Roberto Torelli

List of Publications by Year
in descending order

34 papers	353 citations	1162367 8 h-index	1372195 10 g-index
35 all docs	35 docs citations	35 times ranked	222 citing authors

#	Article	IF	Citations
1	Influence of fuel properties on internal nozzle flow development in a multi-hole diesel injector. Fuel, 2017, 204, 171-184.	3.4	56
2	An Experimental and Numerical Study of Diesel Spray Impingement on a Flat Plate. SAE International Journal of Fuels and Lubricants, 0, 10, 407-422.	0.2	38
3	Numerical study on spray collapse process of ECN spray G injector under flash boiling conditions. Fuel, 2021, 290, 119961.	3.4	32
4	Evaluation of Shot-to-Shot In-Nozzle Flow Variations in a Heavy-Duty Diesel Injector Using Real Nozzle Geometry. SAE International Journal of Fuels and Lubricants, 0, 11, 379-295.	0.2	31
5	Evaluation of Diesel Spray-Wall Interaction and Morphology around Impingement Location. , 0, , .		18
6	Internal Nozzle Flow Simulations of the ECN Spray C Injector under Realistic Operating Conditions. SAE International Journal of Advances and Current Practices in Mobility, 0, 2, 2229-2240.	2.0	17
7	Toward predictive and computationally affordable Lagrangianâ€“Eulerian modeling of sprayâ€“wall interaction. International Journal of Engine Research, 2020, 21, 263-280.	1.4	15
8	Towards understanding the development and characteristics of under-expanded flash boiling jets. International Journal of Multiphase Flow, 2020, 129, 103315.	1.6	13
9	Modeling the Fuel Spray of a High Reactivity Gasoline Under Heavy-Duty Diesel Engine Conditions. , 2017, , .		12
10	Comparison of In-Nozzle Flow Characteristics of Naphtha and N-Dodecane Fuels. , 0, , .		12
11	Automatic Mech Generation for Full-Cycle CFD Modeling of IC Engines: Application to the TCC Test Case. , 2014, , .		11
12	Computational fluid dynamics modeling and analysis of silica nanoparticle synthesis in a flame spray pyrolysis reactor. Combustion and Flame, 2022, 236, 111789.	2.8	11
13	Piston Bowl Geometry Effects on Gasoline Compression Ignition in a Heavy-Duty Diesel Engine. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	1.4	9
14	A SPHERICAL VOLUME INTERACTION DDM APPROACH FOR DIESEL SPRAY MODELING. Atomization and Sprays, 2015, 25, 335-374.	0.3	9
15	DATA-DRIVEN MODEL REDUCTION OF MULTIPHASE FLOW IN A SINGLE-HOLE AUTOMOTIVE INJECTOR. Atomization and Sprays, 2020, 30, 401-429.	0.3	9
16	Computational characterization of the secondary droplets formed during the impingement of a train of ethanol drops. International Journal of Engine Research, 2020, 21, 248-262.	1.4	8
17	Accelerating the Generation of Static Coupling Injection Maps Using a Data-Driven Emulator. , 0, , .		8
18	Using a DNS Framework to Test a Splashed Mass Sub-Model for Lagrangian Spray Simulations. , 0, , .		6

#	Article	IF	Citations
19	Dynamic UAS Simulation Framework for Energy and Mission Performance Optimization. , 2020, , .		6
20	Exploration of Cavitation-Suppressing Orifice Designs for a Heavy-Duty Diesel Injector Operating with Straight-Run Gasoline. , 0, , .		6
21	Effect of Fuel Temperature on the Performance of a Heavy-Duty Diesel Injector Operating with Gasoline. , 0, , .		5
22	Three-Dimensional CFD Investigation of Pre-Spark Heat Release in a Boosted SI Engine. , 0, , .		3
23	CFD modeling of pre-spark heat release in a boosted direct-injection spark-ignition engine. International Journal of Engine Research, 2023, 24, 3-15.	1.4	3
24	Investigation and Simulation of Gasoline in a Diesel Fuel Injector for Gasoline Compression Ignition Applications. Proceedings, 2019, , 423-442.	0.2	3
25	CFD modeling of Unmanned Aerial Systems with Cut-cell Grids and Adaptive Mesh Refinement. , 2020, , .		2
26	An Analytical Energy-budget Model for Diesel Droplet Impingement on an Inclined Solid Wall. , 0, , .		2
27	Piston Bowl Geometry Effects on Gasoline Compression Ignition in a Heavy-Duty Diesel Engine. , 2020, , .		2
28	Cavitation-Suppressing Orifice Design Applied to a Heavy-Duty Diesel Engine Injector Operating With Gasoline. , 2020, , .		2
29	Data-Driven Modeling of Large-Eddy Simulations for Fuel Injector Design. , 2021, , .		1
30	Machine Learning-Enabled Prediction of Transient Injection Map In Automotive Injectors With Uncertainty Quantification. , 2021, , .		1
31	Impact of high-speed diesel drop trains: Pursuing cleaner diesel engines. Physical Review Fluids, 2021, 6, .	1.0	1
32	Video: Impact of high-speed diesel drop trains - pursuing cleaner diesel engines. , 0, , .		1
33	Performance Characterization of Alternative Ignition Systems Using Optical Tools in Natural Gas Engines. , 2018, , .		0
34	Numerical Characterization of a Multi-Copter using Moving Boundaries and Cut-Cell Grids. , 2021, , .		0