Hua Tan

List of Publications by Year
in descending order

34 papers	717 citations	430874 18 h-index	526287 27 g-index
35 all docs	35 docs citations	35 times ranked	643 citing authors

#	ARTICLE	IF	CITATIONS
1	Multiscale modeling of unsaturated flow in dual-scale fiber preforms of liquid composite molding I: Isothermal flows. Composites Part A: Applied Science and Manufacturing, 2012, 43, 1-13.	7.6	77
2	Finite element implementation of stress-jump and stress-continuity conditions at porous-medium, clear-fluid interface. Computers and Fluids, 2009, 38, 1118-1131.	2.5	59
3	Three-dimensional simulation of micrometer-sized droplet impact and penetration into the powder bed. Chemical Engineering Science, 2016, 153, 93-107.	3.8	53
4	Optofluidic sensing from inkjet-printed droplets: the enormous enhancement by evaporation-induced spontaneous flow on photonic crystal biosilica. Nanoscale, 2016, 8, 17285-17294.	5.6	44
5	Multiscale modeling of unsaturated flow of dual-scale fiber preform in liquid composite molding II: Non-isothermal flows. Composites Part A: Applied Science and Manufacturing, 2012, 43, 14-28.	7.6	43
6	Darcy's law–based numerical simulation for modeling 3D liquid absorption into porous wicks. AICHE Journal, 2011, 57, 1132-1143.	3.6	37
7	Multiscale modeling of unsaturated flow in dual-scale fiber preforms of liquid composite molding III: reactive flows. Composites Part A: Applied Science and Manufacturing, 2012, 43, 29-44.	7.6	36
8	Variations in unsaturated flow with flow direction in resin transfer molding: An experimental investigation. Composites Part A: Applied Science and Manufacturing, 2007, 38, 1872-1892.	7.6	35
9	Numerical simulation of liquid absorption in paper-like swelling porous media. AICHE Journal, 2012, 58, 2536-2544.	3.6	29
10	Fast liquid composite molding simulation of unsaturated flow in dual‐scale fiber mats using the imbibition characteristics of a fabric‐based unit cell. Polymer Composites, 2010, 31, 1790-1807.	4.6	28
11	Numerical study on splashing of high-speed microdroplet impact on dry microstructured surfaces. Computers and Fluids, 2017, 154, 142-166.	2.5	27
12	Numerical simulation of reactive flow in liquid composite molding using flux-corrected transport (FCT) based finite element/control volume (FE/CV) method. International Journal of Heat and Mass Transfer, 2010, 53, 2256-2271.	4.8	26
13	REMOVED: An adaptive mesh refinement based flow simulation for free-surfaces in thermal inkjet technology. International Journal of Multiphase Flow, 2016, 82, 1-16.	3.4	25
14	Numerical simulation of LCM mold-filling during the manufacture of natural fiber composites. Journal of Reinforced Plastics and Composites, 2012, 31, 363-378.	3.1	24
15	Numerical simulation of droplet ejection of thermal inkjet printheads. International Journal for Numerical Methods in Fluids, 2015, 77, 544-570.	1.6	24
16	Jet ejection following drop impact on micropillared hydrophilic substrates. Physical Review Fluids, 2020, 5, .	2.5	23
17	Absorption of picoliter droplets by thin porous substrates. AICHE Journal, 2017, 63, 1690-1703.	3.6	21
18	Numerical study of a bubble driven micromixer based on thermal inkjet technology. Physics of Fluids, 2019, 31, 062006.	4.0	19

#	Article	IF	Citations
19	On passing a non-Newtonian circulating tumor cell (CTC) through a deformation-based microfluidic chip. Theoretical and Computational Fluid Dynamics, 2018, 32, 753-764.	2.2	17
20	Effect of fiber–mat anisotropy on 1D mold filling in LCM: A numerical investigation. Polymer Composites, 2008, 29, 869-882.	4.6	15
21	On the thin-film-dominated passing pressure of cancer cell squeezing through a microfluidic CTC chip. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	13
22	Applying the free-slip boundary condition with an adaptive Cartesian cut-cell method for complex geometries. Numerical Heat Transfer, Part B: Fundamentals, 2018, 74, 661-684.	0.9	8
23	One Dimensional Model for Droplet Ejection Process in Inkjet Devices. Fluids, 2018, 3, 28.	1.7	8
24	Self-powered microfluidic pump using evaporation from diatom biosilica thin films. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	7
25	Compound Droplet Modeling for Circulating Tumor Cell Microfiltration With Adaptive Meshing Refinement. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, .	1.5	6
26	Persistent Octrees for Parallel Mesh Refinement through Non-Volatile Byte-Addressable Memory. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 677-691.	5.6	4
27	Jet Dynamics Associated with Drop Impact on Micropillared Substrate. Fluids, 2021, 6, 155.	1.7	3
28	Compound droplet dynamics of a tumor cell squeezing through conical microfilters. Theoretical and Computational Fluid Dynamics, 2020, 34, 287-300.	2.2	2
29	A numerical investigation of puddle jumping. Physics of Fluids, 2020, 32, 012109.	4.0	2
30	One Dimensional Simulation of Droplet Ejection of Drop-on-Demand Inkjet. , 2017, , .		1
31	An adaptive mesh refinement based simulation for pressure-deformability analysis of a circulating tumor cell. , 2019, , .		1
32	A Numerical Study on Highly Viscous Compound Cancer Cell Microfiltration. , 2016, , .		0
33	High-Speed Microdroplet Impact on a Textured Rough Surface: A Numerical Investigation. , 2017, , .		0
34	Evaporation-Based Microfluidic Pump Using Super-Hydrophilic Diatom Biosilica Thin Films. , 2019, , .		0