Adrian Irimescu

List of Publications by Year
in descending order

52 papers	998 citations	516710 16 h-index	610901 24 g-index
52 all docs	52 docs citations	52 times ranked	522 citing authors

#	Article	IF	Citations
1	Performance and fuel conversion efficiency of a spark ignition engine fueled with iso-butanol. Applied Energy, 2012, 96, 477-483.	10.1	97
2	Compression ratio and blow-by rates estimation based on motored pressure trace analysis for an optical spark ignition engine. Applied Thermal Engineering, 2013, 61, 101-109.	6.0	49
3	A RANS knock model to predict the statistical occurrence of engine knock. Applied Energy, 2017, 191, 251-263.	10.1	44
4	Fuel conversion efficiency of a port injection engine fueled with gasoline–isobutanol blends. Energy, 2011, 36, 3030-3035.	8.8	40
5	CFD Analysis of Combustion and Knock in an Optically Accessible GDI Engine. SAE International Journal of Engines, 0, 9, 641-656.	0.4	37
6	Flame Front Propagation in an Optical GDI Engine under Stoichiometric and Lean Burn Conditions. Energies, 2017, 10, 1337.	3.1	34
7	Development of a semi-empirical convective heat transfer correlation based on thermodynamic and optical measurements in a spark ignition engine. Applied Energy, 2015, 157, 777-788.	10.1	33
8	Development of a RANS-Based Knock Model to Infer the Knock Probability in a Research Spark-Ignition Engine. SAE International Journal of Engines, 0, 10, 722-739.	0.4	33
9	Investigation on the effects of butanol and ethanol fueling on combustion and PM emissions in an optically accessible DISI engine. Fuel, 2018, 216, 121-141.	6.4	33
10	Numerical Simulation of Gasoline and n-Butanol Combustion in an Optically Accessible Research Engine. SAE International Journal of Fuels and Lubricants, 0, 10, 32-55.	0.2	32
11	Effect of injection timing on combustion and soot formation in a direct injection spark ignition engine fueled with butanol. International Journal of Engine Research, 2017, 18, 490-504.	2.3	30
12	UV-visible Optical Characterization of the Early Combustion Stage in a DISI Engine Fuelled with Butanol-Gasoline Blend. SAE International Journal of Engines, 0, 6, 1953-1969.	0.4	29
13	Optical diagnostics of early flame development in a DISI (direct injection spark ignition) engine fueled with n-butanol and gasoline. Energy, 2016, 108, 50-62.	8.8	29
14	Evaluation of different methods for combined thermodynamic and optical analysis of combustion in spark ignition engines. Energy Conversion and Management, 2014, 87, 914-927.	9.2	28
15	Application of an entrainment turbulent combustion model with validation based on the distribution of chemical species in an optical spark ignition engine. Applied Energy, 2016, 162, 908-923.	10.1	26
16	Development of Chemistry-Based Laminar Flame Speed Correlation for Part-Load SI Conditions and Validation in a GDI Research Engine. SAE International Journal of Engines, 0, 11, 715-741.	0.4	26
17	Cycle-resolved visualization of pre-ignition and abnormal combustion phenomena in a GDI engine. Energy Conversion and Management, 2016, 127, 380-391.	9.2	23
18	Effect of coolant temperature on air–fuel mixture formation and combustion in an optical direct injection spark ignition engine fueled with gasoline and butanol. Journal of the Energy Institute, 2017, 90, 452-465.	5.3	23

#	Article	IF	Citations
19	Evaluation of compression ratio and blow-by rates for spark ignition engines based on in-cylinder pressure trace analysis. Energy Conversion and Management, 2018, 162, 98-108.	9.2	23
20	Influence of Engine Speed and Injection Phasing on Lean Combustion for Different Dilution Rates in an Optically Accessible Wall-Guided Spark Ignition Engine. SAE International Journal of Engines, 0, 11, 1343-1369.	0.4	23
21	Optical characterization of combustion processes in a DISI engine equipped with plasma-assisted ignition system. Applied Thermal Engineering, 2014, 69, 177-187.	6.0	22
22	Spectroscopic characterization of energy transfer and thermal conditions of the flame kernel in a spark ignition engine fueled with methane and hydrogen. International Journal of Hydrogen Energy, 2017, 42, 13276-13288.	7.1	22
23	Study of cold start air–fuel mixture parameters for spark ignition engines fueled with gasoline–isobutanol blends. International Communications in Heat and Mass Transfer, 2010, 37, 1203-1207.	5.6	21
24	Convective heat transfer equation for turbulent flow in tubes applied to internal combustion engines operated under motored conditions. Applied Thermal Engineering, 2013, 50, 536-545.	6.0	19
25	Performance and emissions of a small scale generator powered by a spark ignition engine with adaptive fuel injection control. Applied Energy, 2014, 121, 196-206.	10.1	19
26	Flame Contour Analysis through UV-Visible Imaging during Regular and Abnormal Combustion in a DISI Engine. , 0, , .		15
27	Split Injection in a DISI Engine Fuelled with Butanol and Gasoline Analyzed through Integrated Methodologies. SAE International Journal of Engines, 0, 8, 474-494.	0.4	15
28	Numerical Simulation and Flame Analysis of Combustion and Knock in a DISI Optically Accessible Research Engine. SAE International Journal of Engines, 0, 10, 576-592.	0.4	15
29	Influence of water injection on combustion identified through spectroscopy in an optical direct injection spark ignition engine. Fuel, 2020, 273, 117729.	6.4	15
30	Flame Front and Burned Gas Characteristics for Different Split Injection Ratios and Phasing in an Optical GDI Engine. Applied Sciences (Switzerland), 2019, 9, 449.	2.5	14
31	Working Fluid Properties Variation During Combustion in Premixed Charge Hydrogen Engines. , 0, , .		13
32	Effect of the Fuel-Injection Strategy on Flame-Front Evolution in an Optical Wall-Guided DISI Engine with Gasoline and Butanol Fueling. Journal of Energy Engineering - ASCE, 2016, 142, .	1.9	13
33	Effect of Fuel Injection Strategy on the Carbonaceous Structure Formation and Nanoparticle Emission in a DISI Engine Fuelled with Butanol. Energies, 2017, 10, 832.	3.1	12
34	Estimation of operational parameters for a direct injection turbocharged spark ignition engine by using regression analysis and artificial neural network. Thermal Science, 2017, 21, 401-412.	1.1	12
35	Experimental Evaluation of an Advanced Ignition System for GDI Engines. SAE International Journal of Engines, 0, 8, 2351-2367.	0.4	9
36	Combustion Process Investigation in a DISI Engine Fuelled with n-butanol Through Digital Imaging and Chemiluminescence. , 0, , .		8

#	Article	IF	Citations
37	Numerical Investigation of Water Injection Effects on Flame Wrinkling and Combustion Development in a GDI Spark Ignition Optical Engine. , 0, , .		8
38	Optical Properties Investigation of Alternative Fuels Containing Carbon-Based Nanostructures. , 2014, , .		6
39	Correlation between Simulated Volume Fraction Burned Using a Quasi-Dimensional Model and Flame Area Measured in an Optically Accessible SI Engine. , 2017, , .		6
40	Back-Pressure and Fuel Type Effects on Exhaust Gas Oxygen Sensor Readings for a Single Cylinder Spark Ignition Engine Running on Gasoline and Ethanol. , 0, , .		6
41	Development of a Sectional Soot Model Based Methodology for the Prediction of Soot Engine-Out Emissions in GDI Units. , 0, , .		6
42	Quasi-Dimensional Simulation of Downsizing and Inverter Application for Efficient Part Load Operation of Spark Ignition Engine Driven Micro-Cogeneration Systems. , 0, , .		6
43	Plasma Assisted Ignition Effects on a DISI Engine Fueled with Gasoline and Butanol under Lean Conditions and with EGR. , 0, , .		4
44	On the Entrainment Velocity and Characteristic Length Scales Used for Quasi-Dimensional Turbulent Combustion Modeling in Spark Ignition Engines. , 0, , .		3
45	Influence of Combustion Efficiency on the Operation of Spark Ignition Engines Fueled with Methane and Hydrogen Investigated in a Quasi-Dimensional Simulation Framework. , 2018, , .		3
46	Laminar Flame Speed Based Optimization of Efficiency and Emissions for Methane-Hydrogen Fueled SI Micro-Generators. , 0, , .		3
47	Experimental and Numerical Investigation of the Flow Field Effect on Arc Stretching for a J-type Spark Plug. , 0, , .		3
48	Green pathway to a new fuel extender: continuous flow catalytic synthesis of butanol/butyl butyrate mixtures. RSC Advances, 2020, 10, 3130-3136.	3.6	2
49	Implementation of a Multi-Zone Numerical Blow-by Model and Its Integration with CFD Simulations for Estimating Collateral Mass and Heat Fluxes in Optical Engines. Energies, 2021, 14, 8566.	3.1	2
50	Lean Burn Flame Kernel Characterization for Different Spark Plug Designs and Orientations in an Optical GDI Engine. Energies, 2022, 15, 3393.	3.1	2
51	Effect of Electrode Geometry on Flame Kernel Development in a DI SI Engine. Proceedings in Automotive Engineering, 2019, , 481-493.	0.1	1
52	Influence of Dwell Time for Double Injection Strategies in a Wall Guided GDI Engine. Proceedings in Automotive Engineering, 2019, , 494-502.	0.1	1