Kerstin Eckert

List of Publications by Year
in descending order

160 papers	3,466 citations	126708 33 h-index	197535 49 g-index
166 all docs	166 docs citations	166 times ranked	1978 citing authors

#	Article	IF	Citations
1	Hydrogen evolution under the influence of a magnetic field. Electrochimica Acta, 2011, 56, 2665-2675.	2.6	146
2	Efficient Melt Stirring Using Pulse Sequences of a Rotating Magnetic Field: Part II. Application to Solidification of Al-Si Alloys. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2008, 39, 304-316.	1.0	109
3	Square cells in surface-tension-driven BÃ©nard convection: experiment and theory. Journal of Fluid Mechanics, 1998, 356, 155-197.	1.4	97
4	Dynamics of Single Hydrogen Bubbles at a Platinum Microelectrode. Langmuir, 2015, 31, 8184-8193.	1.6	93
5	Cytocompatible, Injectable, and Electroconductive Soft Adhesives with Hybrid Covalent/Noncovalent Dynamic Network. Advanced Science, 2019, 6, 1802077.	5.6	84
6	A numerical study of unidirectional solidification of a binary metal alloy under influence of a rotating magnetic field. International Journal of Heat and Mass Transfer, 2006, 49, 1501-1515.	2.5	82
7	Plume and Finger Regimes Driven by an Exothermic Interfacial Reaction. Physical Review Letters, 1999, 82, 4436-4439.	2.9	77
8	Chemical pattern formation driven by a neutralization reaction. I. Mechanism and basic features. Physics of Fluids, 2004, 16, 385-399.	1.6	75
9	Marangoni convection at electrogenerated hydrogen bubbles. Physical Chemistry Chemical Physics, 2018, 20, 11542-11548.	1.3	71
10	Reversibly Assembled Electroconductive Hydrogel via a Hostâ€“Guest Interaction for 3D Cell Culture. ACS Applied Materials & Interfaces, 2019, 11, 7715-7724.	4.0	69
11	Efficient Melt Stirring Using Pulse Sequences of a Rotating Magnetic Field: Part I. Flow Field in a Liquid Metal Column. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2007, 38, 977-988.	1.0	66
12	Desorption of hydrogen from an electrode surface under influence of an external magnetic field â€“ In-situ microscopic observations. Electrochemistry Communications, 2009, 11, 425-429.	2.3	61
13	Electromagnetic melt flow control during solidification of metallic alloys. European Physical Journal: Special Topics, 2013, 220, 123-137.	1.2	60
14	Spin-up of a liquid metal flow driven by a rotating magnetic field in a finite cylinder: A numerical and an analytical study. Physics of Fluids, 2005, 17, 067101.	1.6	53
15	Convective Mixing Induced by Acidâ€“Base Reactions. Journal of Physical Chemistry B, 2011, 115, 9739-9744.	1.2	53
16	Pattern formation and mass transfer under stationary solutal Marangoni instability. Advances in Colloid and Interface Science, 2014, 206, 344-371.	7.0	53
17	Secondary instability in surface-tension-driven BÃ©nard convection. Physical Review E, 1995, 52, R5772-R5775.	0.8	50
18	Noncovalently Assembled Electroconductive Hydrogel. ACS Applied Materials & Interfaces, 2018, 10, 14418-14425.	4.0	50

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19	Confinement of paramagnetic ions under magnetic field influence: Lorentz versus concentration gradient force based explanations. Electrochemistry Communications, 2007, 9, 2479-2483.	2.3	49
20	Oscillating Hydrogen Bubbles at Pt Microelectrodes. Physical Review Letters, 2019, 123, 214503.	2.9	45
21	Thermocapillary convection during hydrogen evolution at microelectrodes. Electrochimica Acta, 2019, 297, 929-940.	2.6	45
22	Application of a rotating magnetic field during directional solidification of Pbâ€“Sn alloys: Consequences on the CET. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 413-414, 211-216.	2.6	44
23	A novel Hele-Shaw cell design for the analysis of hydrodynamic instabilities in liquidâ€“liquid systems. Chemical Engineering Science, 2008, 63, 3560-3563.	1.9	44
24	On the Electrolyte Convection around a Hydrogen Bubble Evolving at a Microelectrode under the Influence of a Magnetic Field. Journal of the Electrochemical Society, 2016, 163, E248-E257.	1.3	44
25	Introduction to the Focus Issue: Chemo-Hydrodynamic Patterns and Instabilities. Chaos, 2012, 22, 037101.	1.0	43
26	Fragmentation-driven grain refinement in directional solidification of AlCu10wt-% alloy at low pulling speeds. Acta Materialia, 2017, 126, 236-250.	3.8	42
27	General evolution equation for the specific interface area of dendrites during alloy solidification. Acta Materialia, 2017, 140, 87-96.	3.8	42
28	Structured electrodeposition in magnetic gradient fields. European Physical Journal: Special Topics, 2013, 220, 287-302.	1.2	39
29	Acceleration of reaction fronts by hydrodynamic instabilities in immiscible systems. Chemical Engineering Science, 2006, 61, 5523-5533.	1.9	38
30	Dendrite fragmentation by catastrophic elastic remelting. Acta Materialia, 2009, 57, 657-665.	3.8	38
31	Dendrite fragmentation in alloy solidification due to sidearm pinch-off. Physical Review E, 2015, 92, 060401.	0.8	37
32	The influence of negatively charged silica nanoparticles on the surface properties of anionic surfactants: electrostatic repulsion or the effect of ionic strength?. Physical Chemistry Chemical Physics, 2020, 22, 2238-2248.	1.3	37
33	Chemo-Marangoni convection driven by an interfacial reaction: Pattern formation and kinetics. Chaos, 2012, 22, 037112.	1.0	36
34	Magnetic separation of Dy(III) ions from homogeneous aqueous solutions. Applied Physics Letters, 2014, 105, .	1.5	34
35	Enrichment of Paramagnetic Ions from Homogeneous Solutions in Inhomogeneous Magnetic Fields. Journal of Physical Chemistry Letters, 2012, 3, 3559-3564.	2.1	33
36	Lorentz-force-driven convection during copper magnetoelectrolysis in the presence of a supporting buoyancy force. Electrochimica Acta, 2012, 69, 209-219.	2.6	32

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37	Control of chemo-hydrodynamic pattern formation by external localized cooling. Europhysics Letters, 2005, 69, 746-752.	0.7	29
38	How to obtain structured metal deposits from diamagnetic ions in magnetic gradient fields?. Electrochemistry Communications, 2011, 13, 946-950.	2.3	29
39	Copper deposition and dissolution in seemingly parallel electric and magnetic fields: Lorentz force distributions and flow configurations. Journal of Solid State Electrochemistry, 2007, 11, 687-701.	1.2	28
40	The thermocapillary effect on gas bubbles growing on electrodes of different sizes. Electrochimica Acta, 2020, 353, 136461.	2.6	28
41	Growth and detachment of single hydrogen bubbles in a magnetohydrodynamic shear flow. Physical Review Fluids, 2017, 2, .	1.0	28
42	The concentration field during transient natural convection between vertical electrodes in a small-aspect-ratio cell. Journal of Electroanalytical Chemistry, 2008, 613, 97-107.	1.9	27
43	Bio-compatible flotation of Chlorella vulgaris: Study of zeta potential and flotation efficiency. Algal Research, 2019, 44, 101705.	2.4	27
44	Multiscale structures in solutal Marangoni convection: Three-dimensional simulations and supporting experiments. Physics of Fluids, 2013, 25, .	1.6	26
45	Coarsening evolution of dendritic sidearms: From synchrotron experiments to quantitative modeling. Acta Materialia, 2018, 146, 176-186.	3.8	26
46	The start-up of natural convection during copper electrolysis in the presence of an opposing Lorentz force. Electrochimica Acta, 2008, 54, 352-359.	2.6	24
47	Influence of an axial magnetic field on the stability of spherical Couette flows with different gap widths. Acta Mechanica, 2011, 219, 255-268.	1.1	24
48	Relaxation oscillations of solutal Marangoni convection at curved interfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 481, 633-643.	2.3	24
49	Magnetic-field-assisted electrodeposition of metal to obtain conically structured ferromagnetic layers. Electrochimica Acta, 2021, 365, 137374.	2.6	23
50	A + B â†' C reaction fronts in Hele-Shaw cells under modulated gravitational acceleration. Physical Chemistry Chemical Physics, 2012, 14, 7337.	1.3	22
51	Convective dynamics of traveling autocatalytic fronts in a modulated gravity field. Physical Chemistry Chemical Physics, 2014, 16, 26279-26287.	1.3	22
52	Orientation-dependent Hydrodynamic Instabilities from Chemo-Marangoni Cells to Large Scale Interfacial Deformations. Chinese Journal of Chemical Engineering, 2007, 15, 748-753.	1.7	21
53	Evaporation-Assisted Magnetic Separation of Rare-Earth Ions in Aqueous Solutions. Journal of Physical Chemistry C, 2017, 121, 24576-24587.	1.5	21
54	Gas bubble detection in liquid metals by means of the ultrasound transit-time-technique. European Physical Journal: Special Topics, 2013, 220, 53-62.	1.2	20

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55	Influence of magnetic fields on the behavior of bubbles in liquid metals. European Physical Journal: Special Topics, 2013, 220, 167-183.	1.2	20
56	Single bubble rise in GaInSn in a horizontal magnetic field. International Journal of Multiphase Flow, 2018, 104, 32-41.	1.6	20
57	Dynamics of single hydrogen bubbles at Pt microelectrodes in microgravity. Physical Chemistry Chemical Physics, 2021, 23, 11818-11830.	1.3	20
58	Numerical study of a laminar melt flow driven by a rotating magnetic field in enclosed cylinders with different aspect ratios. Acta Mechanica, 2006, 186, 17-35.	1.1	19
59	Relaxation oscillations between Marangoni cells and double diffusive fingers in a reactive liquidâ€“liquid system. Chemical Engineering Science, 2012, 68, 530-540.	1.9	19
60	Neutron imaging of froth structure and particle motion. Minerals Engineering, 2018, 119, 126-129.	1.8	19
61	Magnetically Induced Aggregation of Iron Oxide Nanoparticles for Carrier Flotation Strategies. ACS Applied Materials & Interfaces, 2021, 13, 20830-20844.	4.0	19
62	Detection of gas entrainment into liquid metals. Nuclear Engineering and Design, 2015, 294, 16-23.	0.8	18
63	Adaptive Micromixer Based on the Solutocapillary Marangoni Effect in a Continuous-Flow Microreactor. Micromachines, 2018, 9, 600.	1.4	18
64	Mass transfer and electrolyte flow during electrodeposition on a conically shaped electrode under the influence of a magnetic field. Journal of Electroanalytical Chemistry, 2019, 842, 203-213.	1.9	18
65	Application of Positron Emission Particle Tracking (PEPT) to measure the bubble-particle interaction in a turbulent and dense flow. Minerals Engineering, 2020, 156, 106410.	1.8	18
66	Experimental techniques to study proteinâ€“surfactant interactions: New insights into competitive adsorptions via drop subphase and interface exchange. Advances in Colloid and Interface Science, 2022, 301, 102601.	7.0	18
67	On the decay of the Lorentz-force-driven convection in vertical concentration stratification during magnetoelectrolysis. Electrochimica Acta, 2009, 54, 7056-7065.	2.6	17
68	Carrier Flotation: State of the Art and its Potential for the Separation of Fine and Ultrafine Mineral Particles. Materials Science Forum, 0, 959, 125-133.	0.3	17
69	Protein enrichment by foam Fractionation: Experiment and modeling. Chemical Engineering Science, 2022, 256, 117715.	1.9	17
70	Dancing performance of organic droplets in aqueous surfactant solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 566, 141-147.	2.3	16
71	Dynamics of Competitive Adsorption of Lipase and Ionic Surfactants at the Waterâ€“Air Interface. Langmuir, 2020, 36, 12010-12022.	1.6	16
72	On the homogenization of the thickness of Cu deposits by means of MHD convection within small dimension cells. Electrochemistry Communications, 2013, 36, 80-83.	2.3	15

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73	On the prospects of magnetic-field-assisted electrodeposition of nano-structured ferromagnetic layers. Electrochimica Acta, 2022, 420, 140422.	2.6	15
74	Numerical and analytical study of rotating flow in an enclosed cylinder under an axial magnetic field. Acta Mechanica, 2003, 164, 175-188.	1.1	14
75	Velocity measurements inside the concentration boundary layer during copper-magneto-electrolysis using a novel laser Doppler profile sensor. Electrochimica Acta, 2011, 56, 6150-6156.	2.6	14
76	Rotating magnetic field-driven flows in conductive inhomogeneous media: Part Iâ€"Numerical study. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 349-359.	1.0	13
77	Oscillatory Lorentz-force-driven flows during potentiostatic current oscillations in magnetic fields. Electrochemistry Communications, 2010, 12, 1576-1580.	2.3	13
78	Electromagnetic flow control in metallurgy, crystal growth and electrochemistry. European Physical Journal: Special Topics, 2013, 220, 1-8.	1.2	13
79	Measuring the diameter of rising gas bubbles by means of the ultrasound transit time technique. Nuclear Engineering and Design, 2015, 291, 64-70.	0.8	13
80	A novel method for measuring flotation recovery by means of 4D particle tracking velocimetry. Minerals Engineering, 2018, 124, 116-122.	1.8	13
81	Influence of microscopic precipitate structures on macroscopic pattern formation in reactive flows in a confined geometry. Physical Chemistry Chemical Physics, 2019, 21, 2910-2918.	1.3	13
82	Stochastic geometry of polygonal networks: An alternative approach to the hexagon-square transition in BÃ©nard convection. Physical Review E, 1998, 58, 3458-3468.	0.8	12
83	An Impact of a Low Voltage Steady Electrical Current on the Solidification of a Binary Metal Alloy: A Numerical Study. Steel Research International, 2007, 78, 402-408.	1.0	12
84	Contactless Mixing of Liquid Metals. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2010, 41, 94-111.	1.0	12
85	The initial transient of natural convection during copper electrolysis in the presence of an opposing Lorentz force: Current dependence. European Physical Journal: Special Topics, 2013, 220, 303-312.	1.2	12
86	Solutal Marangoni convection in a Heleâ€"Shaw geometry: Impact of orientation and gap width. European Physical Journal: Special Topics, 2015, 224, 261-276.	1.2	12
87	Ultrasonic measurements of the bulk flow field in foams. Physical Review E, 2018, 97, 013113.	0.8	12
88	Do rotating magnetic fields unconditionally lead to grain refinement? A case study for directionally solidified Al-10wt%Cu alloys. Materialia, 2018, 3, 326-337.	1.3	12
89	Convective Instability in a Liquidâ^'Liquid System Due to Complexation with a Crown Ether. Journal of Physical Chemistry A, 2008, 112, 7357-7364.	1.1	11
90	Experimental and numerical investigations of Niâ€"Coâ€"SiO2 alloy films deposited by magnetic-field-assisted jet plating. Surface and Coatings Technology, 2021, 423, 127583.	2.2	11

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91	X-ray particle tracking velocimetry in liquid foam flow. Soft Matter, 2020, 16, 2093-2103.	1.2	11
92	Controlled retardation of electrochemical Rayleighâ€“BÃ©nard convection during copper electrolysis. Journal of Electroanalytical Chemistry, 2007, 611, 241-249.	1.9	10
93	Spin-up and spin-down dynamics of a liquid metal driven by a single rotating magnetic field pulse. European Journal of Mechanics, B/Fluids, 2008, 27, 177-201.	1.2	10
94	Pulse magnetoelectrolysis. Electrochemistry Communications, 2009, 11, 318-322.	2.3	10
95	A wavelet and Zernike-polynomial-based shearing interferometry approach to analyse hydrodynamic instabilities at interfaces. Acta Astronautica, 2011, 68, 707-716.	1.7	10
96	Mixing Enhancement in Gas-Stirred Melts by Rotating Magnetic Fields. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 1454-1464.	1.0	10
97	On the transition from cellular to wavelike patterns during solutal Marangoni convection. European Physical Journal: Special Topics, 2013, 219, 121-130.	1.2	10
98	Magnetic Separation of Paramagnetic Ions From Initially Homogeneous Solutions. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	9
99	Interplay of the Open Circuit Potential-Relaxation and the Dissolution Behavior of a Single H2Bubble Generated at a Pt Microelectrode. Journal of Physical Chemistry C, 2016, 120, 15137-15146.	1.5	9
100	Investigations of fluid flow effects on dendritic solidification: Consequences on fragmentation, macrosegregation and the influence of electromagnetic stirring. IOP Conference Series: Materials Science and Engineering, 2017, 228, 012005.	0.3	9
101	The influence of interface curvature on solutal Marangoni convection in the Hele-Shaw cell. International Journal of Heat and Mass Transfer, 2017, 115, 1064-1073.	2.5	9
102	Solid-liquid flow in stirred tanks: â€œCFD-gradeâ€•experimental investigation. Chemical Engineering Science, 2021, 245, 116743.	1.9	9
103	Salt Effects on Formation and Stability of Colloidal Gas Aphrons Produced by Anionic and Zwitterionic Surfactants in Xanthan Gum Solution. Colloids and Interfaces, 2020, 4, 9.	0.9	9
104	Enzymatic Hydrolysis of Triglycerides at the Waterâ€“Oil Interface Studied via Interfacial Rheology Analysis of Lipase Adsorption Layers. Langmuir, 2021, 37, 12919-12928.	1.6	9
105	Convection in two-layer systems with an anomalous thermocapillary effect. Physical Review E, 2000, 62, 3619-3631.	0.8	8
106	Heat transfer enhancement in magnetic cooling by means of magnetohydrodynamic convection. International Journal of Refrigeration, 2016, 62, 166-176.	1.8	8
107	Convective instability in sheared foam. Journal of Fluid Mechanics, 2021, 911, .	1.4	8
108	High-Gradient Magnetic Separation of Compact Fluorescent Lamp Phosphors: Elucidation of the Removal Dynamics in a Rotary Permanent Magnet Separator. Minerals (Basel, Switzerland), 2021, 11, 1116.	0.8	8

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109	Flow oscillations driven by a rotating magnetic field in liquid metal columns with an upper free surface. Journal of Crystal Growth, 2012, 339, 52-60.	0.7	7
110	Optical velocity measurements of electrolytic boundary layer flows influenced by magnetic fields. European Physical Journal: Special Topics, 2013, 220, 79-89.	1.2	7
111	Space- and time-resolved interferometric measurements of the thermal boundary layer at a periodically magnetized gadolinium plate. International Journal of Refrigeration, 2015, 56, 246-255.	1.8	7
112	Linear stability analysis of the convective flow in a spherical gap withÎ·=0.714. International Journal of Heat and Mass Transfer, 2015, 80, 266-273.	2.5	7
113	Entrance effects in a radial Hele-Shaw cell: Numerical and experimental study. Chemical Engineering Journal, 2022, 428, 131146.	6.6	7
114	Interfacial Behavior of Particle-Laden Bubbles under Asymmetric Shear Flow. Langmuir, 2021, 37, 13244-13254.	1.6	7
115	On the electrodeposition of conically nano-structured nickel layers assisted by a capping agent. Journal of Electroanalytical Chemistry, 2022, 904, 115935.	1.9	7
116	Tracking of Particles in Froth Using Neutron Imaging. Chemie-Ingenieur-Technik, 2019, 91, 1001-1007.	0.4	6
117	Stability criterion for the magnetic separation of rare-earth ions. Physical Review E, 2020, 101, 013109.	0.8	6
118	Magnetic separation of rare-earth ions: Transport processes and pattern formation. Physical Review Fluids, 2021, 6, .	1.0	6
119	Effect of deposition current density on the Coâ€“Ni/SiO₂ alloy composite coatings using scanning jet electrodeposition. Surface Topography: Metrology and Properties, 2021, 9, 015027.	0.9	6
120	Interfacial flow of a surfactant-laden interface under asymmetric shear flow. Journal of Colloid and Interface Science, 2021, 599, 837-848.	5.0	6
121	Effects of gravity modulation on the dynamics of a radial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si31.svg"><mml:mrow><mml:mi>A</mml:mi><mml:mo linebreak="badbreak">+</mml:mo><mml:mi>B</mml:mi><mml:mo>â†’</mml:mo><mml:mi>C</mml:mi></mml:mrow></mml:math> reaction front. Chemical Engineering Science, 2022, 257, 117703.	1.9	6
122	Nonbound dislocations in hexagonal patterns: pentagon lines in surface-tension-driven BÃ©nard convection. Physical Review E, 1999, 60, 4117-4124.	0.8	5
123	On Three-Dimensional Magnetic Field Effects during Metal Deposition in Cuboid Cells. ECS Transactions, 2008, 13, 9-13.	0.3	5
124	The impact of turbulent flow on the solidification of metal alloys driven by a rotating magnetic field. International Journal of Cast Metals Research, 2009, 22, 236-239.	0.5	5
125	Use of time-modulated AC magnetic fields for melt flow control during unidirectional solidification. International Journal of Cast Metals Research, 2009, 22, 78-81.	0.5	5
126	Influence of an axial magnetic field on the stability of convective flows between non-isothermal concentric spheres. International Journal of Heat and Mass Transfer, 2012, 55, 7520-7531.	2.5	5

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127	Free dendrite growth under modulated flow in pure substances: two-dimensional phase-field simulations. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012045.	0.3	5
128	A new method for mixing of suspended superparamagnetic beads using variable electromagnetic fields. Engineering in Life Sciences, 2015, 15, 727-732.	2.0	5
129	The eruptive regime of mass-transfer-driven Rayleighâ€“Marangoni convection. Journal of Fluid Mechanics, 2016, 791, .	1.4	5
130	Self-Pinning on a Liquid Surface. Journal of Physical Chemistry Letters, 2016, 7, 520-524.	2.1	5
131	Oscillatory Copper Deposition on Conical Iron Electrodes in a Nonuniform Magnetic Field. Magnetochemistry, 2021, 7, 46.	1.0	5
132	Dynamics of adsorption of CTAB-Silica nanoparticle complexes: New experiments and modeling approach. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 629, 127448.	2.3	5
133	Measurements of the diameter of rising gas bubbles by means of the ultrasound transit time technique. Magnetohydrodynamics, 2017, 53, 383-392.	0.5	5
134	The Use of Steady Electromagnetic Fields to Control the Columnar Solidification of Binary-Metal Alloys. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2009, 40, 317-327.	1.0	4
135	Influence of the Prandtl number on the stability of convective flows between non-isothermal concentric spheres. International Journal of Heat and Mass Transfer, 2013, 66, 154-163.	2.5	4
136	Smart Tomographic Sensors for Advanced Industrial Process Control TOMOCON. Chemie-Ingenieur-Technik, 2018, 90, 1238-1239.	0.4	4
137	Formation of Structured Membranes by Coacervation of Xanthan Gum with C_nTAB Surfactants. Langmuir, 2019, 35, 13624-13635.	1.6	4
138	Oscillatory surface deformation of paramagnetic rare-earth solutions driven by an inhomogeneous magnetic field. Physical Review E, 2020, 101, 062601.	0.8	4
139	Evolution of specific interface area in dendritic alloy solidification. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012072.	0.3	3
140	Meniscus Asymmetry and Chemoâ€Marangoni Convection in Capillaries. Chemical Engineering and Technology, 2017, 40, 2067-2074.	0.9	3
141	Information transmission by Marangoni-driven relaxation oscillations at droplets. Soft Matter, 2018, 14, 9250-9262.	1.2	3
142	Numerical simulation of mass transfer and convection near a hydrogen bubble during water electrolysis in a magnetic field. Magnetohydrodynamics, 2017, 53, 193-200.	0.5	3
143	Localization of rare earth ions in an inhomogeneous magnetic field toward their magnetic separation. Journal of Rare Earths, 2022, 40, 1598-1605.	2.5	3
144	Magnetic Separation of Rare-Earth Ions: Property Database and Kelvin Force Distribution. Journal of Physical Chemistry C, 2022, 126, 2226-2233.	1.5	3

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145	Pulse Reverse Plating of Copper Micro-Structures in Magnetic Gradient Fields. Magnetochemistry, 2022, 8, 66.	1.0	3
146	Modeling and measurements of heat transfer phenomena in two-phase PbSn alloy solidification in an external magnetic field. Journal of Thermal Science, 2003, 12, 357-362.	0.9	2
147	Growth of a free dendrite in pure substances under modulated flow conditions. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012106.	0.3	2
148	Numerical Study of the Influence of an Applied Electrical Potential on the Solidification of a Binary Metal Alloy. , 0, , 296-308.		2
149	Secondary Instabilities in Surface-Tension-Driven BÃ©nard-Marangoni Convection. Springer Tracts in Modern Physics, 2006, , 163-176.	0.1	2
150	Pattern Formation Emerging from Stationary Solutal Marangoni Instability: A Roadmap Through the Underlying Hierarchic Structures. Understanding Complex Systems, 2013, , 105-121.	0.3	2
151	Radial solidification of Al-Si alloys in the presence of a rotating magnetic field. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012048.	0.3	1
152	Experimental studies of two-phase liquid metal-gas chain flow with ultrasonic echo pulse method and in the magnetic field of permanent magnets. MATEC Web of Conferences, 2018, 240, 03003.	0.1	1
153	Detection of the pulp-froth interface using the ultrasound transit time technique. Minerals Engineering, 2021, 160, 106679.	1.8	1
154	Measurements of Gas Phase Velocity in Liquid Metal by Means of Ultrasonic Pulse-Echo Method. Lecture Notes in Electrical Engineering, 2019, , 1-12.	0.3	1
155	RANS Modelling of Turbulent Flows Driven by a Travelling Magnetic Field. , 2007, , 745-745.		1
156	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>1</mml:mi><mml:mi>n</mml:mi><mml:mo>:</mml:mo><mml:mtext>â€™</mml:m measurements of dendrite tip shape selection in a metallic alloy. Physical Review Materials, 2022, 6, .	0.9	
157	Euler-Euler/RANS modeling of solid-liquid flow in stirred tanks: A comprehensive model validation. Minerals Engineering, 2022, 185, 107679.	1.8	1
158	21. Experimentelle und numerische Untersuchungen zu InstabilitÃten beim reaktiven StoffÃ¼bergang an einer ebenen fluiden Phasengrenze im vertikalen Spalt. Chemie-Ingenieur-Technik, 1999, 71, 945-945.	0.4	0
159	Complex Patterns and Elementary Structures of Solutal Marangoni Convection: Experimental and Numerical Studies. Advances in Mathematical Fluid Mechanics, 2017, , 445-488.	0.1	0
160	Measurement and Calculation of Heat Exchanger Performance Using Film Method. , 2004, , .		0