Daniele Chiappini

List of Publications by Year
in descending order

40 papers	588 citations	623188 14 h-index	610482 24 g-index
40 all docs	40 docs citations	40 times ranked	501 citing authors

#	ARTICLE	IF	CITATIONS
1	Energy management of a plug-in fuel cell/battery hybrid vehicle with on-board fuel processing. Applied Energy, 2016, 184, 140-154.	5.1	82
2	Lattice Boltzmann Methods for Multiphase Flow Simulations across Scales. Communications in Computational Physics, 2011, 9, 269-296.	0.7	68
3	Fluid flow around NACA 0012 airfoil at low-Reynolds numbers with hybrid lattice Boltzmann method. Computers and Fluids, 2018, 166, 200-208.	1.3	51
4	Improved Lattice Boltzmann Without Parasitic Currents for Rayleigh-Taylor Instability. Communications in Computational Physics, 2010, 7, 423-444.	0.7	50
5	Hybrid lattice Boltzmann method on overlapping grids. Physical Review E, 2017, 95, 013309.	0.8	32
6	Modern lattice Boltzmann methods for multiphase microflows. IMA Journal of Applied Mathematics, 2011, 76, 712-725.	0.8	30
7	SOFC Management in Distributed Energy Systems. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	28
8	Coupled lattice Boltzmann finite volume method for conjugate heat transfer in porous media. Numerical Heat Transfer; Part A: Applications, 2018, 73, 291-306.	1.2	24
9	Experimental characterisation of a novel thermal energy storage based on open-cell copper foams immersed in organic phase change material. Energy Conversion and Management, 2019, 200, 112101.	4.4	24
10	A moving-grid approach for fluid–structure interaction problems with hybrid lattice Boltzmann method. Computer Physics Communications, 2019, 234, 137-145.	3.0	21
11	Numerical simulation of natural convection in open-cells metal foams. International Journal of Heat and Mass Transfer, 2018, 117, 527-537.	2.5	19
12	Direct Numerical Simulation of an Open-Cell Metallic Foam through Lattice Boltzmann Method. Communications in Computational Physics, 2015, 18, 707-722.	0.7	18
13	A comparison of numerical methods for non-Newtonian fluid flows in a sudden expansion. International Journal of Modern Physics C, 2016, 27, 1650139.	0.8	18
14	APPLICATIONS OF FINITE-DIFFERENCE LATTICE BOLTZMANN METHOD TO BREAKUP AND COALESCENCE IN MULTIPHASE FLOWS. International Journal of Modern Physics C, 2009, 20, 1803-1816.	0.8	16
15	Hydrodynamic behavior of the pseudopotential lattice Boltzmann method for interfacial flows. Physical Review E, 2019, 99, 053305.	0.8	15
16	Ultralow Carbon Dioxide Emission MCFC Based Power Plant. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	12
17	A biogas-solar based hybrid off-grid power plant with multiple storages for United States commercial buildings. Renewable Energy, 2021, 179, 705-722.	4.3	11
18	Modeling liquid break-up through a kinetic approach. SAE International Journal of Engines, 0, 2, 390-399.	0.4	8

#	Article	IF	Citations
19	Technical Assessment of Different Operating Conditions of an On-Board Autothermal Reformer for Fuel Cell Vehicles. Energies, 2017, 10, 839.	1.6	8
20	A coupled lattice Boltzmann-finite volume method for phase change material analysis. International Journal of Thermal Sciences, 2021, 164, 106893.	2.6	8
21	Off-grid PV/URFC power plant fueled with biogas from food waste: An energetic and economic analysis. Energy, 2021, 219, 119537.	4.5	7
22	OPEN-CELL METAL FOAM MESH GENERATION FOR LATTICE BOLTZMANN SIMULATIONS. Journal of Porous Media, 2018, 21, 423-439.	1.0	6
23	Cooling System Energy Consumption Reduction through a Novel All-Electric Powertrain Traction Module and Control Optimization. Energies, 2021, 14, 33.	1.6	5
24	Ligament break-up simulation through pseudo-potential lattice Boltzmann method. AIP Conference Proceedings, 2018, , .	0.3	4
25	Performance Evaluation of an Electric Vehicle with Multiple Electric Machines for Increased Overall Drive Train Efficiency. , 0, , .		4
26	A comparison between different fractal grid generation methods coupled with lattice Boltzmann approach. AIP Conference Proceedings, 2016, , .	0.3	3
27	Influence of Fuel Type on the Pperformance of a Plug-In Fuel Cell/Battery Hybrid Vehicle with On-Board Fuel Processing. , 0, , .		3
28	A lattice-Boltzmann free surface model for injection moulding of a non-Newtonian fluid. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190407.	1.6	3
29	Cooling Performance of an Modified R744 Air Conditioning System with Vortex Tube and Internal Heat Exchanger for an Electric Vehicle. , 0, , .		3
30	Water impact on obstacles using KBC-free surface lattice Boltzmann method. AIP Conference Proceedings, 2018, , .	0.3	2
31	A Coupled Lattice Boltzmann-Finite Volume Method for the Thermal Transient Modeling of an Air-Cooled Li-Ion Battery Cell for Electric Vehicles. , 0, , .		2
32	A numerical model for CO effect evaluation in HT-PEMFCs: Part 2 - Application to different membranes. AIP Conference Proceedings, 2016, , .	0.3	1
33	A numerical model for CO effect evaluation in HT-PEMFCs: Part 1 - Experimental validation. AIP Conference Proceedings, 2016, , .	0.3	1
34	Analysis of the Fluid Motion Induced by a Vibrating Lamina Through Free Surface-Lattice Boltzmann Coupled Method. , 2018, , .		1
35	Overview on ICNAAM 2017 Session on Hull Slamming and Water-Entry Problems. AIP Conference Proceedings, 2018, , .	0.3	0
36	Fluid Structure Interaction of 2D Objects through a Coupled KBC-Free Surface Model. Water (Switzerland), 2020, 12, 1212.	1.2	0

#	ARTICLE	IF	CITATIONS
37	Progress in mesoscale methods for fluid dynamics simulation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200393.	1.6	0
38	Sizing and Optimization of a Vortex Tube for Electric Vehicle HVAC Purposes. , 0, , .		0
39	Ultra Low Carbon Dioxide Emission MCFC Based Power Plant. , 2009, , .		0
40	A Coupled Lattice Boltzmann-Finite Volume Method for the Thermal Transient Analysis of an Air-Cooled Li-Ion Battery Module for Electric Vehicles with Porous Media Insert Modeled at REV Scales. , 0, , .		0