Axel Voigt

List of Publications by Year
in descending order

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191 papers	5,161 citations	109321 35 h-index	118850 62 g-index
218 all docs	218 docs citations	218 times ranked	3479 citing authors

#	Article	IF	Citations
1	Wetting Resistance at Its Topographical Limit: The Benefit of Mushroom and Serif T Structures. Langmuir, 2013, 29, 1100-1112.	3.5	202
2	Derivation of the phase-field-crystal model for colloidal solidification. Physical Review E, 2009, 79, 051404.	2.1	178
3	AMDiS: adaptive multidimensional simulations. Computing and Visualization in Science, 2007, 10, 57-67.	1.2	170
4	Solving pdes in complex geometries. Communications in Mathematical Sciences, 2009, 7, 81-107.	1.0	168
5	A diffuse-interface method for two-phase flows with soluble surfactants. Journal of Computational Physics, 2011, 230, 375-393.	3.8	162
6	Phase-field modeling of the dynamics of multicomponent vesicles: Spinodal decomposition, coarsening, budding, and fission. Physical Review E, 2009, 79, 031926.	2.1	157
7	A new phase-field model for strongly anisotropic systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 1337-1359.	2.1	154
8	Non-invasive perturbations of intracellular flow reveal physical principles of cell organization. Nature Cell Biology, 2018, 20, 344-351.	10.3	130
9	Benchmark computations of diffuse interface models for twoâ€dimensional bubble dynamics. International Journal for Numerical Methods in Fluids, 2012, 69, 747-761.	1.6	126
10	Software concepts and numerical algorithms for a scalable adaptive parallel finite element method. Advances in Computational Mathematics, 2015, 41, 1145-1177.	1.6	105
11	Surface evolution of elastically stressed films under deposition by a diffuse interface model. Journal of Computational Physics, 2006, 214, 187-208.	3.8	97
12	PDE's on surfaces---a diffuse interface approach. Communications in Mathematical Sciences, 2006, 4, 575-590.	1.0	97
13	Tunable nano-replication to explore the omniphobic characteristics of springtail skin. NPG Asia Materials, 2013, 5, e37-e37.	7.9	91
14	Nucleation and growth by a phase field crystal (PFC) model. Philosophical Magazine Letters, 2007, 87, 813-820.	1.2	84
15	A diffuse-interface approach for modelling transport, diffusion and adsorption/desorption of material quantities on a deformable interface. Communications in Mathematical Sciences, 2009, 7, 1009-1037.	1.0	83
16	A NOMPC-Dependent Membrane-Microtubule Connector Is a Candidate for the Gating Spring in Fly Mechanoreceptors. Current Biology, 2013, 23, 755-763.	3.9	82
17	A finite element approach to incompressible two-phase flow on manifolds. Journal of Fluid Mechanics, 2012, 708, 418-438.	3.4	78
18	Strontium and bisphosphonate coated iron foam scaffolds for osteoporotic fracture defect healing. Biomaterials, 2018, 157, 1-16.	11.4	75

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19	Complex dewetting scenarios of ultrathin silicon films for large-scale nanoarchitectures. Science Advances, 2017, 3, eaao1472.	10.3	74
20	Faceting of Equilibrium and Metastable Nanostructures: A Phase-Field Model of Surface Diffusion Tackling Realistic Shapes. Crystal Growth and Design, 2015, 15, 2787-2794.	3.0	69
21	Dynamics of multicomponent vesicles in a viscous fluid. Journal of Computational Physics, 2010, 229, 119-144.	3.8	68
22	Electromagnetic melt flow control during solidification of metallic alloys. European Physical Journal: Special Topics, 2013, 220, 123-137.	2.6	60
23	Solving the incompressible surface Navier-Stokes equation by surface finite elements. Physics of Fluids, 2018, 30, .	4.0	58
24	Capturing the complex physics behind universal grain size distributions in thin metallic films. Acta Materialia, 2014, 64, 72-77.	7.9	55
25	Complex Shape Evolution of Electromigration-Driven Single-Layer Islands. Physical Review Letters, 2005, 94, 166105.	7.8	54
26	Diffuse interface models of locally inextensible vesicles in a viscous fluid. Journal of Computational Physics, 2014, 277, 32-47.	3.8	52
27	The Interplay of Curvature and Vortices in Flow on Curved Surfaces. Multiscale Modeling and Simulation, 2015, 13, 632-643.	1.6	51
28	Signaling networks and cell motility: a computational approach using a phase field description. Journal of Mathematical Biology, 2014, 69, 91-112.	1.9	50
29	Finite element method for epitaxial growth with attachmentâ€“detachment kinetics. Journal of Computational Physics, 2004, 194, 409-434.	3.8	47
30	A continuum model of colloid-stabilized interfaces. Physics of Fluids, 2011, 23, .	4.0	45
31	A mechanism for cell motility by active polar gels. Journal of the Royal Society Interface, 2015, 12, 20150161.	3.4	41
32	A diffuse-interface approximation for step flow in epitaxial growth. Nonlinearity, 2004, 17, 477-491.	1.4	40
33	Active crystals on a sphere. Physical Review E, 2018, 97, 052615.	2.1	40
34	Three-dimensional phase-field crystal modeling of fcc and bcc dendritic crystal growth. Journal of Crystal Growth, 2011, 334, 146-152.	1.5	39
35	A finite element approach for vector- and tensor-valued surface PDEs. Journal of Computational Physics, 2019, 389, 48-61.	3.8	38
36	Hydrodynamic interactions in polar liquid crystals on evolving surfaces. Physical Review Fluids, 2019, 4, .	2.5	37

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37	A level set approach to anisotropic flows with curvature regularization. Journal of Computational Physics, 2007, 225, 183-205.	3.8	36
38	Curvature controlled defect dynamics in topological active nematics. Scientific Reports, 2017, 7, 5211.	3.3	36
39	Phase-field Approaches to Structural Topology Optimization. International Series of Numerical Mathematics, 2012, , 245-256.	1.1	35
40	Margination of white blood cells: a computational approach by a hydrodynamic phase field model. Journal of Fluid Mechanics, 2016, 790, 389-406.	3.4	34
41	Extracting Grain Boundaries and Macroscopic Deformations from Images on Atomic Scale. Journal of Scientific Computing, 2008, 35, 1-23.	2.3	33
42	Orientational Order on Surfaces: The Coupling of Topology, Geometry, and Dynamics. Journal of Nonlinear Science, 2018, 28, 147-191.	2.1	33
43	Templated dewetting of single-crystal sub-millimeter-long nanowires and on-chip silicon circuits. Nature Communications, 2019, 10, 5632.	12.8	33
44	Particles on curved surfaces: A dynamic approach by a phase-field-crystal model. Physical Review E, 2010, 81, 025701.	2.1	31
45	The influence of membrane bound proteins on phase separation and coarsening in cell membranes. Physical Chemistry Chemical Physics, 2012, 14, 14509.	2.8	31
46	A microscopic field theoretical approach for active systems. New Journal of Physics, 2016, 18, 083008.	2.9	31
47	A coarse-grained phase-field crystal model of plastic motion. Journal of the Mechanics and Physics of Solids, 2020, 137, 103856.	4.8	31
48	Growth kinetics and morphological analysis of homoepitaxial GaAs fins by theory and experiment. Physical Review Materials, 2018, 2, .	2.4	31
49	Particles at fluid-fluid interfaces: A new Navier-Stokes-Cahn-Hilliard surface- phase-field-crystal model. Physical Review E, 2012, 86, 046321.	2.1	30
50	Morphological Evolution of Pit-Patterned Si(001) Substrates Driven by Surface-Energy Reduction. Nanoscale Research Letters, 2017, 12, 554.	5.7	30
51	SPN-approximations of internal radiation in crystal growth of optical materials. Journal of Crystal Growth, 2004, 266, 264-270.	1.5	29
52	Controlling the energy of defects and interfaces in the amplitude expansion of the phase-field crystal model. Physical Review E, 2017, 96, 023301.	2.1	27
53	Closing the gap between atomic-scale lattice deformations and continuum elasticity. Npj Computational Materials, 2019, 5, .	8.7	27
54	Stress Induced Branching of Growing Crystals on Curved Surfaces. Physical Review Letters, 2016, 116, 135502.	7.8	26

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55	A phase-field-crystal approach to critical nuclei. Journal of Physics Condensed Matter, 2010, 22, 364104.	1.8	25
56	A Navier-Stokes phase-field crystal model for colloidal suspensions. Journal of Chemical Physics, 2015, 142, 154904.	3.0	25
57	Collective migration under hydrodynamic interactions: a computational approach. Interface Focus, 2016, 6, 20160037.	3.0	25
58	Discrete Exterior Calculus (DEC) for the Surface Navier-Stokes Equation. Advances in Mathematical Fluid Mechanics, 2017, , 177-197.	0.1	25
59	Ostwald ripening of two-dimensional homoepitaxial islands. Physical Review B, 2005, 72, .	3.2	24
60	Engineered Coalescence by Annealing 3D Ge Microstructures into High-Quality Suspended Layers on Si. ACS Applied Materials & Interfaces, 2015, 7, 19219-19225.	8.0	24
61	A Mechanistic Collective Cell Model for Epithelial Colony Growth and Contact Inhibition. Biophysical Journal, 2015, 109, 1347-1357.	0.5	24
62	Hyperuniform Monocrystalline Structures by Spinodal Solid-State Dewetting. Physical Review Letters, 2020, 125, 126101.	7.8	24
63	A Discrete Scheme for Parametric Anisotropic Surface Diffusion. Journal of Scientific Computing, 2007, 30, 223-235.	2.3	23
64	Competition Between Kinetics and Thermodynamics During the Growth of Faceted Crystal by Phase Field Modeling. Physica Status Solidi (B): Basic Research, 2019, 256, 1800518.	1.5	23
65	Morphological instability of heteroepitaxial growth on vicinal substrates: A phase-field crystal study. Journal of Crystal Growth, 2011, 318, 18-22.	1.5	22
66	Development and Analysis of a Block-Preconditioner for the Phase-Field Crystal Equation. SIAM Journal of Scientific Computing, 2015, 37, B425-B451.	2.8	21
67	A numerical approach for fluid deformable surfaces. Journal of Fluid Mechanics, 2020, 900, .	3.4	21
68	A multigrid finite element method for reaction-diffusion systems on surfaces. Computing and Visualization in Science, 2010, 13, 177-185.	1.2	20
69	A Continuous Approach to Discrete Ordering on $mathbb{S}^2$. Multiscale Modeling and Simulation, 2011, 9, 314-334.	1.6	20
70	Microscopic field-theoretical approach for mixtures of active and passive particles. Physical Review E, 2018, 98, .	2.1	20
71	Defects at grain boundaries: A coarse-grained, three-dimensional description by the amplitude expansion of the phase-field crystal model. Physical Review Materials, 2018, 2, .	2.4	20
72	A discrete scheme for regularized anisotropic surface diffusion: a 6th order geometric evolution equation. Interfaces and Free Boundaries, 2005, 7, 353-370.	0.8	19

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73	A diffuse-interface approximation for surface diffusion including adatoms. Nonlinearity, 2007, 20, 177-192.	1.4	19
74	Spiral Growth and Step Edge Barriers. Physical Review Letters, 2008, 100, 035506.	7.8	19
75	Comment on â€œDegenerate mobilities in phase field models are insufficient to capture surface diffusionâ€•[Appl. Phys. Lett. 107, 081603 (2015)]. Applied Physics Letters, 2016, 108, .	3.3	19
76	Experimental analysis of retention forces of different magnetic devices for bone-anchored auricular facial prostheses. International Journal of Oral and Maxillofacial Surgery, 2008, 37, 664-668.	1.5	18
77	Phase-field simulations of faceted Ge/Si-crystal arrays, merging into a suspended film. Applied Surface Science, 2017, 391, 33-38.	6.1	18
78	Nematic liquid crystals on curved surfaces: a thin film limit. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170686.	2.1	18
79	Topological and geometrical quantities in active cellular structures. Journal of Chemical Physics, 2019, 150, 164108.	3.0	18
80	Controlling Grain Boundaries by Magnetic Fields. Physical Review Letters, 2019, 122, 126103.	7.8	18
81	A multi-mesh finite element method for Lagrange elements of arbitrary degree. Journal of Computational Science, 2012, 3, 420-428.	2.9	17
82	Phase-field modeling of epitaxial growth: Applications to step trains and island dynamics. Physica D: Nonlinear Phenomena, 2012, 241, 77-94.	2.8	17
83	An efficient numerical framework for the amplitude expansion of the phase-field crystal model. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 044004.	2.0	17
84	Liquid crystals on deformable surfaces. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200313.	2.1	17
85	Phase-field modeling of anomalous spiral step growth on Si(001) surface. Physical Review B, 2009, 79, .	3.2	16
86	Multi-scale simulation of plant stem reinforcement by brachysclereids: A case study in apple fruit peduncles. Journal of Structural Biology, 2015, 192, 116-126.	2.8	16
87	Thin-film growth dynamics with shadowing effects by a phase-field approach. Physical Review B, 2016, 94, .	3.2	16
88	Various phase-field approximations for Epitaxial Growth. Journal of Crystal Growth, 2004, 266, 278-282.	1.5	15
89	Chemotaxis of mesenchymal stem cells within 3D biomimetic scaffoldsâ€”a modeling approach. Journal of Biomechanics, 2011, 44, 359-364.	2.1	15
90	Buckling Instability of Viral Capsidsâ€”A Continuum Approach. Multiscale Modeling and Simulation, 2012, 10, 82-110.	1.6	15

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91	Modeling and numerical approximations for bubbles in liquid metal. European Physical Journal: Special Topics, 2013, 220, 185-194.	2.6	15
92	Reduced material model for closed cell metal foam infiltrated with phase change material based on high resolution numerical studies. Applied Thermal Engineering, 2016, 94, 505-512.	6.0	15
93	Doubly degenerate diffuse interface models of surface diffusion. Mathematical Methods in the Applied Sciences, 2021, 44, 5385-5405.	2.3	15
94	Locomotion, wrinkling, and budding of a multicomponent vesicle in viscous fluids. Communications in Mathematical Sciences, 2012, 10, 645-670.	1.0	15
95	Phase-field model for island dynamics in epitaxial growth. Applicable Analysis, 2004, 83, 1015-1025.	1.3	14
96	Kinetic model for step flow growth of [100] steps. Physical Review E, 2005, 72, 022601.	2.1	14
97	The influence of electric fields on nanostructuresâ€"Simulation and control. Mathematics and Computers in Simulation, 2010, 80, 1449-1457.	4.4	14
98	Incompressible two-phase flows with an inextensible Newtonian fluid interface. Journal of Computational Physics, 2016, 322, 850-858.	3.8	14
99	Continuum modelling of semiconductor heteroepitaxy: an applied perspective. Advances in Physics: X, 2016, 1, 331-367.	4.1	14
100	Mesoscale Defect Motion in Binary Systems: Effects of Compositional Strain and Cottrell Atmospheres. Physical Review Letters, 2021, 126, 185502.	7.8	14
101	Finite Element Discretization Methods for Velocity-Pressure and Stream Function Formulations of Surface Stokes Equations. SIAM Journal of Scientific Computing, 2022, 44, A1807-A1832.	2.8	14
102	Linear stability analysis for step meandering instabilities with elastic interactions and Ehrlich-Schwoebel barriers. Physical Review E, 2007, 76, 011601.	2.1	13
103	A Note on the Convergence Analysis of a Diffuse-domain Approach. Computational Methods in Applied Mathematics, 2012, 12, 153-167.	0.8	13
104	Smectic monolayer confined on a sphere: topology at the particle scale. Soft Matter, 2017, 13, 8120-8135.	2.7	13
105	Properties of surface Landauâ€"de Gennes Q-tensor models. Soft Matter, 2020, 16, 4032-4042.	2.7	13
106	Facet formation and coarsening modeled by a geometric evolution law for epitaxial growth. Journal of Crystal Growth, 2005, 275, e47-e51.	1.5	12
107	Morphological stability of electromigration-driven vacancy islands. Physical Review E, 2007, 75, 046210.	2.1	12
108	Solidâ€"liquid interfacial energies and equilibrium shapes of nanocrystals. Journal of Physics Condensed Matter, 2009, 21, 464109.	1.8	12

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109	A Phase Field Crystal Approach for Particles in a Flowing Solvent. Macromolecular Theory and Simulations, 2011, 20, 541-547.	1.4	12
110	A Hardware/Software Stack for Heterogeneous Systems. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 243-259.	2.4	12
111	Solid-state dewetting of single-crystal silicon on insulator: effect of annealing temperature and patch size. Microelectronic Engineering, 2018, 190, 1-6.	2.4	12
112	Multiphase field models for collective cell migration. Physical Review E, 2021, 104, 054410.	2.1	12
113	Finite Element Method for Epitaxial Growth with Thermodynamic Boundary Conditions. SIAM Journal of Scientific Computing, 2005, 26, 2029-2046.	2.8	11
114	A numerical scheme for regularized anisotropic curve shortening flow. Applied Mathematics Letters, 2006, 19, 691-698.	2.7	11
115	Structure and dynamics of interfaces between two coexisting liquid-crystalline phases. Physical Review E, 2013, 87, 052406.	2.1	11
116	Active flows on curved surfaces. Physics of Fluids, 2021, 33, .	4.0	11
117	A Stepâ€Flow Model for the Heteroepitaxial Growth of Strained, Substitutional, Binary Alloy Films with Phase Segregation: I. Theory. Multiscale Modeling and Simulation, 2007, 6, 158-189.	1.6	10
118	The effect of kinetics in the surface evolution of thin crystalline films. Journal of Crystal Growth, 2007, 303, 90-94.	1.5	10
119	Adaptive diffuse domain approach for calculating mechanically induced deformation of trabecular bone. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 31-38.	1.6	10
120	The interplay of morphological and compositional evolution in crystal growth: a phase-field model. Philosophical Magazine, 2014, 94, 2162-2169.	1.6	10
121	A phase field crystal study of heterogeneous nucleation â€“ application of the string method. European Physical Journal: Special Topics, 2014, 223, 497-509.	2.6	10
122	Morphological evolution of Ge/Si nano-strips driven by Rayleigh-like instability. Applied Physics Letters, 2018, 112, 022101.	3.3	10
123	Analysis of microscopic bone properties in an osteoporotic sheep model: a combined biomechanics, FE and ToF-SIMS study. Journal of the Royal Society Interface, 2019, 16, 20180793.	3.4	10
124	A 2 + 1-Dimensional Terrace-Step-Kink Model for Epitaxial Growth Far from Equilibrium. Multiscale Modeling and Simulation, 2006, 5, 45-61.	1.6	9
125	Phase-field simulation of stripe arrays on metal bcc(110) surfaces. Physical Review E, 2008, 77, 051605.	2.1	9
126	Simultaneous step meandering and bunching instabilities controlled by Ehrlich-Schwoebel barrier and elastic interaction. Applied Physics Letters, 2011, 99, .	3.3	9

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127	Relaxation of curvature-induced elastic stress by the Asaro-Tiller-Grinfeld instability. Europhysics Letters, 2015, 111, 48006.	2.0	9
128	Defects in Active Nematics â€“ Algorithms for Identification and Tracking. Computational Methods in Applied Mathematics, 2021, 21, 683-692.	0.8	9
129	Higher Order Regularization of Anisotropic Geometric Evolution Equations in Three Dimensions. Journal of Computational and Theoretical Nanoscience, 2006, 3, 560-564.	0.4	9
130	Doubly degenerate diffuse interface models of anisotropic surface diffusion. Mathematical Methods in the Applied Sciences, 2021, 44, 5406-5417.	2.3	9
131	Defect formation in CZ Silicon growth. Journal of Crystal Growth, 2004, 266, 126-131.	1.5	8
132	Stability of a circular epitaxial island. Physica D: Nonlinear Phenomena, 2004, 198, 231-247.	2.8	8
133	Step meandering in epitaxial growth. Journal of Crystal Growth, 2007, 303, 80-84.	1.5	8
134	Finite Element-Based Level Set Methods for Higher Order Flows. Journal of Scientific Computing, 2008, 35, 77-98.	2.3	8
135	Geodesic Evolution Lawsâ€”A Level-Set Approach. SIAM Journal on Imaging Sciences, 2008, 1, 379-399.	2.2	8
136	Simulation of common features and differences of surfactant-based and solid-stabilized emulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 413, 298-302.	4.7	8
137	An Adaptive Finite Element Multi-Mesh Approach for Interacting Deformable Objects in Flow. Computational Methods in Applied Mathematics, 2016, 16, 475-484.	0.8	8
138	Topological fine structure of smectic grain boundaries and tetratic disclination lines within three-dimensional smectic liquid crystals. Physical Chemistry Chemical Physics, 2022, 24, 15691-15704.	2.8	8
139	The radiosity equation for solving global heat transfer in industrial furnaces. Mathematical and Computer Modelling, 2004, 39, 145-150.	2.0	7
140	A Level Set Approach to Anisotropic Surface Evolution with Free Adatoms. SIAM Journal on Applied Mathematics, 2008, 69, 64-80.	1.8	7
141	Crystalline order and topological charges on capillary bridges. Soft Matter, 2014, 10, 4694.	2.7	7
142	Computation of thermo-elastic deformations on machine tools a study of numerical methods. Production Engineering, 2016, 10, 253-263.	2.3	7
143	Fluid deformable surfaces. Journal of Fluid Mechanics, 2019, 878, 1-4.	3.4	7
144	Two-phase flow in complex geometries: A diffuse domain approach. CMES - Computer Modeling in Engineering and Sciences, 2010, 57, 77-106.	1.1	7

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145	Transient and quasi-stationary simulation of heat and mass transfer in Czochralski silicon crystal growth. Crystal Research and Technology, 2003, 38, 499-505.	1.3	6
146	On Level Set Formulations for Anisotropic Mean Curvature Flow and Surface Diffusion. , 2005, , 227-237.		6
147	Magnetically induced/enhanced coarsening in thin films. Physical Review Materials, 2020, 4, .	2.4	6
148	Observer-invariant time derivatives on moving surfaces. Journal of Geometry and Physics, 2022, 173, 104428.	1.4	6
149	Impact of contact inhibition on collective cell migration and proliferation. Physical Review E, 2022, 105, 034402.	2.1	6
150	A kinetic model for step flow growth in molecular beam epitaxy. Surface Science, 2006, 600, 3436-3445.	1.9	5
151	Directed self-organization of trenched templates for nanowire growth. Applied Physics Letters, 2009, 94, 043108.	3.3	5
152	Effects of curvature on epithelial tissue â€"Coordinated rotational movement and other spatiotemporal arrangements. Europhysics Letters, 2022, 138, 67002.	2.0	5
153	Finite element method for epitaxial island growth. Journal of Crystal Growth, 2004, 266, 381-387.	1.5	4
154	A cellular automata algorithm for step dynamics in continuum modeling of epitaxial growth. Journal of Crystal Growth, 2007, 303, 100-104.	1.5	4
155	Adaptive full domain covering meshes for parallel finite element computations. Computing (Vienna/New York), 2007, 81, 53-75.	4.8	4
156	Elastic interactions in phase-field crystal models: numerics and postprocessing. International Journal of Materials Research, 2010, 101, 467-472.	0.3	4
157	Vorticityâ€stream function approaches are inappropriate to solve the surface Navierâ€Stokes equation on a torus. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000006.	0.2	4
158	Faceting of Si and Ge crystals grown on deeply patterned Si substrates in the kinetic regime: phase-field modelling and experiments. Scientific Reports, 2021, 11, 18825.	3.3	4
159	Transfer Operator-Based Extraction of Coherent Features on Surfaces. Mathematics and Visualization, 2017, , 283-297.	0.6	4
160	The elastic inclusion problem in the (amplitude) phase field crystal model. Examples and Counterexamples, 2022, 2, 100067.	0.6	4
161	Magnetic APFC modeling and the inï¬‚uence of magneto-structural interactions on grain shrinkage. Modelling and Simulation in Materials Science and Engineering, 0, , .	2.0	4
162	On the Iso-Diameter Growth of Î² -BaB2O4 (BBO) Crystals by Flux Pulling Method. Crystal Research and Technology, 2000, 35, 1141-1149.	1.3	3

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163	A framework for optimization of crystal growth processes applied to VGF growth of fluorides. Journal of Crystal Growth, 2005, 275, e349-e353.	1.5	3
164	Simulations of Nonlinear Strongly Anisotropic, Misfitting Crystals and Thin Films. Materials Research Society Symposia Proceedings, 2008, 1087, 20101.	0.1	3
165	Geometric Ginzburg-Landau theory for faceted crystals in one dimension: From coarsening to chaos through a driving force. Physical Review E, 2009, 79, 011115.	2.1	3
166	A comparison of different approaches to enforce lattice symmetry in twoâ€dimensional crystals. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000192.	0.2	3
167	Control of Nanostructures through Electric Fields and Related Free Boundary Problems. International Series of Numerical Mathematics, 2012, , 561-572.	1.1	3
168	Predicting Material Parameters for Intrinsic Point Defect Diffusion in Silicon Crystal Growth. Solid State Phenomena, 2003, 95-96, 35-42.	0.3	2
169	Edge Diffusion in Phase-Field Models for Epitaxial Growth. , 2005, , 115-125.		2
170	Growth of a free dendrite in pure substances under modulated flow conditions. IOP Conference Series: Materials Science and Engineering, 2012, 33, 012106.	0.6	2
171	Interactive Evolution of a Bicontinuous Structure. Leonardo, 2020, 53, 327-330.	0.3	2
172	Self-Assembly of Nanovoids in Si Microcrystals Epitaxially Grown on Deeply Patterned Substrates. Crystal Growth and Design, 2020, 20, 2914-2920.	3.0	2
173	A Phase Field Approach to Trabecular Bone Remodeling. Frontiers in Applied Mathematics and Statistics, 2020, 6, .	1.3	2
174	Identification of Grain Boundary Contours at Atomic Scale. , 2007, , 765-776.		2
175	How to apply FLUCS in single cells and living embryos. Protocol Exchange, 0, , .	0.3	2
176	Deterministic three-dimensional self-assembly of Si through a rimless and topology-preserving dewetting regime. Physical Review Materials, 2019, 3, .	2.4	2
177	Relating Microdefects to Growth Conditions in Czochralski Si Crystal Growth. Crystal Growth and Design, 2003, 3, 727-731.	3.0	1
178	A Finite Element Framework for Burton-Cabrera-Frank Equation. , 2005, , 97-114.		1
179	Dynamics of evolving surfaces with small corner energy regularization. Nonlinear Analysis: Theory, Methods & Applications, 2005, 63, e1179-e1184.	1.1	1
180	Adaptive FEM/BEM Coupling for Solving Global Heat Transfer in High-Temperature Furnaces. Numerical Heat Transfer, Part B: Fundamentals, 2007, 51, 25-41.	0.9	1

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181	ath altimg="si3.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd"	2.0	1
182	Two-dimensional liquid crystalline growth within a phase-field-crystal model. Physical Review E, 2015, 92, 012504.	2.1	1
183	Towards Infinite Tilings with Symmetric Boundaries. Symmetry, 2019, 11, 444.	2.2	1
184	Effect of the Temperature Fluctuation of the Melt on Î²-BaB2O4 (BBO) Crystal Growth. Crystal Research and Technology, 2001, 36, 1239.	1.3	0
185	Growth mechanisms on stepped surfaces, from atomistic to step-flow models. Journal of Crystal Growth, 2005, 275, e2251-e2255.	1.5	0
186	Simulation of Ostwald Ripening in Homoepitaxy. , 2005, , 175-192.		0
187	Mini-Workshop: Anisotropic Motion Laws. Oberwolfach Reports, 2007, 3, 2277-2306.	0.0	0
188	Phase-field modeling of thin film growth. , 2011, , 52-59.		0
189	Superresolution of Images Using Area Preserving Geometric Evolution Laws. , 2012, 2012, 1-5.		0
190	Numerical Methods for the Simulation of Epitaxial Growth and their Application in the Study of a Meander Instability. , 2008, , 53-73.		0
191	Deformable active nematic particles and emerging edge currents in circular confinements. European Physical Journal E, 2022, 45, 14.	1.6	0