title: Effect of fuel properties on the combustion process and NO emission in spark ignition engine
931985  Title: Study on oxidation processes of unburnt HC in exhaust system of spark ignition engines.
931988  Title: Evolution of passenger car emission in Germany—A comparative assessment of two forecast models
931991  Title: Running loss emissions from gasoline-fueled motor vehicles
Title: SIMS 500—Rapid low energy secondary ion mass spectrometer for in-line analysis of gaseous compounds—Technology and applications in automotive emission testing

International Pacific Conference on Automotive Engineering
811385  Title: Future engine designs for minimum fuel consumption and exhaust emissions

International West Coast Meeting
790761  Title: Diesel engined, light duty vehicles for an emission controlled environment
Meeting Information Not Available
751001  Title: Combustion process fundamentals and combustion chamber design for low emissions

Mobility Technology Conferences and Exhibit
921435  Title: Study on formaldehyde generation mechanism and formaldehyde reducing items
921436  Title: Evaluation results with three-way catalysts for ethanol and gasohol vehicles
921456  Title: The flexible fuel concept by Mercedes-Benz
921459  Title: Evaluation of a thermal storage system on warm-up exhaust emissions
921506  Title: Additive application in diesel fuels and lubricants as an emission control strategy

Motorsports Engineering Conference and Exhibition
942493  Title: Development of a low-emissions, high-output engine conversion

National Fuels and Lubricants and Transportation Meetings
750683  Title: Control of automotive sulfate emissions

National Truck Meeting and Truck Engineering Exposition
770893  Title: Exhaust system considerations for 1982 heavy duty trucks

Powertrain and Fluid Systems Conference and Exhibition
2002-01-1869  Title: Particulate emissions from a modern light-duty CIDI engine
Title: Fuel economy and engine-out emissions from a single-cylinder, two-valve, direct-injection S.I. engine operating in the stratified-combustion regime

Title: Detailed chemical composition and particle size assessment of diesel engine exhaust

Title: The effect of non-circular nozzle holes on combustion and emission formation in a heavy-duty diesel engine

Title: Analysis of multiple injection strategies for the reduction of emissions, noise and BSFC of a DI CR small displacement non-road diesel engine

Title: Effects of engine oil formulation variables on exhaust emissions in taxi fleet service

Title: Engine oil effects on the friction and emissions of a light-duty, 2.2L direct-injection diesel engine: Part 1- Engine test results

Title: An experimental and theoretical study of the contribution of oil evaporation to oil consumption

Title: Effect of fuel humidity on the performance of a single-cylinder research engine operating on hydrogen

Title: Emissions from hydrogen-enriched CNG production engines

Title: Experimental study of direct-injection diesel engine fueled with two types of gas to liquid (GTL)

Title: Experimental study on DeNOx performance by plasma-catalyst (Ag, Au/Al2O3) system

Title: Application of photocatalyst-plasma-honeycomb system for cold-start emission of gasoline vehicles

Title: The study of the effects of nonthermal plasma-photocatalyst combined reactor on hydrocarbon decomposition and reduction during cold start and warm-up in a SI ENGINE

Title: Studies on emission measurement techniques for super-ultra-low-emission vehicles

Title: Improvement of repeatability in tailpipe emission measurement with direct injection spark ignition (DISI) vehicles

Title: Why the limit of detection (LOD) value is not an appropriate specification for automotive emissions analyzers

Title: Zero gases for emission monitoring—Production, storage, treatment and usage

Title: Development and application of a new mass spectrometer-based measurement system for fast online monitoring of oil emission in the raw exhaust gas of combustion engines

Title: A fast response particulate spectrometer for combustion aerosols

Title: Concurrent quantitative laser-induced incandescence and SMPS measurements of EGR effects on particulate emissions from a TDI diesel engine

Title: Study on the measuring method of vehicular PM size distribution to simulate the atmospheric dilution process

Title: Impact of ultra-clean Fischer-Tropsch diesel fuel on emissions in a light-duty passenger car diesel engine
Title: Evaluating a Fischer-Tropsch fuel, Eco-Par™ in a Valmet diesel engine

Title: Exhaust particle number and size distributions with conventional and Fischer-Tropsch diesel fuels
Title: The role that Methylcyclopentadienyl Manganese Tricarbonyl (MMT®) can play in improving low-temperature performance of diesel particulate filters
Title: An emission and performance comparison of the natural gas Cummins Westport Inc. C-Gas Plus versus diesel in heavy-duty trucks

Title: A comparison of transient air-fuel measurement techniques

Title: The SAE Clean Snowmobile Challenge 2002—Summary and results

Title: Refining the University of Idaho clean snowmobile

Title: Kettering University’s design of an automotive-based, four-stroke-powered clean snowmobile

Title: Colorado State University Clean Snowmobile Challenge 2002

Title: Reducing the emissions and noise of a turbocharged, four-stroke snowmobile

Title: The University of Alberta four-stroke Ski-Doo MXZ-X conversion

Title: Design and testing of single-cylinder, turbocharged, four-stroke snowmobile with E.F.I. and catalytic exhaust treatment

Title: Development solutions to a cleaner, quieter, two-stroke snowmobile

Title: A clean, quiet, environmentally friendly snowmobile

Title: Thorough analysis of a two-stroke cycle engine versus a four-stroke cycle engine: Minnesota State University, Mankato’s entry for the SAE Clean Snowmobile Challenge 2002

Title: Base oil effects on emissions and fuel economy in a heavy-duty vehicle over the European transient cycle (ETC)

Title: Performance of a synthetic diesel engine oil

Title: Effect of lubricant on particulate emissions of heavy-duty diesel engines

Title: Multiple injections with EGR effects on NOx emissions for DI diesel engines analyzed using an engineering model

Title: Multi-objective optimization of diesel engine emissions and fuel economy using genetic algorithms and phenomenological model

Title: Low-pressure EGR calibration strategies for reliable diesel particulate filter regeneration on HDD engines

Title: Passenger car series application of a new diesel particulate filter system using a new ceria-based, fuel-borne catalyst: From the engine test bench to European vehicle certification

Title: A mixed numerical-experimental analysis procedure for non-blocking metal-supported soot trap design
Title: Experience of fitting London Black Cabs with fuel-borne catalyst-assisted diesel particulate filters—Part 1: Regulated emissions and regeneration performance

Title: Experience of fitting London Black Cabs with fuel-borne catalyst assisted diesel particulate filters—Part 2: Non-regulated emissions measurements

Title: Modelling of diesel particulate filter regeneration: Effect of fuel-borne catalyst

Title: Development of a full-flow burner DPF system for heavy-duty diesel engines

Title: Fuel sulfur effect on membrane-coated diesel particulate filter

Title: Performances and durability of DPF (diesel particulate filter) tested on a fleet of Peugeot 607 Taxis—First and second test phases results

Title: Application of secondary air injection for simultaneously reducing converter-in emissions and improving catalyst light-off performance

Title: Spark ignition engine hydrocarbon emissions behaviors in stopping and restarting

Title: Influence of atomization quality on mixture formation, combustion and emissions in a MPI-engine under cold-start conditions—Part II

Title: Influence of atomization quality on mixture formation, combustion and emissions in a MPI-engine under cold-start conditions—Part I

Title: High-boost C.R. diesel engine: A feasibility study of performance enhancement and exhaust-gas power cogeneration

Title: Parametric study and clarification of determination factors of diesel exhaust emission using a single-cylinder engine and model fuels—JCAP Combustion Analysis Working Group Report: Part I

Title: Novel analysis approach for better understanding of fuel and engine effects on diesel exhaust emission—JCAP Combustion Analysis Working Group Report: Part II

Title: Potentiality of the modern engines fed by new diesel fuels to approach the future European emission limits

Title: Hot-start transient emissions from a Mercedes OM 366 LA and a Detroit Diesel operated on Chilean, California, and US 2D fuels

Title: Oxygenated compounds and diesel engine pollutant emissions performances of new generation of products

Title: In-Situ NH3 generation for SCR NOx applications

Title: Speciation of organic compounds from the exhaust of trucks and buses: Effect of fuel and after-treatment on vehicle emission profiles

Title: Effects of regeneration conditions on NOx adsorber performance
Title: Weighting of parameters in artificial neural network prediction of heavy-duty diesel engine emissions

Title: Interlaboratory cross-check of heavy-duty vehicle chassis dynamometers

Title: Durability of NOx absorbers: Effects of repetitive sulfur loading and desulfation

Title: Impact of engine operating conditions on low-NOx emissions in a light-duty CIDI engine using advanced fuels

Title: Performance of a urea SCR system combined with a PM and fuel-optimized, heavy-duty diesel engine able to achieve the Euro V emission limits

Title: Desulfation dynamics of NOx storage catalysts

Title: A fundamental consideration on NOx adsorber technology for DI diesel application

Title: Reformulating gasoline for lower emissions using the fuel additive MMT®

Title: The impact of MMT gasoline additive on exhaust emissions and fuel economy of low emission vehicles (LEV)

Title: Real-world emissions from 40 heavy-duty diesel trucks recruited at Tulare, CA, rest area

Title: A peer-reviewed critical analysis of SAE paper 2002-01-2894 "the impact of MMT gasoline additive on exhaust emissions and fuel economy of low emission vehicles (LEV)"

Title: Thermal shock study of a converter package for a drive cycle

Title: Effect of design parameters on the performance of finned exhaust heat exchanger

Title: Gasoline sulfur effect on emissions from vehicles equipped with lean NOx catalyst under mileage accumulation tests

Title: Deposition of catalysts onto vehicle heat exchangers via thermal and kinetic spray processes for direct ozone reduction

Title: Fuel effects on soot processes of fuel jets at DI diesel conditions

Title: Development of a smoke sensor for diesel engines

Title: Characterization of the soot formation processes in a high pressure combusting diesel fuel spray

Title: Performance and emission studies on the effect of injection timing and diesel replacement on a 4-S LPG-diesel dual-fuel engine

Title: Unburned hydrocarbon emissions from stratified charge direct injection engines

Title: Application of a biodegradable lubricant in a diesel vehicle

Title: Model for kinetic formation of CO emissions in internal combustion engines

Title: Influence of water-diesel fuel emulsions and EGR on combustion and exhaust emissions of heavy-duty, DI-diesel engines equipped with common-rail injection system

Title: System and utility considerations for analyzer calibration and measurement of low concentrations in automotive exhaust
2003-01-3155  Title: Transient particulate emission measurements in diesel engine exhausts
2003-01-3156  Title: Performance of a fixed volume open-loop mini SHED system for evaporative emissions testing
2003-01-3158  Title: Experimental study on unregulated emission characteristics of turbocharged DI diesel engine with common rail fuel injection system
2003-01-3159  Title: ELPI measurement of particulate matter from HSDI diesel engine with diesel oxidation catalyst
2003-01-3160  Title: Study on the aging test methods and the properties of the three-way catalysts
2003-01-3165  Title: Development of a novel DPF additive
2003-01-3166  Title: New catalyzed cordierite diesel particulate filters for heavy-duty engine applications
2003-01-3167  Title: The effect of sulfur-free diesel fuel on the measurement of the number and size distribution of particles emitted from a heavy-duty diesel engine equipped with a catalyzed particulate filter
2003-01-3168  Title: An investigation into the effect of a diesel/water emulsion on the size and number distribution of the particulate emissions from a heavy-duty diesel engine
2003-01-3169  Title: Sizes, graphitic structures and fractal geometry of light-duty diesel engine particulates
2003-01-3173  Title: Combined effects of fuel-type and engine speed on intake temperature requirements and completeness of bulk-gas reactions for HCCI combustion
2003-01-3175  Title: Experimental and numerical studies on particulate matter formed in fuel rich mixture
2003-01-3176  Title: An experimental and numerical study of the performance characteristics of the diesel oxidation catalyst in a continuously regenerating particulate filter
2003-01-3177  Title: Examination of engine control parameters for the regeneration of catalytic-activated diesel particulate filters in commercial vehicles
2003-01-3178  Title: Rolling regeneration trap for diesel particulate control
2003-01-3179  Title: The influence of engine lubricating oil on diesel nanoparticle emissions and kinetics of oxidation
2003-01-3182  Title: Development of DPF system for commercial vehicle—Basic characteristic and active regenerating performance
2003-01-3184  Title: Gasoline-ethanol blend aging effects on engine performance and exhaust emissions
2003-01-3204  Title: The potential for reducing CO and NOx emissions from an HCCI engine using H2O addition
2003-01-3239  Title: An on-board distillation system to reduce cold-start hydrocarbon emissions
2003-01-3240  Title: Correlating port fuel injection to wetted fuel footprints on combustion chamber walls and UBHC in engine start processes
2003-01-3241  Title: A new NOx reduction catalyst system for diesel engine with high sulfur tolerance
2003-01-3244  Title: Selective catalytic reduction of NOx emissions from a 5.9 liter diesel engine using ethanol as a reductant
2003-01-3245  Title: Sulfur management of NOx adsorber technology for diesel light-duty vehicle and truck applications
2003-01-3246  Title: Key characteristics of the sorption process in lean NOx traps
Title: Development of Urea-SCR system for commercial vehicle—basic characteristics and improvement of NOx conversion at low load operation

Title: Combustion and emissions of ethanol fuel (E100) in a small SI engine

Title: Review of exhaust emissions of compression ignition engines operating on E diesel fuel blends

Title: Creation and evaluation of a medium heavy-duty truck test cycle

Title: Particle emissions at moderate and cold temperatures using different fuels

SAE 2000 World Congress

Title: Catalytic converter vibration measurement under dynamometer simulated roadloads

Title: Finite element optimization of an exhaust system

Title: Opportunity for diesel emission reductions using advanced catalysts and water blend fuel

Title: Effect of catalyst support structure on conversion efficiency

Title: Predicting pressure drop of wall-flow diesel particulate filters—Theory and experiment

Title: Characterization of SiC-DPF for passenger car

Title: Achieving heavy-duty diesel NOx/PM levels below the EPA 2002 Standards—An integrated solution

Title: An integrated SCR and continuously regenerating trap system to meet future NOx and PM legislation

Title: Improved SCR systems for heavy-duty applications

Title: The development of urea-SCR technology for US heavy-duty trucks

Title: Numerical simulation and experimental validation of the catalytic converter cool down process

Title: Development of dual-wall air gap exhaust system

Title: Simulating heat transfer in catalyst substrates with triangular and sinusoidal channels and the effect of oblique inlet flow

Title: Three-dimensional numerical study on the use of warm-up catalyst to improve light-off performance

Title: Study on flow characteristics of automotive catalytic converters with various configurations

Title: Modeling and simulation of transient thermal and conversion characteristics for catalytic converters

Title: 1D fluid dynamic modeling of unsteady reacting flows in the exhaust system with catalytic converter for S.I. engines

Title: Influence of physical and chemical parameters on the conversion rate of a catalytic converter: A numerical simulation study

Title: Experimental and modeling study of variable cycle time for a reversing flow catalytic converter for natural gas/diesel dual-fuel engines

Title: Numerical simulation of deactivation process of three-way catalytic converters

Title: Heat insulation methods for manifold mounted converters
Title: Catalytic converter thermal environment measurement under dynamometer- simulated road loads

Title: Container deformation procedure for ceramic monolith catalytic converters

Title: Characterization of catalytic converter mat material for predictive analysis

Title: Low-temperature catalytic converter durability

Title: Catalytic converter mat material durability measurement under controlled thermal and vibration environments

Title: Force distribution on catalysts during converter assembly

Title: The assembly deformation and pressure of stuffed catalytic converter accounting for the hysteresis behavior of pressure versus density curve of the intumescent mat

Title: Experimental and numerical investigation on the EGR system of a new automotive diesel engine

Title: Layout of a high load EGR system for LD, MD and HD truck engines by means of simulation

Title: A comparison between different EGR Systems for HD diesel engines and their effect on performance, fuel consumption and emissions

Title: Membrane-based nitrogen-enriched air for NOx reduction in light-duty diesel engines

Title: Ultra-low emission and high performance diesel combustion with highly oxygenated fuel

Title: Parameters that affect the impact of auxiliary gas injection in a DI diesel engine

Title: Diesel-exhaust tests should be revised with respect to health-indicators

Title: The effects of injection timing and diluent addition on late-combustion soot burnout in a DI diesel engine based on simultaneous 2-D imaging of OH and soot

Title: Exhaust emissions from a direct-injection spark-ignition (DISI) engine equipped with an air-forced fuel injector

Title: Sooting tendencies in an air-forced, direct-injection, spark-ignition (DISI) engine

Title: 430LNb—A new ferritic wire for automotive exhaust applications

Title: Effects of initial in-cylinder flow field on mixture formation in a premixed compression-ignition engine

Title: Improved P/M stainless steel exhaust flanges based on innovative design concepts

Title: Strategies for the control of particulate trap regeneration

Title: Passenger car serial application of a particulate filter system on a common-rail, direct-injection diesel engine

Title: Operating experience of diesel vehicles equipped with particulate filters and using fuel additive for regeneration

Title: Optimized diesel particulate filter system for diesel exhaust aftertreatment

Title: An experimental and modeling study of cordierite traps—Pressure drop and permeability of clean and particulate-loaded traps
Title: Some empirical observations on diesel particulate filter modeling and comparison between simulations and experiments

Title: Electrochemical exhaust gas purification

Title: Development of emission control technology for urban bus retrofit

Title: European experience of high mileage durability of continuously regenerating diesel particulate filter technology

Title: Design considerations for advanced ceramic catalyst supports

Title: Prediction of catalytic performance for ultra-thin-wall and high cell-density substrates

Title: The innovative reinforcement technology of thin-wall ceramic substrate having high coatability

Title: High flexibility in converter design by using modular block metallic substrates

Title: Improved three-way catalyst performance using an active bias control regeneration system

Title: Improved catalyst systems for SULEV legislation: First practical experience

Title: Use of high cell density substrates and high technology catalysts to significantly reduce vehicle emissions

Title: Design Criteria of Catalyst Substrates for NOxAdsorber Function

Title: An investigation of the dependence of NO and soot formation and oxidation in transient combusting jets on injection and chamber conditions

Title: An investigation of the dependence of NO and soot emissions from a diesel engine on heat release rate characteristics - I

Title: Effects of oxygen enhancement on the emissions from a DI diesel via manipulation of fuels and combustion chamber gas composition

Title: A quick warm-up system during engine start-up period using adaptive control of intake air and ignition timing

Title: Advanced canister purge algorithm with a virtual [HC] sensor

Title: Reduced pressure carbon dioxide cycle for vehicle climate control: Progress since 1999

Title: NO formation and decomposition models for di diesel engines

Title: Optimization of exhaust manifold for a multicylinder turbocharged two-stroke diesel engine

Title: Some basic considerations of pollutant emission and knock in internal combustion engines

Title: Real-time catalytic converter temperature estimator in the powertrain controller

Title: A simplified model for the dynamics of a three-way catalytic converter

Title: Experimental and modeling investigation of catalyzed hydrocarbon trap performance

Title: Modeling of Hydrocarbon Trap Systems

Title: Modeling the effects of auxiliary gas injection on diesel engine combustion and emissions

Title: The influence of the valve stem seal oil metering rate on exhaust emissions
<table>
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<tr>
<th>Title</th>
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<td>A model-based evaluation of emissions for manifold-injected SI engines</td>
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Title: Demonstration of Caterpillar C10 dual-fuel natural gas engines in commuter buses

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Title: Effects of advanced fuels on the particulate and NOx emissions from an optimized light-duty CIDI engine

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Title: Reduction of NOx and PM from diesel engines by WPD emulsified fuel

Title: Global trends in diesel emissions regulation—A 2001 update

Title: Diesel emission control in review

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Title: Impact of future exhaust gas emission legislation on the heavy-duty truck engine

Title: Particulate trap selection for retrofitting vehicle fleets based on representative exhaust temperature profiles

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Title: Innovative secondary air injection systems

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Title: Combining fuel-borne catalyst, catalytic wash coat and diesel particulate filter

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Title: Molten salts supported on ceramic foam in the potential application of a diesel soot abatement technology

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Title: Year-long evaluation of trucks and buses equipped with passive diesel particulate filters

Title: PM thermal regeneration—The potential for catalytic combustion

Title: VERT particulate trap verification

Title: Series application of a diesel particulate filter with a ceria-based, fuel-borne catalyst: Preliminary conclusions after one year of service

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Title: Impact of alkali metals on the performance and mechanical properties of NOx adsorber catalysts

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Title: Determination of diesel injector nozzle characteristics using two-color optical pyrometry

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Title: Optimization strategies applied to exhaust system design

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Title: Application of neural networks for prediction and optimization of exhaust emissions in a H.D. diesel engine

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Title: Reduction of NOx with superheated steam in a DI diesel engine

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Title: Oxidation catalytic converter and emulsified fuel effects on heavy-duty diesel engine particulate matter emissions

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Title: An investigation of SF6 gas for testing instrumental integrity of the emerging SULEV/PZEV measurement technology

Title: A computational study of the effects of low fuel loading and EGR on heat release rates and combustion limits in HCCI engines

Title: Flow distributions and pressure drops of wall-flow diesel particulate filters

Title: Application of new diesel aftertreatment strategies on a production 1.9 L common-rail turbocharged engine

Title: Cam phaser actuation rate performance impact on fuel consumption and NOx emissions over the FTP-75 drive cycle
Title: Diesel emission control in review—The last 12 months

Title: Heavy-duty diesel emission regulations—Past, present, and future

Title: Diesel exhaust emissions control for light-duty vehicles

Title: NOx adsorber aging on a heavy-duty on-highway diesel engine—Part one

Title: Passenger car investigations of NOx adsorber and DPF combination to fulfill future diesel emission limits

Title: System evaluation of the HC deNOx catalyst for industrial heavy-duty diesel engine

Title: Performance of NOx adsorber emissions control systems for diesel engines

Title: Diesel particulate filters: Trends and implications of particle size distribution measurement

Title: Performance of a catalyzed diesel particulate filter system during soot accumulation and regeneration

Title: Effects of a catalyzed particulate filter on emissions from a diesel engine: Chemical characterization data and particulate emissions measured with thermal optical and gravimetric methods

Title: Effects of flame lift-off and flame temperature on soot formation in oxygenated fuel sprays

Title: Superior idle elimination system for truck air-conditioning (SIESTA)

Title: Lattice Boltzmann simulations of flows in a duct with multiple inlets

Title: Attribute analysis and criteria for automotive exhaust systems

Title: A contribution to predictive engine calibration based on vehicle drive cycle performance

Title: Cooled EGR rate measurement with a thermal anemometer for EPA02 heavy-duty diesel engine emission control

Title: Particle size distribution from a heavy-duty diesel engine: Steady-state and transient emission measurement using two dilution systems and two fuels

Title: Nanoparticle exhaust gas measurement: On-Line response, high sensitivity, low cost

Title: Retention of fuel-borne catalyst particles by diesel particle filter systems

Title: Study of exhaust emissions from idling heavy-duty diesel trucks and commercially available idle-reducing devices

Title: Particulate matter and aldehyde emissions from idling heavy-duty diesel trucks

Title: The effect of ambient temperature, humidity, and engine speed on idling emissions from heavy-duty diesel trucks

Title: Secondary emissions from catalytic active particle filter systems

Title: Central Carolina vehicle particulate emissions study
Title: Performance and emissions evaluation of compressed natural gas and clean diesel buses at New York City's Metropolitan Transit Authority

Title: Quantifying vehicle emission factors for various ambient conditions using an on-road, real-time emissions system

Title: Effect of engine operating conditions on particle-phase organic compounds in engine exhaust of a heavy-duty, direct-injection (D.I.) diesel engine

Title: Reduction of pollutant emissions in a HD diesel engine by adjustment of injection parameters, boost pressure and EGR

Title: Can the technology for heavy-duty diesel engines be common for future emission regulations in USA, Japan and Europe?

Title: An experimental investigation of PCCI-DI combustion and emissions in a heavy-duty diesel engine

Title: Computational study of the effects of injection timing, EGR and swirl ratio on a HSDI multi-injection diesel engine emission and performance

Title: Experimental investigation on emission control in C.I. engines using shrouded inlet valve

Title: Secondary air injection in the exhaust after-treatment system of S.I. engines: 1D fluid dynamic modelling and experimental investigation

Title: Demonstration of the benefits of DPF/FBC systems on London Black Cabs

Title: Ceria-based, fuel-borne catalysts for series diesel particulate filter regeneration

Title: An optimal usage of NOx in a combined Pt/ceramic foam and a wall-flow monolith filter for an effective NOx-assisted diesel soot oxidation

Title: Material development of high porous SiC for catalyzed diesel particulate filters

Title: HC measurements by means of flame ionization: Background and limits of low emission measurement

Title: Accuracy of total hydrocarbon analyzer measurements in the SULEV region

Title: Optimization of a commercially available chemiluminescence analyzer for low-level NOx measurement

Title: Development of the direct nonmethane hydrocarbon measurement technique for vehicle testing

Title: Vehicle exhaust emissions simulator—A quality control tool to evaluate the performance of low level emission sampling and analytical systems

Title: Oxygen content variation in "zero" grade air due to production, treatment and distribution

Title: Influence of time-alignment on the calculation of mass emissions on a chassis rolls dynamometer

Title: Impact of ultra thinwall catalyst substrates for TIER2 emission standards

Title: Effect of nozzle hole geometry on a HSDI diesel engine-out emissions
Title: Numerical study and analysis of pollutant production and emission control using ion current prediction in the SI engine

Title: Effect of boiling point differences of two-component normal paraffin fuels on combustion and emission in CI engines

Title: Particle-free exhaust gas recirculation by molecular diffusion: Proof of concept

Title: U.S. 2007—Which way to go?—Possible technical solutions

Title: Recent DPF/SCR results targeting US2007 and Euro 4/5 HD emissions

Title: Application of organic freeze-point depressants in aqueous urea solutions: Effect on NOx reduction

Title: Problems of partial sample systems for modal raw exhaust mass emission measurement

Title: Advancements in exhaust flow measurement technology

Title: Parameters affecting direct vehicle exhaust flow measurement

Title: DVE—Direct vehicle exhaust flow measurement using head-type flowmeters

Title: Phase-based TEOM measurements compared with traditional filters for diesel PM

Title: The choice of instrument (ELPI and/or SMPS) for diesel soot particulate measurements

Title: Simultaneous detection of NOx and particulate in exhaust of a CR diesel engine by UV-visible spectroscopy

Title: Design of a practical intelligent catalyst

Title: Development of a low precious-metal automotive perovskite catalytic system for LEV-II

Title: A catalyzed hydrocarbon trap using metal-impregnated zeolite for SULEV systems

Title: Development of third generation of gasoline P-ZEV technology

Title: Development of PZEV exhaust emission control system

Title: A metal substrate with integrated oxygen sensor; functionality and influence on air/fuel ratio control

Title: FTP and US06 performance of advanced high cell density metallic substrates as a function of varying air/fuel modulation

Title: Experimental determination of the kinetics of diesel soot oxidation by $O_2$—Modelling consequences

Title: Lattice-Boltzmann diesel particulate filter sub-grid modelling—A progress report

Title: Visualization of combustion phenomena in regeneration of diesel particulate filter

Title: Heat-up of diesel particulate filters: 2D continuum modelling and experimental results

Title: Novel three-dimensional ceramic lattices as catalyst supports and diesel particulate traps

Title: Multichannel simulation of soot oxidation in diesel particulate filters

Title: The progressive spin inlet—Homogeneous flow distributions under stringent conditions
Title: A one-dimensional computational model for studying the filtration and regeneration characteristics of a catalyzed wall-flow diesel particulate filter

Title: A study describing the performance of diesel particulate filters during loading and regeneration—A lumped parameter model for control applications

Title: Prediction and validation of pressure drop for catalyzed diesel particulate filters

Title: Simulation of triangular-cell-shaped, fibrous wall-flow filters

Title: Modelling of SCR DeNOx catalyst—Looking at the impact of substrate attributes

Title: Flow resistance descriptors for diesel particulate filters: Definitions, measurements and testing

Title: Impact of the inlet flow distribution on the light-off behavior of a 3-way catalytic converter

Title: Modelling the effect of primary atomization on diesel engine emissions

Title: A new quasi-three dimensional combustion model for prediction of DI diesel engines' performance and pollutant emissions

Title: Zero-dimensional soot modelling

Title: Reducing soot emissions from diesel engines using one atmosphere uniform glow discharge plasma

Title: Steady-state engine testing of g-alumina catalysts under plasma assist for NOx control in heavy-duty diesel exhaust

Title: Fundamental study on durability of photocatalysts-plasma-honeycomb (PPH) converter

Title: Comparison of exhaust emissions, including toxic air contaminants, from school buses in compressed natural gas, low-emitting diesel, and conventional diesel engine configurations

Title: Combined compensation strategy for the minimization of the pollutant emission of GDI engines under variable atmospheric conditions

Title: An integrated simulation model for the prediction of GDI engine cylinder emissions and exhaust after-treatment system performance

Title: Thermal studies in the exhaust system of a diesel-powered, light-duty vehicle

Title: Theoretical and experimental methodology for the improvement of EGR-coolers design

Title: Potential of a controllable engine cooling system to reduce NOx emissions in diesel engines

Title: Diesel emission control technology—2003 in review

Title: Improvement and simplification of DPF system using a ceria-based, fuel-borne catalyst for diesel particulate filter regeneration in serial applications

Title: The development and in-field performance of highly durable particulate control systems

Title: Performances and durability of DPF (diesel particulate filter) tested on a fleet of Peugeot 607 taxis: Final results
Title: Results from a 1/4 million km, heavy-duty truck trial, using FBC regenerated DPFs

Title: Durability of extruded homogeneous SCR catalyst

Title: Reliability of DPF systems: Experience with 6000 applications of the Swiss retrofit fleet

Title: Durability studies of a base metal catalyzed particulate filter in a severe non-road application

Title: Experience of continuously regenerating particulate traps on city buses in Europe

Title: Long-term durability of passive diesel particulate filters on heavy-duty vehicles

Title: Combustion and performance of a diesel engine with oxygenated diesel blend

Title: Simulation of effects of valve pockets and internal residual gas distribution on HSDI diesel combustion and emissions

Title: Exhaust chemistry of low-NOX, low-PM diesel combustion

Title: Simulation studies of the effect of fuel injection pattern on NO and soot formation in diesel engines

Title: DI diesel emission control by optimized fuel injection

Title: Effect of diesel soot deposition on the performance of exhaust gas recirculation cooling devices

Title: Emissions solutions for 2007 and 2010 heavy-duty diesel engines

Title: Effect of cooling of burned gas by vertical vortex on NOx reduction in small DI diesel engines

Title: Numerical study of combustion processes and pollutant formation in HSDI diesel engines

Title: Emission systems optimization to meet future European legislation

Title: Cold-start emissions optimization using an expert knowledge-based calibration methodology

Title: Emission reduction device for SULEV vehicle applications

Title: A measuring technology to analyze HC concentration in the air intake system while the engine is in operation

Title: Evaporative leak check system by depressurization method

Title: Development of a canning method for catalytic converters using ultra-thin-wall substrates

Title: Ultra-thin-wall mat design and optimization with hybrid mats

Title: Catalytic converter hot vibration test methods at The 3M Co.

Title: Development of an emission aftertreatment system for handheld powertools

Title: A CFD study of diesel substrate channels with differing wall geometries

Title: Control-oriented model of an SCR catalytic converter system

Title: Optimization of urea SCR deNOx systems for HD diesel engines

Title: Modelling an ammonia SCR deNOx catalyst: Model development and validation

Title: Factors affecting diesel LNT durability in lab reactor studies

Title: Prediction of pressure drop in diesel particulate filters considering ash deposit and partial regenerations

Title: Soot regeneration model for SiC-DPF system design
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<tr>
<th>Date</th>
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<tr>
<td>2004-01-02</td>
<td>Title: Automotive sensors and sensor interfaces</td>
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<td>2004-01-05</td>
<td>Title: Online estimation of the oxygen storage level of a three-way catalyst</td>
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<td>2004-01-05</td>
<td>Title: A diesel lean NOx trap model for control strategy verification</td>
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<td>Title: A new feedback control of a lean NOx trap catalyst</td>
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<td>Title: Reduction of heavy-duty diesel engine emission and fuel economy with multi-objective genetic algorithm and phenomenological model</td>
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<td>Title: NOx-particulate filter (NPF): Evaluation of an after-treatment concept to meet future diesel emission standards</td>
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<td>2004-01-05</td>
<td>Title: Development of a new DPNR catalyst</td>
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<td>2004-01-05</td>
<td>Title: Development of NOx trap system for commercial vehicle—Basic characteristics and effects of sulfur poisoning</td>
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<td>2004-01-05</td>
<td>Title: Development of a diesel passenger car meeting Tier 2 emissions levels</td>
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<td>Title: NOx trap regeneration with an on-board hydrogen generation device</td>
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<td>2004-01-05</td>
<td>Title: Achieving Tier 2 Bin 5 emission levels with a medium-duty diesel pick-up and a NOXadsorber, diesel particulate filter emissions system-exhaust gas temperature management</td>
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<td>Title: Achieving Tier 2 Bin 5 emission levels with a medium-duty diesel pick-up and a NOxadsorber, diesel particulate filter emissions system—NOxadsorber management</td>
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<td>2004-01-05</td>
<td>Title: Systems approach to meeting EPA 2010 heavy-duty emission standards using a NOxadsorber catalyst and diesel particle filter on a 15L engine</td>
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<td>Title: Comparison of an alternative particulate mass measurement with advanced microbalance analysis</td>
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<td>Title: Diesel engine exhaust thermal and vibration mapping</td>
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<td>2004-01-05</td>
<td>Title: Measurement of gasoline exhaust hydrogen emissions</td>
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<td>2004-01-05</td>
<td>Title: An investigation of sample bag hydrocarbon emissions and carbon dioxide permeation properties</td>
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<td>2004-01-05</td>
<td>Title: An experimental procedure for simulating an SC03 emissions test with air conditioner on</td>
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<td>2004-01-05</td>
<td>Title: A new approach of accelerated life testing for metallic catalytic converters</td>
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<td>2004-01-05</td>
<td>Title: Trapping performance of fine particles from a diesel engine by various DPFs with different surface structures</td>
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<td>Title: Turbulent temperature fluctuations in spark ignition engines and their effect on NOx emissions</td>
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<td>Title: Numerical investigation of real-world gasoline car drive-cycle fuel economy and emissions</td>
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<td>Title: The most significant vehicle operating parameter for real-world emission levels</td>
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<td>2004-01-05</td>
<td>Title: Life cycle and economic analysis of heavy-duty diesel vehicle idling alternatives</td>
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<td>Title: Plastic turbo for secondary air injection</td>
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<td>2004-01-05</td>
<td>Title: Effect of nano-filtered intake air on diesel particulate matter emissions</td>
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<td>Title: Development of new generation hybrid system (THS II)</td>
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Title: Research and development program of the next-generation environmentally friendly vehicles (EFVs) in Japan

Title: Emissions prediction of CNG/diesel dual fuel engine based on RBF neural network

Title: Exhaust gas management

Title: Microstructural aspects of soot oxidation in diesel particulate filters

Title: The diesel exhaust aftertreatment (DEXA) Cluster: A systematic approach to diesel particulate emission control in Europe

Title: Effect of aspect ratio on pressure drop and acoustics in diesel particulate filters

Title: Reaction and diffusion phenomena in catalyzed diesel particulate filters

Title: Modelling and experimental study of uncontrolled regenerations in SiC filters with fuel-borne catalyst

Title: Retrofit program of a EURO 1 and EURO 2 urban bus fleet in La Rochelle, using the ceria-based fuel-borne catalyst for diesel particulate filter regeneration (phase #1)

Title: Influence of the nitrogen dioxide-based regeneration on soot distribution

Title: DPR developed for extremely low PM emissions in production commercial vehicles

Title: Features of the particulate emission and regenerations of different DPF’s on a Detroit Diesel 2-stroke bus engine

Title: Failure mechanisms in automotive exhaust decouplers

Title: Soot emission from a direct injection diesel engine

Title: Ash storage concept for diesel particulate filters

Title: Asymmetrical channels to increase DPF lifetime

Title: Durability study on Si-SiC material for DPF(2)

Title: Engine bench and vehicle durability tests of Si-bonded SiC particulate filters

Title: New cordierite diesel particulate filter material for the diesel particulate-NOx reduction system

Title: Properties and performance of diesel particulate filters of an advanced ceramic material

Title: Diesel particulate filter operational characterization

Title: Study on reliability of wall-flow-type diesel particulate filter

Title: The number concentration of non-volatile particles—Design study for an instrument according to the PMP recommendations

Title: Infrared thermometry for diesel exhaust aftertreatment temperature measurement

Title: Influence of dilution process on engine exhaust nano-particles

Title: Time-resolved measurements of exhaust PM for FTP-75: Comparison of LII, ELPI, and TEOM techniques

Title: Reproducibility and accuracy of on-board emission measurements using the RAVEM™ system
Title: PM measurement artifact: Organic vapor deposition on different filter media
Title: A photoacoustic sensor system for time-resolved quantification of diesel soot emissions
Title: The effect of semi-circular micro riblets on the deposition of diesel exhaust particulate
Title: Improvement of modal mass analysis with analyzer hardware optimizations and mathematically enhanced response time
Title: Transient analysis of engine nano-particles using a fast-scanning differential mobility particle analyzer
Title: Influence of hydrogen-rich-gas addition on combustion, pollutant formation and efficiency of an IC-SI engine
Title: Analysis of HC emissions on single cylinder during transient conditions
Title: The heavy-duty gasoline engine—An alternative to meet emissions standards of tomorrow
Title: Effects of MMT®fuel additive on emission system components: Comparison of clear- and MMT®-fueled Escort vehicles from the alliance study
Title: A study of the effects of fuel type and emission control systems on regulated gaseous emissions from heavy-duty diesel engines
Title: Study on fuel economy and NOx emissions of medium-duty hybrid truck in real traffic conditions
Title: The effect of ambient temperature and humidity on measured idling emissions from diesel school buses
Title: Application of experimental design in the steady state particulate exposure levels in a 1992 International school bus
Title: Emission reduction in small SI engine generator sets
Title: Development of catalytic converter for 2-stroke-engine-powered vehicles
Title: Numerical and experimental analysis of the 3D flow-pattern in exhaust gas sensors
Title: Reliability-based design optimization of a vehicle exhaust system
Title: Sensitivity analysis of a diesel exhaust system thermal model
Title: Integrated 1D to 3D simulation workflow of exhaust aftertreatment devices
Title: The optimum cell density for wall-flow monolithic filters: Effects of filter permeability, soot cake structure and ash loading
Title: Advanced emission and fuel economy concept using combined injection of gasoline and hydrogen in SI engines
Title: Development and system application of an ultra-low loaded precious metal catalyst technology on LEV2 vehicles
Title: Thermal properties of the intelligent catalyst
Title: Research on HC adsorption emission system
Title: Innovative materials with high stability, high OSC, and low light-off for low PGM technology

Title: Development of a high-performance catalyzed hydrocarbon trap using Ag-zeolite

Title: Catalyst design for high-performance engines capable to fulfill future legislation

Title: The development and in-field demonstration of highly durable SCR catalyst systems

Title: Onboard emissions monitoring on a HD Truck with an SCR system using NOx sensors

Title: NOx control development with urea SCR on a diesel passenger car

Title: Technical advantages of urea SCR for light-duty and heavy-duty diesel vehicle applications

Title: LOTUS: A co-operation for low temperature urea-based selective catalytic reduction of NOx

Title: Internal EGR systems for NOx emission reduction in heavy-duty diesel engines

Title: Development of new 2.2-liter turbocharged diesel engine for the EURO-IV standards

Title: A new electrical mobility particle sizer spectrometer for engine exhaust particle measurements

Title: Detailed kinetic modelling and laser diagnostics of soot formation process in diesel jet flame

Title: Non-sooting, low flame temperature mixing-controlled DI diesel combustion

Title: Investigation of the relationship between DI diesel combustion processes and engine-out soot using an oxygenated fuel

Title: On the correlation between NOx emissions and the diesel premixed burn

Title: Investigation of soot formation in diesel combustion using forward illumination light extinction (FILE) technique

Title: Soot diagnostics using laser-induced incandescence within an optically accessible HSDI diesel engine

Title: Simulation of freely propagating, premixed, laminar flames of iso-octane/air mixtures with methylcyclopentadienyl manganese tricarbonyl (MMTMTM) additive

Title: Instantaneous exhaust temperature measurements using thermocouple compensation techniques

Title: Comparative analysis of different heavy-duty diesel oxidation catalysts configurations

Title: Diesel emission control devices—Design factors affecting mounting mat selection

Title: The development of a RTD temperature sensor for exhaust applications

Title: Diagnostics for diesel particulate filters

Title: The study of particle number reduction using after-treatment systems for a heavy-duty diesel engine

Title: Homogeneous loading and regeneration of diesel particulate filters using progressive spin elements

Title: Combined NOx and PM exhaust gas aftertreatment approaches for HSDI diesel engines

Title: Pre-filter diesel oxidation catalyst development for DOC-CSF system

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Title: Oxygen quench effect on flame ionization detector for hydrocarbon emission measurements
2004-01-1432  Title: Soot distribution in DPF systems—A simple and cost-effective measurement method for series development
2004-01-1436  Title: Development of vehicle exhaust flow measurement calibration device
2004-01-1438  Title: Bag mini-diluter system diagnostics

2004-01-1439  Title: Performance evaluation of a novel sampling and measurement system for exhaust particle characterization
2004-01-1440  Title: Development of two-layer fuel tube system consisting of adhesive-ETFE and modified-PA12
2004-01-1441  Title: Further investigations on time-alignment
2004-01-1442  Title: Exhaust flow meter calibration

2004-01-1444  Title: Development and testing of a compact and mobile CVS system for passenger car particulate measurement
2004-01-1445  Title: Chemical analysis of exhaust emissions from a gasoline direct injection SI engine
2004-01-1447  Title: Application of converter efficiency simulation tool for substrate design
2004-01-1488  Title: Next-generation catalysts are turbulent: Development of support and coating

2004-01-1489  Title: Effect of catalyst inlet cone flow mal-distribution on emissions performance of a close-coupled catalytic converter
2004-01-1490  Title: Development of an engine management strategy and a cost-effective catalyst system to meet SULEV emission requirements demonstrated on a V-6 engine
2004-01-1492  Title: Effect of thermal mass on aging and emissions performance
2004-01-1495  Title: Improvement of heat resistance for lean NOx catalyst
2004-01-1680  Title: Modelling and simulation of n-butane adsorption/desorption in a carbon canister
2004-01-1738  Title: Deactivation of oxidation catalysts by oil-derived sulfur
2004-01-1790  Title: Developed technologies of the new rotary engine (RENESIS)

SAE Automobile Engineering and Manufacturing Meeting
750903  Title: Emissions control of gasoline engines for heavy-duty vehicles
750930  Title: Lean burn engine concepts—emissions and economy
750954  Title: Car design for economy and emissions

SAE Brazil '93 Mobility Technology Conference and Exhibit
931632  Title: MHC and other conversions in a natural gas-fueled engine
931636  Title: Mercedes-Benz commercial vehicle engines for Euro II and EPA 94 emission limits
931637  Title: Challenges to meet heavy duty diesel engine Euro II and U.S. 1998 emission regulations

SAE Brazil 94
942412  Title: A new test cell computer for exhaust and evaporative emission testing
942418  Title: Experiences with a mini-dilution system for engine homologation and development
Title: Catalyst development for stoichiometric and lean burn natural gas engines

Title: Development strategies for commercial vehicle engines for complying with Euro III limit with particular consideration of the customer benefit

Title: The modern exhaust gas laboratory for development of environment friendly engines

Title: Natural gas engine Mercedes-Benz M447hG with exhaust emissions lower than 50% Euro II

Title: Advances in three-way catalysts design to meet Brazilian Phase III emission limits

Title: Influence of piston design on exhaust gas emissions of gasoline engines

Title: Chromatograph determination of unburned fuel concentration in the exhaust of an SI engine

Title: Advances of durability of ceramic converter systems

Title: Advanced engine management using on-board gasoline partial oxidation reforming for meeting super-ULEV (SULEV) emissions standards

Title: The influence of the combustion chamber head material of a gasoline engine on exhaust HC

Title: Simultaneous reduction of NOx and particulate emissions by using multiple injections in a small diesel engine

Title: Experiments and analysis of diesel particulate filter loading and regeneration

Title: Application of non-thermal plasma-assisted catalyst technology for diesel engine emission reduction

Title: Development of HC sensor and system for catalyst monitoring of automobiles

Title: Hydrocarbon adsorbers for reducing cold-start emissions

Title: Evaluating the environmental advantages of advanced vehicles

Title: Multi-component remote sensing of vehicle exhaust by dispersive absorption spectroscopy

Title: OBD using statistical pattern recognition

Title: Promise and cost of cellulosic ethanol for the U.S. light-duty fleet

Title: Oxygenated diesel: Emissions and performance characteristics of ethanol-diesel blends in CI engines

Title: Recent advances in reducing fuel permeability and leakage into the environment from automotive fuel systems

Title: Step forward in diesel engine emissions reduction: System incorporating a novel low-emission diesel fuel combined with a diesel oxidation catalyst

Title: Engine start characteristics of two hybrid electric vehicles (HEVs)—Honda Insight and Toyota Prius
2001-01-2502  Title: Assessment of hybrid configuration and control strategies in planning future metropolitan/urban transit systems
2001-01-2503  Title: Sulfur poisoning and desulfation of the lean NOx trap
2001-01-2504  Title: Improved performance and reduced emissions in a D. I. engine by fuel additives
2001-01-2505  Title: Emissions from a Cummins B5.9 diesel engine fueled with oxygenate-in-diesel blends
2001-01-2515  Title: Study of three-dimensional modeling for fibrous filters with image effect
2001-01-2537  Title: Test results and modeling of the Honda Insight using ADVISOR

911668  Title: Identification and analysis of excess CO emissions using EPA approved short tests and remote sensing
911671  Title: A comparison of heavy-duty diesel truck engine smoke opacities at high altitude and at sea level
921545  Title: Combustion chamber design for a lean-burn SI engine
931782  Title: Performance and emissions of clean fuels in transit buses with Cummins L10 engines
931783  Title: Chassis dynamometer emissions testing results for diesel and alternative-fueled transit buses
931787  Title: Evaluation of a particulate trap system and an ethanol injection/catalyst system on an upgraded DDC 6V-92 TA transit bus engine

931788  Title: A correlation study between two heavy-duty vehicle chassis dynamometer emissions testing facilities
961678  Title: A novel approach for simultaneous NOx and smoke reduction: Interacting-Sprays injection
961699  Title: Ontario's indoor, controlled-mode remote sensing I/M prescreen concept

961700  Title: Repair effectiveness indices for the British Columbia vehicle emissions inspection and maintenance program
961709  Title: Study of in-use alternative fuel vehicle emission performance under EPA and BC AirCare test cycle
972675  Title: Advances in air charging technology
981933  Title: A new concept for low-emission diesel combustion (2nd report: reduction of HC and CO emission, and improvement of fuel consumption by EGR and MTBE blended fuel)

SAE Government Industry Meeting and Exposition
1999-01-2249  Title: The DOE/NREL environmental science and health effects program—An overview
1999-01-2250  Title: Progress in understanding the toxicity of gasoline and diesel engine exhaust emissions

2000-01-2198  Title: Emission control research to enable fuel efficiency: department of energy heavy vehicle technologies
2000-01-2212  Title: Diesel aerosol sampling in the atmosphere

2000-01-2213  Title: Particulate emissions from a pre-emissions control era spark-ignition vehicle: a historical benchmark
2000-01-2214  Title: Comparative toxicity of gasoline and diesel engine emissions
Title: Exhaust aftertreatment research for heavy vehicles

Title: The DOE/NREL environmental science program

Title: Automotive emissions and health effects research needs: the European view

Title: Automobile emissions: primary health effects concerns

Title: NOx reduction is compatible with fuel economy through Toyota's lean combustion system

Title: The development of a real-time evaporative emission test

Title: Short term options for controlling CO emission of light duty vehicles

SAE International Alternative Fuels Conference and Exposition

Title: Comparative emissions from natural gas and diesel buses

Title: Gasoline evaporative emissions—Ethanol effects on vapor control canister sorbent performance

Title: Powertrain development of the 1996 Ford Flexible Fuel Taurus

Title: ULEV potential of a DI/TCI diesel passenger car engine operated on Dimethyl Ether

SAE International Congress and Exposition

Title: Global trends in diesel emissions control—A 1999 update

Title: Diesel exhaust treatment—New approaches to ultra low emission diesel vehicles

Title: Hydrocarbon DeNOx catalysis—System development for diesel passenger cars and trucks

Title: The impact of retrofit exhaust control technologies on emissions from heavy-duty diesel construction equipment

Title: Assessment of the performance of diesel particulate filter systems with fuel additives for enhanced regeneration characteristics

Title: Diesel particulate control—Application of an activated particulate trap in combination with fuel additives at an ultra low dose rate

Title: Use of ozone-enriched air for diesel particulate trap regeneration

Title: The ignition and combustion of cerium doped diesel soot

Title: Particulate traps for retro-fitting construction site engines—VERT: Final measurements and implementation

Title: Simultaneous measurement of soot mass concentration and primary particle size in the exhaust of a DI diesel engine by time-resolved laser-induced incandescence (TIRE-LII)

Title: Evaluation of Horiba MEXA 7000 bag bench analyzers for single range operation

Title: Evaluation of mass flow controller gas divider for linearizing emission analytical equipment

Title: Numerical analysis of mass emission measurement systems for low emission vehicles

Title: A CFV type mini-dilution sampling system for vehicle exhaust emissions measurement

Title: The control of TP pressure in emissions sampling systems

Title: New methods for emission analyzer calibrations
Title: Proportional ambient sampling: A CVS improvement for ULEV and lean engine operation
Title: Experimental investigation of the effect of fuel composition on the formation of pollutants in direct injection diesel engines
Title: Long term stable NOx sensor with integrated in-connector control electronics
Title: Emissions and fuel utilization after cold starting spark ignition engines
Title: Further improvements on a HC emissions model: Partial burn effects
Title: Utilization of a quasi-dimensional model for predicting pollutant emissions in SI engines
Title: Application of a multi-zone combustion model for the prediction of large scale marine diesel engines performance and pollutants emissions
Title: A computational investigation of premixed lean diesel combustion—Characteristics of fuel-air mixture formation, combustion and emissions
Title: A developed model for emissions prediction of a DI diesel engine
Title: High cell density and thin wall substrate for higher conversion ratio catalyst
Title: Thin wall ceramic catalyst supports
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Title: A comparison of emissions and flow restriction of thinwall ceramic substrates for low emission vehicles
Title: The impact of high cell density ceramic substrates and washcoat properties on the catalytic activity of three way catalysts
Title: Thermal shock resistance of standard and thin wall ceramic catalysts
Title: Development of low light-off three way catalyst
Title: Improvements in Pd:Rh and Pt:Rh three way catalysts
Title: Comparison of Pd-only versus Pd-Rh catalysts: Effects of sulfur, temperature and space velocity
Title: Closed loop catalyst temperature feedback for controlled catalyst lightoff and diagnostics for ULEV
Title: Chemical aspects of the dynamic performance of a three-way catalyst
Title: Modeling of catalytic conversion of CO/HC in gasoline exhaust at engine cold-start
Title: Exhaust system heat transfer and catalytic converter performance
Title: CFD prediction and experimental validation of high- temperature thermal behavior in catalytic converters
Title: A fuel-rate-based catalyst pass fraction model for predicting tailpipe NOx emissions from a composite car
Title: Development and application of a computer-aided engineering tool for hydrocarbon adsorber catalysts
Title: A study of flow characteristics inside the two types of exhaust manifold and CCC systems
Title: Computer-aided engineering in the development of diesel exhaust aftertreatment systems

Title: Reversed flow converter: Fundamentals of the design

Title: Modeling the transient characteristics of a three-way catalyst

Title: SULEV and "off-cycle" emissions benefits of a vacuum-insulated catalytic converter

Title: Development of high-durability diesel particulate filter by using SiC fiber

Title: SiC diesel particulate filter application to electric heater system

Title: A computational model describing the performance of a ceramic diesel particulate trap in steady-state operation and over a transient cycle

Title: Filtration assessment and thermal effects on aerodynamic regeneration in silicon carbide and cordierite particulate filters

Title: A new design to limit the particulate matter (PM) emissions by the use of a retro-fit

Title: Optimized filter design and selection criteria for continuously regenerating diesel particulate traps

Title: Periodically reversed flow regeneration of diesel particulate traps

Title: The latest developments in heavy-duty vehicle aftertreatment testing for real-world emissions and fuel economy

Title: The reduction of diesel engine emissions by using the oxidation catalysts on Japan diesel 13 mode cycle

Title: The effect of in-cylinder, wall-wetting location on the HC emissions from SI engines

Title: In-cylinder quantitative soot concentration measurement by laser-induced incandescence

Title: A study of unburnt hydrocarbon emission in small DI diesel engines

Title: A theoretical model for the correlation of smoke number to dry particulate concentration in diesel exhaust

Title: Unburned hydrocarbon emissions from SI engines using gaseous fuels

Title: Development of high-performance catalyst temperature sensor for NOx catalyst control

Title: A new converter concept providing improved flow distribution and space utilization

Title: Improving flow efficiency of a catalytic converter using the concept of radially variable cell density—Part I

Title: The necessity of optimizing the interactions of advanced post-treatment components in order to obtain compliance with SULEV legislation

Title: Reduction technologies for evaporative emissions in zero-level emission vehicle

Title: Technology for reducing exhaust gas emissions in zero-level emission vehicles (ZLEV)

Title: ERIC—A system to modify vehicle emissions through computer-controlled signal interception

Title: Using advanced emission control systems to demonstrate LEV II ULEV on light-duty gasoline engines
1999-01-0775 Title: Emission control technologies for EU Stage IV + EOBD on small cars (Part I): Pre-screening of potential solutions

1999-01-0776 Title: Dual-catalyst underfloor LEV/ULEV strategies for effective precious metal management

1999-01-0792 Title: An internally heated tip injector to reduce HC emissions during cold start

1999-01-0835 Title: Reduction of steady-state NOx levels from an automotive diesel engine using optimized VGT/EGR schedules

1999-01-0836 Title: NOx emissions from direct-injection diesel engines with water/steam dilution

1999-01-0837 Title: Efficient EGR technology for future HD diesel engine emission targets

1999-01-0840 Title: the influence of boost pressure on emissions and fuel consumption of a heavy-duty, single-cylinder D.I. diesel engine

1999-01-0841 Title: Prediction of major pollutants emission in direct-injection, dual-fuel diesel and natural gas engines

1999-01-0971 Title: Reduction of hybrid diesel engine emission by EGR (an only possible method to meet U.S. emission standard of the year 2004)

1999-01-1073 Title: Euro III/Euro IV emissions—A study of cold-start and warm-up phases with a SI (spark ignition) engine

1999-01-1074 Title: Emission of CO and fuel consumption for automotive vehicles

1999-01-1076 Title: Influence of oxygen storage characteristics on automobile emissions

1999-01-1081 Title: Reduction of N,O from automobiles equipped with three-way catalyst—Analysis of N,O increase due to catalyst deactivation

1999-01-1093 Title: An application of carbo canister modeling to air-fuel ratio control and idle by-pass control

1999-01-1103 Title: A control-oriented carbon canister model

1999-01-1137 Title: Effects of DGM and oxidation catalyst on diesel exhaust emissions

1999-01-1144 Title: Exhaust particulate emissions from two port-fuel-injected, spark-ignition engines

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Title: Exhaust emission and energy consumption effects from hydrogen supplementation of natural gas
Title: Lean burn natural gas fueled S.I. engine and exhaust emissions
Title: Engine operating parameter effects on the speciated aldehyde and ketone emissions from a natural gas fuelled engine

Title: Effects of California Phase2 Reformulated Gasoline Regulations on exhaust emissions reduction: Part 2
Title: Effects of gasoline properties (T50, T90, and Sulfur) on exhaust hydrocarbon emissions of current and future vehicles: Modal analysis—The Auto/Oil Air Quality Improvement Research Program
Title: Effects of gasoline properties (T50, T90, and Sulfur) on exhaust hydrocarbon emissions of current and future vehicles: Speciation analysis—The Auto/Oil Air Quality Improvement Research Program
Title: Comparison of CNG and gasoline vehicle exhaust emissions: Mass and composition—The Auto/Oil Air Quality Improvement Research Program
Title: Emissions with E85 and gasolines in flexible/variable fuel vehicles—The Auto/Oil Air Quality Improvement Research Program
Title: Gasoline reformulation and vehicle technology effects on emissions—Auto/Oil Air Quality Improvement Research Program
Title: Effects of gasoline properties on emissions of current and future vehicles—T50, T90, and Sulfur—Auto/Oil Air Quality Improvement Research Program
Title: Time-resolved analysis of soot formation and oxidation in a direct-injection diesel engine for different EGR-rates by an extinction method

Title: Simultaneous reductions of smoke and NOx from a DI diesel engine with EGR and dimethyl carbonate
Title: The independent effect of mid-range, back-end volatility and aromatics on emissions from two European gasoline engines
Title: The effect of gasoline RVP on exhaust emissions from current European vehicles

Title: Effect of cylinder head and engine block temperature on HC emissions from a single cylinder spark ignition engine
Title: Effects of piston crevice geometry of the steady-state engine-out hydrocarbons emissions of a S.I. engine
Title: Reduction of hydrocarbon emissions from SI-engines by use of carbon pistons
Title: Fuel composition effects on hydrocarbon emissions from a spark-ignited engine—Is fuel absorption in oil significant?

Title: A comparison of the exhaust emission effects of MTBE with a hydrocarbon surrogate of equivalent volatility
Title: Effects of fuel sulfur level on emissions from transitional low emission vehicles
Title: The attainment of Stage III gasoline European emissions limits utilizing advanced catalyst technology
Title: The impact of passenger car motor oil phosphorus levels on automotive emissions control systems
Title: Advanced substrate design for low-emission vehicles
Title: An engine test to measure the oxygen storage capacity of a catalyst
Title: Relative effects of vehicle technology and fuel formulation on gasoline vehicle exhaust emissions
Title: Relative effects of catalyst and fuel formulation on gasoline vehicle exhaust emissions
Title: A comparison of the emissions from a vehicle in both normal and selected malfunctioning operation modes
Title: Washcoat technology and precious metal loading study targeting the California LEV MDV2 standard
Title: New generation of rare earth compounds for automotive catalysis
Title: Optimization of precious metal loadings in automotive catalysts using response surface methodology
Title: Effects of cylinder lubrication oil film on hydrocarbon emissions of SI engine
Title: Time-resolved measurement of cold-start HC concentration using the fast FID
Title: Crank angle resolved HC detection using LIF in the exhausts of small two-stroke engines running at high engine speed
Title: Predicting exhaust emissions in a glow-assisted DI methanol engine using a combustion model combined with full kinetics
Title: Effect of diesel fuel chemistry on regulated emissions at high altitude
Title: The effect of engine variables on hydrocarbon emissions—An investigation with statistical experiment design and fast response FID measurements
Title: Effects of gas flow and mixture properties on engine-out HC emissions
Title: Analyses of exhaust hydrocarbon compositions and ozone forming potential during cold start
Title: Time-resolved, speciated emissions from an SI engine during starting and warm-up
Title: Simulation of exhaust unburned hydrocarbons from a spark-ignition engine, originating from in-cylinder crevices
Title: Development and application of an improved ring pack model for hydrocarbon emissions studies
Title: Modeling of NOx emissions with comparison to exhaust measurements for a gas fuel converted heavy-duty diesel engine
Title: Numerical simulations of emerging piston crevice gases
Title: Effect of reformulated diesel fuel on unregulated emissions of light-duty vehicles
Title: Methane emissions abatement from lean-burn natural gas vehicle exhaust: sulfur’s impact on catalyst performance

Title: The influence of fuel formulations on pollutant of a light-duty D.I. diesel engine

Title: Emission effects of shell LOW NOx fuel on a 1990 model year heavy heavy-duty diesel engine

Title: The effect of diesel sulfur content and oxidation catalysts on transient emissions at high altitude from a 1995 Detroit Diesel Series 50 urban bus engine

Title: Rapid deactivation of lean-burn natural gas engine exhaust oxidation catalysts

Title: Mutagenic activity of the soluble organic fraction of exhaust gas particulate from a direct-injection diesel engine

Title: Considerations on the temperature distribution and gradient in the filter during the regeneration process in burner type particulate trap system

Title: Exhaust particulate size distribution: vehicle and fuel influences in light-duty vehicles

Title: U.S. Army investigation of diesel exhaust emissions using JP-8 fuels with varying sulfur content

Title: Gasoline/alcohol blends: exhaust emissions, performance and burn-rate in a multi-valve production engine

Title: Effect of selected LPG fuel components on speciated exhaust emissions

Title: Reactivity and exhaust emissions from an EHC-equipped LPG conversion vehicle operating on butane/propane fuel blends

Title: Intake port fuel transport and emissions: the influence of injector type and fuel composition

Title: A correlation between tailpipe hydrocarbon emissions and driveability

Title: The effect of MTBE in gasolines on regulated exhaust emissions from current European vehicles

Title: Influence of combustion chamber deposits (CCDs) on vehicle performance and tailpipe emissions

Title: Research results on processes and catalyst materials for lean NOx conversion

Title: A study of the catalytic reduction of NOx in diesel exhaust

Title: NOXabatement for diesel engines: reductant effects; engine versus reactor tests

Title: Aftertreatment system for NOx and soot removal. Evaluation of an integrated system

Title: Evaluation of NOx adsorber catalysts systems to reduce emissions of lean running gasoline engines

Title: Comparison of De-NOx and adsorber-catalysts to reduce NOx emissions of lean-burn gasoline engines

Title: New developments in lean NOxCatalysis for gasoline-fueled passenger cars in Europe

Title: SMART catalyst development approach applied to automotive diesel application

Title: Laboratory screening of diesel oxidation catalysts and validation with vehicle testing: the importance of hydrocarbon storage

Title: Development of a lean-NOxCatalyst containing metal-ligand complex impregnated molecular sieves
Title: Experimental and modeling investigations of NOxtrap performance
Title: Three-dimensional modeling of NOx and soot formation in DI-diesel engines using detailed chemistry based on the interactive flamelet approach
Title: Exploring the use of multiple injectors and split injection to reduce DI diesel engine emissions
Title: A PC-based model for predicting NOx reductions in diesel engines
Title: Modeling the effects of split injection scheme on soot and NO emissions of direct-injection diesel engines by a phenomenological combustion model
Title: NYSERDA AFV-FDP M85 flexible fuel vehicle fleet operating experience
Title: NYSERDA AFV-FDP light-duty CNG vehicle fleet operating experience
Title: NYSERDA AFV-FDP light-duty propane vehicle fleet operating experience
Title: NYSERDA AFV-FDP CNG transit bus fleet operating experience
Title: Substrate effects on light-off—Part I thermal energy requirements
Title: Effect of fuel/air ratio variations on catalyst performance and hydrocarbon emissions during cold-start and warm-up
Title: Numerical approach for improving the conversion characteristics of exhaust catalysts under warming-up condition
Title: The significance of high value of ignition retard control on the catalyst lightoff
Title: Development of increased test conditions for close-coupled catalyst applications
Title: Metal converter technology using precoated metal foil
Title: A comparison of extruded powder metal heating elements and metallic foil heating elements
Title: Preconditioning effects on I/M test results using IM240 and ASM procedures
Title: Impact of fuels and ambient conditions on IM240 emissions
Title: Alternative techniques for detecting excessive evaporative emissions during I/M tests
Title: Effects of alcohol composition on gasohol vehicle emissions
Title: Review: utilization of rapeseed oil, rapeseed oil methyl ester of diesel fuel: exhaust gas emissions and estimation of environmental effects
Title: CNG compositions in Texas and the effects of composition on emissions, fuel economy, and driveability of NGVs
Title: The Texas Project: Part 1 - emissions and fuel economy of aftermarket CNG and LPG conversions of light-duty vehicles
Title: The Texas Project: Part 2 - control system characteristics of aftermarket CNG and LNG conversions for light-duty vehicles
Title: The Texas Project: Part 3 - off-cycle emissions of light-duty vehicles operating on CNG, LPG, Federal Phase 1 reformulated gasoline, and/or low sulfur certification gasoline
Title: Stratified diesel fuel-water-diesel fuel injection combined with EGR—The most efficient in-cylinder NOx and PM reduction technology

Title: Effects of cetane-enhancing additives and ignition quality on diesel engine emissions

Title: Investigation of particulate formation of DI diesel engine with direct sampling from combustion chamber

Title: Emissions and efficiency comparison of gasoline and LPG fuels in a 1.4-liter passenger car engine

Title: Hydrocarbon speciation of a lean-burn, spark-ignited engine

Title: The influence of mixture preparation on the HC concentration histories from an S.I. engine running under steady-state conditions

Title: Extension of the equation for calculation of the air-fuel equivalence ratio

Title: The effect on engine performance and NO emissions of a two-stage expansion cycle in a spark-ignition engine

Title: Effects of physical and chemical properties of diesel fuel on NOx emissions of heavy-duty diesel engines

Title: Exhaust emissions of a DI diesel engine fueled with blends of biodiesel and low sulfur diesel fuel

Title: Influence of various diesel traps on particulate size distribution

Title: The effect of hydrocarbon composition on lean NOx catalysis

Title: Effect of upgraded diesel fuels and oxidation catalysts on emission properties, especially PAH and genotoxicity

Title: Analysis of plasma-catalysis for diesel NOx remediation

Title: Pulsed corona plasma technology for the removal of NOx from diesel exhaust

Title: A new method for the investigation of unburned oil emissions in the raw exhaust of SI engines

Title: A long-term field emissions study of natural gas-fueled refuse haulers in New York City

Title: Optimizing CFD predictions of diesel engine combustion and emissions using design of experiments: comparison with engine measurements

Title: Three-dimensional simulation of pollutant formation in a DI diesel engine using multiple interactive flamelets

Title: Further developments on a characteristic time model for NOx emissions from diesel engines

Title: A predictive tool for engine performance and NOx emission

Title: Modeling of soot formation during DI diesel combustion using a multi-step phenomenological model

Title: Lean-combustion spark-ignition engine exhaust aftertreatment using non thermal plasma

Title: Multi-stage pulsed corona discharge system for reduction of NOx emission from diesel engine vehicle
Title: Direct chemical reduction of NOxin diesel exhaust
Title: Plasma processing of diesel exhaust by pulsed corona discharge

Title: Determination of particulate and unburned hydrocarbon emissions from diesel engines fueled with biodiesel
Title: Flow distribution in a close-coupled catalytic converter
Title: A 45% engine size catalyst system for MDV2 ULEV applications

Title: A study of a gasoline-fueled, near-zero-emission vehicle using an improved emission measurement system
Title: Numerical prediction of transient conversion characteristics in a three-way catalytic converter
Title: Time resolved exhaust port sampling studies related to hydrocarbon emissions from SI engines

Title: Investigation of the influence of top land crevice geometry on hydrocarbon emissions from SI engines
Title: Comparison of analytically and experimentally obtained residual fractions and NOx emissions in spark-ignited engines

Title: Reduction of NOx in lean exhaust by selective NOx recirculation (SNR technique)—Part II: NOx storage materials
Title: Sulfur interaction with lean NOx traps: Laboratory and engine dynamometer studies
Title: Engine and aftertreatment modeling for gasoline direct injection
Title: Tests on a new diesel particulate system with traps of metal fleece
Title: A study of the size, number and mass distribution of the automotive particulate emissions for European light-duty vehicles

Title: Investigation of the dilution process for measurement of particulate matter from spark-ignition engines
Title: A review of recent literature investigating the measurement of automotive particulate; the relationship with environmental aerosol, air quality and health effects
Title: Improvements in intimately coupled diesel hydrocarbon adsorber/lean NOx catalysis leading to durable Euro 3 performance
Title: Exhaust emissions of a vehicle with a gasoline direct-injection engine
Title: Passive and active performance characteristics of NOx catalysts for direct-injection diesel engines for passengers cars

Title: Effects of in-cylinder fuel spray formation on emissions and cyclic variability in a lean-burn engine—Part 2: results
Title: The conical catalytic converter—Potential for improvement of catalytic effectiveness
Title: New methods for reducing visible emissions of diesel engines
Title: Removal of exhaust particulate from a Mercedes 300D diesel car
Title: Physical size distribution characterization of diesel particulate matter and the study of the coagulation process
Title: The effect of mixing rate, end of injection, and sac volume on hydrocarbon emissions from a D.I. diesel engine
Title: Effects of combustion and injection systems on unburnt HC and particulate emissions from a DI diesel engine
Title: Effects of intake oxygen concentration on the characteristics of particulate emissions from a D.I.Diesel Engine
Title: Improvements of exhaust gas emissions and cold startability of heavy duty diesel engines by new injection-rate-control pump
Title: Diesel engine emissions: A timing control approach
Title: Cyclically resolved HC emissions from a spark ignition engine
Title: A study of NOx generation mechanism in diesel exhaust gas
Title: Small utility engine emissions reduction using automotive technology
Title: Present and future European exhaust emission regulations for off-road diesel engines
Title: The role of exhaust pipe and incylinder deposits on diesel particulate composition
Title: On-vehicle exhaust gas cooling in a diesel emissions control system
Title: A simple but effective catalyst model for two-stroke cycle engines
Title: Respirable particulate genotoxicant distribution in diesel exhaust and mine atmospheres
Title: Application of direct air-assisted fuel injection to a SI cross-scavenged two-stroke engine
Title: Factors affecting catalyst efficiency a theoretical and investigative treatise
Title: Emissions and performance of a small L-head utility engine fueled with homogeneous propane/air and propane/air/nitrogen mixture
Title: Emission control of a propane fueled small utility engine utilizing air/fuel ratio control and three-way catalyst
Title: Two-zone model for calculation of nitrogen-oxide formation in direct-injection diesel engines
Title: Meeting ISO 8178 requirements for the measurement of diesel particulates with partial-flow dilution systems
Title: Evaluation of a catalyzed ceramic diesel particulate filter and catalytic converter on an underground mine vehicle
Title: The influence of oxidation catalysts on NOx in diesel exhaust
Title: SiC as a substrate for diesel particulate filters
Title: A convenient technique for determining two-stroke emission measurement accuracy and A/F ratio
Title: Modelling of oxidation catalysts for two-stroke cycle engines
Title: Reaction mapping during light-off in a two-stroke oxidation catalyst

Title: Exhaust gas emissions and environmental effects by use of rape seed oil based fuels in agricultural tractors

Title: Study of two-and four-stroke outboard marine engine exhaust emissions using a total dilution sampling system
Title: Worldwide harmonization of exhaust emission test procedures for nonroad engines based on the International Standard ISO 8178

Title: A new proportional collection system for extremely low emission measurement in vehicle exhaust
Title: Vehicle exhaust particle size distributions: A comparison of tailpipe and dilution tunnel measurements
Title: Japan Clean Air Program (JCAP)—Program objectives and design

Title: Japan Clean Air Program (JCAP)—Preliminary modeling study of vehicle emission impacts on air quality
Title: New measuring method for blue and white smoke in diesel engines by a digital camera system
Title: Emissions and fuel economy of a 1998 Toyota with a direct-injection, spark-ignition engine

Title: Effects of load on emissions and NOx trap/catalyst efficiency for a direct-injection, spark-ignition engine
Title: Engine-out emissions from a direct-injection, spark-ignition (DISI) engine
Title: Particulate emissions from a direct-injection, spark ignition (DISI) engine
Title: A study on the practicability of a secondary air injection for emission reduction
Title: Shoebox converter design for thinwall ceramic substrates

Title: The influence of egr on heat release rate and no formation in a di diesel engine
Title: New quiescent combustion system for heavy-duty diesel engines to overcome exhaust emissions and fuel consumption trade-off

Title: Relative impact on environment and health from the introduction of low emission city buses in sweden
Title: The effects of driveability on emissions in European gasoline vehicles
Title: Particulate traps for construction machines properties and field experience
Title: Particulate trap technology for light duty vehicles with a new regeneration strategy
Title: Particulate traps used in city-buses in switzerland

Title: Novel approaches to an efficient trap of diesel particulates and it's regeneration
2000-01-19  Title: Emissions and performance of a carbon fiber reinforced carbon piston
2000-01-19  Title: Alcohol as automotive fuel-brazilian experience
2000-01-19  Title: Japan clean air program (jcap)-step 1 study of gasoline vehicle and fuel influence on emissions
2000-01-19  Title: Japan clean air program-step 1 study of diesel vehicle and fuel influence on emissions
2000-01-19  Title: NanoMet: On-line characterization of nanoparticle size and composition
2000-01-20  Title: Measurement of the number and size distribution of particle emissions from heavy-duty engines
2000-01-20  Title: Characterization of snowmobile particulate emissions
2000-01-20  Title: The effect of piston topland geometry on emissions of unburned hydrocarbons from a homogeneous charge compression ignition (HCCI) engine
2001-01-18  Title: On-road demonstration of NOx emission control for heavy-duty diesel trucks using SINOx™urea SCR technology—Long-term experience and measurement results
2001-01-19  Title: Strategies for meeting future harmonized emissions standards in sport utility vehicles with direct-injection diesel engines
2001-01-19  Title: Performance of a NOxadsorber and catalyzed particle filter system on a light-duty diesel vehicle
2001-01-19  Title: Mechanism of NOx reduction by ethanol on a silver-base catalyst
2001-01-19  Title: The use of emulsion, water induction and EGR for controlling diesel engine emissions
2001-01-19  Title: Original modeling approach of diesel particulate filter regeneration
2001-01-19  Title: Diesel particle size distribution: The conversion of particle number size distribution to mass distribution
2001-01-19  Title: DAF Euro-4 heavy-duty diesel engine with TNO EGR system and CRT particulates filter
2001-01-19  Title: Diesel aftertreatment systems: 2004-2007, a cost assessment
2001-01-19  Title: Measuring diesel emissions with a split exhaust configuration
2001-01-19  Title: Model-based determination of dynamic engine control function parameters
2001-01-20  Title: Experimental investigation of emission control from spark-ignition engine using electrically heated catalyst
2001-01-20  Title: Effects of oxygenated compounds on combustion and soot evolution in a DI diesel engine: Broadband natural luminosity imaging
2002-01-16  Title: The effects of leaner charge and swirl on diesel combustion
2002-01-16  Title: The M111 engine CCD and emissions test: Is it relevant to real-world vehicle data?
2002-01-16  Title: Comparative study of butadiene and B, T, X tailpipe emissions for gasoline of different octane levels
2002-01-16  Title: Diesel particulate emissions from biofuels derived from Spanish vegetable oils
2002-01-16  Title: Fuel additive and blending approaches to reducing NOx emissions from biodiesel
2002-01-16  Title: Study on removal of PM and NOx in diesel exhaust by using DC corona discharge
2002-01-1664  Title: A study to assess the effect of octane on vehicle emissions
2002-01-1666  Title: Engine controller for the hydrocarbon reduction during cold start in SI engine
2002-01-1667  Title: Estimation of air-fuel ratio of a SI engine from exhaust gas temperature at cold-start condition
Title: Sooted diesel engine oil pumpability studies as the basis of a new heavy-duty diesel engine oil performance specification
2002-01-1671  Title: Evaluation of NOx emission control technologies for SIDI engines
2002-01-1676  Title: A Study of the thermochemical conditions in the exhaust manifold using secondary air in a 2.0-L engine
2002-01-1677  Title: Effects of engine operating conditions on catalytic converter temperature in an SI engine
2002-01-1678  Title: An alternative method for fast light-off of catalysts—Cranking exhaust gas ignition
Title: Continuous pre- and post-catalyst hydrocarbon and nitrogen compounds- monitoring of various DeNOx reactions by twin chemical ionization mass spectrometry
2002-01-1679  Title: Pressure and gas matrix independent dilution system for fuel cell gas and exhaust distribution monitoring
2002-01-1681  Title: Measurement of mass emissions from in-use two-stroke engine three-wheelers in South Asia
2002-01-1682  Title: The reduction of soot emissions by the use of a piston with micro-chambers on a medium-duty diesel engine
2002-01-1683  Title: Reactivity of soot with nitrogen oxides in exhaust stream
2002-01-1684  Title: Quantitative flow-reactor study of diesel soot oxidation process
Title: Real-time measurement of the volatile fraction of diesel particulate matter using laser-induced desorption with elastic light scattering (LIDELS)
2002-01-1685  Title: A study of the analysis of PM components with CR-DPF
2002-01-1686  Title: Study on the relation between fuel-air ratio and combustion products
Title: Mutagenic potential of particulate matter from diesel engine operation on Fischer-Tropsch fuel as a function of engine operating conditions and particle size
2002-01-1699  Title: Comparison of emissions and fuel economy characteristics of conventional, additized, and substantially synthetic diesel fuels in a heavy-duty diesel engine
2002-01-1702  Title: Isotopic tracing of bio-derived carbon from ethanol-in-diesel blends in the emissions of a diesel engine
2002-01-1705  Title: The effect of oxygenates on diesel engine particulate matter
2002-01-1706  Title: The possibility of gas to liquid (GTL) as a fuel of direct injection diesel engine
2002-01-1714  Title: Real-time, on-road measurement of driving behavior, engine parameters and exhaust emissions
2002-01-1716  Title: Development of a transient duty cycle for large nonroad SI engines
2002-01-1717  Title: N₂O emissions from vehicles equipped with three-way catalysts in a cold climate
Title: Performance of partial flow sampling systems relative to full flow CVS for determination of particulate emissions under steady-state and transient diesel engine operation

2002-01-1718  Title: Diesel and CNG heavy-duty transit bus emissions over multiple driving schedules: Regulated pollutants and project overview

2002-01-1722  Title: Principles for the design of diesel oxidation catalysts

2002-01-1723  Title: Development of deNOx catalyst based on Ag/Al₂O₃ catalyst for diesel applications

2002-01-1724  Title: Effect of an oxidation catalyst on exhaust emissions of a DI diesel engine operating with a partial fumigation of the intake air with fuel

2002-01-1726  Title: Effect of an oxidation catalyst on exhaust emissions of a DI diesel engine operating with fumigation of the intake air with superheated steam

2002-01-1727  Title: Combustion and emissions characteristics of a small spark-ignited LPG engine

2002-01-1738  Title: Development of the high-power NADI™ concept using dual-mode diesel combustion to achieve zero NOx and particulate emissions

2002-01-1748  Title: Investigation of effects of piston bowl and fuel injector offsets on combustion and emissions in D.I. diesel engines

2002-01-1750  Title: A numerical study on combustion and exhaust gas emissions characteristics of a dual-fuel natural gas engine using a multi-dimensional model combined with detailed kinetics

2002-01-1752  Title: Evaluation of durable emission controls for large nonroad SI engines

2002-01-1753  Title: Development and initial use of a heavy-duty diesel truck test schedule for emissions characterization

2002-01-1754  Title: Translation of distance-specific emissions rates between different heavy-duty vehicle chassis test schedules

2002-01-1755  Title: Measurement of brake-specific NOX emissions using zirconia sensors for in-use, on-board heavy-duty vehicle applications

2002-01-1756  Title: Determination of in-use, brake-specific emissions from off-road equipment powered by mechanically controlled diesel engines

2002-01-1757  Title: Development and validation of a quasi-dimensional model for HCCI engine performance and emissions studies under turbocharged conditions

961065  Title: European Program on Emissions, Fuels and Engine Technologies—Objectives and design

961066  Title: European Program on Emissions, Fuels and Engine Technologies (EPEFE)—Gasoline and diesel test fuels blending and analytical data

961067  Title: European programmes on emissions, fuels and engine technologies (EPEFE) - vehicle/engine technology
Title: European Program on Emissions, Fuels and Engine Technologies (EPEFE)—Statistical design and analysis techniques

Title: European Programs on Emissions, Fuels and Engine Technologies (EPEFE) fuel and exhaust gas analysis

Title: European Program on Emissions, Fuels and Engine Technologies (EPEFE) "Emissions from gasoline sulphur study"

Title: European Program on Emissions, Fuels and Engine Technologies (EPEFE)—Gasoline aromatics/E100 study

Title: Impact of EPEFE data on the European auto-oil process

Title: Ultra low emissions vehicle using LPG engine fuel

Title: Emissions and lube oil monitoring of a diesel engine fueled with palm oil methyl esters and its emulsions

Title: On-line analysis of formaldehyde and acetaldehyde in non-stationary engine operation using laser mass spectrometry

Title: An investigation to determine the exhaust particulate size distributions for diesel, petrol, and compressed natural gas fueled vehicles

Title: Methane dedicated catalysts for heavy-duty natural gas engines

Title: Organic pollutants from the thermal degradation of oxygenated fuels

Title: Particulate characterization using five fuels

Title: FTP emissions test results from flexible-fuel methanol Dodge Spirits and Ford Econoline Vans

Title: Round 1 emissions test results from compressed natural gas vans and gasoline controls operating in the U.S. Federal fleet

Title: Federal test procedure emissions test results from ethanol variable-fuel vehicle Chevrolet Luminas

Title: NOx emissions and efficiency of hydrogen, natural gas and hydrogen/natural gas blended fuels

Title: A LABVIEW©-based Mini-SHED system for permeation determination of fuel system components

Title: Speed and acceleration impact on pollutant emissions

Title: Emissions testing with blends of esters of rapeseed oil fuel with and without a catalytic converter

Title: Emission control technology to comply with FTP revisions

Title: Compound injection to assure the performance of motor vehicle emissions sampling systems

Title: Development of a fuelling system to reduce cold-start hydrocarbon emissions in an SI engine

Title: Three-dimensional computation of the effects of the swirl ratio in direct-injection diesel engines on NOx and soot emissions

Title: Advanced catalyst studies of diesel NOx reduction for heavy-duty diesel trucks

Title: New type of NOx sensors for automobiles
Title: Rare earth catalysts for purification of auto exhaust
Title: Changes in pollutant emissions from passenger cars under cold start conditions
Title: Applications and benefits of catalytic converter thermal management
Title: Electrically heated catalyst—Design and operation requirements
Title: The role of methane on catalyst conversion of NOx: A study based on FTIR
Title: Simultaneous reductions in diesel NOx and smoke emissions with aqueous metal-salt solutions directly injected into the combustion chamber
Title: The dilution, chemical, and thermal effects of exhaust gas recirculation on diesel engine emissions—Part 1: Effect of reducing inlet charge oxygen
Title: Transient emissions from No. 2 diesel and biodiesel blends in a DDC Series 60 engine
Title: The dilution, chemical, and thermal effects of exhaust gas recirculation on diesel engine emissions—Part 2: Effects of carbon dioxide
Title: An investigation into the influence of LPG (autogas) composition on the exhaust emissions and fuel consumption of 3 bi-fuelled Renault vehicles
Title: The effects of oxygen-enriched intake air on FFV exhaust emissions using M85
Title: Diesel fuel quality and particulate emissions: An overview
Title: A mathematical model for in-cylinder catalytic oxidation of hydrocarbons in spark-ignition engines
Title: Simulation study on the effect of introducing low-emission vehicles on air quality improvement
Title: Carbon canister modeling for evaporative emissions: Adsorption and thermal effects
Title: Development of an exhaust carbon monoxide emissions model
Title: The effects of sulfur on emissions from a S.I. engine
Title: Comparison of the exhaust emissions from California Phase 1 (without oxygenates) and Phase 2 (with oxygenates) fuel: A case study of 11 passenger vehicles
Title: Relationship between gasoline anti-knock agents, gasoline aromatics content and SI engine emissions
Title: Pyrosynthesis of PAH in a modern IDI diesel engine
Title: Characterization of diesel particulate emissions of two IDI diesel engines using diesel and kerosene fuels
Title: Simulating exhaust emissions characteristics and their improvements in a glow-assisted DI methanol engine using combustion models combined with detailed kinetics
Title: Effectiveness of engine calibration techniques to reduce off-cycle emissions
Title: Factors influencing drive cycle emissions and fuel consumption
Title: On-line analysis of individual aromatic hydrocarbons in automotive exhaust: dealkylation of the aromatic hydrocarbons in the catalytic converter
Title: CRC hydrocarbon emissions analysis round robin test program, phase II
Title: CRC carbonyl emissions analysis round robin program—Phase II
Title: Simultaneous fast response NO and HC measurements from a spark-ignition engine
Title: Optimizing engine performance and emissions using Bayesian techniques

Title: A dynamometer study of off-cycle exhaust emissions—The auto/oil air quality improvement research program
Title: Water injection effects on NOx emissions for engines utilizing diffusion flame combustion
Title: Experimental investigation of smoke emission dependent upon engine operating conditions
Title: The dilution, chemical, and thermal effects on exhaust gas recirculation on diesel engine emissions—Part 3: effects of water vapor
Title: The dilution, chemical, and thermal effects of exhaust gas recirculation on diesel engine emissions—Part 4: effects of carbon dioxide and water vapor
Title: Chemical and biological characteristics of exhaust emission from a DI diesel engine fueled with rapeseed oil methyl ester (RME)
Title: Fundamental limits on NOx reduction by plasma
Title: Vehicle exhaust treatment using electrical discharge methods
Title: Non-thermal plasma exhaust aftertreatment: a fast rise-time concept
Title: Experimental determination of spontaneous diesel flame emission spectra in a large diesel engine operated with different diesel fuel qualities
Title: Characterization of recent-model, high-emitting automobiles

Title: Evaluation of catalyzed hydrocarbon traps in the EGI system: potential for hydrocarbon emissions reduction
Title: A study of the effects of exhaust gas recirculation on heavy-duty diesel engine emissions
Title: Combustion diagnostics by means of multizone heat release analysis and NO calculation
Title: Simulation of combustion, soot and NOx emissions in a large medium-speed diesel engine

Title: Government-Industry Partnership for improving the military's and nation's trucks: The 21stCentury Truck Initiative
Title: Plasma treatment of diesel particulate for a minibus
Title: Comparison of in-use emissions from diesel and natural gas trucks and buses
Title: Hybrid electric systems for 20-ton platforms
Title: Development of continuous dilution factor for CVS emissions sampling and calculation
Title: Emissions from conventional and hybrid electric transit buses tested on standard and San Francisco specific driving cycles
2002-01-3118  Title: The influence of grade on the operating characteristics of conventional and hybrid electric transit buses
Title: Hydraulic power assist—A demonstration of hydraulic hybrid vehicle regenerative braking in a road vehicle application

2002-01-3128  Title: Vehicle dynamometer for hybrid truck development

2003-01-3360  Title: Experiments in active diesel particulate filter regeneration

2003-01-3362  Title: Control strategy for NOx—Emission reduction with SCR

2003-01-3366  Title: Chassis dynamometer emission measurements from refuse trucks using Dual-Fuel™ natural gas engines

2003-01-3403  Title: A cost-effective, new coating for multi-layer steel exhaust gaskets

2003-01-3423  Title: The development of a novel self-powered centrifugal oil cleaner for automotive applications

922435  Title: Determination of heavy-duty vehicle energy consumption by a chassis dynamometer

922436  Title: Exhaust emissions from in-use heavy duty vehicles tested on a transportable transient chassis dynamometer

932950  Title: Emissions from heavy-duty trucks converted to compressed natural gas

932952  Title: Emissions comparisons of twenty-six heavy-duty vehicles operated on conventional and alternative fuels

932954  Title: Diesel particulate analysis for effective exhaust aftertreatment

932958  Title: A diesel oxidation catalyst for exhaust emissions reduction

932982  Title: A diesel engine/catalyst system for pick-up and medium-duty trucks

942261  Title: Emissions from methanol, ethanol, and diesel powered urban transit buses

942262  Title: Sampling strategies for characterization of the reactive components of heavy-duty, diesel exhaust emissions

942263  Title: Heavy-duty testing cycles: survey and comparison

942264  Title: The optimized Duetz Service Diesel Particulate Filter System DPFS II

942314  Title: A demonstration of methanol-powered buses in Windsor, Ontario

942318  Title: The Orange Country Transportation Authority's Cleaner Air through Reduced-Emission Systems (OCTA CARES) program

952650  Title: A study of the durability of diesel oxidation catalysts

952651  Title: A demonstration of transit bus particulate traps in Ottawa Ontario

952652  Title: Development of a urea DeNOx catalyst concept for European ultra-low emission heavy-duty diesel engines

952653  Title: Transient emissions tests of Cummins N-14 natural gas engine

962159  Title: Speciation of heavy-duty diesel exhaust emissions under steady-state operating conditions
Title: Development of a low-emission, high-performance motorcycle
Title: Provision for emission reduction of sports utility motorcycle
Title: Increase of flow rate of super-mini suck nozzle and its application for general-use small engine
Title: Combustion characteristics and exhaust gas emissions of lean mixture ignited by direct diesel fuel injection with internal EGR
Title: A study on the effects of recirculated exhaust gas upon NOx and soot emissions in diesel engines with scrubber EGR system
Title: Development of stratified scavenging two-stroke cycle engine for emission reduction
Title: Stratified scavenging applied to a small-capacity, two-stroke scooter for the reduction of fuel consumption and emissions
Title: Development of catalysts for two-stroke engines
Title: Development of a catalytic exhaust system for a two-stroke scooter engine
Title: Three-way catalyst technology for off-road equipment engines
Title: AVL SDIS Mk.II—Low-cost automotive F1 applied to 2-stroke engines for future CARB—Regulations
Title: A study of exhaust emission control for direct-fuel-injection, two-stroke engine
Title: The impact of catalytic aftertreatment on particulate matter emissions from small motorcycles
Title: Thermal and poisoning effects on the performance of motorcycle emission control catalysts
Title: Development of low-emissions small off-road engines
Title: Development of a CFD system using PCC method and its application to an exhaust muffler design for motorcycles
Title: Time-resolved emission sampling in a direct-injection engine
Title: Investigation on relationship between thermal efficiency and NOx formation in ultra-lean combustion
Title: Experimental and computational analysis of a tuned exhaust system for a small two-stroke engine
Title: Development and progress of the exhaust-system device for 2-stroke engines
Title: Best available technology for emission reduction of small 4S SI engines
Title: The effect of high ethanol blends on emissions from small utility engines
Title: A new approach for isomerized LPG-diesel, dual-fuel engine by two different isomerization catalysts acidic Al2O3 versus Al2O3/Pt—An experimental study
Title: Study of the impact to the water quality by marine engine exhaust emissions
Title: Catalytic reduction of marine sterndrive engine emissions
Title: TCT—Total combustion technology
Title: Small engine catalyst for US emission regulations
Title: Investigation of low-emission, two-stroke cycle engine chainsaw
Title: Development of an electronically controlled carburetion system to reduce the exhaust emissions of small IC engines for handheld power tools

Title: Basic investigation of particulate matters (O-PM) and polycyclic aromatic hydrocarbons emitted by two-stroke motorcycles

Title: Catalytic exhaust emission control of small internal combustion engines

Title: Emission control of four-stroke motorcycle engine

Title: Reducing utility engine exhaust emissions with a thermal reactor

Title: Analysis on fuel economy improvement and exhaust emission reduction in a two-stroke engine by using an exhaust valve

Title: Exhaust catalyst selection for small two-stroke engines

Title: Durability of ceramic catalytic converters for motorcycles

Title: Evaluation of a low-emissions concept on a 50 cc 2-stroke scooter engine

Title: Emission and fuel consumption reduction in a two-stroke engine using delayed charging

Title: Development of computerized lubrication system of 2-stroke gasoline engines for exhaust smoke reduction

Title: Catalytic converter applications for two-stroke, spark-ignited marine engines

Subzero Engineering Conditions Conference and Exposition

Title: Automotive exhaust emissions at low ambient temperature

Title: Vehicle emission characteristics under cold ambient conditions

Title: Measurement of regulated and unregulated emissions at low ambient temperature

Title: Optimizing three-way catalyst emission control system for low ambient temperature operations

Title: Emissions and fuel consumption at FTP test cycles at +22°C and -2°C from vehicles equipped with block heaters

Total Life Cycle Conference and Exposition

Title: Life-cycle management in the automotive supply chain: Results of a survey of Saturn Tier I suppliers

Title: Construction of a DFE approach applied to the automotive industry - Report on the EDIT Project

Title: Life Cycle Engineering - Advantages for economy and ecology

Title: "Diesel smoke problem in India"

Title: ExternE: A European accounting framework for life cycle impact assessment and external costs of transport

Title: Life cycle engineering as a tool for design for environment

Title: Application of life cycle assessment methodology to comparative LADA automobiles
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<tr>
<td>Title: Identifying the environmental impact drivers and tradeoff options in the life cycle of automobiles - A software-based methodology for the sound restriction of system boundaries</td>
<td>2000</td>
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<tr>
<td>Title: Credible life cycle inventory data for studies of automotive aluminum</td>
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<td>Title: Optimizing vehicle life using life cycle energy analysis and dynamic replacement modeling</td>
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<td>Title: System performance simulation based on life cycle considerations</td>
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<td>Title: Concepts for pro-active life cycle design support tools</td>
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<td>Title: Review of the allocation procedure in ISO 14041</td>
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<td>Title: Life cycle inventories of conventional and alternative automobile fuel/propulsion systems: Summary and conclusions</td>
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<td>Title: Setting boundaries to develop a LCA of an automobile: Brazilian case study</td>
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<td>Title: LCA-based design for environment in the automotive industry</td>
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<td>Title: Vehicle total life cycle exhaust emissions</td>
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<td>Title: A method for the site-dependent life cycle impact assessment of toxic air pollutants from traffic emissions</td>
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<td>Title: Comparison of methodologies for calculating use-stage environmental burdens for an automobile</td>
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<td>Title: Possibilities to reduce exhaust emissions of road motor vehicles in Slovakia</td>
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<td>Title: Scenarios for the future energy demand and CO₂ emissions from the global transport sector</td>
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<td>Title: Direct-injection, internal-combustion engines—the automotive industry's contribution to reduced CO₂ emissions</td>
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<td>Title: Impact of US02 and Euro4 emission legislation on powertrain cooling challenges and solutions for heavy-duty trucks</td>
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<td>Title: Use of simulation tools in EGR development process</td>
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<td>Title: Development of EGR coolers for truck and passenger car application</td>
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<td>Title: Laser welding of EGR coolers—a new process technology for heat exchanger manufacturing</td>
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<td>Title: An integrated computational model for the optimization of monolith catalytic converters</td>
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<td>Title: Catalytic converter preheating by using a chemical reaction</td>
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<td>Title: Predicted cold start emission reductions resulting from exhaust thermal energy conservation to quicken catalytic converter lightoff</td>
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<td>Title: An early-design methodology for predicting transient fuel economy and catalyst-out exhaust emissions</td>
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<td>2004 SAE spark-ignition engines technology</td>
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<td>2003-01-3522</td>
<td>Numerical simulation of a bus underhood flow</td>
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<td>2003-01-3545</td>
<td>Component tolerances impact on critical clearances for Ford Fiesta supercharger exhaust assembly</td>
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<td>Finite difference model for journal bearings applied in the camshaft support elements</td>
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<td>Study of the turbulence intensity variation within the combustion chamber of a SI engine due to turbocharging</td>
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<td>The effect of intake system geometry on the sensitivity of hot film type air flow meter</td>
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<td>PIV characterization of a 4-valve engine with a camshaft profile switching (CPS) system</td>
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<td>Study of antiknock performance under various octane numbers and compression ratios in a DISI engine</td>
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<td>Effects of fuel and diluents on stratified charge turbulent combustion in simplified conditions</td>
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<td>2003-01-1811</td>
<td>Characterization of mixture formation processes in D.I. gasoline sprays by the laser absorption scattering (LAS) technique—Effect of injection conditions</td>
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Title: The effect of active species in internal EGR on preignition reactivity and on reducing UHC and CO emissions in homogeneous charge engines
Title: Numerical simulation of multicomponent fuel spray
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Title: Modelling of wall impinging behavior with a fan-shaped spray
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Title: Port fuel injection and combustion simulation of a racing engine
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Title: Effects of fuel properties on the stratified-charge combustion of direct-injection gasoline engine with EGR
Title: Emission reduction technologies adopted for Japan U-LEV certified vehicles
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Title: Characteristics of icing phenomenon on injector in a liquid phase LPG injection SI engine
Title: Oil transport in the piston ring pack (Part I): Identification and characterization of the main oil transport routes and mechanisms
Title: Oil transport in the piston ring pack (Part II): Zone analysis and macro oil transport model
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Title: Oil distribution optimization for friction reduction in a high-speed racing engine (CART)
Title: A new technique for dynamic oil aeration monitoring
Title: Air-X, an innovative device for on-line oil aeration measurement in running engines
Title: Development of a direct injection spark ignition engine test for injector fouling

Title: Spatially resolved determination of fuel/air ratio inside a direct injection SI engine under real fuel conditions
Title: Fleet tests to determine the octane response at different altitudes for vehicles equipped with knock sensors
Title: Indicated mean effective pressure measuring method using optical fiber pressure sensor
Title: An investigation of long and short duration tests for evaluating engine non-starts caused by CCD flaking
Title: Numerical analysis of flow characteristics for intake valve design
2003-01-2024 Title: Direct injection gasoline (DIG) injector deposit control with additives
2003 SAE/JSBE Small Engine Technology Conference and Exhibition
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2003-32-0008 Title: Visualization of the flow inside the transfer channels of small two-stroke cylinders
2003-32-0009 Title: Combustion stability and control analysis of scooter engine

2003-32-0011 Title: Investigating combustion enhancement and emissions reduction with the addition of 2H, + O, to a SI engine
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Title: Interconnection technology for engine generators

Title: Development of advanced plating system for cylinder bores of motorcycles

Title: How gearbox ratios influence lap time and driving style—An analysis based on time-optimal maneuvers

Title: Modelling the sound source of an intake and predicting the intake sound pressure level for a motorcycle

Title: Development of spraying technology for improving the wear resistance of engine cylinder bores

Title: Drivetrain effects on small engine performance

Title: Numerical simulation of intake port flow by using VECTIS CFD code

Title: Intake manifold optimization by using 3-D CFD analysis

Title: Optimization of a direct-injected 2-stroke cycle snowmobile

Title: Improving the University of Idaho clean snowmobile

Title: Kettering University’s 2003 design for the Clean Snowmobile Challenge

Title: Comparison of an E10 direct injection two-stroke cycle engine and an E85 four-stroke cycle engine

Title: An assessment of intake and exhaust philosophies for variable valve timing

Title: Scavenging measurements in a direct-injection, two-stroke engine

Title: Low-pressure, in-cylinder fuel injection

Title: Adaptation of four-stroke motorcycle engine to continuously variable transmission for snowmobile application

Title: Fuel injection system for small motorcycles

Title: Optimization of inlet port design in a uniflow-scavenged engine using a 3-D turbulent flow code

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Title: Thermodynamic reference eco-cycle of IC engine

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Title: Design of carbon pistons using transient heat transfer and stress analyses

Title: Modeling and control of transient engine conditions

Title: Stratified-charged SI and CI Engines in SRFNPH are functioned by forming of REABP and Radicals—SI-CVCC, SI-GDI, CI-OSKA, CI-MK—(SRFNPH: simultaneous reduction of SFC, NOx, particulate, HC REABP: Re-entrainment of active burned products)
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Title: Improved energy conversion efficiency of Otto-type engine (relations between work and EC efficiency from the theoretical to the the net)

Title: Modeling of a four-valve S.I. engine combustion: A comparison of two 3-D computer codes

Title: Technologies for carbon-neutral passenger transport—A comparative analysis

Title: Fuel for tomorrows cars—Do we have to leave the hydrocarbons?

Title: The new "torque strategy" for the control of the spark ignition engine—Development of a motorized butterfly valve through experimental techniques and computational modeling

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Title: Adaptive control of the fuel injected per cycle and of the ignition advance for the spark ignition engine using fuzzy inferential systems

Title: Description of the hybrid technology mounted to production model

Title: Very advanced automotive powertrains with the crankless prime movers

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Title: A combined experimental - numerical approach for motorcycle crank noise: Modelling

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Title: Tribological performance of NFC coatings under oil lubrication

Title: Nissan's gasoline SULEV technology

Title: The Cooperative Automotive Research for Advanced Technology Program (CARAT): Accelerating the commercialization of innovative technology

Title: Time-resolved and quantitative characterization of highly transient gasoline sprays by x-radiography

Title: Near-term fuel economy potential for light-duty trucks

Title: Fuel economy improvement via hybridization versus vehicle performance level
2002-01-1910  Title: The opportunity for IC engines in a hybrid world
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931897  Title: Unsteady flow phenomena and volume effects in automotive engines manifolds.
931900  Title: Detecting knock in noisy spark ignition engines
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Title: Rapid evaluation of powertrain subsystems and components
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Title: Oil development for Nascar racing
Title: Improvements to maximize power in a restricted 2002 Formula SAE base engine
Title: Racing applications and validation of a hard-carbon, thin-film coating
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<td>Turbocharged, spark ignition, two-stroke engine</td>
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</table>
Title: An analysis of the probable effects of engine geometry on the inlet pipe pressure, flow and engine volumetric efficiency

Title: Design of a land-speed record motorcycle engine

Title: Numerical study of volumetric efficiencies in a high-speed, four valve, four cylinder, spark ignition engine

Title: Numerical correlation of combustion evolution and port and combustion chamber shape in a high-speed, four-valve, spark ignition engine

Title: Impact of accelerative forces on performance in race engines with wet-fuel manifolds

Title: Alternative performance turbocharger bearing design

Title: Advanced numerical simulation techniques for fatigue and NVH optimization of motorsport engines

Title: Abrasive flow machining of cylinder heads and its positive effects on performance and cost characteristics

Title: Camshaft timing drive analysis for a Winston Cup race engine

Title: Computer optimization of camshaft lift profiles for a NASCAR V-8 engine with restrictor plate

Title: Optimizing internal combustion engine performance through response surface methodology

Title: Experimental and computational analysis of a high-performance motorcycle engine

Title: Relationship between discharge coefficients and accuracy of engine simulation

Title: Coefficients of discharge in high performance two-stroke engines

Title: Cylinder pressure analysis in high performance two-stroke engines

Title: Numerical optimization of a racing engine with variable intake and exhaust geometry and valve actuation

Title: An analysis of the output of the 1993 3.5L Chrysler-Lamborghini CL-01 Formula 1 engine

Title: The Chrysler/Lamborghini 3.5L Formula One engine: control system development and calibration methodology

Title: Beyond rapid prototyping—A seamless transition from CAD to manufacturing of functional metal parts with complex geometry

Title: The optimization of the coolant system flow in a NASCAR Winston cup engine

Title: Engine knock, a renewed concern in motorsports—a literature review

Title: Comparison of V10 and V12 F1 engines

Title: Comparison between V12 and W12 F1 engines

Title: IRL Aurora V8 design and development

Title: Empiricism and simulation in the design of the high performance four-stroke engine

Title: Reconstruction of Formula 1 engine instantaneous speed by acoustic emission analysis

Title: Simulation of a high performance turbocharged S.I. engine
Title: Design and development of an 850 cc single crankshaft V-4 two-stroke engine for SCCA D-sports racing
Title: Measurement of exhaust gas temperatures in a high performance two-stroke engine
Title: Synthesis of a Formula SAE engine

Powertrain and Fluid Systems Conference and Exhibition

2002-01-2655 Title: Stratified mixture formation and piston surface wetting in a DISI engine

2002-01-2656 Title: Fuel-air mixing homogeneity and performance improvements of a stratified-charge DISI combustion system
2002-01-2657 Title: Dynamometer development results for a stratified-charge DISI combustion system
Title: Fuel economy and engine-out emissions from a single-cylinder, two-valve, direct-injection S.I. engine operating in the stratified-combustion regime

2002-01-2658 Title: A study of injector deposits, combustion chamber deposits (CCD) and intake valve deposits (IVD) in direct injection spark ignition (DISI) engines

2002-01-2659 Title: Reducing deposits in a DISI engine
2002-01-2660 Title: Flash-boiling effects on the development of gasoline direct-injection engine sprays
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2002-01-2673 Title: Experimental and numerical study of spray generated by a high-pressure gasoline swirl injector

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2002-01-2701 Title: Development and validation of a knock model in spark ignition engines using a CFD code
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Title: Improvement of repeatability in tailpipe emission measurement with direct injection spark ignition (DISI) vehicles

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Title: Modelling the effects of combustion variability for application to idle speed control in SI engines

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Title: The effects of engine speed and injection pressure transients on gasoline direct injection engine cold start

Title: Soft spray formation of a low-pressure, high-turbulence fuel injector for direct-injection gasoline engines

Title: Some concepts of DISI engine for high fuel efficiency and low emissions

Title: LIF characterization of intake valve fuel films during cold start in a PFI engine

Title: Experimental investigation of changing fuel path dynamics in twin-independent variable camshaft timing engines

Title: Experimental study of a hybrid electrohydrodynamic, air-assisted liquid atomizer

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Title: Kettering University's design of an automotive-based, four-stroke-powered clean snowmobile

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Title: The University of Alberta four-stroke Ski-Doo MXZ-X conversion

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Title: Influence of atomization quality on mixture formation, combustion and emissions in a MPI-engine under cold-start conditions—Part I

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Title: The New DaimlerChrysler 5.7L HEMI V-8 engine: Design and advanced simulation techniques

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Title: A physical solution to engine knock

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Title: Turbulent burning velocities of outwardly propagating flames

Title: Mechanism of combined combustion of premixed gas and droplets

Title: A study of LPG lean burn for a small SI engine

Title: Performance, fuel economy, and emissions optimization for a 2.2L multipoint fuel injection gasoline engine

Title: A new experimental method for determining port-generated swirl flow

Title: HCCI combustion phasing in a multi-cylinder engine using variable compression ratio

Title: Characterization of pressure waves in HCCI combustion

Title: The effect of POx on the autoignition chemistry of n-heptane and isooctane in an HCCI engine

Title: Simulation of HCCI—Addressing compression ratio and turbocharging

Title: The effect of in-cylinder flow and turbulence on HCCI operation

Title: Piston-liner crevice geometry effect on HCCI combustion by multi-zone analysis
Title: A computer-generated reduced iso-octane chemical kinetic mechanism applied to simulation of HCCI combustion

Title: Development of the unburned exhaust gas ignition (UEGI) technology to achieve fast light-off of catalysts and emissions reduction

Title: Development of piston friction force measurement system

Title: Injector durability and emissions from liquid LPG port-injected spark ignition engine

Title: Engine cycle simulation of ethanol and gasoline blends

Title: Numerical study of the effects of droplet size distribution on fuel transport and air-fuel mixing in a gasoline direct-injection engine

Title: Contributors to the fuel economy advantage of DISI engines over PFI engines

Title: Experimental investigation into the liquid sheet break-up of high-pressure DISI swirl atomizers

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Title: In-cylinder tumble flow characteristics and implications for fuel/air mixing in direct injection gasoline engines

Title: Development and analysis of a spray-guided DISI combustion system concept

Title: Gasoline injection and spray combustion in a cell with conditions typical of direct injection engines

Title: New family of 1.1-liter/cylinder structural/agricultural engines with high-pressure, common-rail injection

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Title: Optimizing engine concepts by using a simple model for knock prediction

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Title: The analysis of observed burn rates in a spark-ignition engine and the relation to fuel properties

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Title: A transient, multi-cylinder engine model using Modelica

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Title: Influence of the intake system design on a small spark-ignition engine performance—A theoretical analysis

Title: Impact of railplug circuit parameters on energy deposition and durability

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Title: Determination of residual gas fraction in IC engines

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2003-01-3151 | Title: In-nozzle and spray diagnostic techniques for real-sized pressure swirl and plain orifice gasoline direct injectors
2003-01-3152 | Title: Optical investigations in stratified gasoline combustion systems with central injector position leading to optimized spark locations for different injector designs
2003-01-3161 | Title: Characterization of mixture formation processes in DI gasoline engine sprays with split injection strategy via laser absorption and scattering (LAS) technique
2003-01-3162 | Title: A study of injector deposits, combustion chamber deposits (CCD) and intake valve deposits (IVD) in direct injection spark ignition (DISI) engines II
2003-01-3163 | Title: Fuel injection pressure effects on the cold-start performance of a GDI engine
2003-01-3164 | Title: Formation of fuel mixture in a SI two-stroke engine with direct pneumatic injection
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2003-01-3186 | Title: Fuel effects on SIDI efficiency and emissions
2003-01-3202 | Title: Direct measurement of powertrain component efficiencies for a light-duty vehicle with a CVT operating over a driving cycle
2003-01-3208 | Title: Statistical process control and design of experiment process improvement methods for the powertrain laboratory
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2003-01-3211 | Title: Novel two-stroke engine concept, feasibility study
2003-01-3212 | Title: A study on a spark plug for charging of stratified mixture in a local area
2003-01-3214 | Title: Supercharging HCCI to extend the operating range in a multi-cylinder VCR-HCCI engine
2003-01-3216 | Title: Ion current sensing for HCCI combustion feedback
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2003-01-3237 | Title: Effects of substantial spark retard on SI engine combustion and hydrocarbon emissions
2003-01-3259 | Title: Engine knock toughness improvement through water jacket optimization
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2000-01-0026 | Title: Active noise cancellation in future air intake systems
2000-01-0027 | Title: Requirements to noise reduction concepts and parts in future engine compartments
2000-01-0028 | Title: Air flow noise of plastic air intake manifolds
2000-01-0036 | Title: Dynamic characteristics of cylindrical hydraulic engine mounts with simple construction utilizing air compressibility
Title: General guidelines for improving burst pressure strength of welded nylon air intake manifolds

Title: Development of plastic intake manifold by DRI process

Title: Establishing thermoplastic cam cover capability in North American market

Title: The reduction of air-rush noise in plastic engine intake manifolds

Title: Manufacturing feasibility of all-aluminum automotive engines via application of high silicon aluminum alloy

Title: Development of a hard surfacing process for the inner bores of aluminum engines

Title: An approach on modeling for functional development of automobile

Title: Objective evaluation of exciting engine sound in passenger compartment during acceleration

Title: Aspects of laminar and turbulent burning velocity relevant to SI engines

Title: The phenomena of flame propagation in a cylindrical combustion chamber with a swirling mixture

Title: Bi-modal combustion chamber for a stratified charge engine

Title: Performance of a flame jet ignition system in a two-stroke engine

Title: A semi-empirical model of spark-ignited turbulent flame growth

Title: End-gas temperature measurements in a DOHC spark-ignition engine using CARS

Title: Measurement of fuel distribution in the piston cavity of direct injection SI engine by using LIF

Title: A visualization study of liquid fuel distribution and combustion inside a port-injected gasoline engine under different start conditions

Title: Multicomponent liquid and vapor fuel distribution measurements in the cylinder of a port-injected, spark-ignition engine

Title: Cyclic variability of large-scale turbulent structures in directed and undirected IC engine flows

Title: Prediction of tumble speed in the cylinder of the 4-valve, spark-ignition engines

Title: Gasoline direct injection—A promising engine concept for future demands

Title: Technology assessment of boosted direct-injection, stratified-charge gasoline engines

Title: Effect of compression ratio on the combustion of a pressure-charged, gasoline direct-injection engine

Title: Turbocharging the DI gasoline engine

Title: Optical investigation of knocking location on S.I. engines with direct-injection

Title: Fundamental characteristics of an air-assisted, direct-injection combustion system as applied to 4-stroke automotive gasoline engines

Title: Development of a charge motion controlled combustion system for DI SI engines and its vehicle application for EU-4 emission regulations

Title: Modification of the injection map of a motor of port fuel injection, four times, with arrangement to the European drive cycle
Title: Nonlinear model-based throttle control

Title: Determination of a nonlinear, unified and robust individual cylinder air-fuel ratio estimator

Title: A spray/wall interaction submodel for the KIVA-3 wall film model

Title: Numerical modeling of fuel sprays in DISI engines under early-injection operating conditions

Title: A turbulent combustion model for a stratified charged, spark ignited internal combustion engine

Title: Modeling and simulation of a cooling system using multiport approach

Title: CFD simulation by automatically generated tetrahedral and prismatic cells for engine intake duct and coolant flow in three days.

Title: Simplified engine combustion diagnostics using "synthetic" variables

Title: A time-domain-based diagnostic system for misfire detection in spark-ignition engines by exhaust-gas pressure analysis

Title: Misfire detection on S.I. engines, by instantaneous torque analysis

Title: High wear and heat resistant P/M valve guides

Title: Self-lubrication type P/M materials for the lead-free valve seat

Title: New copper alloy powder for laser-clad valve seat used in aluminum cylinder heads

Title: Assembled camshaft with sintered cam lobes: Torsional fatigue strength and wear performance

Title: An extraordinary rotor pump

Title: Evaluation of press & sinter connecting rods with warm compaction process

Title: Performance of high-density p/m connecting rods

Title: Application of a new combustion concept to direct-injection gasoline engine

Title: Enhanced mixture preparation approach for lean stratified SI combustion by a combined use of GDI and electronically controlled valve-timing.

Title: Effects of swirl and tumble on in-cylinder fuel distribution in a central injected DISI engine

Title: Characteristics of mixture formation and combustion in a spray-guided concept gasoline direct-injection engine: An experimental and numerical approach

Title: Application of optical techniques to the study of mixture preparation in direct injection gasoline engines and validation of a CFD model.

Title: Momentary engine speed signal measurement: Noise analysis and compensation

Title: Unconventional approach to achieving a default throttle position

Title: Calorimetric characterization of commercial ignition systems

Title: Investigation of misfire nature using optical combustion sensor in a SI automotive engine

Title: Ion sensing for combustion stability control of a spark-ignited, direct-injected engine

Title: Crankangle-based torque estimation: Mechanistic/stochastic

Title: Torque estimation and misfire detection using block angular acceleration
Title: An universally applicable thermodynamic method for T.D.C. determination
Title: A valvetrain design analysis tool with multiple functionality
Title: Engine valve temperature simulation system

Title: Performance scaling of spark-ignition engines: Correlation and historical analysis of production engine data
Title: Optimization of a four-stroke engine by means of experimental and 1-D numerical analysis
Title: Control-oriented modeling of a pressure wave supercharger
Title: Modeling the effect of plenum-runner interface geometry on the flow through an inlet system
Title: On the flow modeling through the valve assembly in engine cycle simulations

Title: Development of a dedicated ethanol (E-85)-powered Chevrolet Silverado for the 1999 Ethanol Vehicle Challenge
Title: Optimization of an engine cradle in frequency domain
Title: A study on the balancing of the three-cylinder engine with balance shaft
Title: Development of supercarburized tappet shim to improve fuel economy
Title: Aspects of mixture formation and combustion in GDI engines
Title: Combustion in spark ignition engines with direct injection
Title: Strategies for future engine combustion systems—Homogeneous or stratified charge
Title: Modeling of the interaction of intake flow and fuel spray in DISI engines
Title: Using 1-D and 3-D models for the simulation of gas exchange processes
Title: Modeling the time-dependent flow through a throttle valve
Title: Second generation of high-response V6 Engine series (3.0 and 3.5 liters)
Title: Similarity rules and parametric design of race engines
Title: Development of the high-power, low-emission engine for the "Honda S2000"
Title: Development of the high-speed 2ZZ-GE engine
Title: AVL Spectros - A concept for lightweight modular engine design
Title: An integrated powertrain (IPT) model—Stage one
Title: Low emission technologies for high-performance handheld outdoor products
Title: Analysis of a stratified charging concept for high-performance, two-stroke engines
Title: Scavenging flow optimization of two-stroke diesel engine by use of CFD
Title: Techniques for manufacturing and coating liners of small engines
Title: Development of P/M titanium Engine valves
Title: Dynamic analysis of a 3D finger follower valve train system coupled with flexible camshafts
Title: The effect of crankshaft offset on piston friction force in a gasoline engine
Title: Long-term testing of Base Resistant Elastomers (BRE) suitable for power cylinder systems
Title: Combustion-pressure-based engine management system

Title: Approximation and control of the engine torque using neural networks

Title: In-cylinder pressure estimation from structure-borne sound

Title: Cylinder-pressure-based engine control using pressure-ratio-management and low-cost non-intrusive cylinder pressure sensors

Title: Closed-loop control of spark advance and air-fuel ratio in SI engines using cylinder pressure

Title: Engine/powertrain/vehicle modeling tool applicable to all stages of the design process

Title: Identification and validation of an air mass flow predictor using a nonlinear stochastic state representation

Title: Entropy generation in flow restrictions: Modeling and identification for engine control

Title: A computer code for S.I. engine control and powertrain simulation

Title: An engine coolant temperature model and application for cooling system diagnosis

Title: Operating characteristics of a spark-ignition engines using the second law of thermodynamics: Effects of speed and load

Title: A technique for estimating completeness of combustion and its use in modeling cycle-by-cycle variations in combustion

Title: Heat release regressions for GDI engines

Title: A model for the estimation of inducted air mass and the residual gas fraction using cylinder pressure measurements

Title: A modeling and experimental study of initial flame kernel development and propagation in SI engines

Title: Use of multizone combustion models to analyze and predict the effect of cyclic variations on SI engines

Title: Engine thermal management with electric cooling pump

Title: FEA computations applied to engine cooling fans

Title: Application of sinter-hardenable materials for advanced automotive applications such as gears, cams, and sprockets

Title: IC-engine downsizing and pressure-wave supercharging for fuel economy

Title: An analysis of the parallel combustion two-stroke engine

Title: Concept of interactive development of a GDI system with high-pressure modulation

Title: Analysis method for the spray characteristics of a GDI system with high pressure modulation

Title: A study on fuel spray pattern control of fuel injector of gasoline direct injection engines

Title: A review of investigations using the second law of thermodynamics to study internal-combustion engines
2000-01-1084  Title: Prediction of heat transfer to the walls for autoignition-related situations in SI engines
2000-01-1086  Title: A standard method for measuring fuel system pulse damper attenuation
2000-01-1087  Title: Twice Electronic Fuel Injection (TEFI)—A new idea of lean combustion in S.I. engines
2000-01-1088  Title: A stochastic model of the fuel injection of the SI engine
2000-01-1207  Title: Cyclic variations of initial flame kernel growth in a Honda VTEC-E lean-burn spark-ignition engine
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Title: Misfire detection from ionization feedback utilizing the SmartFire® plasma ignition technology

SAE 2001 World Congress

Title: Co-simulation: Developing a virtual vehicle modeling capability

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Title: Meta-CVD system—An electro-mechanical cylinder and valve deactivation system

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Title: VarioCam Plus—A highlight of the Porsche 911 turbo engine

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Title: Numerical modeling for auto-ignition and combustion processes of fuel sprays in high-pressure environment

Title: Controlling cyclic combustion variations in lean-fueled spark-ignition engines

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Title: Active damping of engine idle speed oscillation by applying adaptive PID control

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Title: High performance idle speed control applying the sliding mode control with H robust hyperplane

Title: Secondary O,feedback using prediction and identification sliding mode control—Second report

Title: Further development of an Ion Current Combustion Control System (ICCS)

Title: A new approach for a multi-fuel, torque-based ECU concept using automatic code generation

Title: Preparing for CARTRONIC—Interface and new strategies for torque coordination and conversion in a spark ignition engine-management system
Title: An approach to torque-based engine management systems

Title: Design and implementation of a new generation of turbo charger test benches using hot gas technology

Title: Saturn engine stop-start system with an automatic transmission

Title: Newly developed AZ series engine

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Title: General Motors Corporation powertrain's new VORTEC 4200 inline 6 engine

Title: Engine control using intake, combustion and transmission models

Title: Feasibility of detailed vehicle modeling

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Title: Nondestructive measures of structural integrity in powder metal parts using resonance—Case study

Title: Metal injection-molded components in automotive applications

Title: Performance comparison between chain and belt cam-drive systems

Title: IAV's steam engine—A unique approach to fulfill emission levels from SULEV to ZEV

Title: Mechanical performance of v-ribbed belt drives (theoretical modeling)

Title: Research on adaptation of pressure wave supercharger (PWS) to gasoline engine

Title: Approximation of IC engine valve acceleration from proximity probe displacement data

Title: Development of a new air cleaner filter

Title: P/M high-speed steels for valve seat insert application

Title: The development of sintered materials containing dispersed die steel hard particles for intake valve seat inserts

Title: Impact of decarburization on the fatigue life of powder metal-forged connecting rods

Title: Newly developed P/M materials to replace malleable and ductile cast irons

Title: Successes in transportation casting designs

Title: An ADI crankshaft designed for high performance in TVR's Tuscan Speed Six sports car

Title: DHT alloys: New self-lubricating, wear and gall resistant, high-strength aluminum alloys

Title: Development of creep-resistant magnesium alloys for powertrain applications: Part 1 of 2

Title: Tensile creep and microstructure of magnesium-aluminum-calcium-based alloys for powertrain applications—Part 2 of 2

Title: Heat resistant magnesium alloys for powertrain applications

Title: Bolt-load retention behavior of a die cast magnesium-rare earth alloy

Title: Optimizing mechanical performance of injection molded multiple gated rotating thermoplastic components: Part 1—Consideration of structural analysis and knit line effects
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<td>Optimizing mechanical performance of injection molded multiple gated</td>
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<td>rotating thermoplastic components: Part 2—Knit line/weld inter-phase</td>
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<td>High-energy spark-flow coupling in an IC engine for ultra-lean and</td>
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<td>high EGR mixtures</td>
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<td>Mixing control and combustion in gasoline direct injection engines</td>
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<td>for reducing cold-start emissions</td>
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<td>Fuel evaporation parameter identification during SI cold start</td>
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<td>Dynamic EGR estimation for production engine control</td>
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<td>A model-based environment for production Engine Management System</td>
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<td>(EMS) development</td>
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<td>On-board optimization of driveability character depending on driver</td>
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<td>Object-oriented modeling of intake air flow control system</td>
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<td>A production wide-range AFR sensor response diagnostic algorithm for</td>
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<td>direct-injection gasoline application</td>
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<td>OBD engine fault detection using a neural approach</td>
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Title: A system for the static and dynamic measurement of cylinder head to block separation in operating engines

Title: Elastomer moulded gaskets for stationary structural components in combustion engines

Title: Optimization of swirl and tumble in KMC 2.4L lean burn engine

Title: Combustion chamber deposit measurement techniques

Title: Combustion chamber deposit interference effects in late model vehicles

Title: Scavenging of a firing two-stroke spark-ignition engine

Title: Investigation of the fuel distribution in a two-stroke engine with an air-assisted injector

Title: A generic engine simulation program applied to the development of a V6 automotive two-stroke engine

Title: Development of a pumpless air-assisted injection system for two-cycle, S.I. engines

Title: Theoretical and experimental investigations of pressure die cast cylinder with pressed conical sleeve applied in two-stroke low-power engine

Title: The Northstar cam bearing caps: A new application for aluminum P/M

Title: Automotive main bearing caps manufactured by powder metallurgy

Title: The influence of mixture preparation on a warm 1.9L Ford engine

Title: Measurement of the wall-wetting dynamics of a sequential injection spark ignition engine

Title: New variable intake and mixture formation system for multi-valve SI engines

Title: A critical study of the dual versus single plug systems in S.I. engines

Title: Flow and combustion in a four-valve, spark-ignition optical engine

Title: An investigation of steady flow through a curved inlet port

Title: Numerical prediction of fuel secondary atomization behavior in SI engine based on the oval-parabola trajectories (OPT) model

Title: A PC-based fuel and ignition control system used to map the 3-D surfaces of torque and emissions versus air-fuel ratio and ignition timing
Title: Synchronous, simultaneous optimization of ignition timing and air-fuel ratio in a gas-fueled spark ignition engine

Title: Valve lifter guides—The development of a nylon internal engine component

Title: The effect of engine mounts on the noise and vibration behavior of vehicles

Title: High performance active noise control system for engine noise in a car cabin

Title: Vehicle interior noise prediction using sound intensity measurement

Title: Effect of resonator location on resonator effectiveness using NASTRAN mode shape prediction analysis and LAMPS acoustic model

Title: Rapid engine development system for internal combustion engines: from concept to production validation

Title: Spatially resolved determination of the turbulent flame speed from CH band emission measurements under engine conditions

Title: Early flame acceleration measurements in a turbulent spark-ignited mixture

Title: Torsional response of automotive timing chain systems

Title: Improvement of multi-layer aluminum-silicon-tin bearings for high power engines through a reinforced intermediate layer

Title: Achieving a selected load distribution in the bolted joint of a cylinder head of highly variable stiffness and contact geometry

Title: Analysis of stick-slip noise of piston ring

Title: Engine experiments on the effects of design and operational parameters on piston secondary motion and piston slap

Title: A numerical model of piston secondary motion and piston slap in partially flooded elastohydrodynamic skirt lubrication

Title: Three dimensional crankshaft vibration analysis including gyroscopic effect

Title: A preliminary study of chemically enhances autoignition in an internal combustion engine

Title: Oil aeration in high speed combustion engines

Title: On-road tests using small crankcase-supercharged 4-stroke cycle engines

Title: Development of aluminum powder metallurgy composites for cylinder liners

Title: The development and performance simulation of polychloroprene high temperature bush type engine mount

Title: Effect of elevated piston temperature on combustion chamber deposit growth

Title: Polycrylate elastomers in engine gasket applications

Title: Predictive engine spark timing control
Title: In-cylinder fuel distribution, flow field, and combustion characteristics of a mixture injected SI engine

Title: Single-shot temporally and spatially resolved chemiluminescence spectra from an optically accessible SI engine

Title: Controlling combustion in a spark ignition engine by quantitative fuel distribution

Title: Investigations of the influence of mixture preparation on cyclic variations in a SI-engine, using laser induced fluorescence

Title: A model for converting SI engine flame arrival signals into flame contours

Title: Fuel distributions in a firing direct-injection spark-ignition engine using laser-induced fluorescence imaging

Title: Study of anti-corrosive property of engine coolant for aluminum cylinder heads

Title: Single-surface flame quenching distance dependence on wall temperature, quenching geometry and turbulence

Title: Spark spectroscopy for spark ignition engine diagnostics

Title: Development experience of a multi-cylinder CCVS engine

Title: Development of Yamaha Tumble Induction Control System (YTIS)

Title: An experimental study of connecting rod big ends

Title: In-cylinder flow measurement and its application for cyclic variation analysis in a two-stroke engine

Title: Studies on the cyclic variations of single cylinder two-stroke engines—Cycle analysis

Title: Driveability evaluation in two-stroke engine at part throttle operation by torque map

Title: Investigating scavenge pressure of a two-stroke engine with a view to alleviate thermal conditions

Title: Ram-tuned and air-assisted direct fuel injection systems applied to a SI two-stroke engine

Title: An experimental comparison between air-assisted injection system and high pressure injection system at 2-stroke engine

Title: Spray formation of air-assist injection for two-stroke engine

Title: A new simplified carburetor for small engines

Title: Prepared discussion of "a new simplified carburetor for small engines"

Title: Numerical analysis of gasoline engine coolant flow

Title: Full cycle computational fluid dynamics calculations in a motored four valve pent room combustion chamber and comparison with experiment

Title: Computation and measurement of flow and combustion in a four-valve engine with intake variations
Title: Sealing performance of an embossed rubber coated metal gasket
Title: Trap protection by limiting A/F ratio during regeneration
Title: Development of hard sintered tappet and new testing method
Title: Sinter diffusion bonded idler sprocket of automotive engine
Title: HAJI operation in a hydrogen-only mode for emission control at cold start
Title: Automotive engine modeling for real-time control using MATLAB/SIMULINK (ILIDS)
Title: Studies of mixture preparation in a spark-ignition engine using Interferometric Laser Imaging for Droplet Sizing (ILIDS)
Title: Fuel distribution effects on the combustion of a direct-injection stratified-charge engine
Title: Combustion chambers for natural gas SI engines—Part I: fluid flow and combustion
Title: Structural design and evaluation of composite closure systems for under-the-hood applications
Title: The spray characteristics of automotive port fuel injection—A critical review
Title: Influence of injection timing on in-cylinder fuel distribution in a Honda VTEC-E engine
Title: Fuel droplet entrainment studies for minimization of cold-start wall-wetting

Title: Spray formation observation and fuel film development measurements in the intake of a spark ignition engine
Title: Combustion chambers for natural gas SI engines. Part 2: combustion and emissions
Title: A new technique for measuring the deformation of cylinder bores during engine operation
Title: Analysis of cylinder bore distortion during engine operation
Title: The effect of length on the acoustic attenuation performance of concentric expansion chambers: an analytical, computational, and experimental investigation
Title: Optimum design of engine and body mounts at total system level using unconstrained minimization
Title: Convective heat transfer for pulsating flow in the takedown pipe of a V-6 engine
Title: 3-D LDV measurement of in-cylinder air flow in a 3.5L four-valve SI engine
Title: Analysis of fuel behavior in the spark-ignition engine start-up process
Title: An experimental study of combustion chamber deposits and their effects in a spark-ignition engine
Title: Cyclic variations in a lean-burn spark-ignition engine without and with swirl
Title: Development of KMC 2.4L lean burn engine
Title: Heat transfer to the combustion chamber walls in spark-ignition engines
Title: The impact of combustion phasing on cycle-by-cycle performance of a spark-ignition engine
Title: Development of the stratified charge and stable combustion method in DI gasoline engines
Title: Optimum control of an S.I. engine with a Lambda=5 capability

Title: Studies of knock in a spark-ignition engine with "CARS" temperature measurements and using different fuels
Title: Fatigue analysis of crankshafts using nonlinear transient simulation techniques
Title: Influence of material and mechanical properties on thermal fatigue life of aluminum castings
Title: Reynolds stress components in the flow field of a motored reciprocating engine

Title: An investigation of fluid flow during induction stroke of a water analog model of an IC engine employing LIPA
Title: A study of the cycle-to-cycle variation of in-cylinder flow in a motored engine through digital image processing of visualized images
Title: A dynamic water flow visualization rig for automotive combustion system development
Title: Characterization of barrel swirl motion under steady flow conditions
Title: Barrel-swirl behavior in a four-valve engine with pentroof chamber

Title: Mechanism of combustion chamber deposit interference and effects of gasoline additives on CCD formation
Title: A test technique to evaluate the injector nozzle deposit formation tendency of a spark-ignition fuel

Title: A technique for evaluating octane requirement additives in modern engines on dynamometer test stands
Title: A probabilistic gasket design method
Title: New light-weight 3-liter V6 Toyota engine with high-output torque, good fuel economy and low-exhaust emission levels
Title: Analytical engine design methods: a review
Title: Powertrain systems definition process
Title: Turbulence and cycle-by-cycle variation of mean velocity generated by swirl and tumble flow and their effects on combustion
Title: Cycle-by-cycle variations in combustion and mixture concentration in the vicinity of spark plug gap
Title: Tickford five valve per cylinder technology for optimized performance and combustion
Title: The application of a lost motion VVT system to a DOHC SI engine
Title: Practical use of two piston ring set for gasoline engine
Title: Parametric design of helical intake ports
Title: Model-based air-fuel ratio control of a lean multi-cylinder engine
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Title: A review of ion nitrided piston ring surface treatment development and the resultant ability to provide improved operating capability
Title: Effect of piston top ring design on oil consumption
Title: An experimental study of the effect of cylinder bore finish on engine oil consumption
Title: Oil separation in crankcase ventilation—New concepts through system analysis and measurements
Title: Titanium alloy bar suitable for highly efficient wear-resistance treatment
Title: Finite element study of a composite material sump pan of an I.C. engine
Title: Experimental and analytical evaluation of contoured thrust bearings
Title: AlSn10Ni2MnCu—A new high strength Al-bearing material
Title: Development of new aluminum alloy bearing with overlay
Title: An advanced aluminum-tin-silicon engine bearing alloy and its performance characteristics
Title: Response of aluminum alloys to temperature exposures observed in automotive service
Title: Insulated expansion tank (IET) and thermal storage for engine cold start
Title: Near-wall unsteady premixed flame propagation in SI engines

Title: Effects of swirl and spark plug shape on combustion characteristic in a high speed single-shot visualized SI engine
Title: Experimental study on spark ignition of flowing combustible mixtures
Title: Analysis of knocking mechanism applying the chemical luminescence method
Title: A jet dispersed combustion (JDC) method to stimulate lean burning in SI piston engines
Title: Underhood thermal management by controlling air flow

Title: Air flow and heat transfer analysis of an automotive engine radiator to calculate air-to-boil temperature
Title: Extended oil drain intervals: Conservation of resources or reduction of engine life?
Title: Effects of lubricant composition on fuel efficiency in modern engines
Title: Throttle body at engine idle—Tolerance effect on flow rate
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Title: 1996 GM 7.4 liter engine upgrade
Title: Bench test for scuff evaluation of surface modified piston and bore materials
Title: A diamond-like carbon coating for aluminum alloy piston/bore application
Title: Classical engine design calculations using spreadsheets
Title: Modeling of the intake manifold filling dynamics
Title: An overview of misfiring cylinder engine diagnostic techniques based on crankshaft angular velocity measurements
Title: Instantaneous crankshaft torque measurement in cars
Title: Mixture formation during cold starting and warm-up in spark ignition engines
Title: Extent of oxidation of hydrocarbons desorbing from the lubricant oil layer in spark-ignition engines
Title: Modeling near wall temperature gradients in "motored" spark ignition engines
Title: Sensitivity of pressure rise to spark energy and flame travel velocity in a spark ignition engine
Title: Combustion modeling in SI engines with a peninsula-fractal combustion model
Title: Practical experience with passenger car engine blocks produced in high quality compacted graphite iron
Title: Simulating the dynamic behavior of chain drive systems by advanced CAE programs

Title: Pitch difference and belt tooth configuration effect on load distribution of timing belt using FEM analysis
Title: A review of ceramic tribology and application of Si-based ceramics to engine valves/seat inserts
Title: Study on mechanism of lubricating oil consumption caused by cylinder bore deformation
Title: PIFFO - piston friction force measurements during engine operation
Title: Dynamic model and computer simulation of valve train assemblies with hydraulic lash adjuster
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Title: Determination of optimal counterweight configurations for multithrow crankshafts

Title: Development of a locally nondimensional, mathematically symmetric cam profile for optimal camshaft design
Title: Piston ring conformability in a distorted bore
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Title: Use of an implicit filtering algorithm for mechanical system parameter identification
Title: ODECS—A computer code for the optimal design of S.I. engine control strategies
Title: Pro-Ject air-assisted fuel injection system for two-stoke S.I. engines
Title: Numerical analysis of the performances of small two-stroke engine with direct injection
Title: Automotive calibration of the IAPAC fluid dynamically controlled two-stroke combustion process
Title: Diaphragm injection carburetor (DIC) for stratified-scavenging of small two-stroke gasoline engine
Title: Diaphragm fuel injection system (DFI) for stratified-charging of small two-stroke engine
Title: The effect of transfer port geometry on scavenging flow velocities at high engine speed
Title: Study on exhaust control valves and direct air-fuel injection for improving scavenging process in two-stroke gasoline engines
Title: Measurements and analysis of the exhaust noise of single-cylinder two-stroke engines
Title: PM-connecting-rods: porosity versus performance—An inevitable conflict?

Title: Effect of fuel atomization on the lean-burn characteristics under steady condition in a spark-ignition engine
Title: Method and systems for power control of internal combustion engines using individual cycle cut-off
Title: Diagnosis of the working unevenness of each cylinder by the transient crankshaft speed
Title: Gasoline direct injection: actual trends and future strategies for injection and combustion systems
Title: On the causes of in-cylinder air-fuel ratio excursions during load and fuelling transients in port-injected spark-ignition engines

Title: A model of droplet thermodynamic and dynamic behavior in the port of a port-injected engine

Title: Results of a computer model of droplet thermodynamic and dynamic behavior in the port of a port-injected engine

Title: Correlation between knock intensity and heat transfer under light and heavy knocking conditions in a spark ignition engine

Title: Spark-ignition engine knock control and threshold value determination

Title: A review of the effect of engine operating conditions on borderline knock

Title: Application of QFD correlation matrix technology to engine development time

Title: A newly developed intelligent variable valve timing system—Continuously controlled cam phasing as applied to a new 3-liter in-line-6 engine

Title: A comparative study of variable camshaft phasing and port throttling for performance and emissions

Title: Camless engine

Title: The effect of valve strategy on in-cylinder flow and combustion

Title: Development of a lean-burn engine with a variable valve timing mechanism

Title: Comparison of variable camshaft timing strategies at part load

Title: Effect of early closing of intake-valve on the engine performance in a spark-ignition engine

Title: Influence of late intake-valve opening on the S.I. engine performance in idle condition

Title: Port throttling and port de-activation applied to a 4-valve SI engine

Title: Controlling the load and the boost pressure of a turbocharged SI engine by means of early intake-valve closing

Title: An initial study of variable valve timing implemented with a secondary valve in the intake runner

Title: Combustion control technologies for direct injection SI engine

Title: A study of combustion of hydrogen-enriched gasoline in a spark ignition engine

Title: Design and evaluation of a low emission spark ignition engine cylinder head

Title: The effects of electrode design on mixture ignitability

Title: Continuous variable tumble—a new concept for future lean burn engines

Title: Influence of the inlet port and combustion chamber configuration on the lean-burn behavior of a spark-ignited gasoline engine

Title: Evaluation of IMEP routines and analysis errors

Title: Thermodynamic determination of T.D.C. in piston combustion engines

Title: An experimental study of the cyclic variability in spark ignition engines
Title: Cycle-by-cycle variations in spark ignition engine combustion—Part I: flame speed and combustion measurements and a simplified turbulent combustion model

Title: Cycle-by-cycle variations in spark ignition engine combustion—Part II: modeling of flame kernel displacements as a cause of cycle-by-cycle variations

Title: Development of engine roughness tester

Title: Engine knock analysis and detection using time-frequency analysis

Title: Misfire detection in a high-performance engine by the principal component analysis approach

Title: Mathematical modeling of wall films formed by impinging sprays

Title: Modeling and simulation of thin liquid films formed by spray-wall interaction

Title: A high temperature and high pressure evaporation model for the KIVA-3 code

Title: Engine flow calculations using a Reynolds Stress model in the Kiva-II code

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Title: Contribution of nuclear physics to engine design: Application of surface layer activation to tappet rotation measurements

Title: Piston ring microwelding phenomenon and methods of prevention

Title: Exciplex fluorescence visualization systems for pre-combustion diagnosis of an automotive gasoline engine

Title: Development of a new measurement technique for the investigation of end-gas autoignition and engine knock

Title: Quantitative in-cylinder fluid composition measurements using broadband spontaneous Raman scattering

Title: ILIDS measurements of the evaporation of fuel droplets during the intake and compression strokes in a firing lean burn engine

Title: Understanding the CCVS stratified EGR combustion system

Title: Development of the Ford QVM CNG bi-fuel 4.9L F-Series pickup truck

Title: An experimental study of air-reformed natural gas in spark-ignited engines

Title: An optical sensor for determination of combustion parameters in a natural gas fuelled spark ignition engine

Title: Cavitation intensity measurements for internal combustion engines

Title: Rapid evaluation of variable valve lift strategies using 3-D in-cylinder flow measurements

Title: Hybrid traction control system utilizing an engine inertia brake

Title: The use of frequency domain vibration methods for automotive component durability

Title: The importance of crankshaft surface texture to bearing system reliability
Title: Analysis of engine main bearing excitation by application of cranktrain modelling and optimization methods
Title: Effects of EHD contacts upon the bearing and housing behavior
Title: Development of bearing with composite overlay for high-performance engines
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Title: IC engine air/fuel ratio feedback control during cold start
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Title: An improved method for determining the TDC position in a PV-diagram (first report)
Title: A computational investigation of unsteady heat flux through an I.C. engine cylinder wall including soot layer dynamics
Title: The potential of the variable-stroke spark-ignition engine
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Title: Stratified and homogeneous charge operation for the direct-injection gasoline engine—High power with low fuel consumption and emissions
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Title: Application of engineering thermoplastics for sealing automotive engines
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Title: Engine valve stem seal II, improved lip with PTFE layer for oil leakage control
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Title: Identification of discharge coefficients for flow through valves and ports of internal combustion engines
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Title: A new 2.3L DOHC engine with balance shaft housing—Steps of refinement and optimization
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Title: Direct air injection for substantial improvement of SI engine cold start performance
Title: On the future of combustion in piston engines
Title: Hydrostatic lock and detonation: spark plugs as pressure relief devices

Title: The improvement of lean mixture combustion in the spark ignition engine by stratified charge in large prechamber
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Title: Measurement of air flow around an inlet valve using a pitot probe
Title: Laser spectroscopic investigation of flow fields and NO formation in a realistic SI engine
Title: Simultaneous attainment of low fuel consumption, high output power and low exhaust emissions in direct-injection SI engines

Title: Preliminary investigation of a diffusing-oriented spray stratified combustion system for DI gasoline engines
Title: Evaluation of a concept of DI gasoline combustion using enhanced gas motion
Title: Fuel-spray/charge-motion interaction within the cylinder of a direct-injected, 4-valve, SI engine
Title: Analysis of mixture formation of direct-injection gasoline engine
Title: The effects of mixture stratification on combustion in a constant-volume combustion vessel

Title: Early spray development in gasoline direct-injected, spark-ignition engines
Title: Wavelet analysis of in-cylinder LDV measurements and correlation against heat-release
Title: Effects of intake port geometry on large-scale, in-cylinder flows
Title: Dynamic evolution of the 3-D flow field during the latter part of the intake stroke in an IC engine

Title: Gasoline DI engines: the complete system approach by interaction of advanced development tools
Title: CFD-aided development of spray for an outwardly opening direct-injection gasoline injector

Title: Improvements of GDI-injector optimization tools for enhanced SI-engine combustion chamber layout
Title: Fuel injection strategies to increase full-load torque output of a direct-injection SI engine

Title: A description of the shape of an air-fuel mixture and determination of injection advance angles related to the spark discharges in a gasoline direct-injection engine
Title: GDI: interaction between mixture preparation, combustion system and injector performance

Title: Transient flows in high pressure swirl injectors

Title: Mass-related properties of atomizers for direct-injection SI engines

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Title: Control-oriented modeling of mixture formation phenomena in multi-port-injection SI gasoline engines

Title: Maximizing the torque potential at full load of a 1.8 L multi-valve SI engine

Title: Models for the prediction of performance and emissions in a spark ignition engine—A sequentially structured approach

Title: Life of fuel in engine cylinder

Title: A super-extended Zel'dovich mechanism of NOx modeling and engine calibration

Title: Modeling of 1-D unsteady flows in I.C. engine pipe systems: numerical methods and transport of chemical species

Title: Predesign criteria for exhaust manifolds in I.C. automotive engines

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Title: The volume acoustic modes of spark-ignited internal combustion chambers

Title: A parametric study of knock control strategies for a bi-fuel engine

Title: Gasoline engine knock analysis using cylinder pressure data

Title: Effect of tumble strength on combustion and exhaust emissions in a single-cylinder, four-valve, spark-ignition engine

Title: Combustion system optimization for a new SOHC V8 engine
Title: Matching ignition system multi-spark calibration to the burn-rate of an engine to extend ignitability limits

Title: Prior-cycle effects in lean spark-ignition combustion—fuel/air charge considerations

Title: Effects of intake ports on in-cylinder flow and lean combustion in a 4-valve engine

Title: Up-front prediction of the effects of cylinder head design on combustion rates in SI engines

Title: Measurements of turbulent flame speed and integral length scales in a lean stationary premixed flame

Title: The calculation of heat release energy from engine cylinder pressure data

Title: Cycle-resolved measurements of precombustion fuel concentration near the spark plug in a gasoline SI engine

Title: In situ measurement of fuel absorption into the cylinder wall oil film during engine cold start

Title: Balance shaft conversion of a four-cylinder engine—The challenges of packaging and mechanical integration

Title: Development of Toyota 1ZZ-FE engine

Title: Eliminating prototype tooling in blocks and cylinder heads yields a complete new engine design in 90 days—A case study

Title: Computer simulation of vehicle's performance and fuel consumption under steady and dynamic driving conditions

Title: Critical engine geometry generation for rapid powertrain concept design assessment

Title: Development of a high-performance, 2.5-liter, V6 Hyundai engine

Title: Droplet velocity/size and mixture distribution in a single-cylinder, four-valve, spark-ignition engine

Title: A predictive model for gas fueled spark ignition engine applications

Title: Replacing fuel enrichment in a turbocharged SI engine: Lean burn or cooled EGR

Title: SI engine operation with retarded ignition: Part 1—Cyclic variations

Title: Spark to piston—A concept for combustion stability enhancement on a high-dilution SI engine

Title: Compression ratio and TDC calibrations using temperature-entropy diagram

Title: Air-fuel ratio dependence of random and deterministic cyclic variability in a spark-ignited engine

Title: Spark ignition producer gas engine and dedicated compressed natural gas engine—Technology development and experimental performance optimization

Title: Crank-angle resolved temperature in SI engines measured by emission-absorption spectroscopy

Title: Measurement of instantaneous flamelet surface normals and the burning rate in a SI engine

Title: Investigation of intake timing effects on the cold-start behavior of a spark-ignition engine
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<thead>
<tr>
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<tr>
<td>1999-01-3655</td>
<td>Experimental investigation on the characteristics and on the reproducibility of the flow issuing from a high-pressure, direct-injection nozzle</td>
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<tr>
<td>1999-01-3656</td>
<td>A method for suppressing formation of deposits on fuel injector for direct-injection gasoline engine</td>
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<tr>
<td>1999-01-3660</td>
<td>Investigation of spray formation of DI gasoline hollow-cone injectors inside a pressure chamber and a glass ring engine by multiple optical techniques</td>
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<td>Characteristics of direct-injection gasoline spray wall impingement at elevated temperature conditions</td>
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<td>An experimental investigation on a new squish jet-turbulence combustion chamber for SI engine</td>
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<tr>
<td>1999-01-3668</td>
<td>Optical investigations of a gasoline direct-injection engine</td>
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<tr>
<td>1999-01-3669</td>
<td>A study of lean burn of a 4-stroke gasoline engine by the aid of low-pressure, air-assisted, in-cylinder injection—Part II</td>
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<td>2000-01-2798</td>
<td>The 3-D in-cylinder charge motion of a four-valve SI engine under stroke, speed, and load variation</td>
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<td>2000-01-2799</td>
<td>A comparison of modeled and measured 3-D in-cylinder charge motion throughout the displacement of a four-valve SI engine</td>
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<td>2000-01-2801</td>
<td>Intake-port design for Mitsubishi GDI engine to realize distinctive in-cylinder flow and high charge coefficient</td>
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<td>2001-01-3492</td>
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Title: Effects of engine speed on combustion in SI engines: comparisons of predictions of a fractal burning model with experimental data

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Title: A coupled experimental-theoretical model of flame kernel development in a spark ignition engine

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Title: The effect of valve overlap on idle operation: Comparison of model and experiment

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Title: Simultaneous measurement of light emission and absorption behavior of unburned gas during knocking operation

Title: The detection and quantification of knock in spark ignition engines

Title: Development of a cold-start device for methanol-fueled engines

Title: Surface and tribological characterization of coatings for friction and wear reduction

Title: Partial-load and start-up operations of spark-ignition engine with oxygen enriched air

Title: The potential benefits of intake air oxygen enrichment in spark ignition engine powered vehicle
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Title: Prediction of the performance of spark ignition gas engines including knock

Title: Multidimensional port-and-in-cylinder flow calculations and flow visualization study in an internal combustion engine with different intake configurations

Title: Liquid gasoline behavior in the engine cylinder of a SI engine

Title: An experimental and analytical investigation of the spray structure from automotive port injectors

Title: A numerical simulation of intake port phenomena in a spark ignition engine under cold starting conditions

Title: An approach to charge stratification in lean-burn, spark-ignition engines

Title: A major origin of cyclic energy conversion variations in SI engines: cycle-by-cycle variations of the equivalence ratio and residual gas of the initial charge

Title: Measuring absolute-cylinder pressure and pressure drop across intake valves of firing engines

Title: Air flow distribution on the transient conditions of SI engine

Title: Mechanism of combustion chamber deposit formation

Title: A physical mechanism for deposit formation in a combustion chamber

Title: Performance of thin-ceramic-coated combustion chamber with gasoline and methanol as fuels in a two-stroke SI engine

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Title: Modeling of early pressure rise and flame growth in a spark ignition engine

Title: High efficiency stoichiometric spark ignition engines

Title: Rapid characterization of i.c. engine in-cylinder flow at spark: a synergistic approach using experimental and numerical simulations

Title: Study on validation of turbulent entrainment combustion model for spark-ignition engines

Title: Numerical optimization for in-cylinder processes of a spark ignition engine

Title: Engine durability, emissions and fuel economy studies with special boundary lubricant chemistry

Title: A new approach of planar laser induced fluorescence applied to fuel/air ratio measurement in the compression stroke of an optical S.I. engine

Title: Fuel droplets inside a firing spark-ignition engine

Title: High speed laser tomography analysis of flame propagation in a simulated internal combustion engine - applications to nonuniform mixture

Title: Multiple laser sheet imaging investigation of turbulent flame structure in a spark ignition engine

Title: Cycle-resolved hydrogen flame speed measurements with high speed schlieren technique in a hydrogen direct injection SI engine
Title: Pulsed combustion jet ignition in lean mixtures

Title: A model for flame initiation and early development in SI engine and its application to cycle-to-cycle variations

Title: Flame speeds in a spark ignition engine

Title: Imaging of lean premixed flames in spark-ignition engines

Title: Knock damage mechanisms in spark-ignition engines

Title: A study of octane number requirement of mopeds, scooters and motor cycles

Title: Improving the fuel economy of stoichiometrically fuelled S.I. engines by means of EGR and enhanced ignition—A comparison of gasoline, methanol and natural gas

Title: Particle image velocimetry measurements in a high-swirl engine used for evaluation of computational fluid dynamics calculations

Title: Diluents and lean mixture combustion modeling for SI engines with a quasi-dimensional model

Title: Simulation of the mean flow in the cylinder of a motored 4-valved spark ignition engine

Title: Assessment of k-ε turbulence model in KIVA-II by in-cylinder LDV measurements

Title: A multidimensional numerical model for turbulent premixed flames with fractal geometries

Title: Surface layer which reduces the octane number requirement and ORI in gasoline engines

Title: Characterization and analysis of the phenomena that produce O.R.I.

Title: In-cylinder measurements and analysis on fundamental cold start and warm-up phenomena of SI engines

Title: Ignitability and combustion characteristics of the multi spark capacitor discharge igniter for a lean burn engine

Title: Spectroscopic measurement of radical behavior under knocking operation

Title: Predictions of the knock onset and the effects of heat release pattern and unburned gas temperature on torque at knock limit in S.I. engines

Title: The importance of high-frequency, small-eddy turbulence in spark-ignited, premixed engine combustion

Title: The effects of turbulence on spark-ignited, ultra lean, premixed methane-air flame growth in a combustion chamber

Title: Improvement of combustion from spark ignition engines fueled with dual fuels

Title: Influence of mixture stratification pattern on combustion characteristics in a constant volume combustion chamber

Title: Combustion chamber deposits in spark-ignition engines: A literature review
Title: Crevice flow and combustion visualization in a direct-injection spark-ignition engine using laser imaging techniques

Title: Proposition of a stratified charge system by using in-cylinder gas motion

Title: Comparison of the effects of intake-generated swirl and tumble on turbulence characteristics in a 4-valve engine

Title: Spark anemometry of bulk gas velocity at the plug gap of a firing engine

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Title: Quantitative two-dimensional measurements of nitric oxide and temperature distributions in a transparent square piston SI engine

Title: Droplet characteristics in two cylinders of a firing spark-ignition engine

Title: Studies on friction characteristics of reciprocating engines

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Title: Review and evaluation of lubricated wear in simulated valve train contact conditions

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Title: High-speed photography and image analysis techniques applied to study droplet motion within the porting and cylinder of a 4-valve SI engine

Title: Oxidation of hydrocarbons released from piston crevices of S.I. engines

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Title: An application of simplified average Reynolds equation for mixed lubrication analysis of piston ring assembly in an internal combustion engine

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Title: The effect of injector and intake port design on in-cylinder fuel droplet distribution, airflow and lean-burn performance for a Honda VTEC-E engine

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Title: A comprehensive knock model for application in gas engines

Title: Lean limit and performance improvements for a heavy-duty natural gas engine

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Title: Operating a gasoline engine at constant low temperature conditions. The influence of different fuel droplet sizes

Title: A mechanism with twin harmonic drives for camshaft phase adjustment on DOHC engines

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Title: A micrographic study of deposit formation processes in a combustion chamber

Title: Combustion chamber deposits and knock in a spark-ignition engine—Some additive and fuel effects

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Title: Predictions of residual gas fraction in IC engines

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Title: Improving near-wall combustion and wall heat transfer modeling in SI engine computations
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Title: Influence of valve overlap strategies on residual gas fraction and combustion in a spark-ignition engine at idle
Title: Fluid flow, combustion and efficiency with early or late inlet valve closing
Title: Effects of aerodynamics on fuel consumption of a multivalve S-I engine—Investigation of the instantaneous local heat transfer at part loads and distinct equivalence ratios
Title: Fast responding air/fuel sensor for individual cylinder combustion monitoring
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Title: A quasidimensional model of SI natural gas engines with prechamber
Title: Empirical formula for instantaneous heat transfer coefficient in spark-ignition engine
Title: The effect of combustion chamber geometry in an SI engine

Title: The development of the General Motors 2.2L CNG bi-fuel passenger cars
Method of A/F control during SI engine cold start

The occurrence of flash boiling in a port injected gasoline engine

Influence of air assisted fuel injection on the mixing preparation within the intake ports of SI-engines

Experimental results of the investigation of the mixture preparation in spark-ignition engine

Modularity in spark-ignition engines: a review of its benefits, implementation and limitations

Modeling of ring twist for an IC engine

An attempt at lean burn of a 4-stroke gasoline engine by the aid of low-pressure, air-assisted, in-cylinder injection

Influence of fuel volatility on emissions and combustion in a direct-injection, spark-ignition engine

Stability improvement of direct fuel injection engine under lean combustion operation

Title: The SAE Clean Snowmobile Challenge 2000—Summary and results

Title: Reduced emissions/reduced noise snowmobile

Title: Development of an externally-scavenged direct-injected two-stroke cycle engine

Title: Noise and emission reduction strategies for a snowmobile

Title: 1998 Polaris Indy Trail: An entry by Minnesota State University, Mankato in the "Clean Snowmobile Challenge 2000"

Title: Reduction in emissions and noise from a 500 cc snowmobile

Title: High performances and low noise fans for cooling systems of OHV, trains and cars

Title: Energy-saving control of single-rod hydraulic cylinders with programmable valves and improved working mode selection

Title: Modelling an electronically-controlled magnetic actuator operating a hydraulic valve and cylinder

Title: A comparison of some biodegradable hydraulic fluids and engine oils

Title: Applications of metal matrix composites in high performance racing engines

Title: A closed cycle simulation model with particular reference to two-stroke cycle engines

Title: Modifications of a quad 4 engine to permit late intake valve closure

Title: Performance prediction method for diffusing passages with arbitrary shapes

Title: Reduction of fuel consumption and emissions for a small capacity two-stroke cycle engine

Title: Preignition with high olefin fuels in a 2-stroke SI engine

Title: Estimate of IC engine torque from measurement of crankshaft angular position

Title: Engine diagnostics by dynamic shaft measurement: a progress report
Title: Mathematical modeling of reed valve behavior in high-speed, two-stroke engines
Title: Analysis of in-cylinder pressure data in two-stroke engines
Title: CFD application in compact engine development

Title: Inlet port geometry and flame position, flame stability, and emissions in an SI homogenous charge engine

SAE International Spring Fuels and Lubricants Meeting and Exposition
1999-01-1494 Title: Effects of squish area shape on knocking in a four-valve, spark-ignition engine
2000-01-1785 Title: Investigation of package bearings to improve driveline performance
2000-01-1801 Title: A new diagnostic method of knocking in a spark-ignition engine using the wavelet transform
2000-01-1840 Title: Performance and emission analysis of a non-conventional gasoline engine
2000-01-1884 Title: The effects of driveability on emissions in European gasoline vehicles
2000-01-1894 Title: Comparison between two combustion chambers for a motorcycle racing engine
2000-01-1902 Title: Slit nozzle injector for a new concept of direct injection si gasoline engine
2000-01-1903 Title: Advanced tools for analysis of gasoline direct injection engines
2000-01-1946 Title: Emissions and performance of a carbon fiber reinforced carbon piston
2000-01-1965 Title: Alcohol as automotive fuel-brazilian experience
2000-01-1972 Title: Japan clean air program (jcap)-step 1 study of gasoline vehicle and fuel influence on emissions
2000-01-2061 Title: Low emission propane-fueled lawn and garden engines
2001-01-1890 Title: A review of experimental and simulation studies on controlled auto-ignition combustion
2001-01-1897 Title: HCCI operation of a dual-fuel natural gas engine for improved fuel efficiency and ultra-low NOx emissions at low-to-moderate engine loads
2001-01-1907 Title: Analysis of combustion instability phenomena in a CNG-fueled heavy-duty turbocharged engine
2001-01-1909 Title: Characterization of mixture formation in a direct-injected spark ignition engine
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2001-01-1913 Title: Higher accuracy through combining of quasi-3D (instead of 1D) with true-3D manifold flow models during the simulation of ICE gas exchange processes
2001-01-1953 Title: A study of ignition discharge parameters effects on homogeneous mixtures combustion in engine
2001-01-1954 Title: APIR: A new firing concept for the internal combustion engines—Sensitivity to knock and in-cylinder aerodynamics
2001-01-1956 Title: New data on flame behavior in lean-burn S.I. engine
2001-01-1987 Title: Design tools for prediction of valve recession and solving valve/seat failure problems
2001-01-2022 Title: Piston fuel film observations in an optical access GDI engine
Combustion analysis on piston cavity shape of a gasoline direct injection engine

Simultaneous observation of droplets and evaporated state of liquid butane and DME at low injection pressure

Engine oil aging effects on fuel economy as measured by the EPA FTP vehicle dynamometer test in a gm engine

Development of 0W-20 ILSAC GF-3 gasoline engine oil

Impacts of bore surface finish and coating treatment on tribological characteristics of engine cylinder bores

Effects of gasoline driveability index, ethanol and intake valve deposits on engine performance in a dynamometer-based cold start and warmup procedure

The M111 engine CCD and emissions test: Is it relevant to real-world vehicle data?

Quantitative measurement of liquid and vapor phase concentration distributions in a D.I. gasoline spray by the laser absorption scattering (LAS) technique

Influence of an adjustable tumble-system on in-cylinder air motion and stratification in a gasoline direct injection engine

Analysis of EGR cyclic variations in a direct injection gasoline engine by using Raman scattering method

Study of fuel dilution in direct-injection and multipoint-injection gasoline engines

CFD study of an LPG DI SI engine for heavy-duty vehicles

LPG spray flames in constant volume combustion chamber having impinging plate

A fundamental study of the relationship between altitude and research octane number

Methodology for determining octane response at different altitudes for vehicles equipped with knock sensors

Engine controller for the hydrocarbon reduction during cold start in SI engine

Estimation of air-fuel ratio of a SI engine from exhaust gas temperature at cold-start condition

Application of different cylinder-pressure-based knock detection methods in spark ignition engines

Misfire diagnosis in spark ignition engines

Evaluation of NOx emission control technologies for SIDI engines

Effects of engine operating conditions on catalytic converter temperature in an SI engine

Spark ignition engine fuelled by means of liquid propane-butane injection

Development of a transient duty cycle for large nonroad SI engines

Tribological studies for design input parameters on small-displacement - 4-stroke petrol engine—a view from engine oil conservation

Performance improvements for connecting rod bearings with "end-relief"
Title: Transient thermo-elastohydrodynamic lubrication of connecting rod big-end bearings

Title: Multidimensional optimization of in-cylinder tumble motion for the new Chrysler Hemi

Title: A preliminary CFD investigation of in-cylinder stratified EGR for spark ignition engines

Title: A model for residual gas fraction prediction in spark ignition engines

Title: Flame propagation characteristics in a heavy-duty LPG engine with liquid phase port injection

Title: Combustion and emissions characteristics of a small spark-ignited LPG engine

Title: Theoretical and experimental investigations of extended expansion concept for SI engines

Title: Air-fuel ratio control in a spark-ignition LPG engine using grey forecasting model

Title: Theoretical study of combustion intensification in SI piston engines

Title: Evaluation of durable emission controls for large nonroad SI engines

Title: Design and testing of a dedicated hydrogen-fueled engine

Title: Development of a high efficiency, low-emission SI-CNG bus engine

Title: An examination of the role of residual gases in the combustion processes of motored engines fuelled with gaseous fuels

Title: Effect of thermal stability of detergents and carrier fluids on the formation of combustion chamber deposits

Title: Quantitative time resolved 2-D fuel-air ratio measurements in a hydrogen direct injection SI engine using spontaneous Raman scattering

Title: A study of in-cylinder mixing in a natural gas powered engine by planar laser-induced fluorescence

Title: Fuel film evaporation and heat transfer in the intake port of an S.I. engine

Title: A contribution in calculating the thermal fields in internal combustion engines components

Title: A study on engine bearing performance focusing on the viscosity-pressure characteristic of the lubricant and housing stiffness

Title: Fuel spray characterization within an optically accessed gasoline direct injection engine using a CCD imaging system

Title: An investigation of a new type direct-injection stratified-charge combustion system for gasoline engines

Title: Development and application of the Ford split port induction concept

Title: Cyclic variation in an SI engine due to the random motion of the flame kernel

Title: Flames and liquid fuel in an SI engine cylinder during cold start

Title: Adaptive air fuel ratio optimization of a lean burn SI engine

Title: Bayesian experimental design and its application to engine research and development

Title: Lean-burn fuel development using the correlation of CVCC and engine test
Title: Time-controlled pilot injection for stationary and heavy-duty gas engines

Title: Study on improvement of natural gas-fueled spark-ignition engines—Effect of EGR utilization

Title: Study on combustion chamber deposit formation mechanism—Influence of fuel components and gasoline detergents

Title: Intake-valve temperature and the factors affecting it

Title: High-frequency ignition characteristics in a 4-valve SI engine with tumble-swirl flows

Title: Crossed study of residual gas rate—Firing device for a better understanding of SI engines cycle-to-cycle variations

Title: Mixture formation and combustion performance in a new direct-injection SI V-6 engine

Title: A new knock-detection method using cylinder pressure, block vibration and sound pressure signals from a SI engine

Title: A numerical simulation of AFR switch of SI engines

Title: Comparative assessment of the performance and emission characteristics of port and manifold gasoline fuel injection systems of a single-cylinder, four-stroke, spark-ignition engine

Title: An analytical approach for the optimization of a SI engine performance including the consideration of knock

Title: PDF modeling of stratified charge SI engine combustion

Title: Low energy consumption and low noise fans for cooling system of trucks, bus, cars and trains

Title: Optimum engine mounting layout by genetic algorithm

Title: Fuel economy improvements in an SUV equipped with an integrated starter generator

Title: Fuel economy and performance impact of hybrid drive systems in light trucks, vans and SUV's

Title: Physics-based contact fatigue analysis of vehicle powertrain gears

Title: Chrysler 8.0-liter V-10 engine

Title: New 4.0L SOHC V6 engine for the Ford Explorer

Title: An investigation of valve train noise for the sound quality of I.C. engines

Title: Key steps and methods in the design and development of low noise engines

Title: Concept level powertrain radiated noise analysis

Title: Conditioned NExT analysis, a technique for estimation of modal damping ratios of operating piston engines

Title: Simulation of flexible rotating crankshaft with flexible engine block and hydrodynamic bearings for a V6 engine
Title: Engine-induced vibration control for a motorcycle chassis frame by right combination of finite element method and experimental techniques

Title: Analytical studies on influence of crankshaft vibrations on engine noise using integrated parametric finite element model: Quick assessment tool

Title: Evaluation of crankshaft clearance influence on specific roughness noise concern

Title: Influences of torsional damper temperature and vibration amplitude on the three-dimensional vibrations of the crankshaft- cylinder block system under firing conditions

Title: Application of computer simulation using FEM and experimental techniques for the reduction of noise in air-cooled engine and crankcase cover of motorcycle

Title: Application of nearfield acoustic holography for evaluating the design of engine cover

Title: Assessment of a vehicle concept finite-element model for predicting structural vibration

Title: Noise and vibration reduction technology in hybrid vehicle development

Title: Prediction technique for vibration of power-plant with elastic crankshaft system

Title: Sounddesign—The BMW inline six-cylinder engine in different vehicle applications

Title: Flow noise reduction upon quick opening the throttle

Title: Flow-acoustic coupling in quarter-wave resonators using computational fluid dynamics

Title: Air intake development—Effects of coupled fluid/structure modes

Title: Sound design in the passenger compartment with active noise control in the air intake system

Title: Exhaust manifold radiated noise prediction methodology

Title: Engine intake noise modeling by using a time/frequency approach

Title: Application of elastomeric components for noise and vibration isolation in the automotive industry

Title: The effects of natural aging on fleet and durability vehicle engine mounts from a dynamic characterization perspective

Title: Vibrational power flow and its application to a passenger car for identification of vibration transmission path

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Title: Sound absorption performance of membrane covered insulators

Title: Using polyester fibers for improving acoustics and saving weight in automotive applications

Title: Active path tracking—A rapid method for the identification of structure-borne noise paths in vehicle chassis

Title: A virtual car: Prediction of sound and vibration in an interactive simulation environment

Title: Wavelet-based visualization of impulsive and transient sounds in stationary background noise

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Title: Condition monitoring of a gear box using vibration and acoustic emission-based artificial neural network
Title: Development of a precision variable load transmission error test device
Title: Roll-down considerations in idle quality

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Title: Development of an air intake system using vibro-acoustics numerical modeling
Title: Numerical prediction of a whole car vibro-acoustic behavior at low frequencies
Title: Noise sensitivity analysis of an engine mount system using the transfer function synthesis method
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Title: Development procedure for interior noise performance by virtual vehicle refinement, combining experimental and numerical component models
Title: Interior noise simulation for improved vehicle sound
Title: Analytical and experimental techniques in solving the plastic intake manifold NVH
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Title: Combining vehicle and test-bed diagnosis information to guide vehicle development for pass-by noise
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Title: ASAM-ODS: An open standards engineering database for NVH activities

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Title: SCIP simplified direct injection for low-emissions small two-stroke engines
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Title: Evaluation of diesel exhaust emission of advanced emission control technologies using various diesel fuels, and sulfur effect on performance after mileage accumulation—JCAP Diesel WG (fuel) report for step II study
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2003-01-1920 Title: Performance and emissions of a DI diesel engine operated with LPG and cetane-enhancing additives
2003-01-1923 Title: Development of a clean, efficient, propane-fueled tractor
2003-01-1925 Title: Characteristics of spray formation and combustion in diesel engines operated with dimethyl ether
Title: Studies on the optimizations with regard to relationships between performance and emission characteristics in dimethyl ether (DME)-fueled engines using common-rail fuel injection systems
2003-01-1927 Title: Long-term direct injection diesel engine operation on vegetable oil/diesel blends
2003-01-1932 Title: Oil transport in the piston ring pack (Part I): Identification and characterization of the main oil transport routes and mechanisms
2003-01-1952 Title: Oil transport in the piston ring pack (Part II): Zone analysis and macro oil transport model
2003-01-1963 Title: Investigations of the interactions between lubricant-derived species and aftertreatment systems on a state-of-the-art heavy-duty diesel engine
2003-01-2010 Title: Evaluation method for HDV fuel economy performance with PC simulation and mapping procedure
2003-01-2016 Title: Buffer tube of silicone rubber film for damping the pulsating flow in exhaust or induction systems of reciprocating engines

2003 SAE/JSAE Small Engine Technology Conference and Exhibition
2003-32-0001 Title: The application of piezoceramic actuation to direct fuel injection

2003-32-0003 Title: Effects of high-temperature fuel on in-cylinder fuel mixture formation process for direct injection engine
2003-32-0004 Title: Noise reduction potential of single-cylinder DI diesel engines
2003-32-0005 Title: Influence of fuel quality on exhaust gas and noise emissions of small industrial diesel engines
2003-32-0006 Title: Measurement of radical behavior in homogeneous charge compression ignition combustion using dimethyl ether
Title: Optimization of the E-TECTM combustion system for direct-injected, two-stroke engines toward 3-Star emissions

Title: Visual study focused on the combustion problem in gasoline direct injection engine

Title: The potential of the ceramic valve in IC engines

34th Intersociety Energy Conversion Engineering Conference

Title: Optimum compression ratio variation of a 4-stroke, direct-injection diesel engine for minimum bsfc

Title: Combustion noise from a diesel engine operating with high concentrations of intake carbon dioxide

Title: Optimum compression ratio variation of a 4-stroke, direct-injection diesel engine for maximum brake power and torque and minimum soot and NOx emissions

41st Annual Earthmoving Industry Conference

Title: Comprex® supercharging and emissions reduction in vehicular diesel engines

42nd Annual Earthmoving Industry Conference

Title: One piece diesel engine valves and powder metal seat inserts make in roads against traditional components

44th Annual Earthmoving Industry Conference

Title: Modeling of the complete vehicle powertrain using Enterprise

Title: FIND: framework for intelligent design

47th Earthmoving Industry Conference and Exposition

Title: Meeting the customer’s needs—Defining the next generation electronically controlled unit injector concept for heavy duty diesel engines

48th Earthmoving Industry Conference and Exposition

Title: On-engine turbocharger turbine inlet flow characterization

Automotive and Transportation Technology Congress and Exhibition

Title: Analysis of the combustion process in a heavy-duty transparent diesel engine equipped with 4-valve cylinder head and common-rail injection system

Title: Development of a common-rail proportional injector controlled by a tandem-arrayed giant-magnetostrictive-actuator

Title: Modeling and simulation of common-rail systems

Title: Study of a common-rail fuel injection system

Title: Analysis of the influence of injection rate and running conditions on the heat release rate in a D.I. diesel engine

Title: Future power plants for cars

Title: Simulation of endurance and thermo cycle testing for highly loaded HSDI diesel cylinder heads

Title: Modeling, effect and behavior of the EGR venturi in a heavy-duty diesel engine
2001-01-3228  Title: Modeling of wall films formed by impinging diesel sprays
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2001-01-3230  Title: Three-dimensional calculation of the flow in a DI diesel engine with variable swirl intake ports
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2001-01-3262  Title: Cycle-to-cycle diesel combustion characterization during engine transient operation
2001-01-3263  Title: A new combustion chamber concept for low emissions in small DI diesel engines
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2001-01-3265  Title: A detailed phenomenological model for wall heat transfer prediction in diesel engines
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2001-01-3330  Title: Piston-related noise with diesel engines—Parameters of influence and optimization
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2002-01-2161  Title: Multidimensional modelling and spectroscopic analysis of the soot formation process in a diesel engine
2002-01-2165  Title: Development of VFT—Part2
2002-01-2173  Title: Flexible, electronically controlled, hydraulically actuating variable valve system for diesel engine
2002-01-2174  Title: Air/fuel ratio and residual gas fraction control using physical models for engines with widely variable valve timing
2002-01-2175  Title: Control and controllability of electrohydraulic valvetrain in high- and medium-speed diesels
2002-01-2195  Title: Improved energy conversion efficiency of Sabathè-type engine (theoretical prediction in not a combustion chamber but an engine)
2002-01-2198  Title: Effect of thermodynamic irreversibility of internal combustion engines on power output and thermal efficiency
2002-01-2218  Title: A new paraffinic fuel impact on emissions and combustion characteristics of a diesel engine
2002-01-2220  Title: Selected aspects of reformed diesel oil combustion process
2002-01-2233  Title: Effective use of Orinoco tar as alternative fuel for diesel engines (Orinoco tar quality improvement by WPD)

2002-01-2234  Title: Analysis of chosen parameters of dual-fuel CI engine fuelled with propane-butane gas as a main fuel

2002-01-2235  Title: The impact of gas-air composition on combustion parameters of dual-fuel engines fed CNG

2002-01-2244  Title: A new sensor element with high suppression of external fields for rotational speed sensors in engine management applications

2002-01-2249  Title: The tribo-contact dynamics phenomenon in torsional impact of loose gears—Promoting gear rattle

Conference and Exposition on Future Transportation Technology

901502  Title: All electronic dual fuel injection system for the Belarus D-144 diesel engine

Environmental Sustainability Conference and Exhibition

2001-01-3748  Title: Results obtained by methanol-fuelling diesel engine

2001-01-3749  Title: A study on spray and combustion behavior in heavy-duty diesel engine equipped with EGR

2001-01-3768  Title: Future heavy-duty diesel lubricants for low-emission engines

Fifth Autotechnologies Conference and Exposition

910025  Title: Anti-bounce engine mount and its application to a four cylinder turbo charged diesel-engine

Future Car Congress

2000-01-1528  Title: Advanced Power sources for a new generation of vehicles

2000-01-1546  Title: Lightweight engine design strategies

2000-01-1547  Title: Tribological performance of NFC coatings under oil lubrication

2000-01-1548  Title: Tribological behavior of near frictionless carbon coatings in high- and low-sulfur diesel fuels

2000-01-1571  Title: The integrated starter alternator damper: The first step toward hybrid electric vehicles

2000-01-1594  Title: The Cooperative Automotive Research for Advanced Technology Program (CARAT): Accelerating the commercialization of innovative technology

2000-01-1595  Title: Breaking down technology barriers for advanced vehicles: The Graduate Automotive Technology Education (GATE) program

2000-01-1599  Title: Diesel passenger vehicles—Can they meet air quality needs and climate change goals?

2000-01-1600  Title: Effect of injection parameters on diesel spray characteristics

2002-01-1892  Title: Shock waves generated by high-pressure fuel sprays directly imaged by x-radiography

2002-01-1910  Title: The opportunity for IC engines in a hybrid world

2002-01-1920  Title: Effect of thin-film coating on wear in EGR-contaminated oil

2002-01-1921  Title: Friction and wear performance of low-friction carbon coatings under oil lubrication

2002-01-1924  Title: Comparison of HCCI operating ranges for combinations of intake temperature, engine speed and fuel composition
- Title: Experiments and CFD modelling of direct injection gasoline HCCI engine combustion
- Title: Variable compression ratio engine
- Title: Extended, and variable, stroke-reciprocating internal combustion engines
- Title: The Medford Twp., New Jersey biodiesel school bus project

Future Transportation Technology Conference
- Title: The development of an object-oriented tool for the modelling and simulation of hybrid powertrains for vehicular applications
- Title: New CNG concepts for passenger cars: High torque engines with superior fuel consumption
- Title: NOx trap model for lean-burn engine control
- Title: An experimental study of homogeneous charge compression ignition (HCCI) with various compression ratios, intake air temperatures and fuels with port and direct fuel injection
- Title: Diesel engine electric turbo compound technology
- Title: A review of diesel particulate filter technologies

Government/Industry Meeting
- Title: A contribution to understanding automotive fuel economy and its limits

International Mobility Technology Conference and Exhibit
- Title: Application of the natural gas engines Mercedes-Benz in moving stage for the carnival 2001 in Salvador City.
- Title: Production approval process of a heavy-duty diesel engine

International Pacific Conference on Automotive Engineering and High Temperature Engineering Conference
- Title: State-of-the-art; Hino high boosted diesel engine
- Title: A theoretical and experimental studies on the performance of diesel engine with artificial air intake
- Title: Simulation of the thermodynamic processes in diesel cycle internal combustion engines
- Title: Numerical and experimental analysis of diesel air fuel mixing
- Title: Measurement of droplet size distribution of transient diesel spray
- Title: Analysis and computation of characteristic of the water cooling and radiating system for a heavy duty truck diesel engine
- Title: The effect of typical torsional viscous-friction damper on the reduction of vibrations in the three-dimensional space of diesel engine shaftings

Mobility Technology Conferences and Exhibit
- Title: Two-stage power: a cost effective solution for equipment's performance enhancement
- Title: Injection pressure influence on diesel engine performance and emissions
- Title: Oil consumption improvement in a DI diesel engine

Powertrain and Fluid Systems Conference and Exhibition
Title: The potential of HCCI combustion for high efficiency and low emissions
Title: Influence of nozzle hole geometry, rail pressure and pre-injection on injection, vaporization and combustion in a single-cylinder transparent passenger car common-rail engine
Title: Liquid and vapor fuel distributions in a small-bore, high-speed, direct-injection diesel engine
Title: Optical detection of the combustion produced by the pre-injected fuel in a DI diesel engine
Title: Air flow surrounding burning transient diesel sprays
Title: 2-D imaging of soot formation process in a transient spray flame by laser-induced fluorescence and incandescence techniques
Title: Detailed chemical composition and particle size assessment of diesel engine exhaust
Title: The effect of non-circular nozzle holes on combustion and emission formation in a heavy-duty diesel engine
Title: Analysis of multiple injection strategies for the reduction of emissions, noise and BSFC of a DI CR small displacement non-road diesel engine
Title: Techniques for predicting combustion chamber deposits in a direct injection diesel engine
Title: Use of virtual tests in establishing BOI/VGRA
Title: The single technology matrix process for base oil interchange
Title: The role of engine oil formulations on fluid diagnostics
Title: Formulation effects in a severe passenger car diesel engine test
Title: Engine oil effects on the friction and emissions of a light-duty, 2.2L direct-injection diesel engine: Part 1- Engine test results
Title: Experimental study of direct-injection diesel engine fueled with two types of gas to liquid (GTL)
Title: Concurrent quantitative laser-induced incandescence and SMPS measurements of EGR effects on particulate emissions from a TDI diesel engine
Title: Heat release rate analysis of a DI diesel engine using diesel and seawater semi-stable emulsion
Title: Development of a nozzle-fouling test for additive rating in heavy-duty DI diesel engines
Title: Effects of EGR and early injection of diesel fuel on combustion characteristics and exhaust emissions in a methane dual-fuel engine
Title: Impact of ultra-clean Fischer-Tropsch diesel fuel on emissions in a light-duty passenger car diesel engine
Title: Evaluating a Fischer-Tropsch fuel, Eco-Par™ in a Valmet diesel engine
Title: Exhaust particle number and size distributions with conventional and Fischer-Tropsch diesel fuels
Title: The role that Methylcyclopentadienyl Manganese Tricarbonyl (MMT®) can play in improving low-temperature performance of diesel particulate filters
Title: Parameterization and transient validation of a variable geometry turbocharger for mean-value modelling at low and medium speed-load points

Title: A study of oil consumption on a diesel engine with independently lubricated turbocharger

Title: Turbo-hydraulic engine exhaust power recovery system

Title: An emission and performance comparison of the natural gas Cummins Westport Inc. C-Gas Plus versus diesel in heavy-duty trucks

Title: Base oil effects on emissions and fuel economy in a heavy-duty vehicle over the European transient cycle (ETC)

Title: Modelling of a turbocharged DI diesel engine using artificial neural networks

Title: Implementation of detailed chemical mechanisms into multidimensional CFD using in situ adaptive tabulation: Application to HCCI engines

Title: Investigation of diesel spray primary break-up and development for different nozzle geometries

Title: Combustion and spray simulation of a DI turbocharged diesel engine

Title: Theoretical and experimental analysis of diesel spray behavior from multiple injections common-rail system

Title: Multi-objective optimization of diesel engine emissions and fuel economy using genetic algorithms and phenomenological model

Title: LES modelling of diesel engines

Title: Low-pressure EGR calibration strategies for reliable diesel particulate filter regeneration on HDD engines

Title: Passenger car series application of a new diesel particulate filter system using a new ceria-based, fuel-borne catalyst: From the engine test bench to European vehicle certification

Title: A mixed numerical-experimental analysis procedure for non-blocking metal-supported soot trap design

Title: Experience of fitting London Black Cabs with fuel-borne catalyst-assisted diesel particulate filters—Part 1: Regulated emissions and regeneration performance

Title: Experience of fitting London Black Cabs with fuel-borne catalyst assisted diesel particulate filters—Part 2: Non-regulated emissions measurements

Title: Modelling of diesel particulate filter regeneration: Effect of fuel-borne catalyst

Title: Development of a full-flow burner DPF system for heavy-duty diesel engines

Title: Performances and durability of DPF (diesel particulate filter) tested on a fleet of Peugeot 607 Taxis—First and second test phases results

Title: Film formation properties of polymers in the presence of abrasive contaminants
Title: Technological evaluation of fuel efficiency improvement concepts to meet future regulatory requirements in the North American market

Title: High-boost C.R. diesel engine: A feasibility study of performance enhancement and exhaust-gas power cogeneration

Title: Parametric study and clarification of determination factors of diesel exhaust emission using a single-cylinder engine and model fuels—JCAP Combustion Analysis Working Group Report: Part I

Title: Novel analysis approach for better understanding of fuel and engine effects on diesel exhaust emission—JCAP Combustion Analysis Working Group Report: Part II

Title: Influence of hydrogen and carbon monoxide on HCCI combustion of dimethyl ether

Title: An approach for modelling the effects of gas exchange processes on HCCI combustion and its application in evaluating variable valve timing control strategies

Title: An investigation into the effect of fuel composition on HCCI combustion characteristics

Title: On the nature of autoignition leading to knock in HCCI engines

Title: Development of a gasoline engine system using HCCI technology—The concept and the test results

Title: Particle image velocimetry flow measurements and heat-release analysis in a cross-flow cylinder head

Title: E-diesel effects on engine component temperature and heat balance in a Cummins C8.3 engine

Title: Lubricity and injector pump wear issues with E diesel fuel blends

Title: In-cylinder soot evolution analysis in a transparent research DI diesel engine fed by oxygenated fuels

Title: Nature of fundamental parameters related to engine combustion for a wide range of oxygenated fuels

Title: Performance of a diesel engine fueled by rapeseed oil blended with oxygenated organic compounds

Title: Integration of WAVE and ADVISOR simulations for optimization of a hybrid electric sport utility vehicle

Title: HCCI combustion phasing in a multi-cylinder engine using variable compression ratio

Title: Characterization of pressure waves in HCCI combustion

Title: The effect of POx on the autoignition chemistry of n-heptane and isooctane in an HCCI engine

Title: Catalytic igniter to support combustion of ethanol-water/air mixtures in internal combustion engines

Title: The effect of in-cylinder flow and turbulence on HCCI operation

Title: Numerical analysis of combustion in gasoline compression ignition engines

Title: Using pilot diesel injection in a natural gas-fueled HCCI engine
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<td>Title: Dimethyl ether (DME) spray characteristics compared to diesel in a common-rail fuel injection system</td>
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Title: PIV measurements of internal aerodynamic of diesel combustion chamber
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Title: Interaction between fuel additive and oil contaminant: (I) Field experiences
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Title: Transient control of HCCI through combined intake and exhaust valve actuation

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Title: Dimethyl ether: New advances in wear testing: Theoretical and experimental results

SAE 2000 World Congress

2000-01-0202
Title: Application of the Oppenheim Correlation (OPC) for evaluation of heat losses from combustion in IC engine

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Title: Dynamics of combustion in a diesel engine under the influence of air/fuel ratio

2000-01-0236
Title: Two-dimensional imaging of formaldehyde formed during the ignition process of a diesel fuel spray

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Title: Investigating the effect of spray targeting and impingement on diesel engine cold start

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Title: Available strategies for improving the efficiency of DI diesel engines—A theoretical investigation

Title: The influence of physical input parameter uncertainties on multidimensional model predictions of diesel engine performance and emissions

Title: Numerical study of the combustion chamber shape for common-rail H.S.D.I. diesel engines

Title: Improvements of diesel combustion and emissions with two-stage fuel injection at different piston positions

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Title: A new ignition delay formulation applied to predict misfiring during cold starting of diesel engines

Title: A methodology for cycle-by-cycle transient heat release analysis in a turbocharged direct-injection diesel engine

Title: High-pressure fuel injection for high-power density diesel engines

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Title: An improved approach to saving cylinder pressure data from steady-state dynamometer measurements

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Title: Variable valve timing by means of a hydraulic actuation

Title: The application of variable event valve timing to a modern diesel engine

Title: Evaluation of microalloyed steel for articulated piston applications in heavy-duty diesel engines

Title: Diesel piston debond—A perspective

Title: Thermal barrier coatings for monolithic ceramic low heat rejection diesel engine components

Title: Advancements in high temperature cylinder liner and piston ring tribology

Title: Three-dimensional simulation of the piston group

Title: An experimental study of high-pressure nozzles in consideration of hole-to-hole spray abnormalities

Title: The effect of elliptical nozzle holes on combustion and emission formation in a heavy duty diesel engine

Title: Experimental comparison between conventional and bio-derived fuels sprays from a common-rail injection system

Title: Modeling fuel system performance and its effect on spray characteristics

Title: Diesel spray development of VCO nozzles for high-pressure direct injection

Title: Video imaging and analysis of common-rail sprays in an optical engine using shadowgraphy technique
Title: Dynamic characteristics of viscous-friction dampers by simultaneous vibration displacement measurement at two points

Title: Engine control using intake, combustion and transmission models

Title: Development of a detailed friction model to predict mechanical losses at elevated maximum combustion pressures

Title: Design and development of a model-based feedback controlled cooling system for heavy duty diesel truck applications using a vehicle engine cooling system simulation

Title: Newly developed P/M materials to replace malleable and ductile cast irons

Title: Successes in transportation casting designs

Title: Development of creep-resistant magnesium alloys for powertrain applications: Part 1 of 2

Title: Tensile creep and microstructure of magnesium-aluminum-calcium-based alloys for powertrain applications—Part 2 of 2

Title: Optimizing mechanical performance of injection molded multiple gated rotating thermoplastic components: Part 1—Consideration of structural analysis and knit line effects

Title: Optimizing mechanical performance of injection molded multiple gated rotating thermoplastic components: Part 2—Knit line/weld inter-phase integrity

Title: Maximizing the effectiveness of water-blended fuel in reducing emissions by varying injection timing or using after-treatment device

Title: Feedback control of a digital hydraulic operating system (DHOS) diesel injector

Title: Influence of pre- and post-injection on the performance and pollutant emissions in a HD diesel engine

Title: Development of micro-diesel injector nozzles via MEMS technology and effects on spray characteristics

Title: The influence of injector parameters on the formation and break-up of a diesel spray

Title: Flame lift-off on direct-injection diesel sprays under quiescent conditions

Title: X-ray measurements of high pressure diesel sprays

Title: Effect of gas density and the number of injector holes on the air flow surrounding non-evaporating transient diesel sprays

Title: Investigation on measurement of diesel spray breakup length by using doppler signals

Title: Diesel engine combustion chamber geometry optimization using genetic algorithms and multi-dimensional spray and combustion modeling

Title: Use of dynamic valving to achieve residual-affected combustion

Title: Influence of charge dilution on the dynamic stage of combustion in a diesel engine

Title: Modeling and validation of traveling resistance for heavy trucks
2001-01-0556  Title: On-board optimization of driveability character depending on driver style by using a new closed loop approach
2001-01-0563  Title: Simulation of the piston/cylinder behavior for diesel engines
2001-01-0565  Title: A methodology to simulate piston secondary movement under lubricated contact conditions
2001-01-0566  Title: Effects of lubricating oil supply on reductions of piston slap vibration and piston friction
2001-01-0572  Title: Piston ring pack and cylinder wear modeling
2001-01-0573  Title: Exploring PVD coatings for cylinder liner applications
2001-01-0574  Title: A method to reduce the calculation time for an internal combustion engine model

2001-01-0577  Title: Evolution-strategy based, fully automatic, numerical optimization of gas-exchange systems for IC engines
2001-01-0579  Title: The quasi-propagatory model: A new approach for describing transient phenomena in engine manifolds
2001-01-0580  Title: Transient phenomena in one-dimensional ducts
2001-01-0614  Title: A nozzle-integrated flow sensor for common-rail injection systems
2001-01-0682  Title: The development of a fourth-generation hybrid electric vehicle at West Virginia Univ.
2001-01-0684  Title: CAE approach for thermal-acoustical protective shields
2001-01-0918  Title: Measurement of the flame lift-off location on DI diesel sprays using OH chemiluminescence
2001-01-0951  Title: Evaluating commercial and prototype HEVs
2001-01-0985  Title: An improved anti-pulsation mass airflow sensor
2001-01-0990  Title: Individual cylinder IMEP estimation using crankshaft angular velocity measurements
2001-01-0996  Title: Swirl-spray interactions in a diesel engine
2001-01-0997  Title: On non-equilibrium turbulence corrections in multidimensional HSDI diesel engine computations
2001-01-0998  Title: High-pressure spray and combustion modeling using continuous thermodynamics for diesel fuels

2001-01-1001  Title: Simulating the combustion in a DI diesel engine applying a new model for the conditional scalar dissipation rate
2001-01-1003  Title: The role of radical species in diesel engine auto-ignition detection
2001-01-1004  Title: Modeling the effects of EGR and injection pressure on emissions in a high-speed direct-injection diesel engine
2001-01-1005  Title: A mixture fraction averaged approach to modeling NO and soot in diesel engines
2001-01-1007  Title: Quantifying relationships between the crankshaft's speed variation and the gas pressure torque
2001-01-1020  Title: Exhaust heat recovery system for modern cars
2001-01-1021  Title: Towards optimization of automotive waste heat recovery using thermoelectrics
2001-01-1022  Title: OCP—Materials
2001-01-1024  Title: Modeling of the effect of air/fuel ratio and temperature distribution on HCCI engines
Title: Prediction of pre-ignition reactivity and ignition delay for HCCI using a reduced chemical kinetic model

Title: Modeling and experiments of HCCI engine combustion using detailed chemical kinetics with multidimensional CFD

Title: A sequential fluid-mechanic chemical-kinetic model of propane HCCI combustion

Title: Development of a two-zone HCCI combustion model accounting for boundary layer effects

Title: Modeling of HCCI combustion and emissions using detailed chemistry

Title: Closed-loop control of an HCCI engine

Title: Reacting boundary layers in a Homogeneous Charge Compression Ignition (HCCI) engine

Title: Study of homogeneous charge compression ignition using a rapid compression machine

Title: Numerical analysis of passenger car HSDI diesel engines with the 2nd generation of common-rail injection systems: The effect of multiple injections on emissions

Title: A computational investigation of water injection strategies for nitric oxide reduction in large-bore DI diesel engines

Title: Atomization of high-pressure diesel spray: Experimental validation of a new breakup model

Title: Multicomponent fuel consideration for spray evaporation field and spray-wall interaction

Title: Analysis of the frequency, causes and consequences of a common quality problem in the babbit coating of trimetal journal bearings

Title: Numerical simulation of the scavenging process in a two-stroke turbocharged diesel engine

Title: PTFE compounds in automotives

Title: The evolution of fluoroelastomer: SIFEL, a new class of easily processed high-performance elastomer, adhesive and sealant

Title: Development of a novel polyolefinic thermoplastic vulcanizate for fuel line covering applications

Title: A comparative study of the integrity of joints between multilayer fuel line constructions and different connector "barb" designs—Part 2

Title: Performance in diesel and biodiesels of fluorosilicone rubber materials used for automotive quick connector fuel line O-rings and other sealing applications

Title: Permeation and stress relaxation resistance of elastomeric fuel seal materials

Title: Lightweight thermoplastic composite throttle bodies for car and truck applications

Title: Performance of HT-thermoplastic spur gears made out of Polyaryletherketone (PAEK)

Title: Development of a plastic manifold noise syntheses technique

Title: Round robin study of freezing point of coolants using manual and automatic methods

Title: Elastomer service life prediction in organic acid coolants

Title: The effects of contaminated engine coolants on the service life of elastomers
Title: Standard test method for cavitation and erosion-corrosion characteristics of aluminum pumps with engine coolants

Title: A chemical base for engine coolant/antifreeze with improved thermal stability properties

Title: The role of carboxylate-based coolants in cast iron corrosion protection

Title: Heat exchange characteristics of silicate and carboxylate-based coolants in air-cooled engine parts

Title: Combustion system of a lean-burn piston engine with catalytic prechamber

Title: Smart IGBT for advanced ignition systems

Title: A new approach for the validation of engine management strategies specifications through simulation algorithms

Title: A simplified model for the spatial distribution of temperature in a motored DI diesel engine

Title: Computational study of joint effects of shear, compression and swirl on flow and turbulence in a valveless piston-cylinder assembly

Title: Diesel engine cold-start combustion instability and control strategy

Title: Diesel engine transient operation with turbocharger compressor surging

Title: Event-based mean-value modeling of DI diesel engines for controller design

Title: Combustion and exhaust gas modeling of a common-rail diesel engine—An approach

Title: The reverse engineering of a turbocharged diesel engine through a unified systems approach

Title: Integrated cooling systems for passenger vehicles

Title: Experimental study of heat transfer from the heated rib-roughed wall to a steady or pulsating flow

Title: The effect of fuel-vapor concentration on the process of initial combustion and soot formation in a DI diesel engine using LII and LIEF

Title: Some proposals to low-emission, high-specific-power diesel engine equipped with CRT

Title: Combustion system development in a small bore HSDI diesel engine for low-fuel-consuming car

Title: Parametric study of the availability balance in an internal combustion engine cylinder

Title: Reduction of cooling air drag of road vehicles: An analytical approach

Title: Aerodynamic evaluation on Formula SAE vehicles

Title: Diffusion-flame/wall interactions in a heavy-duty DI diesel engine

Title: Extinction measurements of in-cylinder soot deposition in a heavy-duty DI diesel engine

Title: Analysis of the intake flow in a diesel engine head using dynamic steady flow conditions

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Title: LDA measurement and 3-D modelling of air motion in swirl chamber of diesel engines

Title: Application and evaluation of a detailed friction model on a DI diesel engine with extremely high peak combustion pressures

Title: Computer simulation of the performance of a 1.9-liter direct injection diesel engine
Title: Development of a zero-dimensional heat release model for application to small bore diesel engines

Title: Using a phenomenological multi-zone model to investigate the effect of injection rate shaping on performance and pollutants of a DI heavy-duty diesel engine

Title: A controlled EGR cooling system for heavy-duty diesel applications using the vehicle engine cooling system simulation

Title: Fuel consumption improvement and operation range expansion in HCCI by direct water injection

Title: GDI HCCI: Effects of injection timing and air swirl on fuel stratification, combustion and emissions formation

Title: The effect of knock on heat loss in homogeneous charge compression ignition engines

Title: Impingement spray system with direct water injection for premixed lean diesel combustion control

Title: HCCI combustion of hydrogen, carbon monoxide and dimethyl ether

Title: Advanced variable geometry turbocharger for diesel engine applications

Title: Why are NCI pistons not used in heavy-duty diesel engines?

Title: Three-dimensional vibration characteristics of high-speed automobile diesel engine crankshaft system with a viscous fluid damper

Title: Backstepping control with integral action applied to air-to-fuel ratio control for a turbocharged diesel engine

Title: A further application of loop shaping H-infinity control to diesel engine control—Driven-idle speed control

Title: Advanced torque estimation and control algorithm of diesel engines

Title: Individual cylinder control of diesel engines

Title: Model simplification and sliding mode control of automotive powertrain

Title: Dynamic rise of pressure in the common-rail fuel injection system

Title: A thermo-resistive flow sensor for injection rate measurements

Title: Numerical analysis of high-pressure fast-response common-rail injector dynamics

Title: Cavitation initiation, its development and link with flow turbulence in diesel injector nozzles

Title: A numerical study of the influence of diesel nozzle geometry on the inner cavitating flow

Title: Mathematical formulation for hydrodynamic stability of fluidic jets

Title: Study of the impact of variations in the diesel-nozzle geometry parameters on the layout of multiple injection strategy

Title: Characteristics of a common-rail diesel injection system under pilot and post-injection modes

Title: Evaporating spray concentration measurements from small- and medium-bore diesel injectors

Title: Experimental study for high specific load bearings in the diesel engine
Title: Method of accelerated evaluation of automotive engine durability

Title: Model-based sequential turbocharging optimization for Series 8000 M70/M90 engines

Title: Experimental investigation of direct injection gasoline for premixed compression-ignited combustion-phasing control

Title: On the mechanism of controlled auto ignition

Title: A skeletal chemical kinetic model for the HCCI combustion process

Title: The HCCI combustion process in a single cycle—High-Speed fuel tracer LIF and chemiluminescence imaging

Title: The effect of combustion chamber geometry on HCCI operation

Title: Modelling of HCCI combustion using adaptive chemical kinetics

Title: Neural feedforward compensation for closed cycle diesel system

Title: Air/fuel ratio and residual gas fraction control using physical models for high boost engines with variable valve timing

Title: An experimental study on phenomena of piston ring collapse

Title: A study of two-stroke engine braking for HD diesel engines

Title: Modern piston ring coatings and liner technology for EGR applications

Title: Thermal load in a heavy-duty diesel engine with EUI system

Title: The evolution of aluminum-based piston alloys for direct injection diesel engines

Title: Effect of small holes and high injection pressures on diesel engine combustion

Title: Optical investigation of the effect of fuel jet wall impact position on soot emissions in a single-cylinder, common-rail direct injection diesel engine

Title: Fuel injection spray and combustion chamber wall impingement in large-bore diesel engines

Title: Effect of injection parameters and wall impingement on atomization and gas entrainment processes in diesel sprays

Title: The structure analysis of evaporative diesel spray

Title: Air flow characteristics surrounding evaporating transient diesel sprays

Title: A numerical and experimental study towards possible improvements of common-rail injectors

Title: Pilot injection timing effect on the main injection development and combustion in a DI diesel engine

Title: Influence of the post-injection pattern on performance, soot and NOx emissions in a HD diesel engine

Title: Influence of multiple injection strategies on emissions, combustion noise and BSFC of a DI common-rail diesel engine
Title: Effects of VGT and injection parameters on performance of HSDI diesel engine with common-rail FIE system
Title: Investigation of "sweep' mapping approach on engine testbed

Title: Transient modelling for heavy tracked vehicle performance and fuel consumption under accelerating conditions
Title: New stopper technologies for MLS gaskets

Title: A process for modelling and analysis of prototyped products and its application to a variable fan drive
Title: Introduction of a new non-invasive pressure sensor for common-rail systems
Title: Model-based injection mass supervision for diesel engines using a fast broadband oxygen sensor

Title: Viscosity and lubricity of (liquid) dimethyl ether—An alternative fuel for compression-ignition engines
Title: Spray and exhaust emission characteristics of a biodiesel engine operating with the blend of plant oil and DME
Title: Combustion of the rape-seed oil in a diesel engine
Title: Theoretical and experimental investigation of a direct injection dual-fuel diesel-natural gas engine
Title: Performance and emissions characteristics of an LPG direct injection diesel engines
Title: Study of the effect of boiling point on combustion and PM emissions in a compression ignition engine using two-component n-paraffin fuels

Title: Flame lift-off on direct-injection diesel fuel jets: Oxygen concentration effects
Title: Late-cycle turbulence generation in swirl-supported, direct-injection diesel engines
Title: Absolute NO and OH concentrations during diesel combustion process by multiwavelength absorption spectroscopy
Title: An evaluation of a composite model for predicting drop-drop collision outcomes in multidimensional spray computations

Title: Dependence of fuel-air mixing characteristics on injection timing in an early-injection diesel engine
Title: CFD simulation of diesel injection and combustion
Title: Simulation of non-evaporating diesel sprays and verification with experimental data
Title: Multi-mode genetic algorithm optimization of combustion chamber geometry for low emissions
Title: CFD optimization of DI diesel engine performance and emissions using variable intake valve actuation with boost pressure, EGR and multiple injections

Title: Experimental optimization of a heavy-duty diesel engine using automated genetic algorithms
Title: A new approach to boost pressure and EGR rate control development for HD truck engines with VGT
Title: Prospects for combustion in piston engines
2002-01-1076  Title: New-generation, high-pressure sensors for common-rail systems
2002-01-1084  Title: High fuel economy CIDI engine for General Motors Corporation PNGV program
2002-01-1104  Title: An impulse charging system for SI and diesel engines
2002-01-1108  Title: Increasing torque output from a turbodiesel with camless valvetrain

2002-01-1114  Title: Numerical investigation of reaction zone structure and flame liftoff of DI diesel sprays with complex chemistry
2002-01-1115  Title: Numerical study towards smoke-less and NOx-less HSDI diesel engine combustion
2002-01-1116  Title: A comparison of mixing-controlled and flamelet models for diesel combustion

2002-01-1117  Title: Relating integral length scale to turbulent time scale and comparing k-e and RNG k-ε turbulence models in diesel combustion simulation
2002-01-1114  Title: Model-based fault detection of diesel intake with common production sensors

2002-01-1148  Title: Optimization of heavy-duty diesel engine parameters for low exhaust emissions using the design of experiments
2002-01-1150  Title: Potential of multiple injection strategy for low emission diesel engines
2002-01-1161  Title: Phenomenological analysis of injection, auto-ignition and combustion in a small DI diesel engine
2002-01-1162  Title: Optical investigation of auto-ignition process in a small DI diesel engine
2002-01-1211  Title: Design and optimization of the University of Wisconsin's parallel hybrid-electric sport utility vehicle

2002-01-1212  Title: Design and development of the 2001 Michigan Tech FutureTruck, a power-split hybrid electric vehicle
2002-01-1282  Title: Electrohydraulic valvetrain for extreme value diesel engine

2002-01-1292  Title: Coordinated control of EGR and VNT in turbocharged diesel engine based on intake air mass observer
2002-01-1314  Title: A new concept thrust washer for gasoline and diesel engines
2002-01-1316  Title: The progression of engine bearing overlays

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Title: Optimizing the scavenging system for a two-stroke cycle, free piston engine for high efficiency and low emissions: A computational approach

2003-01-0001

Title: Fluid-dynamic analysis of the intake system for a HDDI diesel engine by STAR-CD code and LDA technique

2003-01-0002

Title: On the applications of low-Reynolds cubic k-ε turbulence models in 3D simulations of ICE intake flows

2003-01-0003

Title: Advanced modelling of common-rail injector dynamics and comparison with experiments

2003-01-0006

Title: Improved modelling of DI diesel engines using sub-grid descriptions of spray and combustion

2003-01-0008
Title: The influence of variable valve actuation on the part-load fuel economy of a modern light-duty diesel engine

Title: Diesel emission control in review—The last 12 months

Title: Performance of NOx adsorber emissions control systems for diesel engines

Title: Diesel particulate filters: Trends and implications of particle size distribution measurement

Title: Performance of a catalyzed diesel particulate filter system during soot accumulation and regeneration

Title: NOx and PM control from heavy-duty diesel engines using a combination of low-pressure EGR and continuously regenerating diesel particulate filter

Title: Effects of a catalyzed particulate filter on emissions from a diesel engine: Chemical characterization data and particulate emissions measured with thermal optical and gravimetric methods

Title: Development of multi-layer, aluminum-tin-silicon alloy bearing for automotive diesel engine

Title: Variable geometry diffuser of turbocharger compressor for passenger vehicles

Title: Fatigue life of diesel engine cams in accelerated test environment

Title: Development of a spark-assisted diesel engine

Title: Advances of Hino J-series diesel engines

Title: NVH optimization of the new 2.5L HSDI diesel engine with common rail

Title: In-cylinder measurement of particulate radiant heat transfer in a direct injection diesel engine

Title: Effects of flame lift-off and flame temperature on soot formation in oxygenated fuel sprays

Title: Effects of the in-cylinder environment on diffusion flame lift-off in a DI diesel engine

Title: Measurement of trace metal composition in diesel engine particulate and its potential for determining oil consumption: ICPMS (inductively coupled plasma mass spectrometer) and ATOFMS (aerosol time of flight mass spectrometer) measurements

Title: Komatsu STA 12V140 water-emulsified fuel engine

Title: Simulation of diesel engines cold start

Title: A well-to-wheel comparison of several powertrain technologies

Title: FlexRay—The communication system for future control systems in vehicles

Title: Superior idle elimination system for truck air-conditioning (SIESTA)

Title: Mean value modelling of the gas exchange of a 4-stroke diesel engine for use in powertrain applications

Title: Lattice Boltzmann simulations of flows in a duct with multiple inlets

Title: A diesel engine thermal transient simulation: Coupling between a combustion model and a thermal model
Title: New conceptual lead-free overlays consisted of solid lubricant for internal combustion engine bearings

Title: Journal bearing analysis in engines using simulation techniques

Title: New integrated ""O.P.E.R.A.S."" strategies for low emissions in HSDI diesel engines

Title: Simultaneous low engine-out NOx and particulate matter with highly diluted diesel combustion

Title: Cooled EGR rate measurement with a thermal anemometer for EPA02 heavy-duty diesel engine emission control

Title: Reduction of NOX emissions by water injection into the inlet manifold of a DI diesel engine

Title: Simulation-based vehicle thermal management system—Concept and methodology

Title: Particle size distribution from a heavy-duty diesel engine: Steady-state and transient emission measurement using two dilution systems and two fuels

Title: Retention of fuel-borne catalyst particles by diesel particle filter systems

Title: Study of exhaust emissions from idling heavy-duty diesel trucks and commercially available idle-reducing devices

Title: Particulate matter and aldehyde emissions from idling heavy-duty diesel trucks

Title: Effect of injection pressure on the performance and exhaust emissions of a heavy-duty DI diesel engine

Title: Premixed diesel combustion analysis in a heavy-duty diesel engine

Title: Effect of engine operating conditions on particle-phase organic compounds in engine exhaust of a heavy-duty, direct-injection (D.I.) diesel engine

Title: Reduction of pollutant emissions in a HD diesel engine by adjustment of injection parameters, boost pressure and EGR

Title: Can the technology for heavy-duty diesel engines be common for future emission regulations in USA, Japan and Europe?

Title: An experimental investigation of PCCI-DI combustion and emissions in a heavy-duty diesel engine

Title: Computational study of the effects of injection timing, EGR and swirl ratio on a HSDI multi-injection diesel engine emission and performance

Title: An experimental study on emissions optimization using micro-genetic algorithms in a HSDI diesel engine

Title: Split-spray piston geometry optimized for HSDI diesel engine combustion

Title: The effects of split injection and swirl on a HSDI diesel engine equipped with a common-rail injection system

Title: Experimental investigation on emission control in C.I. engines using shrouded inlet valve

Title: Experimental research on EGR in a diesel engine equipped with common-rail injection system
Title: Model-based control of the VGT and EGR in a turbocharged common-rail diesel engine: Theory and passenger car implementation

2003-01-0357

Title: A neuro-fuzzy approach for anti-jerk control

2003-01-0361

Title: Coordinated control of EGR valve and intake throttle for better fuel economy in diesel engines

2003-01-0362

Title: A new vibration diagnosis method based on the neural network and wavelet analysis

2003-01-0363

Title: Advantages of diesel engine control using in-cylinder pressure information for closed-loop control

2003-01-0364

Title: Revolution control of generator diesel engine by neural network controller

2003-01-0365

Title: Diesel particulate filter optimization

2003-01-0376

Title: An optimal usage of NOx in a combined Pt/ceramic foam and a wall-flow monolith filter for an effective NOx-assisted diesel soot oxidation

2003-01-0379

Title: Material development of high porous SiC for catalyzed diesel particulate filters

2003-01-0380

Title: Engine intake throttling for active regeneration of diesel particle filters

2003-01-0381

Title: A novel fuel-borne catalyst dosing system for use with a diesel particulate filter

2003-01-0382

Title: The effect of SiC properties on the performance of catalyzed diesel particulate filter (DPF)

2003-01-0383

Title: Advantages of diesel engine control using in-cylinder pressure information for closed-loop control

2003-01-0384

Title: Revolution control of generator diesel engine by neural network controller

2003-01-0385

Title: Development of diesel particulate filter for construction machines

2003-01-0386

Title: A novel fuel-borne catalyst dosing system for use with a diesel particulate filter

2003-01-0387

Title: The effect of SiC properties on the performance of catalyzed diesel particulate filter (DPF)

2003-01-0388

Title: Development of an actuator for a fast moving flap for impulse charging

2003-01-0389

Title: Low heat rejection engines—An overview

2003-01-0390

Title: Lightweight engine structures—Mechanical, acoustic and production aspects

2003-01-0391

Title: Further pressure pulsation reduction in fuel rails

2003-01-0392

Title: Assessing tank-to-wheel efficiencies of advanced technology vehicles

2003-01-0393

Title: C-A-S-T is not a four letter word

2003-01-0394

Title: Soft magnetic MIM parts for diesel engines

2003-01-0395

Title: Thermal examination of a MLS gasket with integrated sensor technology for an effective heat management

2003-01-0396

Title: Sealing the high-performance diesel engine with Victocor 500

2003-01-0397

Title: Proteus®—MLS cylinder head gasket analysis tool

2003-01-0398

Title: MLS influence on engine structure and sealing function

2003-01-0399

Title: Equations for physical properties of automotive coolants

2003-01-0400

Title: Advances in automotive heat exchanger technology

2003-01-0401

Title: Knowledge-based CAx tools for the development of environmentally sound products

2003-01-0402
Title: Multidimensional modelling of the effects of radiation and soot deposition in heavy-duty diesel engines
Title: Heat transfer sensitivity study for an advanced diesel engine
Title: Actively controlled cooling jets
Title: Simulation of transient heat transfer for coupling 3-D moving component system within internal combustion chamber
Title: Advanced two-actuator EUI and emission reduction for heavy-duty diesel engines
Title: Effect of cycle-to-cycle variation in the injection pressure in a common-rail diesel injection system on engine performance
Title: Effects of pilot injection parameters on combustion for common-rail diesel engines
Title: The effects of multirow nozzles on diesel combustion
Title: Measurements of spray momentum for the study of cavitation in diesel injection nozzles
Title: Effect of nozzle hole geometry on a HSDI diesel engine output emissions
Title: An experimental and numerical study of injector behavior for HSDI diesel engines
Title: Study of the impact on the combustion process of injector nozzle layout creating enhanced secondary spray break-up
Title: Glow plug with combustion pressure sensor
Title: Semiconductor solutions for piezo injector systems
Title: Fatigue analysis methodology for predicting engine valve life
Title: Simulation of an engine valve stress/strain response during a closing event
Title: Prediction of in-cylinder pressure, temperature, and loads related to the crank-slider mechanism of I. C. engines: A computational model
Title: A compound technology for HCCI combustion in a DI diesel engine based on the multi-pulse injection and the BUMP combustion chamber
Title: Dual-mode combustion concept with premixed diesel combustion by direct injection near top dead center
Title: The effect of cooled EGR on emissions and performance of a turbocharged HCCI engine
Title: Gas temperature measurements during ignition in an HCCI engine
Title: HCCI combustion in DI diesel engine
Title: Combustion control and operating range expansion with direct injection of reaction suppressors in a premixed DME HCCI engine
Title: Effects of air/fuel ratios and EGR rates on HCCI combustion of n-heptane, a diesel type fuel
Title: Integrated simulation and engine test of closed-loop HCCI control by aid of variable valve timings
Title: Expansion of HCCI operating region by the combination of direct fuel injection, negative valve overlap and internal fuel reformation
Title: Modelling and simulation of a dual-fuel (diesel/natural gas) engine with multidimensional CFD
Title: Development of retrofit DME diesel engine operating with rotary distributor fuel injection pump
Title: Compression ignition delay (physical + chemical) of dimethyl ether—An alternative fuel for compression-ignition engines
Title: Effect of diethyl ether on the performance and emission of a 4 - S DI diesel engine
Title: A study of direct injection diesel engine fueled with hydrogen
Title: Study on combustion and emission characteristics of diesel engines using ethanol-blended diesel fuels
Title: Fischer-Tropsch diesel fuels—Properties and exhaust emissions: A literature review
Title: Spray characteristics of LPG direct injection diesel engine
Title: A study on the determination of the amount of pilot injection and rich and lean boundaries of the pre-mixed CNG/air mixture for a CNG/diesel dual-fuel engine
Title: A study of some combustion characteristics of dual-fuel engine using EGR
Title: Vegetable oils and their derivatives as fuels for CI engines: An overview
Title: Particle-free exhaust gas recirculation by molecular diffusion: Proof of concept
Title: U.S. 2007—Which way to go?—Possible technical solutions
Title: Application of organic freeze-point depressants in aqueous urea solutions: Effect on NOx reduction
Title: Control of a urea SCR catalytic converter system for a mobile heavy-duty diesel engine
Title: PM reduction by SCR catalyst
Title: The development and performance of the compact SCR-Trap system: A 4-way diesel emission control system
Title: Cost competitiveness of fuel cell vehicles through novel hybridization approaches
Title: Experimental determination of the kinetics of diesel soot oxidation by O₂—Modelling consequences
Title: Lattice-Boltzmann diesel particulate filter sub-grid modelling—A progress report
Title: Visualization of combustion phenomena in regeneration of diesel particulate filter
Title: Heat-up of diesel particulate filters: 2D continuum modelling and experimental results
Title: Novel three-dimensional ceramic lattices as catalyst supports and diesel particulate traps
Title: The progressive spin inlet—Homogeneous flow distributions under stringent conditions
Title: A one-dimensional computational model for studying the filtration and regeneration characteristics of a catalyzed wall-flow diesel particulate filter
Title: A study describing the performance of diesel particulate filters during loading and regeneration—A lumped parameter model for control applications

Title: Prediction and validation of pressure drop for catalyzed diesel particulate filters

Title: Simulation of triangular-cell-shaped, fibrous wall-flow filters

Title: Modelling of SCR DeNOx catalyst—Looking at the impact of substrate attributes

Title: Flow resistance descriptors for diesel particulate filters: Definitions, measurements and testing

Title: Drivetrain modelling, simulation, and analysis using VHDL-AMS

Title: Drive—An integrated system approach to automotive powertrain simulation

Title: Math-based, computer-aided prototyping for automotive mechatronic applications

Title: New heat- and oil-resistant thermoplastic vulcanizate (TPV) for demanding underhood applications

Title: Flow resistance descriptors for diesel particulate filters: Definitions, measurements and testing

Title: The effects of configuration on sealing force measurement and compression stress relaxation response

Title: Evaluation of new ACM polymers in sealing applications using advances in compressive stress relaxation test measurement

Title: The development of lab-simulation test to accelerate the durability validation of engine mounting and wiring harness

Title: Development of a computerized electrodynamic resonant fatigue test machine and its applications to automotive components

Title: Development of the ferritic stainless steel welding wire providing fine-grain microstructure weld metal for the components of automotive exhaust system

Title: Development of a technique to predict oil consumption with consideration for cylinder deformation—Prediction of ring oil film thickness and amount of oil passing across running surface under cylinder deformation

Title: Simplified elasto-hydrodynamic friction model of the cam-tappet contact

Title: Prediction of temperatures on pistons with cooling gallery in diesel engines using CFD tool

Title: Bringing MATLAB® into the test cell

Title: Three-dimensional shape measurement with high-energy x-ray CT-scan

Title: Real-time calibration and debug techniques of embedded processors with the Nexus 5001 interface

Title: A test bench for performance of gas-to-gas intercooler

Title: Fuel design concept for low emission in engine systems 4th report: Effect of spray characteristics of mixed fuel on exhaust concentrations in diesel engine

Title: Behavior of a diesel injection system with biodiesel fuel
Title: Time-resolved spray characterization in a common-rail, direct-injection, production-type diesel engine using combined Mie/LIF laser diagnostics

Title: Modelling the effect of primary atomization on diesel engine emissions

Title: Influence of wall impingement on the structure of reacting jets

Title: Multi-dimensional modelling of direct-injection diesel spray liquid length and flame lift-off length using CFD and parallel detailed chemistry

Title: A cascade atomization and drop breakup model for the simulation of high-pressure liquid jets

Title: Investigation of atomization characteristics and prediction accuracy of hybrid models for high-speed diesel fuel sprays

Title: Comparison between two droplet heating models under diesel spray-like conditions

Title: A common software architecture for diesel and gasoline engine control systems of the new generation

Title: Benefits of using a real-time engine model during engine ECU development

Title: Real-time engine models

Title: A new quasi-three dimensional combustion model for prediction of DI diesel engines' performance and pollutant emissions

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Title: Statistical methods for solving the fuel consumption/emission conflict on DI diesel engines

Title: Diagnostics for the study of cold-start mixture preparation in a port fuel-injected engine

Title: Two-color combustion visualization of single and split injections in a single-cylinder, heavy-duty D.I. diesel engine using an endoscope-based imaging system

Title: NO emission characteristics of a CI engine fueled with neat dimethyl ether
Title: Study of particle size distributions emitted by a diesel engine
Title: Diesel engine exhaust emissions modeling using artificial neural networks
Title: Scaling aspects of the characteristic time combustion model in the simulation of diesel engines
Title: Turbulent self-ignition and combustion modeling in diesel engines
Title: Studying the roles of kinetics and turbulence in the simulation of diesel combustion by means of an extended characteristic time model
Title: Effects of initial conditions in multidimensional combustion simulations of HSDI diesel engines
Title: Application of computational mesh optimization techniques to heavy-duty diesel intake port modeling
Title: Investigation of wear mechanisms occurring in passenger car diesel engine inlet valves and seat inserts
Title: Diesel lube oil conditioning—The systems approach
Title: An innovative glow system for modern diesel engines
Title: Transient investigation of two variable geometry turbochargers for passenger vehicle diesel engines
Title: Development of VFT (variable flow turbocharger)
Title: Cold-start equipment for diesel direct-injection engines
Title: Research on the practical application of 1-liter, semi-DI, 2-stroke diesel engine to compact cars
Title: Effects of oil groove locations on the performance of the big end bearing of a medium-speed diesel engine
Title: Structure vibration excitation by timing gear impacts
Title: Investigation in the noise from main running gear, timing gears and injection pump of DI diesel engines
Title: Analysis of noise sources and their transfer paths in diesel engines
Title: The effect of intake duct length on the in-cylinder air motion in a motored diesel engine
Title: Measurement of turbulent flow in the combustion chamber of a D.I. diesel engine
Title: Trapping performance of diesel particulate filter
Title: Development of new aluminum-zinc-silicon bearings for heavy load applications in uprated engines
Title: Damage accumulation during high temperature testing of a squeeze formed aluminum piston alloy
Title: Diesel engine cylinder head design—The compromises and the techniques
Title: An analytical technique for assessing cylinder liner cavitation erosion
Title: Optimization of diesel engine test deployment via statistical methods
Title: The flexible diesel engine
Title: Modeling, identification, and torque control of a diesel engine for transient test cycles
Title: The transient performance analysis of a turbocharged vehicle diesel engine with electronic fuelling control
Title: In-cylinder flow and combustion modeling of 1.7L Caterpillar engine

Title: Three dimensional modeling of combustion and soot formation in an indirect injection diesel engine
Title: Radial lip crankshaft seals for heavy-duty diesel engines
Title: A new look at oxygen enrichment—The diesel engine
Title: Modulation of injection rate to improve direct injection diesel engine noise
Title: A methodology for inhibiting the formation of pollutants in diesel engines
Title: A study of non-swirling and swirling flow fields and their effects on spray and combustion in an optically-accessible, DI diesel engine

Title: Droplet sizes and velocities in a transient diesel fuel spray
Title: Effects of auxiliary injection on diesel engine combustion
Title: Combustion of minimally processed coal liquids in a diesel engine
Title: Ceramic piston-cup—Design and testing
Title: Ceramic tappets cast in aluminum alloy for diesel engines
Title: A new antifreeze coolant for heavy-duty diesel engines
Title: Analysis of coolants from diesel engines
Title: Effect of nitrate concentration on passivation of aluminum alloys in commercial coolants for heavy duty diesel engines

Title: Cavitation damage of diesel engine wet-cylinder liners
Title: Combustion chamber shape and pressurized injection in high-speed direct-injection diesel engines
Title: Diesel cold starting—Actual cycle analysis under border-line conditions
Title: New strategy on diesel combustion development
Title: An EGR control method for heavy-duty diesel engines under transient operations
Title: Universal mixing correlations for the performance and emission of open chamber diesel combustion supported by air swirl

Title: Similarity law of entrainment into diesel spray and steady spray
Title: Nickel coated pistons for improved durability in knock control engines
Title: On the thermal fields of I.C.E. cylinder liners
Title: Structures of fuel sprays in diesel engines
Title: Transient characteristics of multi-hole diesel sprays
Title: An investigation of structural effects of fiber matrix reinforcement in aluminum diesel pistons
Title: Diesel engine emissions reduction—The benefits of low oil consumption design
Title: The effects of flow-through type oxidation catalysts on the particulate reduction of 1990s diesel engines

Title: Development of a self-cleaning particle trap for diesel engine particulate control

Title: Some analytical investigations on a four stroke diesel engine for high specific output and low heat rejection

Title: NOx reduction by injection control

Title: Reduction of diesel exhaust smoke by air-mixed fuel injection

Title: Injection rate shaping and high speed combustion analysis—New tools for diesel engine combustion development

Title: Analysis of diesel soot formation under varied ignition lag with a laser light extinction method

Title: Particulate emissions from diesel engines—Influence of in-cylinder surface

Title: The new Audi five-cylinder turbo diesel engine—The first passenger car diesel engine with second generation direct injection

Title: Mathematical modeling of the semi-permanent mould casting of aluminum alloy cylinder heads and engine blocks

Title: Development of Toyota reflex burn (TRB) system in DI diesel

Title: Instantaneous heat transfer in a highly rated DI truck engine

Title: Evaluation of a selectively-cooled single-cylinder 0.5-L diesel engine

Title: The contribution of the fuel injection system to meeting future demands on truck diesel engines

Title: Injection timing and rate control—A solution for low emissions

Title: Multizone modeling of a fumigated diesel engine

Title: Diesel particulate control around the world

Title: Status of particulate trap system for a heavy duty diesel truck

Title: Electric heating regeneration of large wall-flow type DPF

Title: A trap oxidizer system for the turbocharged diesel engine

Title: Flow and combustion in a hydra direct-injection diesel engine

Title: LDV characterization of air entrainment in transient diesel sprays

Title: A study of diesel cold starting using both cycle analysis and multidimensional calculations

Title: The propagation of fuel sprays in a research diesel engine—A joint numerical and experimental analysis

Title: Advanced in-line pump for medium-duty diesel engines to meet future emissions regulations

Title: Fuel injectors in diesels with large needle-barrel clearance

Title: Application of a high flexible electronic injection system to a heavy duty diesel engine

Title: 2-D soot visualization in unsteady spray flame by means of laser sheet scattering technique
Title: Soot distribution in a DI diesel engine using 2-D laser-induced incandescence imaging
Title: Fast burning and reduced soot formation via ultra-high pressure diesel fuel injection
Title: Characteristics of diesel spray with unsteady and higher injection pressure using a rapid compression machine
Title: The IDI diesel engine and its combustion noise variations
Title: Performance and fuel consumption of a single-cylinder, direct-injection diesel engine using a platinum fuel additive
Title: Soot formation oxidation and its mechanism in different combustion systems and smoke emission pattern in DI diesel engines
Title: Development of new electronically controlled fuel injection system ECD-U2 for diesel engines
Title: Numerical simulation of swirling port-valve-cylinder flow in diesel engines
Title: The influence of soot deposits on combustion chamber walls on heat losses in diesel engines
Title: Coolant flow in the cylinder head/block of the Ford 2.5L DI diesel engine
Title: Further studies of electrostatic collection and agglomeration of diesel particles
Title: Evaluation of a self-cleaning particulate control system for diesel engines
Title: An intake charge cooling system for application to diesel, gasoline and natural gas engines
Title: Development of the Mitsubishi TF07 model turbocharger for 1994 U.S. and 1993 European diesel emission standards
Title: Parametric investigation of variable valve timing applied to a turbocharged diesel engine
Title: A computational study of wall temperature effects on engine heat transfer
Title: The effects of ceramic coatings on diesel engine performance and exhaust emissions
Title: Performance of thin thermal barrier coating on small aluminum block diesel engine
Title: Improvement of combustion system of a small D.I. diesel engine for low exhaust emissions
Title: Application of heavy duty diesel engine to future emission standards
Title: The development of a novel variable compression ratio, direct injection diesel engine
Title: A study on shallow W-type combustion system for high-speed diesel engine
Title: The survivability of diesel fuel components in the organic fraction of particulate emissions from an IDI diesel
Title: A study of particulate formation on the combustion chamber wall
Title: The effect of injection parameters and swirl on diesel combustion with high pressure fuel injection
Title: Simultaneous removal of NOx, SOx and soot in diesel engine exhaust by plasma/oil dynamics means
Title: Engine and catalyst strategies for 1994
Title: Isuzu new H-series diesel engines
Title: Development of a new Lombardini prechamber diesel engine family
Title: The development of high-performance viscous-rubber damper for higher boost turbocharged and charge-cooled diesel engine

Title: A numerical simulation method for vibration stress waveforms of high-speed diesel engine crankshaft system

Title: Two-stroke engine technology in the 1990's

Title: Particle sizing using a two-dimensional image

Title: Planar liquid and gas fuel and droplet size visualization in a DI diesel engine

Title: Optical diagnostic for diesel-sprays with ms-time resolution

Title: Measurement of soot and flame temperature along three directions in the cylinder of a direct injection diesel

Title: The low NOxtruck engine

Title: A comparison of the particulate composition between turbocharged and naturally aspirated DI diesel engines

Title: A new approach of the two-color method for determining local instantaneous soot concentration and temperature in a D.I. diesel combustion chamber

Title: Effects of EGR with a supplemental manifold water injection to control exhaust emissions from heavy-duty diesel powered vehicles

Title: Effects of cooling water temperature on particulate emissions from a small high speed DI diesel engine

Title: Factors affecting the fatigue performance of metal matrix composites for diesel pistons

Title: Performance, exhaust emissions and durability of modern diesel engines running on rapeseed oil

Title: The combustion variation characteristics of the pre-combustion chamber type compression ignition engine

Title: Anti-seizure properties of bearing in heavy-duty diesel engines

Title: Composite V-6 diesel engine concept

Title: New Mitsubishi V8 20 liter diesel engine

Title: The new Mercedes-Benz engine brake with decompression valve

Title: Crankshaft durability prediction a new 3-D approach

Title: Relationship between oil consumption, deposit formation and piston ring motion for single-cylinder diesel engines

Title: An investigation on droplet size distribution and evaporation of diesel fuel sprays at high injection pressure by using laser diagnostic technique

Title: A study of the structure of diesel sprays using 2-D imaging techniques

Title: A study of the autoignition process of a diesel spray via high speed visualization
920110 Title: The effect of fuel aromatic structure and content on direct injection diesel engine particulates
920111 Title: Oxidation of soot agglomerates in a direct injection diesel engine
920112 Title: Mean coefficients of radiation in sooty media in light of the Lorenz-Mie and Lorentz-Drude theories
920113 Title: Particulate measurement by simultaneous polychromatic scattering and extinction coefficients
920114 Title: A study on soot formation in unsteady spray flames via 2-D soot imaging
920115 Title: Soot distribution in a D.I. diesel engine using 2-D imaging of laser-induced incandescence, elastic scattering, and flame luminosity
920116 Title: Investigation of the effects of engine design parameters on diesel combustion and emissions using Taguchi methods
920142 Title: Selection and development of a particulate trap system for a light duty diesel engine
920143 Title: Thermal durability of a ceramic wall-flow diesel filter for light duty vehicles
920144 Title: Improvement of pore size distribution of wall flow type diesel particulate filter
920145 Title: Design considerations for diesel flow-through converters
920153 Title: Time-frequency spectral structure of turbulence in an automotive engine
920185 Title: Emissions measurements in a steady combusting spray simulating the diesel combustion chamber
920192 Title: Modeling of the natural gas injection process in a two-stroke diesel engine
920219 Title: Isostatic dry bag compacted powder metallurgical cylinder liner, applications and properties
920240 Title: Modelling of the dynamic processes in an electronic diesel fuel injection system
920254 Title: Dynamic engine testing
920362 Title: Catalytic activity in the regeneration of the ceramic diesel particulate trap
920364 Title: Diesel particulate filter system for a 6V-92TA engine in a neoplan bus
920365 Title: New filtration systems for the control of exhaust emissions from light-duty diesel engines
920367 Title: The role of the through flow oxidation catalyst in the development of a low emissions specification HD diesel engine
920428 Title: Step response of engine torque and speed to load change in small two-stroke cycle diesel engines
920456 Title: Fatigue behavior of squeeze cast metal matrix composites for diesel pistons
920460 Title: The shock wave generation around the diesel fuel spray with high pressure injection
920461 Title: NOx reduction from diesel combustion using pilot injection with high pressure fuel injection
920462 Title: A DI diesel combustion and emission predictive capability for use in cycle simulation
920463 Title: Determination of engine cylinder pressures from crankshaft speed fluctuations
920464 Title: Reduction of NOx, smoke, BSFC, and maximum combustion pressure by low compression ratios in a diesel engine fuelled by emulsified fuel
920465 Title: Combustion similarity for different size diesel engines: theoretical prediction and experimental results
Title: Factors that affect NOx and particulates in diesel engine exhaust—Part II
Title: Characteristics of combustion in an IDI diesel engine with a swirl chamber made of ceramics
Title: Combustion in a small DI diesel engine at starting
Title: Exhaust-gas recirculation—A measure to reduce exhaust emissions of DI diesel engines
Title: Spray visualization in a partially insulated combustion chamber and performance of a low heat rejection diesel engine
Title: Optimizing lubricating oil filtration systems for diesel engines
Title: Intake and cylinder flow modeling with a dual-valve port

Title: Results of a quasi-steady evaporation model applied to multi-dimensional D.I. diesel combustion simulation
Title: Modeling the effects of drop drag and breakup on fuel sprays
Title: Multidimensional fluid flow calculations in diesel engine exhaust valve- port geometries
Title: Diesel engine combustion modeling using the coherent flame model in Kiva-II
Title: Numerical simulation of soot formation and oxidation in diesel engines

Title: The role of diesel ceramic coatings in reducing automotive emissions and improving combustion efficiency
Title: Compression brake master piston assembly: a cost effective use of a structural ceramic to reduce sliding wear in heavy duty diesel engines

Title: Elevated temperature mechanical properties of squeeze cast metal matrix composites for diesel pistons
Title: The new Navistar T 444E direct-injection turbocharged diesel engine
Title: HEUI—A new direction for diesel engine fuel systems
Title: Development of the HEUI fuel system—Integration of design, simulation, test, and manufacturing
Title: Piston design for the nineties
Title: Articulated piston cooling optimization
Title: Intake valve flow measurements of an IC engine using particle image velocimetry
Title: A system approach for the assessment of cavitation corrosion damage of cylinder liners in internal combustion engines
Title: A technique for the analysis of cylinder liner vibrations and cavitation
Title: Performance and emissions trade-offs for a HSDI diesel engine—An optimization study
Title: Effect of nozzle configuration on characteristics of steady-stage diesel spray
Title: An analysis of the combustion of a DI diesel engine by photography processing
Title: DI diesel engine in-cylinder pressure data analysis under TDC setting error
Title: Computational and experimental investigation in induction gas dynamics of a small two-cylinder diesel engine

Title: Experimental study on characteristics of conical spray and combustion for medium speed DI diesel engine

Title: A high-pressure diesel fuel injection system using spool acceleration and oil hammering

Title: Diesel combustion and transient emissions optimization using Taguchi methods

Title: Combined effects of EGR and supercharging on diesel combustion and emissions

Title: Measurement of cyclic variability in a diesel engine using a single cycle sampler

Title: Surrounding gas effects on soot formation and extinction—Observation of diesel spray combustion using a rapid compression machine

Title: Fuel spray—Air motion interaction in DI diesel engines: a review

Title: Evaluation of combustion parameters in direct injection diesel engines—An easy and reliable methods

Title: The investigation of calculation methods for optimization of the performance of the diesel engine

Title: The study of a turbulence-film type direct injection combustion system in a diesel engine

Title: Investigation of the engine pressure data by comparing the experimental test with the results of analytical model

Title: Diesel engine piston scuffing: a preliminary investigation

Title: Some effects of liner finish on diesel engine operating characteristics

Title: New 12L 6WA1TC turbocharged diesel engine

Title: Metallurgical stability of articulated piston under severe engine operating condition

Title: The progress of IDI diesel engine for passenger car

Title: Prediction and measurement of combustion limit of gaseous fuel mixed with air in intake pipe of diesel engines

Title: Experimental and numerical investigation of inter-ring gas pressures and blowby in a diesel engine

Title: A hydraulic tappet with variable timing properties

Title: Design and analysis of a roller follower variable valve timing system

Title: Diesel spray combustion—An optical imaging analysis

Title: Simultaneous concentration measurement of vapor and liquid in an evaporating diesel spray

Title: The effect of split injection on fuel distribution in an engine-fed combustion chamber

Title: Application of schlieren optical techniques for the measurement of gas temperature and turbulent diffusivity in a diesel engine

Title: Influencing engine design using computational fluid dynamics

Title: Hydrodynamics of droplet impingement on a heated surface
Title: Effect of spray-wall interaction on air entrainment in a transient diesel spray
Title: Spectral characteristics of turbulent flow in a scale model of a diesel fuel injector nozzle
Title: Computer simulation of the diesel fuel injection nozzle
Title: Diesel spray combustion rate enhancement by increasing injection pressure
Title: Combustion of soybean oil methyl ester in a direct injection diesel engine
Title: Bluff-body stabilized glow plug ignition of a methanol-fueled IDI diesel engine
Title: First measurements of the liquid phase temperature in diesel sprays
Title: Diesel engine combustion studies in a newly designed optical-access engine using high-speed visualization and 2-D laser imaging
Title: Influence of swirl on high pressure injection in hydra diesel engine
Title: A study of diesel flame movement by using the cross correlation method

Title: Design optimization of the piston compounded adiabatic diesel engine through computer simulation
Title: Combustion and performance characteristics of a low heat rejection engine
Title: Experimental analysis and performance improvement of a single cylinder direct injection turbocharged low heat rejection engine
Title: Effect of sulfur dioxide added to induction air on wear of diesel engine
Title: Diesel engine oil consumption depending on piston ring motion and design
Title: Competitive fuel economy and low emissions achieved through flexible injection control
Title: Low heat rejection from high output ceramic coated diesel engine and its impact on future design
Title: Mechanisms of deposit formation in internal combustion engines and heat exchangers
Title: Diesel engine design for the 1990s
Title: Characterization of the transient spray form a high pressure swirl injector
Title: Analogy between atomization and vaporization based on the conservation of energy
Title: Study on atomization and fuel drop site distribution in direct injection diesel spray
Title: Spray characteristics of five-hole V.C.O. nozzles of a diesel electro-injector
Title: Diesel electro-injector: a numerical simulation code
Title: Recent progress in rate shaping technology for diesel in-line pumps
Title: A new multi-impingement-wall head diffusion combustion system (NICS-MH) of a DI diesel engine
Title: The 2&2-stroke cycle engines
Title: Tractor diesel engine performance under variable loading
Title: Hybrid combustion engine with premixed gasoline homogeneous charge and ignition by injected diesel fuel—Effects of pre-combustion chamber parameters
Title: Hybrid combustion engine with premixed gasoline homogeneous charge and ignition by injected diesel fuel—Exhaust emission characteristics

Title: Hybrid combustion engine with premixed gasoline homogeneous charge and ignition by injected diesel fuel—On-road test using a bus

Title: Optical measurements of soot particle size, number density and temperature in a direct injection diesel engine as a function of speed and load

Title: Particle image velocimetry measurements in the piston bowl of a DI diesel engine

Title: Analysis of in-cylinder turbulent air motion dependence on engine speed

Title: Airflow and thermal analysis of underhood engine enclosures

Title: Combustion and emissions characteristics of minimally processed methanol in a diesel engine without ignition assist

Title: Modeling diesel engine natural gas injection: injector/cylinder boundary conditions

Title: Performance of HD-DI-diesel engine with addition of ethanol and rapeseed oil

Title: Designing composite engine sealing components

Title: Development of a fiber reinforced aluminum piston for heavy duty diesel engines

Title: Design and development of the Jacobs Model 340A Engine Retarder using concurrent development

Title: Benefits of new fuel injection system technology on cold startability of diesel engines—Improvements on cold startability and white smoke reduction by means of multi injection with common rail fuel system (ECD-U2)

Title: New Mitsubishi 2.8L four-cylinder diesel engine

Title: Development of valve seals for turbocharged compression ignition engines

Title: Friction measurement in the valve train with a roller follower

Title: The determination of cylinder center spacing for vehicle diesel engines

Title: Optimum sealing design of cylinder head gasket for high peak pressure diesel engines

Title: Modeling and experimental validation of torsional crankshaft dynamics

Title: Development of OSKA-DH diesel engine using fuel jet impingement and diffusion—Investigation of mixture formation and combustion

Title: Direct injection diesel engine soot modeling: formulation and results

Title: A three-zone heat release model for DI diesel engines

Title: Technology for low emission, combustion noise and fuel consumption on diesel engine

Title: Analysis of the irreversibilities in diesel engines

Title: Preinjection—A measure to optimize the emission behavior of DI-diesel engines

Title: Combustion and emissions in a new concept DI stratified charge engine with two-stage fuel injection
Title: Interactions and main effects with auxiliary injection a two-stroke DI diesel engine
Title: Flow and heat transfer characteristics of impinging transient diesel sprays
Title: Engine-based image acquisition for piloted diesel fuel spray analysis
Title: A/F ratio visualization in a diesel spray
Title: Spray and self-ignition visualization a DI diesel engine
Title: Quantitative 2-D fuel vapor concentration imaging in a firing D.I. diesel engine using planar laser-induced Rayleigh scattering
Title: The effects of wall temperature on flame structure during flame quenching
Title: The effect of bearing stiffness on crankshaft natural frequencies
Title: Parametric study of crankshaft natural frequencies
Title: Modeling of corrosion of cylinder liner in diesel engines caused by sulphur in the diesel fuel
Title: Application of crankcase-supercharging to a 4-stoke cycle compression ignition engine
Title: An observation and analysis of the combustion under supercharging on a DI diesel engine
Title: Introducing a high efficiency variable positive displacement automotive supercharger
Title: Improved engine performance via use of nickel ceramic composite coatings (NCC Coat)
Title: Quantitative specification of the cyclic irregularity of diesel engine flame radiation
Title: Diesel combustion improvement and emissions reduction using VCO nozzles with high pressure fuel injection
Title: Internal combustion engine with homogeneous and heterogeneous charge
Title: Imaging and spatially resolved two-color temperature measurements through a coherent fiber optic: observation of auxiliary fuel injection effects on combustion in a two-stroke DI diesel
Title: Formability of deep oil sump for heavy-duty truck engines using vibration damping steel sheets
Title: An observation of high temperature combustion phenomenon in low-heat-rejection diesel engines
Title: 100 hour endurance testing of a high output adiabatic diesel engine
Title: Utilizing neat methanol and glow plug ignition in DI diesels: laboratory testing of a single and multi-cylinder engine
Title: The effects of rapeseed oil methyl ester on diesel engine performance, exhaust emissions and long-term behavior
Title: Emissions and performance characteristics of a 4-stroke, direct injected diesel engine fueled with blends of biodiesel and low sulfur diesel fuel
Title: Limited durability of the diesel engine with a duel-fuel system on neat sunflower oil
Title: Measurement of ambient air entrainment into transient free gas jet by means of flow visualization
Title: Comparison between lean-burn and stoichiometric technologies for CNG heavy-duty engines
Title: A new clean diesel technology: Demonstration of ULEV emissions on a Navistar diesel engine fueled with dimethyl ether

Title: Development of fuel injection equipment and combustion system for DI diesels operated on dimethyl ether

Title: Performance and emissions of a 0.273 liter direct injection diesel engine fuelled with neat dimethyl ether

Title: An improved mathematical model of conventional FIE processes

Title: Direct injection diesel sprays and the effect of cavitation and hydraulic flip on atomization

Title: Variable-orifice geometry verified on the two-phase nozzle (VRD)

Title: Characteristics of fuel sprays from specially shaped and impinging flow nozzles

Title: Nozzle effect on high pressure diesel injection

Title: Analysis of diesel smoke emission at low engine speed

Title: Three dimensional analysis of the flow through a multihole V.C.O. nozzle for DI diesel engine

Title: Fuel jet models for multidimensional diesel combustion calculations: An update

Title: The evaluation of oxidation catalysts for diesel trucks

Title: Modelling and experimental study about the effect of exhaust gas recirculation on diesel engine combustion and emissions

Title: Reducing particulate and NOX using multiple injections and EGR in a D.I. diesel

Title: Influence of injection system parameters on spray development, combustion and soot formation by optical measurement techniques in a model combustion chamber

Title: The development and application of a diesel ignition and combustion model for multidimensional engine simulations

Title: The spray models and their influence on ignition

Title: Combustion in a swirl chamber diesel engine simulation by computation of fluid dynamics

Title: An application of the coherent flamelet model to diesel engine combustion

Title: Modeling the effects of intake flow characteristics on diesel engine combustion

Title: Development of methodology for spray impingement simulation

Title: Comparisons of computed and measured hollow-cone sprays in an engine

Title: Multidimensional computation of multicomponent spray vaporization and combustion

Title: CFD in-cylinder flow simulation of an engine and the flow visualization

Title: High-speed/high-resolution imaging of fuel sprays from various injector nozzles for direct injection engines

Title: Experimental study of cavitation in the nozzle hole of diesel injectors using transparent nozzles

Title: Heavy duty diesel head/block joints—An in depth study
950611  Title: Reduction of diesel engine NOx using pilot injection
950613  Title: Experimental study on low-swirl shallow W-type combustion system for a small D.I. diesel engine
950731  Title: Level crossing probabilities for cyclostationary processes with two frequencies in marine diesel engine shafting systems
950735  Title: Development of wall-flow type diesel particulate filter system with efficient reverse pulse air regeneration
950737  Title: A thermally regenerated diesel particulate trap using high-temperature glass-fiber filters
950808  Title: Development of a DI diesel engine with four valves for passenger cars
950847  Title: Flow characteristics in transient gas jet
950848  Title: In-cylinder measurement of temperature and soot concentration using the two-color method
950849  Title: Investigations of soot particle growth in a diffusion flame considering the temperature dependent optical constant of the particles
950850  Title: Effect of EGR on combustion development in a 1.9L DI diesel optical engine
950851  Title: A new multi-impingement-wall head diffusion combustion system (NICS-MH) of a DI diesel engine
950852  Title: A study on small bore diesel engine with shallow W-type combustion system—Combustion rate and NOx emission
950853  Title: Numerical calculation of spray mixing process in a D.I. diesel engine and comparison with experiments
950854  Title: Modeling and identification of a diesel combustion process with the downhill gradient search method
950855  Title: The droplet group micro-explosions in W/O diesel fuel emulsion sprays
950856  Title: Combustion process of diesel spray in high-temperature air
950857  Title: Combustion process of diesel engines at regions with different altitude
950936  Title: A review of ion nitrided piston ring surface treatment development and the resultant ability to provide improved operating capability
951023  Title: Measurement of soot in diesel engine lubricating oil
951039  Title: Analysis of cam/roller follower friction and slippage in valve train systems
951047  Title: Optimization of the DEUTZ air-cooled FL 912/913 engine family for compliance with future exhaust emission requirements
960015  Title: Design and development of three combustion systems for a small passenger-car diesel engine
960028  Title: A study on combustion behavior of a diesel fuel spray impinging on a wall
960029  Title: Transient combustion process of an IDI diesel engine with dual-throat jet at cold-starting
960030  Title: A study of diesel combustion process under the condition of EGR and high-pressure fuel injection with gas sampling method
Title: The combustion process in a DI-diesel hydraulic free-piston engine

Title: Reduction of exhaust emission with new water injection system in a diesel engine

Title: Effects of gas density and vaporization on penetration and dispersion of diesel sprays

Title: Influences of fuel injection and air motion energy sources on fuel-air mixing rates in a D.I. diesel combustion system

Title: Experimental results on the effect of piston surface roughness and porosity on diesel engine combustion

Title: Evaluation of constant speed assumption for determining cylinder excitation torque

Title: Development of plasma-spray-coated cylinder liners

Title: Plastic oil rings for diesel engines: a preliminary evaluation

Title: A study of the critical impingement frequency of fluid in curved pipes for piston applications

Title: The piston ring shape and its effects on engine performance

Title: A spherical joint piston design for high-speed diesel engines

Title: The new Mercedes-Benz OM 904 LA light heavy-duty diesel engine for class 6 trucks

Title: ROTULAR TAPPET™ valve trains for hemispherical combustion chambers

Title: Analysis of dry cylinder liner behavior during engine operation

Title: A calculation method for torsional vibration of a crankshafting system with a conventional rubber damper by considering rubber form

Title: Investigation of a lean-burn piston engine with catalytic prechamber

Title: Injection rate shaping technology with common rail fuel system (ECD-U2)

Title: Evaluation of the intensity of turbulent velocities by using a cross-correlation technique for pattern tracking

Title: Speed dependence of turbulence properties in a high-squish automotive engine combustion system

Title: Application of special tooth profile ("LogiX") to P/M gear

Title: Development of an assembled camshaft by mechanical bonding

Title: Experimental measurements on the effect of insulated pistons on engine performance and heat transfer

Title: Ignition, combustion and emissions in a DI diesel engine equipped with a micro-hole nozzle

Title: The analysis of combustion flame under EGR conditions in a DI diesel engine

Title: An experiment formula for D.I. diesel engine flame temperature estimation

Title: The characteristics of scavenging flow in a poppet-valve type 2-stroke diesel engine by using RSSV system
Title: The effect of selective insulation on the performance, combustion, and NO emissions of a DI diesel engine
Title: Combustion and combustion chamber for a low heat rejection engine
Title: A simplified analytical methodology for selecting element density for low heat rejection diesel head thermal analysis
Title: Crank-angle-based control of high-speed diesel engines
Title: Modeling fuel film formation and wall interaction in diesel engines
Title: An improved model to describe spray evaporation under diesel-like conditions
Title: A computational investigation of the spray-induced flow and its influence on the fuel distribution for continuous and intermittent DI diesel sprays
Title: The PDF-equation approach to diesel spray evaporation computations
Title: Modeling the effects of intake generated turbulence and resolved flow structures on combustion in DI diesel engines
Title: Intake and in-cylinder flow modeling characterization of mixing and comparison with flow bench results
Title: Observations of the reliability effects of operating heavy duty diesel engines with a nitrite/borate/low silicate coolant with no coolant change interval
Title: Development of aluminum cooling system components for a 10.8 liter diesel engine
Title: Combustion analysis of esters of soybean oil in a diesel engine
Title: Hot surface assisted compression ignition of natural gas in a direct injection diesel engine
Title: Analysis of diesel spray structure using magnified photography and PIV
Title: Structure of sprays from an air-assist hollow-cone injector
Title: PDA and LDA measurements of large angle hollow cone spray proposed for hot-premixed combustion type diesel engine
Title: Analysis of current spray penetration models and proposal of a phenomenological cone penetration model
Title: Characterization of D.I. diesel sprays in high density conditions
Title: Experimental study on the effects of spray impingement and turbulence structure on spray mixing rate by gas jet simulation
Title: A new method for time-resolved full-field measurement of local average gas concentration during fuel-injection
Title: OH radical imaging in a DI diesel engine and the structure of the early diffusion flame
Title: Visualization and modeling of pilot injection and combustion in diesel engines
Title: 3D modelling and photographic investigation of combustion in Hydra DI diesel engine
Title: Two dimensional analysis of diesel combustion by spectral flame emissivity measurements

Title: NOx reduction using injection rate shaping and intercooling in diesel engines

Title: A new compression ignition combustion system to greatly lower the NOx production without sacrificing the fuel consumption

Title: Gas efficient liquid atomization using micro-machined spray nozzles

Title: High pressure multiple injection spray characteristics

Title: Experimental and numerical studies of high pressure multiple injection sprays

Title: Effect of gas density and temperature on air entrainment in a transient diesel spray

Title: Near wall interaction in spray impingement

Title: Experimental study and modeling of diesel spray/wall impingement

Title: Compact rotary spill pump with electronic control for high speed direct injection engines

Title: From concept to end product—Computer simulation in the development of the EUI-200

Title: The influence of hydro grinding at VCO nozzles on the mixture preparation in a D.I. diesel engine

Title: Geometric optimization of nozzles for inclined injectors for D.I. diesel engines

Title: Shaping of fuel delivery characteristics for solenoid operated diesel engine gaseous injectors

Title: Common rail, an attractive fuel injection system for passenger car DI diesel engines

Title: Modeling diesel engine using KIVA II 3D-code: Validation of a new global combustion model and its sensitivity to the spatial discretization

Title: Predictive optimization of piston and ring stability

Title: Numerical study on ignition and combustion process of a diesel spray in EGR environment

Title: Object oriented modelling approaches to variable granularity; Application to a diesel engine

Title: Estimation of air motion kinetic energy dissipation rates in a D.I. diesel combustion system

Title: Numerical simulation of transient liquid fuel sprays vaporization under engine-like conditions using diffusion limit and well mixed vaporization models

Title: Real time cavitation detection method

Title: A bench test procedure for evaluating the cylinder liner pitting protection performance of engine coolant additives for heavy duty diesel engine applications

Title: Quantifying parameters relevant to liner cavitation on a diesel engine

Title: A comparison of engine coolant in an accelerated heavy duty engine cavitation test

Title: A large scale mixing model for a quiescent chamber direct injection diesel

Title: The application of phenomenological combustion model for experimental study of D.I. diesel engines

Title: Dynamic behavior of multi-stage injection diesel spray

Title: Characteristics of free and impinging gas jets by means of image processing
Title: Movement and structure of diesel spray impinging on an inclined wall
Title: Modeling spray impingement considering fuel film formation on the wall
Title: Non-reactive diesel spray computations supported by PDA measurements
Title: Liquid jet atomization and droplet breakup modeling of non-evaporating diesel fuel sprays
Title: What is adequate resolution in the numerical computations of transient jets
Title: Flow analysis in nozzle hole in consideration of cavitation
Title: Injection pressure effects upon droplet behavior in transient diesel sprays
Title: Experimental investigation and numerical modeling of an advanced turbocharged DI diesel engine
Title: High temperature tribological coatings for advanced military diesel engines
Title: Coatings for improving engine performance
Title: Experimental investigation on some performance parameters of a diesel engine using ceramic coating on the top of the piston
Title: Exhaust purification of diesel engines by homogeneous charge with compression ignition—Part 1: experimental investigation of combustion and exhaust emission behavior under pre-mixed homogeneous charge compression ignition method
Title: Exhaust purification of diesel engines by homogeneous charge with compression ignition—Part 2: analysis of combustion phenomena and NOx formation by numerical simulation with experiment
Title: An attempt of moving bottom auxiliary combustion chamber to reduce diesel particulate and NOx
Title: Effect of intake composition on combustion and emission characteristics of DI diesel engine at high intake pressure
Title: EGR technologies for a turbocharged and intercooled heavy-duty diesel engine
Title: Development of SJ (Swirl Jet) turbocharger for diesel engine vehicles
Title: Variable valve actuation and diesel engine retarding performance
Title: Particle image velocimetry characterization of a turbocharger turbine inlet flow
Title: The design and operation of a turbocharger test facility designed for transient simulation
Title: Common rail injection system for commercial diesel vehicles
Title: The optimization of common rail FIE equipped engines through the use of statistical experimental design, mathematical modeling and genetic algorithms
Title: Application of an FIE computer model to an in-line pump-based injection system for diesel engines
Title: A theoretical code to simulate the behavior of an electro-injector for diesel engines and parametric analysis
Title: A comparison of unit injector and pump line nozzle systems
Title: A droplet tagging method to investigate diesel spray
Title: Influence of injection nozzle improvement on DI diesel engine
Title: Combustion processes of particulate matter and soot in ceramic filter traps for diesel engines and numerical modeling

Title: Modeling of the engine mechanical system crankshaft, its bearings and supports

Title: Development of an improved heavy-duty dirt exclusion system for radial lip seals

Title: A simulation analysis of the effect of governor technical characteristics and type on the transient performance of a naturally aspirated IDI diesel engine

Title: An integrated transient analysis simulation model applied in thermal loading calculations of an air-cooled diesel engine under variable speed and load conditions

Title: Advanced computational methods for predicting flow losses in intake regions of diesel engines

Title: The influence of thermal barrier coatings on morphology and composition of diesel particulates

Title: Effects of fuel properties on exhaust emissions for diesel engines with and without oxidation catalyst and high pressure injection

Title: HVOF cermet coatings for high-horse-power diesel engines

Title: Development of material surface engineering to reduce the friction and wear of the piston ring

Title: Improvement in the compatibility between the wear rates of top ring and liner materials

Title: Effects of piston-ring dynamics on ring/groove wear and oil consumption in a diesel engine

Title: The potential of small DI-diesel engines with 250 cm³/cylinder for passenger car drive trains

Title: A conceptual model of DI diesel combustion based on laser-sheet imaging

Title: Investigation on particle size distribution in the cylinder of a passenger car DI diesel engine using a fast gas sampling valve

Title: Modeling drop drag effects on fuel spray impingement in direct injection diesel engines

Title: Direct injection diesel engine simulation: A combined numerical and experimental approach from aerodynamics to combustion

Title: Prediction of the flow and spray processes in an automobile DI diesel engine

Title: Modeling radiant heat loss characteristics in a diesel engine

Title: An experimental heat release rate analysis of a diesel engine operating under steady state conditions

Title: Combustion and emission characteristics of premixed lean diesel combustion engine

Title: Modeling of direct-injection diesel engine fuel consumption

Title: Lightweight crankcase for a new turbocharged direct injection diesel engine

Title: Reduced cross section compression rings for diesel engines

Title: On the future of combustion in piston engines

Title: Prediction of DI diesel engine emissions by multidimensional simulation

Title: The visualization and its analysis of combustion flame in a DI diesel engine
Title: Simultaneous measurements of concentration and temperature distributions in unsteady gas jets by an iodine LIF method
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Title: PLIF imaging of NO formation in a DI diesel engine
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Title: Effects of EGR on heat release in diesel combustion
980184
Title: Whole field MTV measurements in a steady flow rig model of an IC engine
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Title: A numerical simulation of ignition delay in diesel engines
980501
Title: A study of physical and chemical delay in a high swirl diesel system via multiwavelength extinction measurements
980502
Title: Radiation heat transfer in a combustion chamber of diesel engine with partially transparent burnt gas zone
980504
Title: Intake flow effects on combustion and emissions in a diesel engine
980508
Title: A model for multicomponent droplet vaporization in sprays
980511
Title: Two-color imaging of in-cylinder soot concentration and temperature in a heavy-duty DI diesel engine with comparison to multidimensional modeling for single and split injections
980524
Title: The effects of mixture formation on premixed lean diesel combustion
980533
Title: Effect of swirl and fuel injection characteristics on premixed phase of diesel combustion
980534
Title: Diesel fumigation partial premixing for reducing ignition delay and amplitude of pressure fluctuations
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Title: Variation of piston ring oil film thickness in an internal combustion engine—Comparison between thrust and anti-thrust sides
980563
Title: An FEM-based approach to crankshaft dynamics and life estimation
980565
Title: Design and development of method of valve-train friction measurement
980572
Title: Comparisons of computed and measured results of combustion in a diesel engine
980786
Title: Supercharged homogeneous charge compression ignition
980787
Title: A common rail injection system for high-speed, direct-injection diesel engines
980803
Title: A new method for measuring fuel-injection rate
980804
Title: A study on surrounding air flow induced by diesel sprays
980805
Title: Common rail fuel injection system for improvement of engine performance on heavy-duty diesel engine
980806
Title: Injection characteristics and spray features of the Variable Orifice Nozzle (VON) for direct-injection diesel engines
980807
Title: Simulation of liquid jet atomization for fuel sprays by means of a cascade drop breakup model
980808
Title: Liquid-phase fuel penetration in diesel sprays
980809
Title: An experimental and numerical study of sprays from a common rail injection system for use in an HSDI diesel engine

Title: Analysis of the flow in the nozzle of a vertical multihole diesel engine injector

Title: Study of the injection control valve in a new electronic diesel fuel system

Title: Development of a continuously variable speed viscous fan clutch for engine cooling system

Title: Cylinder head gasket simulation in finite element analysis

Title: Development of a new metal cylinder head gasket

Title: Stacked panel filter for engine air intake systems

Title: High-pressure injection fuel system wear study

Title: Intake flow predictions of a transparent DI diesel engine

Title: Development and validation of a 3-D multi-zone combustion model for the prediction of DI diesel engines performance and pollutants emissions

Title: Simulation of soot formation under diesel engine conditions using a detailed kinetic soot model

Title: Numerical study of the cloud cavitation in a fuel injection pump

Title: Modeling the structural thermal response of an air-cooled diesel engine under transient operation including a detailed thermodynamic description of boundary conditions.

Title: Cylinder-to-cylinder variation of losses in intake regions of IC engines

Title: IC engine intake region design modifications for loss reduction based on CFD methods

Title: Experimental investigation on the fluctuation intensities in a stationary spray

Title: Simulation of a diesel jet assumed fully atomized at the nozzle exit

Title: An efficient cam design procedure for a prescribed diesel fuel injection rate profile using a Bézier curve

Title: Macroscopic and ignition characteristics of high-pressure sprays of single-component fuels

Title: The effects of injection parameters on a heavy-duty diesel engine with TICS system

Title: The computed structure of a combusting transient jet under diesel conditions

Title: Investigation of droplets and ambient gas interaction in a diesel spray using a nano-spark photography method

Title: Critical engine geometry generation for rapid powertrain concept design assessment

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Title: Partitioning emissions tasks across engine and aftertreatment systems

Title: A study of composition and size distribution of particulate matter from DI diesel engine

Title: Analysis of soot particulate formation in a high-pressure confined spray-flame

Title: In-cylinder soot-control with high-speed rotating injector for DI diesel engines
Title: Injection orifice shape: Effects on spray characteristics and heat-release rate in a large-size, single-cylinder diesel engine

Title: The influence of pressure in the nozzle sac and needle lift on fuel spray behavior and HC emissions in DI diesel engines

Title: Analysis of factors influencing particulate matter emissions of a compression-ignition, direct-injection engine

Title: A study of pilot injection in a DI diesel engine

Title: Study of High-pressure Injection DI Diesel Engine

Title: Cycle-to-cycle transient characteristics of diesel emissions during starting

Title: Direct visualization of high-pressure diesel spray and engine combustion

Title: Operating characteristics and description of a dual-fuel engine for diesel-natural gas heavy-duty operation

Title: Influence of mini-tunnel operating parameters and ambient conditions on diesel particulate measurement and analysis

Title: Characterization of soluble organic fraction in DPM: Optimization of the extraction method

Title: Determination of polycyclic aromatic hydrocarbons (PAH) in size-fractionated diesel particles from a light-duty vehicle

Title: Analysis of semivolatile organic compounds in diesel exhaust using a novel sorption and extraction method

Title: NO decomposition in diesel engines

Title: Modeling the effect of split injections in diesel engines using representative interactive flamelets

Title: A simple approach to studying the relation between fuel rate, heat release rate and NO formation in diesel engines

Title: A holistic hydraulic and spray model—Liquid and vapor phase penetration of fuel sprays in DI diesel engines

Title: Modeling the combustion in a small-bore diesel engine using a method based on representative interactive flamelets

Title: Numerical evaluation of soot formation control at diesel-like conditions by reducing fuel injection timing

Title: Correlating the diesel spray behavior to nozzle design

Title: Optimization study of pilot-ignited natural gas direct-injection in diesel engines

Title: NOx sorbate catalyst system with sulfur catalyst protection for the aftertreatment of No. 2 diesel exhaust

Title: Development of a compact reverse-flow catalytic converter for diesel dual-fuel LEV
1999-01-3560 Title: Hydrocarbon sorption and oxidation catalyst for heavy duty engines
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1999-01-3564 Title: Performance evaluation of advanced emission control technologies for diesel heavy-duty engines
1999-01-3565 Title: Development of a microwave-assisted regeneration system for a ceramic diesel particulate system

1999-01-3598 Title: Reduction of NOx, Smoke, and BSFC in a diesel engine fueled by biodiesel emulsion with used frying oil
1999-01-3599 Title: Performance of NOx catalyst in a DI diesel engine operated with neat dimethyl ether
1999-01-3603 Title: Emissions from a diesel vehicle operated on alternative fuels in Copenhagen

1999-01-3604 Title: Effects of two-spring injectors on the performance and emissions of a mustard seed oil-driven tractor engine
1999-01-3633 Title: Plasma-enhanced selective catalytic reduction of NOx in diesel exhaust: Test bench measurements
1999-01-3635 Title: Electrical characterization of a dielectric barrier discharge plasma device
1999-01-3637 Title: Feasibility of plasma aftertreatment for simultaneous control of NOx and particulates
1999-01-3639 Title: Evaluation of a non-thermal plasma system for remediation of NOx diesel exhaust

1999-01-3645 Title: Development of micro-diesel injector nozzles via MEMS technology and initial results for diesel sprays
1999-01-3646 Title: Optimizing common-rail injection by optical diagnostics in a transparent production type diesel engine
1999-01-3647 Title: Analysis of mixture formation, combustion and pollutant formation in HD diesel engines using modern optical diagnostics and numerical simulation
1999-01-3648 Title: High-pressure diesel spray and combustion visualization in a transparent model diesel engine

1999-01-3649 Title: Optical diagnostics applied to a naturally aspirated homogeneous charge compression ignition engine
1999-01-3650 Title: Optical studies in a DI diesel engine
1999-01-3652 Title: Combustion phenomena in IDI diesel engine detected by optical methods
1999-01-3665 Title: The effect of a turbocharger clearance control coating on the performance and emissions of a 2-stroke diesel engine
1999-01-3666 Title: In-service evaluation of performance-enhancing coatings for a heavy-duty diesel truck engine

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Title: Engine component wear rate on diesels equipped with an oil cleaning centrifuge
Title: Planar laser light scattering for the in-cylinder study of soot in a diesel engine
Title: Investigation into extending diesel engine oil drain interval (part 1)—Oil drain interval extension by increasing efficiency of filtering soot in lubricating oil
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Title: Clean diesel exhaust but sooty engines: the importance of the crankcase oil
Title: Heat transfer characteristics of an uncooled silicon nitride surface in a naturally-aspirated DI diesel
Title: Reduction of soot emission by air-jet turbulence in a DI diesel engine
Title: A stochastic combustion model of direct injection diesel engines
Title: Relation between diffusion process of sulfur oxides in exhaust gas into oil film and wear of cylinder liner and piston rings in diesel engines

Title: Relationships among oil composition combustion-generated soot, and diesel engine valve train wear
Title: Laser illuminated photographic studies of the spray and combustion phenomena in a small high speed DI diesel engine
Title: Investigation of spray penetration and fuel distribution inside the piston bowl of a 1.9 l DI diesel engine using two-dimensional mie scattering
Title: Planar fluorescence technique for visualization of a diesel spray
Title: Observation of combustion process of diesel fuel spray in high temperature air simulating diesel combustion
Title: Effects of flame motion and temperature on local wall heat transfer in a rapid compression-expansion machine
Title: Study on the combustion process of a 2 liter supercharged intercooled D.I. diesel engine, based on experimental and modelled results
Title: The influence of some engine operating parameters on particulate emissions
Title: Computer simulation of fuel injection systems for DI diesel engines
Title: Fuel injection rate analysis—A new diagnostic tool for combustion research
Title: Three dimensional calculations of DI diesel engine combustion and comparison with in cylinder sampling valve data

Title: Diesel engine modelling under steady and transient conditions using a transputer based concurrent computer
Title: A simplified model for predicting evaporating spray mixing process in D.I. diesel engine
Title: autoignition of dilute fuel sprays including detailed chemistry
Title: A study of soot formation processes in a dual fueled compression ignition engine
Title: Application of the discrete transfer model of thermal radiation in a CFD simulation of diesel engine combustion and heat transfer
Title: Soot and fuel distributions in a D.I. diesel engine via 2-D imaging
Title: Internal flow in a scale model of a diesel fuel injector nozzle
Title: Vapor delivered lubrication of diesel engines—Uncooled single cylinder engine test
Title: Development of a heavy duty on-highway natural gas-fueled engine
Title: Analysis of knock in a dual-fuel engine
Title: Quantitative, planar soot measurements in a D.I. diesel engine using laser-induced incandescence and light scattering
Title: 2-D imaging of fuel vapor concentration in a diesel spray via exciplex-based fluorescence technique
Title: Technology for meeting the 1994 U.S.A. exhaust emission regulations on heavy-duty diesel engine
Title: The effect of split injection on soot and NOx production in an engine-fed combustion chamber
Title: Simple modeling of autoignition in diesel engines for 3-D computations
Title: Soot formation and oxidation in a D.I. diesel engine: a comparison between measurements and three-dimensional computations
Title: Intake valve flow measurements using PIV
Title: The cold performance of diesel engines
Title: The possible role of surface tension in the reduction of top ring drag
Title: Characterization of the oil film behavior between the liner and piston of a heavy-duty diesel engine
Title: Measurements of cylinder liner oil film thickness in a motored diesel engine
Title: The effects of simulated EGR via intake air dilution on combustion in an optically accessible DI diesel engine
Title: Oxygen-enriched diesel engine experiments with a low-grade fuel
Title: Modeling of diesel spray impingement on a flat wall
Title: Modeling of diesel spray dynamics and comparison with experiments
Title: Three-dimensional computations of diesel sprays in a very high pressure chamber
Title: Toward predictive modeling of diesel engine intake flow, combustion and emissions
Title: Modeling the source of combustion noise in a direct-injection diesel engine using cfd
Title: Three-dimensional computations of the scavenging process in an opposed-piston engine
Title: A multi-zone model for prediction of DI diesel engine combustion and soot emission
Title: Coal-water-slurry autoignition in a high-speed detroit diesel engine
Title: Investigation of diesel spray structure and spray/wall interactions in a constant volume pressure vessel
Title: Injection pressure and intake air density effects on ignition and combustion in a 4-valve diesel engine
Title: Visualization of diesel spray by laser sheet method
Title: Influence of the starting aid position on airflow, spray formation and combustion in a production idi-diesel engine by high-speed filming via endoscopes
Title: New concept for six-stroke diesel engine
Title: Attitude control of a diesel spray under the coanda effect
Title: Ford 4-valve light-duty di diesel development
Title: The method for development of a diesel engine universal performance map
Title: A mathematical model for the calculation of blow-by flow and oil consumption depending on ring pack dynamic. part 1: gas flows, oil scraping and ring pack dynamic
Title: Geometry of the fuel cloud created by impingement of a diesel jet onto a small heated target
Title: LDA analysis of high injection pressure diesel fuel spray and entrainment air flow
Title: European diesel research idea - experimental results from di diesel engine investigations
Title: The influence of lubricant rheology on friction in the piston ring-pack
Title: 1.8l sierra-mondeo turbo-diesel valvetrain friction reduction using a solid film lubricant
Title: Diesel cold-starting study using optically accessible engines
Title: Emissions and engine performance from blends of soya and canola methyl esters with ARB #2 diesel in a DDC 6V92TA MUI engine
Title: Multidimensional modeling of fuel composition effects on combustion and cold-starting in diesel engines
Title: An experimental and numerical study of air-fuel mixing and combustion of a divided-chamber diesel engine system
Title: Progress towards diesel combustion modeling
Title: A new high pressure droplet vaporization model for diesel engine modeling
Title: Modelling the origins of combustion noise in the indirect injection diesel engine
Title: A predictive model for the combustion process in dual fuel engines
Title: The effect of TDC temperature and density on the liquid-phase fuel penetration in a D.I. diesel engine
Title: Non-intrusive temperature measurements during the compression phase of a DI diesel engine
Title: A new test bench for HWA fluid-dynamic characterization of a two-valved in-piston-bowl production engine
Title: Measurement of the oil film thickness between the cylinder liner and the piston rings in a heavy duty directly injected diesel engine
Title: Nonroad engine activity analysis and transient cycle generation

Title: New developments in oil/coolant heat exchangers for heavy-duty engine and transmission applications

Title: Horsepower with brains: The design of the CHIRON free piston engine

Title: First cycles of the dual hydraulic free piston engine

Title: Off-highway noise—Diverging demands of the future

Title: Numerical and experimental methods to investigate cooling air flow in the construction machinery's engine compartment

Title: High performances and low noise fans for cooling systems of OHV, trains, and cars

Title: Development of a new life equation for ball and roller bearings

Title: Development of heat resistant long life through hardening bearing steel (STJ2)

Title: Select-a-Seal™, a new flange sealing technology

Title: Effects of timing and odd/even number of teeth on noise generation of gerotor lubricating pumps for IC engines

Title: 9000T Series John Deere track tractors

Title: Development of KUBOTA new utility M Series tractors

Title: Optimum control of a hydrostatic powertrain in the presence of accessory loads

Title: A comparison of some biodegradable hydraulic fluids and engine oils

Title: Cylinder pressure analysis of a diesel engine using oxygen enriched air and emulsified fuels

Title: Evaluation of oxygenated fuel by direct injection diesel and direct fuel injection impingement diffusion combustion diesel engines

Title: Development of an ethanol DI spark assisted diesel engine (SADE)

Title: The Cummins A3.4-125—A charge cooled IDI turbo diesel for the 1991 U.S. light-heavy duty market

Title: Mitsubishi new 12.0 liter turbocharged and intercooled diesel engine

Title: DDC's 8V71T, low heat rejection engine developed for the U.S. Army self propelled howitzers and support vehicles

Title: The new Cummins C series diesel engine

Title: Visual study of influence of combustion chamber configurations on fuel-air mixing process in D.I. diesel engine using liquid-liquid injection technique

Title: LDA measurements of steady and unsteady flow through the induction system of a heavy duty diesel engine

Title: An image analysis of high speed combustion photographs for D.I. diesel engine with high pressure fuel injection

Title: Experimental investigation of film-space atomization combustion in D.I. diesel engines
Title: The microcrystal structure of soot particulates in the combustion chamber of prechamber type diesel engines

Title: The interaction of fuel spray and air swirl in a diesel combustion chamber with nitrogen gas circulation

Title: Studies on combustion and exhaust emissions in a high speed DI diesel engine

Title: Investigation of flow field and fuel spray in a direct-injection diesel engine via KIVA-II program

Title: Apparatus for the measurement of ignition delay times for diesel engine fuels

Title: New type of diesel engine by impingement of fuel jet (OSKA-D)

Title: Komatsu high pressure fuel injection pump "KP21"

Title: Measuring the injection rate in diesel multi-hole nozzles

Title: A mathematical simulation and test to transient performance of turbo-charged diesel engine

Title: Performance and emissions of a natural gas dual-fueled, indirect injected diesel engine

Title: A prechamber-type compression ignition engine operated by composite fuels

Title: Exciting force characteristics in practical diesel engine with non-uniform velocity balancer driven by eccentric gear

Title: Study on DI diesel engine with an impinging nozzle head—Performance and combustion characteristics

Title: The effects of spray, mixing, and combustion model parameters on KIVA-II predictions

Title: Evaluation and study of the heat release rate of swirl chamber diesel engines

Title: Implementation of a fuel spray wall interaction model in KIVA-II

Title: VR/LE engine concept application to the turbocharged diesel engine

Title: 3-D modeling of diesel engine intake flow, combustion and emissions

Title: Modeling of diesel engine operation

Title: The dynamics of pump-line-nozzle fuel injection systems

Title: Improvement of diesel engine performance through fuel-injection equipment optimization

Title: Effects of a catalyzed diesel particle filter on the chemical and biological character of emissions from a diesel engine used in underground mines

Title: Ignition delay of a diesel spray injected into a residual gas mixture

Title: In-cylinder fluid motion and emissions of conventional and re-entrant diesel combustion systems

Title: Dynamic testing of light duty diesel engine: characterization of combustion parameters evolution

Title: A simple squish model for pentroof combustion chamber

Title: High temperature diesel combustion in a rapid compression-expansion machine

Title: Step response of engine torque and speed in small two-stroke diesel engines

Title: A diesel exhaust filter system for industrial diesel forklifts
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Title: Image analysis of diesel sprays
Title: In-cylinder soot deposition rates due to thermophoresis in a direct injection diesel engine
Title: Design modifications for durability improvements of diesel engines operating on plant oil fuels

Title: Quantitative relations of combustion in a D.I. diesel engine-main combustion period and after burn period
Title: The measurement and analysis of swirl in steady flow
Title: Analysis of swirl in unsteady flow and its effect on diesel combustion
Title: Development of low NOx emission diesel engine by impingement of fuel jet
Title: Self regenerating particulate matter system for on and off-highway diesel engines
Title: Design and development of catalytic converters for diesels

Title: The exhaust and noise emission concepts of the new Deutz B/FM1012/C and B/FM1013/C engine families
Title: New John Deere 2.9L 3-cylinder diesel engines
Title: The design and development of the GENESIS diesel engine family

Title: Development of nodular cast iron pistons with permanent molding process for high speed diesel engines
Title: Computer simulation of one-dimensional pulsating pipe flow with diffuser
Title: Structural analysis of diesel engine cylinder head gasket joints
Title: The dynamic characteristics of torsional viscous-friction dampers on reciprocating engine shaftings
Title: Review of induction system design and a comparison between prediction and results from a single cylinder diesel engine
Title: The use of parameterization for modeling diesel fuel spray
Title: Investigation of probable combustion chamber configurations for high output DI diesel engines
Title: A one-dimensional model for in-cylinder heat convection based on the boundary layer theory
Title: Coolant seal elastomer for diesel engine head gasket
Title: Variable injection timing effects on the performance and emissions of a direct diesel engine
Title: Dynamic parameters for engine diagnostics: effect of sampling
Title: Nonlinear finite element analysis of diesel engine cylinder head gasket joints
Title: Progress in diesel engine intake flow and combustion modeling
Title: Experimental correlations for heat release and mechanical losses in turbocharged diesel engines
Title: Source data determination in modeling of diesel engine operation
Title: Present and future emission requirements for mining engines and their influence on diesel engine design
Title: Optimization of the diesel engine injection nozzle

Title: Optical methods for the measurement of the temperature and concentration distribution in combustion chambers
Title: Apparatus for premixed combustion analysis
Title: A study of energy released during premixed combustion
Title: Optimum injection timings of gas-oil and methanol in dual fuel CI engine
Title: A FEM thermal analysis on a novel designed air-gap insulated piston
Title: Power cylinder design variables and their effects on piston combustion bowl edge stresses
Title: NVH optimization of a 16-cylinder diesel engine

Title: MTBE for improved diesel combustion and emissions?
Title: Number-based droplet velocity distribution in high pressure diesel fuel sprays
Title: The effect of pilot injection on combustion in a turbocharged D.I. diesel engine
Title: Three-dimensional spray distributions in a direct injection diesel
Title: The optimum of heat release patterns in high speed D.I. diesel engine
Title: Effective reduction of noise and vibration of internal combustion engines in marine installations

Title: Optimum phasing of engine and propeller in marine propulsion systems with direct-coupled two-stroke engines
Title: Experimental performance results from a carbon dioxide/oxygen breathing diesel engine
Title: Diesel engines fuel economy characteristics

Title: Numerical solution and study of thermal effect of transient processes of a turbocharged diesel engine
Title: investigation of a direct injection diesel engine by high-speed spectral IR imaging and KIVA-II
Title: The laser interfero-holographic and tomographic analysis of concentration and temperature distribution of a three dimensional transient diesel spray
Title: Computer simulation of fuel injection systems - a parametric study
Title: A review of free piston engine concepts
Title: Performance design of hydraulic mount for low frequency engine vibration and noise control
Title: Development of single cylinder Di diesel engine type 1102 with horizontal cylinder
Title: Heat transfer through ceramic barrier coatings used in internal combustion engines

Title: Evaluation of the thermodynamic process of indirect injection diesel engines by the first and second law
Title: The study of an optimum method for inlet port performance in a D.I. diesel engine
Title: Pressure modulated injection and its effect on combustion and emissions of a HD diesel engine
Title: Nitrogen oxidizing in modeling of diesel engine operation
Title: Dimensionless analysis of diesel engine properties at different atmospheric pressures
Title: A study on the flow in the engine intake system
Title: Numerical analysis of pulsatile flow in pipe system with three-way junction
Title: Flow analysis of the helical intake port and cylinder of a direct injection diesel engine
Title: Frequency analysis technique for intake and exhaust manifold design
Title: Calculation of the diesel fuel injection parameters
Title: A new calculation method for simulating the thermodynamic process in the intercoolers
Title: High output compound diesel engine schemes—How do they compare with state-of-the-art turbocharged engines
Title: Wear characteristics of a roller follower variable valve timing system
Title: A superalloy low heat rejection engine with conventional lubrication
Title: Sequential hydro-supercharging system for turbodiesels
Title: The effects of ceramic port insulation on cylinder head performance in a diesel engine
Title: Performance development of a axially moveable vane turbocharger
Title: Cummins Quantum CELECT fuel system description for the QSK19 diesel engine
Title: Analysis of sound levels from Nebraska Tractor Test data
Title: A perspective on extended service intervals and long-life coolants for heavy-duty engines
Title: Development of an ultra-low silicate, phosphate-free, extended-service interval coolant, supplemental coolant additive and maintenance practice for use in high output off-highway and powerplant internal combustion iron block engines
Title: Experiments and modeling on spray distributions in the combustion chamber of a direct injection diesel engine
Title: Predicting vehicle turbocharged diesel engine performance at altitude