

Manolis Gavaises

List of Publications by Year in descending order

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191
papers

5,890
citations

94381

37
h-index

123376

61
g-index

192
all docs

192
docs citations

192
times ranked

3049
citing authors

#	ARTICLE	IF	CITATIONS
1	IJER editorial: The future of the internal combustion engine. International Journal of Engine Research, 2020, 21, 3-10.	1.4	457
2	Dynamics of water droplets detached from porous surfaces of relevance to PEM fuel cells. Journal of Colloid and Interface Science, 2006, 300, 673-687.	5.0	237
3	Modelling of cavitation in diesel injector nozzles. Journal of Fluid Mechanics, 2008, 616, 153-193.	1.4	168
4	VOF simulations of the contact angle dynamics during the drop spreading: Standard models and a new wetting force model. Advances in Colloid and Interface Science, 2014, 212, 1-20.	7.0	158
5	Vortex flow and cavitation in diesel injector nozzles. Journal of Fluid Mechanics, 2008, 610, 195-215.	1.4	152
6	Cavitation in Real-Size Multi-Hole Diesel Injector Nozzles. , 0, , .		124
7	Simulation of bubble expansion and collapse in the vicinity of a free surface. Physics of Fluids, 2016, 28, .	1.6	119
8	Effect of Fuel Injection Processes on the Structure of Diesel Sprays. , 0, , .		98
9	Wall shear stress from jetting cavitation bubbles. Journal of Fluid Mechanics, 2018, 846, 341-355.	1.4	97
10	LINKING NOZZLE FLOW WITH SPRAY CHARACTERISTICS IN A DIESEL FUEL INJECTION SYSTEM. Atomization and Sprays, 1998, 8, 307-347.	0.3	97
11	The role of hydrogen for future internal combustion engines. International Journal of Engine Research, 2022, 23, 529-540.	1.4	95
12	Numerical investigation on the evaporation of droplets depositing on heated surfaces at low Weber numbers. International Journal of Heat and Mass Transfer, 2008, 51, 1516-1529.	2.5	81
13	Characterization of string cavitation in large-scale Diesel nozzles with tapered holes. Physics of Fluids, 2009, 21, .	1.6	79
14	Large Eddy Simulation of Diesel injector including cavitation effects and correlation to erosion damage. Fuel, 2016, 175, 26-39.	3.4	79
15	Instantaneous and ensemble average cavitation structures in Diesel micro-channel flow orifices. Fuel, 2014, 116, 736-742.	3.4	77
16	Spray Characteristics of a Multi-hole Injector for Direct-Injection Gasoline Engines. International Journal of Engine Research, 2006, 7, 255-270.	1.4	76
17	Investigation of Cavitation in a Vertical Multi-Hole Injector. , 0, , .		71
18	Numerical simulation of a collapsing bubble subject to gravity. Physics of Fluids, 2016, 28, .	1.6	71

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19	Numerical investigation of the evaporation of two-component droplets. Fuel, 2011, 90, 1492-1507.	3.4	70
20	Visualisation and les simulation of cavitation cloud formation and collapse in an axisymmetric geometry. International Journal of Multiphase Flow, 2015, 68, 14-26.	1.6	70
21	Performance of turbulence and cavitation models in prediction of incipient and developed cavitation. International Journal of Engine Research, 2017, 18, 333-350.	1.4	68
22	Cavitation Initiation, Its Development and Link with Flow Turbulence in Diesel Injector Nozzles. , 0, , .		66
23	Analysis of the Flow in the Nozzle of a Vertical Multi-Hole Diesel Engine Injector. , 0, , .		64
24	INFLUENCE OF VORTEX FLOW AND CAVITATION ON NEAR-NOZZLE DIESEL SPRAY DISPERSION ANGLE. Small Group Research, 2009, 19, 247-261.	1.8	62
25	Numerical investigation of the cooling effectiveness of a droplet impinging on a heated surface. International Journal of Heat and Mass Transfer, 2008, 51, 4728-4742.	2.5	60
26	Cavitation Inside Multi-hole Injectors for Large Diesel Engines and Its Effect on the Near-nozzle Spray Structure. , 0, , .		57
27	Simulation of cardiac motion on non-Newtonian, pulsating flow development in the human left anterior descending coronary artery. Physics in Medicine and Biology, 2008, 53, 4875-4892.	1.6	57
28	Flow in valve covered orifice nozzles with cylindrical and tapered holes and link to cavitation erosion and engine exhaust emissions. International Journal of Engine Research, 2008, 9, 435-447.	1.4	57
29	Numerical investigation of quasi-static bubble growth and detachment from submerged orifices in isothermal liquid pools: The effect of varying fluid properties and gravity levels. International Journal of Multiphase Flow, 2015, 74, 59-78.	1.6	57
30	Entropy scaling based viscosity predictions for hydrocarbon mixtures and diesel fuels up to extreme conditions. Fuel, 2019, 241, 1203-1213.	3.4	56
31	Flow Patterns at Stented Coronary Bifurcations. Circulation: Cardiovascular Interventions, 2012, 5, 530-539.	1.4	55
32	A numerical study on droplet-particle collision dynamics. International Journal of Heat and Fluid Flow, 2016, 61, 499-509.	1.1	54
33	Transient heating effects in high pressure Diesel injector nozzles. International Journal of Heat and Fluid Flow, 2015, 51, 257-267.	1.1	53
34	Predicting droplet deformation and breakup for moderate Weber numbers. International Journal of Multiphase Flow, 2016, 85, 96-109.	1.6	53
35	Spray Structure Generated by Multi-Hole Injectors for Gasoline Direct-Injection Engines. , 0, , .		52
36	Investigation of cavitation and vapor shedding mechanisms in a Venturi nozzle. Physics of Fluids, 2020, 32, .	1.6	51

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37	Predicting the evaporation rate of stationary droplets with the VOF methodology for a wide range of ambient temperature conditions. <i>International Journal of Thermal Sciences</i> , 2016, 109, 253-262.	2.6	49
38	Evaluation of the Predictive Capability of Diesel Nozzle Cavitation Models. , 0, , .		47
39	Purely predictive method for density, compressibility, and expansivity for hydrocarbon mixtures and diesel and jet fuels up to high temperatures and pressures. <i>Fuel</i> , 2019, 236, 1377-1390.	3.4	46
40	A numerical study on the effect of cavitation erosion in a diesel injector. <i>Applied Mathematical Modelling</i> , 2020, 78, 200-216.	2.2	46
41	Numerical simulation of cavitation and atomization using a fully compressible three-phase model. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	45
42	Evaluation of the Effect of Droplet Collisions on Spray Mixing. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 1996, 210, 465-475.	1.1	44
43	Modelling of high-pressure dense diesel sprays with adaptive local grid refinement. <i>International Journal of Heat and Fluid Flow</i> , 2008, 29, 427-448.	1.1	44
44	High pressure/high temperature multiphase simulations of dodecane injection to nitrogen: Application on ECN Spray-A. <i>Fuel</i> , 2020, 275, 117871.	3.4	44
45	Unveiling the physical mechanism behind pistol shrimp cavitation. <i>Scientific Reports</i> , 2017, 7, 13994.	1.6	42
46	Friction-induced heating in nozzle hole micro-channels under extreme fuel pressurisation. <i>Fuel</i> , 2014, 123, 143-150.	3.4	41
47	Numerical investigation of bubble dynamics using tabulated data. <i>International Journal of Multiphase Flow</i> , 2017, 93, 158-177.	1.6	39
48	Numerical investigation of aerodynamic droplet breakup in a high temperature gas environment. <i>Fuel</i> , 2016, 181, 450-462.	3.4	38
49	Link Between Cavitation Development and Erosion Damage in Diesel Injector Nozzles. , 0, , .		37
50	High-speed visualization of vortical cavitation using synchrotron radiation. <i>Journal of Fluid Mechanics</i> , 2018, 838, 148-164.	1.4	37
51	Vortex formation and recirculation zones in left anterior descending artery stenoses: computational fluid dynamics analysis. <i>Physics in Medicine and Biology</i> , 2010, 55, 1395-1411.	1.6	36
52	Coupling a local adaptive grid refinement technique with an interface sharpening scheme for the simulation of two-phase flow and free-surface flows using VOF methodology. <i>Journal of Computational Physics</i> , 2015, 300, 732-753.	1.9	36
53	Investigation of cavitation and air entrainment during pilot injection in real-size multi-hole diesel nozzles. <i>Fuel</i> , 2020, 263, 116746.	3.4	36
54	Numerical investigation of heavy fuel droplet-particle collisions in the injection zone of a Fluid Catalytic Cracking reactor, Part I: Numerical model and 2D simulations. <i>Fuel Processing Technology</i> , 2017, 156, 317-330.	3.7	35

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55	Numerical simulation of three-phase flow in an external gear pump using immersed boundary approach. <i>Applied Mathematical Modelling</i> , 2019, 72, 682-699.	2.2	35
56	Numerical investigation of heavy fuel oil droplet breakup enhancement with water emulsions. <i>Fuel</i> , 2020, 278, 118381.	3.4	35
57	Visualisation de la cavitation dans les injecteurs de moteurs Diesel. <i>Mecanique Et Industries</i> , 2001, 2, 375-381.	0.2	34
58	A new method of three-dimensional coronary artery reconstruction from X-ray angiography: Validation against a virtual phantom and multislice computed tomography. <i>Catheterization and Cardiovascular Interventions</i> , 2008, 71, 28-43.	0.7	33
59	Quantitative predictions of cavitation presence and erosion-prone locations in a high-pressure cavitation test rig. <i>Journal of Fluid Mechanics</i> , 2017, 819, 21-57.	1.4	33
60	Comparative evaluation of phase-change mechanisms for the prediction of flashing flows. <i>International Journal of Multiphase Flow</i> , 2017, 95, 257-270.	1.6	33
61	Non-dimensionalisation parameters for predicting the cooling effectiveness of droplets impinging on moderate temperature solid surfaces. <i>International Journal of Thermal Sciences</i> , 2011, 50, 698-711.	2.6	32
62	Application of X-ray micro-computed tomography on high-speed cavitating diesel fuel flows. <i>Experiments in Fluids</i> , 2016, 57, 1.	1.1	32
63	Cloud cavitation vortex shedding inside an injector nozzle. <i>Experimental Thermal and Fluid Science</i> , 2017, 84, 179-189.	1.5	32
64	Effect of Multi-Injection Strategy on Cavitation Development in Diesel Injector Nozzle Holes. , 0, , .		31
65	On the formation of string cavitation inside fuel injectors. <i>Experiments in Fluids</i> , 2014, 55, 1.	1.1	31
66	Parametric Investigations of the Induced Shear Stress by a Laser-Generated Bubble. <i>Langmuir</i> , 2018, 34, 6428-6442.	1.6	31
67	The role of droplet fragmentation in high-pressure evaporating diesel sprays. <i>International Journal of Thermal Sciences</i> , 2009, 48, 554-572.	2.6	30
68	Modelling of sprays from high-pressure swirl atomizers. <i>International Journal of Engine Research</i> , 2001, 2, 95-117.	1.4	29
69	Experimental Study of Diesel-Fuel Droplet Impact on a Similarly Sized Polished Spherical Heated Solid Particle. <i>Langmuir</i> , 2018, 34, 36-49.	1.6	29
70	Modelling cavitation during drop impact on solid surfaces. <i>Advances in Colloid and Interface Science</i> , 2018, 260, 46-64.	7.0	29
71	Numerical investigation of heavy fuel droplet-particle collisions in the injection zone of a Fluid Catalytic Cracking reactor, part II: 3D simulations. <i>Fuel Processing Technology</i> , 2017, 156, 43-53.	3.7	28
72	Pore scale 3D modelling of heat and mass transfer in the gas diffusion layer and cathode channel of a PEM fuel cell. <i>International Journal of Thermal Sciences</i> , 2011, 50, 456-467.	2.6	27

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73	Numerical investigation of the aerodynamic breakup of Diesel and heavy fuel oil droplets. International Journal of Heat and Fluid Flow, 2017, 68, 203-215.	1.1	26
74	Effect of Composition, Temperature, and Pressure on the Viscosities and Densities of Three Diesel Fuels. Journal of Chemical & Engineering Data, 2019, 64, 5529-5547.	1.0	26
75	Improved droplet breakup models for spray applications. International Journal of Heat and Fluid Flow, 2019, 76, 274-286.	1.1	26
76	Modeling wall impaction of diesel sprays. International Journal of Heat and Fluid Flow, 1996, 17, 130-138.	1.1	24
77	Modeling of Pressure-Swirl Atomizers for GDI Engines. , 0, , .		24
78	Illustrating the effect of viscoelastic additives on cavitation and turbulence with X-ray imaging. Scientific Reports, 2018, 8, 14968.	1.6	24
79	Simulation of transcritical fluid jets using the PC-SAFT EoS. Journal of Computational Physics, 2018, 374, 444-468.	1.9	23
80	Cavitation induction by projectile impacting on a water jet. International Journal of Multiphase Flow, 2019, 114, 128-139.	1.6	23
81	Simulation of micro-flow dynamics at low capillary numbers using adaptive interface compression. Computers and Fluids, 2018, 165, 13-32.	1.3	22
82	General method for prediction of thermal conductivity for well-characterized hydrocarbon mixtures and fuels up to extreme conditions using entropy scaling. Fuel, 2019, 245, 594-604.	3.4	22
83	Preferential cavitation and friction-induced heating of multi-component Diesel fuel surrogates up to 450MPa. International Journal of Heat and Mass Transfer, 2021, 166, 120744.	2.5	22
84	Modelling of internal and near-nozzle flow of a pintle-type outwards-opening gasoline piezo-injector. International Journal of Engine Research, 2006, 7, 381-397.	1.4	21
85	Aerodynamic breakup of an n -decane droplet in a high temperature gas environment. Fuel, 2016, 185, 370-380.	3.4	21
86	A simple model for breakup time prediction of water-heavy fuel oil emulsion droplets. International Journal of Heat and Mass Transfer, 2021, 164, 120581.	2.5	21
87	Mapping of cavitating flow regimes in injectors for medium-/heavy-duty diesel engines. International Journal of Engine Research, 2013, 14, 590-605.	1.4	20
88	Complex multicomponent real-fluid thermodynamic model for high-pressure Diesel fuel injection. Fuel, 2019, 257, 115888.	3.4	20
89	Simulation of supercritical diesel jets using the PC-SAFT EoS. Journal of Supercritical Fluids, 2019, 145, 48-65.	1.6	20
90	A cavitation aggressiveness index within the Reynolds averaged Navier Stokes methodology for cavitating flows. Journal of Hydrodynamics, 2015, 27, 579-586.	1.3	19

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91	Numerical investigation of the aerodynamic breakup of droplets in tandem. International Journal of Multiphase Flow, 2019, 113, 289-303.	1.6	19
92	Machine-learning enabled prediction of 3D spray under engine combustion network spray G conditions. Fuel, 2021, 293, 120444.	3.4	19
93	Multi-component fuel vaporization modelling and its effect on spray development in gasoline direct injection engines. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2007, 221, 1321-1342.	1.1	18
94	Derivation of flow related risk indices for stenosed left anterior descending coronary arteries with the use of computer simulations. Medical Engineering and Physics, 2016, 38, 929-939.	0.8	18
95	Turbulence and Cavitation Suppression by Quaternary Ammonium Salt Additives. Scientific Reports, 2018, 8, 7636.	1.6	18
96	A simplified mathematical model for thrombin generation. Medical Engineering and Physics, 2014, 36, 196-204.	0.8	17
97	Simulation and Measurement of Transient Fluid Phenomena within Diesel Injection. SAE International Journal of Advances and Current Practices in Mobility, 0, 1, 291-305.	2.0	17
98	Effect of piezo-driven and solenoid-driven needle opening of common-rail diesel injectors on internal nozzle flow and spray development. International Journal of Engine Research, 2006, 7, 489-502.	1.4	16
99	Novel experimental technique for 3D investigation of high-speed cavitating diesel fuel flows by X-ray micro computed tomography. Review of Scientific Instruments, 2017, 88, 033706.	0.6	16
100	Modelling of Diesel fuel properties through its surrogates using Perturbed-Chain, Statistical Associating Fluid Theory. International Journal of Engine Research, 2020, 21, 1118-1133.	1.4	16
101	Machine Learning and transcritical sprays: A demonstration study of their potential in ECN Spray-A. International Journal of Engine Research, 2022, 23, 1556-1572.	1.4	16
102	On viscoelastic cavitating flows: A numerical study. Physics of Fluids, 2018, 30, .	1.6	15
103	High-Temperature, High-Pressure Viscosities and Densities of <i>n</i> -Hexadecane, 2,2,4,4,6,8,8-Heptamethylnonane, and Squalane Measured Using a Universal Calibration for a Rolling-Ball Viscometer/Densimeter. Industrial & Engineering Chemistry Research, 2019, 58, 4303-4316.	1.8	15
104	Cavitation erosion risk indicators for a thin gap within a diesel fuel pump. Wear, 2020, 442-443, 203024.	1.5	15
105	Pressure-Swirl Atomizers for DISI Engines: Further Modeling and Experiments. , 2000, , .		14
106	Cavitation in Fuel Injection Systems for Spray-Guided Direct Injection Gasoline Engines. , 0, , .		14
107	Simulation of throttle flow with two phase and single phase homogenous equilibrium model. Journal of Physics: Conference Series, 2015, 656, 012086.	0.3	14
108	Prediction of cavitation and induced erosion inside a high-pressure fuel pump. International Journal of Engine Research, 2018, 19, 360-373.	1.4	14

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109	Numerical Investigation of the Aerodynamic Droplet Breakup at Mach Numbers Greater Than 1. Journal of Energy Engineering - ASCE, 2021, 147, .	1.0	14
110	Atomization Mechanism of Internally Mixing Twin-Fluid Y-Jet Atomizer. Journal of Energy Engineering - ASCE, 2021, 147, 04020075.	1.0	14
111	Application of a FIE Computer Model to an In-Line Pump-Based Injection System for Diesel Engines. , 0, , .		13
112	Determination of the aerodynamic droplet breakup boundaries based on a total force approach. International Journal of Heat and Fluid Flow, 2018, 69, 164-173.	1.1	13
113	Influence of Diesel Fuel Viscosity on Cavitating Throttle Flow Simulations under Erosive Operation Conditions. ACS Omega, 2020, 5, 7182-7192.	1.6	13
114	Droplet aerobreakup under the shear-induced entrainment regime using a multiscale two-fluid approach. Physical Review Fluids, 2021, 6, .	1.0	13
115	Numerical simulation of fuel dribbling and nozzle wall wetting. International Journal of Engine Research, 2022, 23, 132-149.	1.4	13
116	Compressible simulations of bubble dynamics with central-upwind schemes. International Journal of Computational Fluid Dynamics, 2016, 30, 129-140.	0.5	12
117	We -T classification of diesel fuel droplet impact regimes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170759.	1.0	12
118	Modeling of Advanced High-Pressure Fuel Injection Systems for Passenger Car Diesel Engines. , 1999, , .		11
119	Simulation of cavitation in outward-opening piezo-type pintle injector nozzles. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2008, 222, 1895-1910.	1.1	11
120	Numerical investigation of the aerodynamic breakup of a parallel moving droplet cluster. International Journal of Multiphase Flow, 2019, 121, 103123.	1.6	11
121	A $\tilde{\tau}$ two-fluid model with dynamic local topology detection: Application to high-speed droplet impact. Journal of Computational Physics, 2020, 408, 109225.	1.9	11
122	X-ray phase contrast and absorption imaging for the quantification of transient cavitation in high-speed nozzle flows. Physics of Fluids, 2021, 33, .	1.6	11
123	Transient Cavitation and Friction-Induced Heating Effects of Diesel Fuel during the Needle Valve Early Opening Stages for Discharge Pressures up to 450 MPa. Energies, 2021, 14, 2923.	1.6	11
124	An Erosion Aggressiveness Index (EAI) Based on Pressure Load Estimation Due to Bubble Collapse in Cavitating Flows Within the RANS Solvers. SAE International Journal of Engines, 0, 8, 2276-2284.	0.4	10
125	Modelling and prediction of cavitation erosion in GDI injectors operated with E100 fuel. Fuel, 2021, 289, 119923.	3.4	10
126	Combined visualisation of cavitation and vortical structures in a real-size optical diesel injector. Experiments in Fluids, 2021, 62, 1.	1.1	10

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127	Evaluation of Pump Design Parameters in Diesel Fuel Injection Systems. , 0, , .		9
128	Numerical investigation of a multiple injection strategy on the development of high-pressure diesel sprays. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2010, 224, 125-141.	1.1	9
129	Smoothed particle hydrodynamics simulation of a laser pulse impact onto a liquid metal droplet. PLoS ONE, 2018, 13, e0204125.	1.1	9
130	Simulation of Heating Effects Caused by Extreme Fuel Pressurisation in Cavitating Flows through Diesel Fuel Injectors. , 2012, , .		9
131	Flow visualisation in real-size optical injectors of conventional, additised, and renewable gasoline blends. Energy Conversion and Management, 2022, 252, 115109.	4.4	9
132	Spray and Combustion Development in a Four-Valve Optical DI Diesel Engine. , 0, , .		8
133	Prediction of Liquid and Vapor Penetration of High Pressure Diesel Sprays. , 2006, , .		8
134	LES Predictions of the Vortical Flow Structures in Diesel Injector Nozzles. , 0, , .		8
135	Vapor-liquid equilibria and mixture densities for 2,2,4,4,6,8,8-heptamethylnonane+ N2 and n-hexadecane+ N2 binary mixtures up to 535â€ K and 135â€ MPa. Fluid Phase Equilibria, 2020, 506, 112378.	1.4	8
136	Experimental and modeling investigations of the interfacial tension of three different diesel+Nitrogen mixtures at high pressures and temperatures. Fuel, 2020, 280, 118543.	3.4	8
137	Vapor-liquid equilibrium calculations at specified composition, density and temperature with the perturbed chain statistical associating fluid theory (PC-SAFT) equation of state. Fluid Phase Equilibria, 2020, 521, 112661.	1.4	8
138	Bioinspired snapping-claw apparatus to study hydrodynamic cavitation effects on the corrosion of metallic samples. Review of Scientific Instruments, 2020, 91, 066101.	0.6	8
139	Solution of cavitating compressible flows using Discontinuous Galerkin discretisation. Journal of Computational Physics, 2020, 410, 109377.	1.9	8
140	Experimental and modeling investigations of the phase behavior and densities of diesel+Nitrogen mixtures. Fuel, 2020, 265, 117027.	3.4	8
141	Interfacial Tension of Isomers <i>n</i> -Hexadecane and 2,2,4,4,6,8,8-Heptamethylnonane with Nitrogen at High Pressures and Temperatures. Industrial & Engineering Chemistry Research, 2020, 59, 9293-9299.	1.8	8
142	Modelling of liquid oxygen nozzle flows under subcritical and supercritical pressure conditions. International Journal of Heat and Mass Transfer, 2021, 177, 121559.	2.5	8
143	Nozzle Hole Film Formation and its Link to Spray Characteristics in Swirl-Pressure Atomizers for Direct Injection Gasoline Engines. , 2002, , .		7
144	The Influence of Variable Fuel Properties in High-Pressure Diesel Injectors. , 0, , .		7

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145	Numerical investigations on bubble-induced jetting and shock wave focusing: application on a needle-free injection. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180548.	1.0	7
146	Hole-to-hole variations in coupled flow and spray simulation of a double-layer multi-holes diesel nozzle. International Journal of Engine Research, 2021, 22, 3233-3246.	1.4	7
147	Simulation of transient effects in a fuel injector nozzle using real-fluid thermodynamic closure. Applications in Energy and Combustion Science, 2021, 7, 100037.	0.9	7
148	FORMATION AND DEVELOPMENT OF WALL LIQUID FILMS DURING IMPACTION OF GASOLINE FUEL SPRAYS. Small Group Research, 2009, 19, 701-726.	1.8	7
149	Nozzle Flow and Spray Characteristics from VCO Diesel Injector Nozzles. , 2004, , 31-48.		6
150	Spray stability from VCO and a new Diesel nozzle design concept. , 2012, , 279-290.		6
151	Evaluation of friction heating in cavitating high pressure Diesel injector nozzles. Journal of Physics: Conference Series, 2015, 656, 012083.	0.3	6
152	THE INFLUENCE OF GEOMETRICAL AND OPERATIONAL PARAMETERS ON INTERNAL FLOW CHARACTERISTICS OF INTERNALLY MIXING TWIN-FLUID Y-JET ATOMIZERS. Atomization and Sprays, 2019, 29, 403-428.	0.3	6
153	Entropy-scaling based pseudo-component viscosity and thermal conductivity models for hydrocarbon mixtures and fuels containing iso-alkanes and two-ring saturates. Fuel, 2021, 283, 118877.	3.4	5
154	An analytical model of diesel injector's needle valve eccentric motion. International Journal of Engine Research, 2022, 23, 469-481.	1.4	5
155	EVAPORATION OF A SUSPENDED MULTICOMPONENT DROPLET UNDER CONVECTIVE CONDITIONS. , 2008, , .		5
156	Numerical simulation of compressible cavitating two-phase flows with a pressure-based solver. , 0, , .		5
157	Structure of high-pressure diesel sprays. , 0, , .		4
158	Non-Newtonian flow of highly-viscous oils in hydraulic components. Journal of Non-Newtonian Fluid Mechanics, 2020, 275, 104221.	1.0	4
159	A direct forcing immersed boundary method for cavitating flows. International Journal for Numerical Methods in Fluids, 2021, 93, 3092-3130.	0.9	4
160	Influence of the Spatially Resolved Nozzle Hole Exit Flow Distribution on Diesel Spray Development. , 0, , .		3
161	Implementation of the Semi Empirical Kinetic Soot Model Within Chemistry Tabulation Framework for Efficient Emissions Predictions in Diesel Engines. Open Physics, 2019, 17, 905-915.	0.8	3
162	A model for the investigation of the second-order structure of caustic formations in dispersed flows. Journal of Fluid Mechanics, 2020, 892, .	1.4	3

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163	Multiphase Phenomena in Diesel Fuel Injection Systems. Energy, Environment, and Sustainability, 2020, , 95-126.	0.6	3
164	SINGLE DROPLET IMPACTS ONTO DEPOSITED DROPS. NUMERICAL ANALYSIS AND COMPARISON. Atomization and Sprays, 2010, 20, 935-953.	0.3	3
165	Editorial: Special Issue on Cavitation in Engine Systems. International Journal of Engine Research, 2013, 14, 541-542.	1.4	2
166	Application of cone-beam micro-CT on high-speed Diesel flows and quantitative cavitation measurements. Journal of Physics: Conference Series, 2015, 656, 012094.	0.3	2
167	Micro-pillar sensor based wall-shear mapping in pulsating flows: In-situ calibration and measurements in an aortic heart-valve tester. Journal of Fluids and Structures, 2021, 105, 103346.	1.5	2
168	Review of Numerical Methodologies for Modeling Cavitation. , 2021, , 1-35.		2
169	TOPOLOGY AND DISTINCT FEATURES OF FLASHING FLOW IN AN INJECTOR NOZZLE. Atomization and Sprays, 2016, 26, 1307-1336.	0.3	2
170	Droplet nuclei caustic formations in exhaled vortex rings. Scientific Reports, 2022, 12, 3892.	1.6	2
171	An Adjoint Method for Hole Cavitating Control Through Inverse Nozzle Design. , 0, , .		1
172	Prediction of Liquid and Vapour Penetration of Early-Injection Diesel Sprays. , 0, , .		1
173	String cavitation formation inside fuel injectors. Journal of Physics: Conference Series, 2015, 656, 012099.	0.3	1
174	Modelling of single bubble-dynamics and thermal effects. Journal of Physics: Conference Series, 2015, 656, 012098.	0.3	1
175	Large Eddy Simulation of diesel injector opening with a two phase cavitation model. Journal of Physics: Conference Series, 2015, 656, 012088.	0.3	1
176	Evaluation of Turbulence Models Performance in Predicting Incipient Cavitation in an Enlarged Step-Nozzle. Journal of Physics: Conference Series, 2015, 656, 012095.	0.3	1
177	Modelling of thrombin generation under flow in realistic left anterior descending geometries. Medical Engineering and Physics, 2017, 50, 50-58.	0.8	1
178	Cavitation in Positive Displacement Pumps. , 2021, , 303-329.		1
179	Numerical investigation of the aerodynamic breakup of diesel droplets under various gas pressures. , 0, , .		1
180	High-speed X-Ray Phase Contrast Imaging of String Cavitation in a Diesel Injector Orifice. , 0, , .		1

#	ARTICLE	IF	CITATIONS
181	Supercritical and transcritical real-fluid mixing using the PC-SAFT EOS. , 0, , .		1
182	Numerical Simulation of Multicomponent Diesel Fuel Spray Surrogates Using Real-Fluid Thermodynamic Modelling. , 0, , .		1
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