

Gerardo Valentino

List of Publications by Year in descending order

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107
papers

1,626
citations

489802

18
h-index

511568

30
g-index

108
all docs

108
docs citations

108
times ranked

1091
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Cylinder-by-Cylinder Variation on Performance and Gaseous Emissions of a PFI Spark Ignition Engine: Experimental and 1D Numerical Study. Applied Sciences (Switzerland), 2021, 11, 6035.	1.3	6
2	Experimental Comparative Study on Performance and Emissions of E85 Adopting Different Injection Approaches in a Turbocharged PFI SI Engine. Energies, 2019, 12, 1555.	1.6	4
3	Experimental and numerical study on the influence of cooled EGR on knock tendency, performance and emissions of a downsized spark-ignition engine. Energy, 2019, 172, 968-976.	4.5	59
4	Optical investigations in a CI engine fueled with water in diesel emulsion produced through microchannels. Experimental Thermal and Fluid Science, 2018, 95, 96-103.	1.5	30
5	Optical Analysis of Combustion and Soot Formation in a CI Engine Fuelled with Water in Diesel Emulsion through Microchannels Emulsification. Journal of Physics: Conference Series, 2018, 1110, 012010.	0.3	2
6	Impact of Ethanol-Gasoline Port Injected on Performance and Exhaust Emissions of a Turbocharged SI Engine. , 2018, , .		4
7	Effect of Water Injection on Fuel Efficiency and Gaseous and PN Emissions in a Downsized Turbocharged SI Engine. Journal of Energy Engineering - ASCE, 2018, 144, .	1.0	11
8	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.	2.7	23
9	Water Spray Flow Characteristics Under Synthetic Jet Driven By a Piezoelectric Actuator. Journal of Physics: Conference Series, 2017, 778, 012005.	0.3	5
10	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.	1.4	30
11	INFLUENCE OF PIEZO-DRIVEN SYNTHETIC JET ON WATER SPRAY BEHAVIOR. Atomization and Sprays, 2017, 27, 691-706.	0.3	13
12	An Experimental Investigation of Alcohol/Diesel Fuel Blends on Combustion and Emissions in a Single-Cylinder Compression Ignition Engine. , 2016, , .		5
13	A Non-Linear Regression Technique to Estimate from Vibrational Engine Data the Instantaneous In-Cylinder Pressure Peak and Related Angular Position. , 2016, , .		10
14	A Modeling Study of Cyclic Dispersion Impact on Fuel Economy for a Small Size Turbocharged SI Engine. SAE International Journal of Engines, 2016, 9, 2066-2078.	0.4	1
15	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, .	1.0	13
16	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.	4.5	29
17	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.	5.1	26
18	Experimental Analysis and Modeling of NOx Emissions in Compression Ignition Engines Fueled with Blends of Diesel and Palm Oil Biodiesel. , 2016, , .		0

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19	Characterization of Alcohol Sprays from Multi-Hole Injector for DISI Engines through PIV Technique. , 2015, , .		2
20	CHARACTERIZATION OF n-BUTANOL AND GASOLINE SPRAY FROM A MULTIHOLE INJECTOR USING PHASE DOPPLER ANEMOMETRY. Atomization and Sprays, 2015, 25, 1047-1062.	0.3	3
21	Butanol-Diesel Blend Spray Combustion Investigation by UV-Visible Flame Emission in a Prototype Single Cylinder Compression Ignition Engine. SAE International Journal of Engines, 2015, 8, 2145-2158.	0.4	4
22	Performances and Emissions of a 2-Stroke Diesel Engine Fueled with Biofuel Blends. Energy Procedia, 2015, 81, 918-929.	1.8	6
23	Combustion process investigations in an optically accessible DISI engine fuelled with n-butanol during part load operation. Renewable Energy, 2015, 77, 363-376.	4.3	45
24	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.	5.1	33
25	Chemiluminescence analysis of the effect of butanol-diesel fuel blends on the spray-combustion process in an experimental common rail diesel engine. Thermal Science, 2015, 19, 1943-1957.	0.5	1
26	Effect of Different Fuels Properties on Emissions and Performance of a Light Duty Four-Cylinder Diesel Engine Under Premixed Combustion. , 2014, , .		3
27	Optical Properties Investigation of Alternative Fuels Containing Carbon-Based Nanostructures. , 2014, , .		6
28	Experimental Study on the Spray Atomization of a Multi-hole Injector for Spark Ignition Engines Fuelled by Gasoline and n-Butanol. , 2014, , .		4
29	Optical Investigation of Postinjection Strategy Effect at the Exhaust Line of a Light-Duty Diesel Engine Supplied with Diesel/Butanol and Biodiesel Blends. Journal of Energy Engineering - ASCE, 2014, 140, .	1.0	6
30	Comparative behavior of gasolineâ€“diesel/butanolâ€“diesel blends and injection strategy management on performance and emissions of a light duty diesel engine. Energy, 2014, 71, 321-331.	4.5	34
31	Optical characterization of combustion processes in a DISI engine equipped with plasma-assisted ignition system. Applied Thermal Engineering, 2014, 69, 177-187.	3.0	22
32	Evaluation of different methods for combined thermodynamic and optical analysis of combustion in spark ignition engines. Energy Conversion and Management, 2014, 87, 914-927.	4.4	28
33	Combustion process investigation in a high speed diesel engine fuelled with n-butanol diesel blend by conventional methods and optical diagnostics. Renewable Energy, 2014, 64, 225-237.	4.3	89
34	Spray-combustion process characterization in a common rail diesel engine fuelled with butanol-diesel blends by conventional methods and optical diagnostics. AIMS Energy, 2014, 2, 116-132.	1.1	6
35	In-cylinder spectroscopic measurements of knocking combustion inÂaÂSI engine fuelled with butanolâ€“gasoline blend. Energy, 2013, 62, 150-161.	4.5	45
36	UV-Visible Emission Spectroscopy of the Combustion Process in a Common Rail CI Engine Filled with N-Butanol - Diesel Blends. Applied Mechanics and Materials, 2013, 390, 286-290.	0.2	1

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37	Investigation of the Effect of Boost Pressure and Exhaust Gas Recirculation Rate on Nitrogen Oxide and Particulate Matter Emissions in Diesel Engines. , 2013, , .		3
38	Multi-Wavelength Spectroscopic Investigations of the Post-Injection Strategy Effect on the Fuel Vapor within the Exhaust Line of a Light Duty Diesel Engine Fuelled with B5 and B30. , 2013, , .		1
39	Experimental Investigation on the Combustion and Emissions of a Light Duty Diesel Engine Fuelled with Butanol-Diesel Blend. , 2013, , .		11
40	Experimental investigations of butanol-gasoline blends effects on the combustion process in a SI engine. International Journal of Energy and Environmental Engineering, 2012, 3, 6.	1.3	53
41	Optical diagnostics of the combustion process in a PFI SI boosted engine fueled with butanol-gasoline blend. Energy, 2012, 45, 277-287.	4.5	82
42	Effects of gasoline-diesel and n-butanol-diesel blends on performance and emissions of an automotive direct-injection diesel engine. International Journal of Engine Research, 2012, 13, 199-215.	1.4	19
43	UV-Visible Imaging and Natural Emission Spectroscopy of Premixed Combustion in High Swirl Multi-Jets Compression Ignition Engine Fuelled with Diesel-Gasoline Blend. , 2012, , .		2
44	Experimental study on performance and emissions of a high speed diesel engine fuelled with n-butanol diesel blends under premixed low temperature combustion. Fuel, 2012, 92, 295-307.	3.4	184
45	Optical Investigation of the Effect on the Combustion Process of Butanol-Gasoline Blend in a PFI SI Boosted Engine. , 2011, , .		17
46	Biodiesel/mineral diesel fuel mixtures: Spray evolution and engine performance and emissions characterization. Energy, 2011, 36, 3924-3932.	4.5	51
47	Effects of Low Temperature Premixed Combustion (LTPC) on Emissions of a Modern Diesel Engine for Passenger Cars. , 2010, , .		1
48	Experimental and numerical investigation of diesel spray behaviour in high pressure common-rail systems. International Journal of Vehicle Design, 2009, 50, 50.	0.1	3
49	Innovative Lift Direct Command to Inner Hydraulic Circuit Injector Comparison for Diesel Engines. , 2006, , .		3
50	Analysis of a High Pressure Diesel Spray at High Pressure and Temperature Environment Conditions. , 2005, , .		14
51	Particle image velocimetry for mixture formation investigation in a GDI prototype engine. , 2003, 5191, 59.		0
52	Fluid-Dynamic Analysis of the Intake System for a HDDI Diesel Engine by STAR-CD Code and LDA Technique. , 2003, , .		12
53	Analysis of the Intake Flow in a Diesel Engine Head Using Dynamic Steady Flow Conditions. , 2001, , .		6
54	Droplet Size and Velocity Distributions of a Transient Hollow-Cone Spray for GDI Engines. Particle and Particle Systems Characterization, 2001, 18, 262-270.	1.2	1

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55	Optical Diagnostics of Temporal and Spatial Evolution of a Reacting Diesel Fuel Jet. Combustion Science and Technology, 1999, 148, 1-16.	1.2	20
56	LDV Measurements of Integral Length Scales in an IC Engine. , 1996, , .		3
57	Interpretation of $k-\hat{\mu}$ computed turbulence length-scale predictions for engine flows. Proceedings of the Combustion Institute, 1996, 26, 2717-2723.	0.3	27
58	Analysis of In-Cylinder Turbulent Air Motion Dependence on Engine Speed. , 1994, , .		10
59	Analysis of in-cylinder flow processes by LDA. Combustion and Flame, 1994, 99, 387-394.	2.8	25
60	Fluid-Dynamic Investigation and Optical Characterization of Particulate to Reduce Diesel Emissions. Combustion Science and Technology, 1993, 93, 291-304.	1.2	1
61	Intake Valve Flow Measurements Using PIV. , 1993, , .		15
62	Experimental and Numerical Investigation of Air Flow Field in an Open Chamber Diesel Engine. , 1988, , .		3
63	Effect of Combustion Chamber Shape on Air Flow Field in a D.I. Diesel Engine. , 0, , .		8
64	The Role Of Mean Motion and Turbulence structure on Gaseous and Particulate Emissions of D. I. Diesel Combustion System. , 0, , .		2
65	Evaluation of Fluid-Mechanic Behavior of Toroidal and Square, Four-Lobe Combustion Chamber by LDA. , 0, , .		4
66	Turbulence Length Scale Measurements by Two-Probe-Volume LDA Technique in a Diesel Engine. , 0, , .		17
67	Improvement of Combustion System of a Small D.I. Diesel Engine for Low Exhaust Emissions. , 0, , .		8
68	In-Cylinder Fluid Motion and Emissions of a Conventional and Re-entrant Diesel Combustion Systems. , 0, , .		2
69	In-Cylinder Flow Measurements by LDA and Numerical Simulation by KIVA-II Code. , 0, , .		3
70	Numerical and Experimental Analysis of Diesel Air Fuel Mixing. , 0, , .		14
71	Assessment of $k-\hat{\mu}$ Turbulence Model in KIVA-II by In-Cylinder LDV Measurements. , 0, , .		4
72	Integral and Micro Time Scales Estimate in a D.I. Diesel Engine. , 0, , .		2

#	ARTICLE	IF	CITATIONS
73	A Study of Physical and Chemical Delay in a High Swirl Diesel System via Multiwavelength Extinction Measurements. , 0, , .		9
74	Interpretation of Air Motion in Reentrant Bowl in-Piston Engine by Estimating Reynolds Stresses. , 0, , .		5
75	Fuel Composition Effects on Air-Fuel Mixing and Self-Ignition in a Divided Chamber Diesel System by Optical Diagnostics. , 0, , .		3
76	Identification of a Common-Rail Diesel Jet Contour and Spray Droplet Velocity by Two Different Laser Techniques. , 0, , .		2
77	Droplets Size and Velocity in a GDI Spray by PDA and Laser Light Extinction Techniques. , 0, , .		1
78	Investigation of the intake tumble flow in a prototype GDI engine using a steady-state test rig. , 0, , .		2
79	Experimental and Numerical Study of Spray Generated by a High Pressure Gasoline Swirl Injector. , 0, , .		1
80	Investigation of Mixture Formation Process in a HDDI Diesel Engine by CFD and Imaging Technique. , 0, , .		3
81	Experimental Investigation of a Spray from a Multi-jet Common Rail Injection System for Small Engines. , 0, , .		17
82	Influence of a Swirling Air Flow on an Evaporating Diesel Spray from a Common Rail Injection System under Realistic Engine Conditions. , 0, , .		5
83	Experimental and Numerical Analyses of Performances and Noise Emission of a Common Rail Light Duty D.I. Diesel Engine. , 0, , .		3
84	Prediction and Optimization of the Performances, Noxious Emissions and Radiated Noise of a Light Duty Common-Rail Diesel Engine. , 0, , .		6
85	The Full Cycle HD Diesel Engine Simulations Using KIVA-4 Code. , 0, , .		12
86	PIV Investigation of High Swirl Flow on Spray Structure and its Effect on Emissions in a Diesel-Like Environment. , 0, , .		7
87	Effects of Premixed Low Temperature Combustion of Fuel Blends with High Resistance to Auto-ignition on Performances and Emissions in a High Speed Diesel Engine. , 0, , .		12
88	Optical Investigation of Premixed Low-Temperature Combustion of Lighter Fuel Blends in Compression Ignition Engines. , 0, , .		9
89	Optical Diagnostics of the Pollutant Formation in a CI Engine Operating with Diesel Fuel Blends. SAE International Journal of Engines, 0, 4, 2543-2558.	0.4	7
90	An Experimental Analysis on Diesel/n-Butanol Blends Operating in Partial Premixed Combustion in a Light Duty Diesel Engine. , 0, , .		7

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91	Combustion Optimization of a Marine DI Diesel Engine. , 0, , .		1
92	Optical Investigation of Post-injection Strategy Impact on the Fuel Vapor within the Exhaust Line of a Light Duty Diesel Engine Supplied with Biodiesel Blends. , 0, , .		1
93	In-Cylinder Spectroscopic Measurements of Combustion Process in a SI Engine Fuelled with Butanol-Gasoline Blend. , 0, , .		6
94	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
95	Spectroscopic Investigation of Post-Injection Strategy Impact on Fuel Vapor within the Exhaust Line of a Light Duty Diesel Engine Supplied with Diesel/Butanol and Gasoline Blends. , 0, , .		1
96	Effect of Control Parameters in an Optical DISI Engine with Gasoline-Butanol Fueling. , 0, , .		2
97	Combustion Process Investigation in a DISI Engine Fuelled with n-butanol Through Digital Imaging and Chemiluminescence. , 0, , .		8
98	Flame Contour Analysis through UV-Visible Imaging during Regular and Abnormal Combustion in a DISI Engine. , 0, , .		15
99	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
100	Experimental Evaluation of an Advanced Ignition System for GDI Engines. SAE International Journal of Engines, 0, 8, 2351-2367.	0.4	9
101	CFD Analysis of Combustion and Knock in an Optically Accessible GDI Engine. SAE International Journal of Engines, 0, 9, 641-656.	0.4	37
102	Plasma Assisted Ignition Effects on a DISI Engine Fueled with Gasoline and Butanol under Lean Conditions and with EGR. , 0, , .		4
103	Water Injection: a Technology to Improve Performance and Emissions of Downsized Turbocharged Spark Ignited Engines. SAE International Journal of Engines, 0, 10, 2319-2329.	0.4	34
104	Water Injection to Enhance Performance and Emissions of a Turbocharged Gasoline Engine under High Load Condition. SAE International Journal of Engines, 0, 10, 928-937.	0.4	47
105	Experimental and Numerical Study of the Water Injection to Improve the Fuel Economy of a Small Size Turbocharged SI Engine. SAE International Journal of Engines, 0, 10, 550-561.	0.4	56
106	Impact of Cooled EGR on Performance and Emissions of a Turbocharged Spark-Ignition Engine under Low-Full Load Conditions. , 0, , .		7
107	Experimental and 1D Numerical Investigations on the Exhaust Emissions of a Small Spark Ignition Engine Considering the Cylinder-by-Cylinder Variability. , 0, , .		2