

Stephan Boden

List of Publications by Year in descending order

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28
times ranked

536
citing authors

#	ARTICLE	IF	CITATIONS
1	Chimney Formation in Solidifying Ga-25wt pct In Alloys Under the Influence of Thermosolutal Melt Convection. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3797-3808.	1.1	75
2	X-Ray Radioscopic Visualization of the Solutal Convection during Solidification of a Ga-30 Wt Pct In Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 613-623.	1.1	69
3	Visualization of freckle formation induced by forced melt convection in solidifying Galn alloys. Materials Letters, 2010, 64, 1340-1343.	1.3	45
4	Quantitative measurement of gas hold-up distribution in a stirred chemical reactor using X-ray cone-beam computed tomography. Chemical Engineering Journal, 2008, 139, 351-362.	6.6	43
5	Application of X-ray radioscopic methods for characterization of two-phase phenomena and solidification processes in metallic melts. European Physical Journal: Special Topics, 2013, 220, 63-77.	1.2	37
6	Quantitative comparison of Taylor flow simulations based on sharpâ€œinterface and diffuseâ€œinterface models. International Journal for Numerical Methods in Fluids, 2013, 73, 344-361.	0.9	36
7	Validation of Interface Capturing and Tracking techniques with different surface tension treatments against a Taylor bubble benchmark problem. Computers and Fluids, 2014, 102, 336-352.	1.3	35
8	Advanced Tomographic Techniques for Flow Imaging in Columns with Flow Distribution Packings. Chemie-Ingenieur-Technik, 2011, 83, 979-991.	0.4	28
9	A study on the two-phase flow in a stirred tank reactor agitated by a gas-inducing turbine. Chemical Engineering Research and Design, 2008, 86, 75-81.	2.7	25
10	Miniature conductivity wire-mesh sensor for gas-liquid two-phase flow measurement. Flow Measurement and Instrumentation, 2009, 20, 15-21.	1.0	22
11	Measurement of Taylor bubble shape in square channel by microfocus X-ray computed tomography for investigation of mass transfer. Flow Measurement and Instrumentation, 2017, 53, 49-55.	1.0	21
12	Influence of magnetic fields on the behavior of bubbles in liquid metals. European Physical Journal: Special Topics, 2013, 220, 167-183.	1.2	20
13	Preparation of $\hat{I}^3\text{-Al}_2\text{O}_3/\hat{I}^\pm\text{-Al}_2\text{O}_3$ ceramic foams as catalyst carriers via the replica technique. Catalysis Today, 2022, 383, 64-73.	2.2	19
14	Detection of gas entrainment into liquid metals. Nuclear Engineering and Design, 2015, 294, 16-23.	0.8	18
15	Synchrotron radiation microtomography of Taylor bubbles in capillary two-phase flow. Experiments in Fluids, 2014, 55, 1.	1.1	16
16	Three-dimensional analysis of macroporosity distributions in polyolefin particles using X-ray microtomography. Powder Technology, 2008, 188, 81-88.	2.1	12
17	Investigation of surfactant effect on the bubble shape and mass transfer in a milli-channel using high-resolution microfocus X-ray imaging. International Journal of Multiphase Flow, 2016, 87, 184-196.	1.6	12
18	In situ X-ray monitoring of convection effects on segregation freckle formation. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012035.	0.3	11

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19	Investigation of mass transfer in milli-channels using high-resolution microfocus X-ray imaging. International Journal of Heat and Mass Transfer, 2016, 93, 653-664.	2.5	11
20	Horizontal annular flow through orifice studied by X-ray microtomography. Experiments in Fluids, 2021, 62, 1.	1.1	10
21	Observation of segregation freckle formation under the influence of melt convection. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012085.	0.3	9
22	Observation of dendritic growth and fragmentation in GaIn alloys by X-ray radioscopy. International Journal of Cast Metals Research, 2009, 22, 30-33.	0.5	8
23	Flow morphology and heat transfer analysis during high-pressure steam condensation in an inclined tube part I: Experimental investigations. Nuclear Engineering and Design, 2020, 361, 110553.	0.8	8
24	Mass transfer measurement in a square milli-channel and comparison with results from a circular channel. International Journal of Heat and Mass Transfer, 2016, 101, 251-260.	2.5	7
25	Experimental analysis of Taylor bubble behavior and mass transfer during lateral oscillation of a vertical milli-channel. Chemical Engineering Journal, 2017, 326, 308-317.	6.6	6
26	X-Ray Microtomography of Taylor Bubbles with Mass Transfer and Surfactants in Capillary Two-Phase Flow. Advances in Mathematical Fluid Mechanics, 2017, , 589-607.	0.1	0