

Wan-Yuan Shi

List of Publications by Year in descending order

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Version: 2024-02-01

32
papers

460
citations

759055

12
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752573

20
g-index

43
all docs

43
docs citations

43
times ranked

228
citing authors

#	ARTICLE	IF	CITATIONS
1	Three-dimensional thermocapillary buoyancy flow of silicone oil in a differentially heated annular pool. <i>International Journal of Heat and Mass Transfer</i> , 2007, 50, 872-880.	2.5	81
2	Marangoni convection instability in a sessile droplet with low volatility on heated substrate. <i>International Journal of Thermal Sciences</i> , 2017, 117, 274-286.	2.6	42
3	Bénard-Marangoni instability in sessile droplet evaporating at constant contact angle mode on heated substrate. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 784-795.	2.5	39
4	Influence of substrate temperature on Marangoni convection instabilities in a sessile droplet evaporating at constant contact line mode. <i>International Journal of Heat and Mass Transfer</i> , 2019, 131, 1270-1278.	2.5	36
5	Thermocapillary flow instabilities of medium Prandtl number liquid in rotating annular pools. <i>International Journal of Thermal Sciences</i> , 2017, 120, 233-243.	2.6	21
6	Longitudinal roll patterns of Marangoni instability in an easily volatile sessile droplet evaporating at constant contact angle mode. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 1283-1291.	2.5	21
7	Transition of Marangoni convection instability patterns during evaporation of sessile droplet at constant contact line mode. <i>International Journal of Heat and Mass Transfer</i> , 2020, 148, 119138.	2.5	20
8	The Influence of Eddy Effect of Coils on Flow and Temperature Fields of Molten Droplet in Electromagnetic Levitation Device. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015, 46, 1895-1901.	1.0	19
9	The influence of Marangoni effect on flow and deformation of an electromagnetically levitated molten droplet under static magnetic fields. <i>International Journal of Heat and Mass Transfer</i> , 2016, 101, 629-636.	2.5	18
10	Numerical investigation on frequency shift of an electromagnetically levitated molten droplet. <i>International Journal of Heat and Mass Transfer</i> , 2018, 122, 69-77.	2.5	15
11	Marangoni instability induced by evaporation in well-defined non-spherical sessile droplet. <i>International Journal of Heat and Mass Transfer</i> , 2019, 141, 168-179.	2.5	13
12	Influence of Coil Angle Arrangement on Dynamic Deformation and Stability of Molten Droplet in Electromagnetic Levitation System. <i>ISIJ International</i> , 2016, 56, 50-56.	0.6	12
13	Investigation on synergistic effect of CuCl ₂ and FeCl ₃ impregnated into fly ash on mercury removal by experiment and density functional theory. <i>Applied Surface Science</i> , 2021, 565, 150484.	3.1	12
14	Marangoni Convection Instabilities Induced by Evaporation of Liquid Layer in an Open Rectangular Pool. <i>Microgravity Science and Technology</i> , 2017, 29, 91-96.	0.7	11
15	Spontaneous thermocapillary motion of condensation droplets. <i>Applied Physics Letters</i> , 2020, 116, 243703.	1.5	10
16	Hydrothermal waves in sessile droplets evaporating at a constant contact angle mode. <i>International Journal of Heat and Mass Transfer</i> , 2021, 172, 121131.	2.5	10
17	Stability of Thermocapillary Convection in Annular Pools with Low Prandtl Number Fluid. <i>Microgravity Science and Technology</i> , 2009, 21, 283-287.	0.7	8
18	Linear-stability Analysis of Thermocapillary Flow in an Annular Two-layer System with Upper Rigid Wall. <i>Microgravity Science and Technology</i> , 2011, 23, 43-48.	0.7	8

#	ARTICLE	IF	CITATIONS
19	Influence of Vertical Static Magnetic Field on Behavior of Rising Single Bubble in a Conductive Fluid. ISIJ International, 2016, 56, 195-204.	0.6	8
20	Effects of vertical, horizontal and rotational magnetic fields on convection in an electromagnetically levitated droplet. International Journal of Heat and Mass Transfer, 2019, 130, 787-796.	2.5	8
21	Marangoni convection instability in an evaporating droplet deposited on volatile liquid layer. International Journal of Heat and Mass Transfer, 2021, 171, 121055.	2.5	6
22	Influence of thermal properties on hydrothermal waves in evaporating sessile droplets. Physics of Fluids, 2021, 33, 102107.	1.6	6
23	Magnetic manipulation of diamagnetic droplet on slippery liquid-infused porous surface. Physical Review Fluids, 2022, 7, .	1.0	6
24	Thermocapillary convection in a differentially heated two-layer annular system with and without rotation. International Journal of Heat and Mass Transfer, 2017, 105, 684-689.	2.5	5
25	Numerical Simulation of Thermocapillary Convection in a Shallow Rectangular Cavity Under the Action of Combining Horizontal Temperature Gradient with Vertical Heat Flux. Microgravity Science and Technology, 2010, 22, 361-367.	0.7	4
26	Traveling waves inside Bénard-Marangoni cells induced by evaporation of a volatile liquid layer. International Journal of Heat and Mass Transfer, 2022, 182, 121963.	2.5	4
27	Marangoni convection instability inside an evaporating droplet on an inclined substrate. International Journal of Heat and Mass Transfer, 2022, 183, 122050.	2.5	4
28	Instabilities of thermocapillary-buoyant-Coriolis flow of medium Prandtl fluid in a slowly rotating annular pool. International Communications in Heat and Mass Transfer, 2022, 130, 105801.	2.9	4
29	Effect of droplet deformation on determination of thermal conductivity in modulated laser calorimetry. International Journal of Heat and Mass Transfer, 2020, 163, 120501.	2.5	3
30	Marangoni convection instabilities in an evaporating droplet on a non-isothermal substrate. International Journal of Heat and Mass Transfer, 2022, 195, 123140.	2.5	3
31	Effect of crystal rotation on thermocapillary flow in a shallow molten silicon pool. Microgravity Science and Technology, 2007, 19, 163-164.	0.7	2
32	Influence of eddy effect of coils on convection and deformation of electromagnetically levitated droplet. International Communications in Heat and Mass Transfer, 2022, 130, 105766.	2.9	1