Ioannis K Karathanassis

List of Publications by Year
in descending order

25 papers	502 citations	840776 11 h-index	794594 19 g-index
25 all docs	25 docs citations	25 times ranked	393 citing authors

#	Article	IF	Citations
1	Multi-objective design optimization of a micro heat sink for Concentrating Photovoltaic/Thermal (CPVT) systems using a genetic algorithm. Applied Thermal Engineering, 2013, 59, 733-744.	6.0	78
2	Investigation of cavitation and vapor shedding mechanisms in a Venturi nozzle. Physics of Fluids, 2020, 32, .	4.0	51
3	Spatio-temporal identification of plume dynamics by 3D computed tomography using engine combustion network spray G injector and various fuels. Fuel, 2020, 280, 118359.	6.4	46
4	High-speed visualization of vortical cavitation using synchrotron radiation. Journal of Fluid Mechanics, 2018, 838, 148-164.	3.4	37
5	Numerical simulation of three-phase flow in an external gear pump using immersed boundary approach. Applied Mathematical Modelling, 2019, 72, 682-699.	4.2	35
6	Comparative evaluation of phase-change mechanisms for the prediction of flashing flows. International Journal of Multiphase Flow, 2017, 95, 257-270.	3.4	33
7	Cloud cavitation vortex shedding inside an injector nozzle. Experimental Thermal and Fluid Science, 2017, 84, 179-189.	2.7	32
8	Experimental Study of Diesel-Fuel Droplet Impact on a Similarly Sized Polished Spherical Heated Solid Particle. Langmuir, 2018, 34, 36-49.	3.5	29
9	Dynamic simulation and exergetic optimization of a Concentrating Photovoltaic/ Thermal (CPVT) system. Renewable Energy, 2019, 135, 1035-1047.	8.9	25
10	Illustrating the effect of viscoelastic additives on cavitation and turbulence with X-ray imaging. Scientific Reports, 2018, 8, 14968.	3.3	24
11	Machine-learning enabled prediction of 3D spray under engine combustion network spray G conditions. Fuel, 2021, 293, 120444.	6.4	19
12	Turbulence and Cavitation Suppression by Quaternary Ammonium Salt Additives. Scientific Reports, 2018, 8, 7636.	3.3	18
13	Machine Learning and transcritical sprays: A demonstration study of their potential in ECN Spray-A. International Journal of Engine Research, 2022, 23, 1556-1572.	2.3	16
14	Prediction of cavitation and induced erosion inside a high-pressure fuel pump. International Journal of Engine Research, 2018, 19, 360-373.	2.3	14
15	X-ray phase contrast and absorption imaging for the quantification of transient cavitation in high-speed nozzle flows. Physics of Fluids, 2021, 33, .	4.0	11
16	Soot and PAH formation in high pressure spray pyrolysis of gasoline and diesel fuels. Combustion and Flame, 2022, 241, 112084.	5.2	11
17	Combined visualisation of cavitation and vortical structures in a real-size optical diesel injector. Experiments in Fluids, 2021, 62, 1.	2.4	10
18	Flow visualisation in real-size optical injectors of conventional, additised, and renewable gasoline blends. Energy Conversion and Management, 2022, 252, 115109.	9.2	9

#	Article	IF	Citations
19	Multiphase Phenomena in Diesel Fuel Injection Systems. Energy, Environment, and Sustainability, 2020, , 95-126.	1.0	3
20	High-speed X-Ray Phase Contrast Imaging of String Cavitation in a Diesel Injector Orifice. , 0, , .		1
21	10.1063/5.0038475.3. , 2021, , .		0
22	10.1063/5.0038475.4. , 2021, , .		0
23	10.1063/5.0038475.2. , 2021, , .		0
24	10.1063/5.0038475.1. , 2021, , .		0
25	X-ray Measurement Techniques Used for Wall-Bounded Cavitating Flows. , 2021, , 211-248.		0