## Jeffrey J Derby

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/678432/jeffrey-j-derby-publications-by-year.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

132 2,575 30 42 g-index

145 2,822 2.3 5.03 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
132	Stability-based optimization of ACRT for the growth of CZT by the traveling heater method. <i>Journal of Crystal Growth</i> , <b>2022</b> , 579, 126446	1.6	2
131	The engulfment of a precipitated particle in a saturated melt during solidification. <i>Journal of Crystal Growth</i> , <b>2022</b> , 577, 126400	1.6	0
130	Modeling optical floating zone crystal growth in a high-pressure, single-lamp furnace. <i>Journal of Crystal Growth</i> , <b>2022</b> , 591, 126723	1.6	1
129	Physically-based, lumped-parameter models for the prediction of oxygen concentration during Czochralski growth of silicon crystals. <i>Journal of Crystal Growth</i> , <b>2021</b> , 576, 126384	1.6	0
128	Optimizing ACRT to reduce inclusion formation during the VGF growth of cadmium zinc telluride: II. Application to experiments. <i>Journal of Crystal Growth</i> , <b>2021</b> , 576, 126385	1.6	3
127	Optimizing ACRT to reduce inclusion formation during the VGF growth of cadmium zinc telluride: I. Computational approach. <i>Journal of Crystal Growth</i> , <b>2021</b> , 576, 126386	1.6	1
126	The effects of ACRT on melt undercooling during the growth of CZT via the traveling heater method: Ekman versus Taylor-Gftler flows. <i>Journal of Crystal Growth</i> , <b>2021</b> , 577, 126409	1.6	3
125	In-situ observation and analysis of solid-state diffusion and liquid migration in a crystal growth system: A segregation-driven diffusion couple. <i>Acta Materialia</i> , <b>2020</b> , 186, 434-442	8.4	3
124	Analysis of chemical stress and the propensity for cracking during the vertical Bridgman growth of BaBrCl:Eu. <i>Journal of Crystal Growth</i> , <b>2020</b> , 546, 125794	1.6	1
123	Computational modeling and neutron imaging to understand interface shape and solute segregation during the vertical gradient freeze growth of BaBrCl:Eu. <i>Journal of Crystal Growth</i> , <b>2020</b> , 536, 125572	1.6	3
122	Advances in CdMnTe Nuclear Radiation Detectors Development 2018,		3
121	The synergy of modeling and novel experiments for melt crystal growth research. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2018</b> , 355, 012001	0.4	4
120	A quantitative model with new scaling for silicon carbide particle engulfment during silicon crystal growth. <i>Journal of Crystal Growth</i> , <b>2017</b> , 463, 100-109	1.6	6
119	Towards optimization of ACRT schedules applied to the gradient freeze growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2017</b> , 480, 126-131	1.6	8
118	In-Situ Observation of Phase Separation During Growth of Cs2LiLaBr6:Ce Crystals Using Energy-Resolved Neutron Imaging. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 6372-6381	3.5	13
117	Particle engulfment dynamics under oscillating crystal growth conditions. <i>Journal of Crystal Growth</i> , <b>2017</b> , 468, 24-27	1.6	7
116	Analysis of the accelerated crucible rotation technique applied to the gradient freeze growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2017</b> , 468, 630-634	1.6	12

### (2012-2017)

115	An axial temperature profile curvature criterion for the engineering of convex crystal growth interfaces in Bridgman systems. <i>Journal of Crystal Growth</i> , <b>2017</b> , 468, 899-904	1.6	4
114	Analysis of particle engulfment during the growth of crystalline silicon. <i>Journal of Crystal Growth</i> , <b>2016</b> , 452, 1-5	1.6	8
113	Analysis of the effects of a rotating magnetic field on the growth of cadmium zinc telluride by the traveling heater method under microgravity conditions. <i>Journal of Crystal Growth</i> , <b>2016</b> , 452, 17-21	1.6	6
112	A fundamental limitation on growth rates in the traveling heater method. <i>Journal of Crystal Growth</i> , <b>2016</b> , 452, 12-16	1.6	8
111	Fluid dynamics in crystal growth: The good, the bad, and the ugly. <i>Progress in Crystal Growth and Characterization of Materials</i> , <b>2016</b> , 62, 286-301	3.5	13
110	Steady-state and dynamic models for particle engulfment during solidification. <i>Journal of Computational Physics</i> , <b>2016</b> , 315, 238-263	4.1	17
109	Analysis of the traveling heater method for the growth of cadmium telluride. <i>Journal of Crystal Growth</i> , <b>2016</b> , 454, 45-58	1.6	20
108	Heat Transfer Analysis and Design for Bulk Crystal Growth: Perspectives on the Bridgman Method <b>2015</b> , 793-843		7
107	An analysis of segregation during horizontal ribbon growth of silicon. <i>Journal of Crystal Growth</i> , <b>2014</b> , 390, 80-87	1.6	12
106	Modeling insights on the melt growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2013</b> , 379, 28-33	1.6	8
105	Stability limits for the horizontal ribbon growth of silicon crystals. <i>Journal of Crystal Growth</i> , <b>2013</b> , 363, 132-140	1.6	15
104	Simulation of heat transfer and convection during sapphire crystal growth in a modified heat exchanger method. <i>Journal of Crystal Growth</i> , <b>2013</b> , 367, 27-34	1.6	14
103	The prospects for traveling magnetic fields to affect interface shape in the vertical gradient freeze growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2013</b> , 364, 133-144	1.6	10
102	Analysis of scintillator crystal production via the edge-defined film-fed growth method 2013,		4
101	Maintaining convex interface shapes during electrodynamic gradient freeze growth of cadmium zinc telluride using a dynamic, bell-curve furnace profile. <i>Journal of Crystal Growth</i> , <b>2012</b> , 355, 113-121	1.6	18
100	Stabilizing detached Bridgman melt crystal growth: Proportional-integral feedback control. <i>Journal of Crystal Growth</i> , <b>2012</b> , 356, 33-45	1.6	6
99	Thermal-capillary analysis of the horizontal ribbon growth of silicon crystals. <i>Journal of Crystal Growth</i> , <b>2012</b> , 355, 129-139	1.6	18
98	Parametric sensitivity and temporal dynamics of sapphire crystal growth via the micro-pulling-down method. <i>Journal of Crystal Growth</i> , <b>2012</b> , 359, 99-106	1.6	5

97	Stabilizing detached Bridgman melt crystal growth: Model-based nonlinear feedback control. <i>Journal of Crystal Growth</i> , <b>2012</b> , 361, 16-24	1.6	7
96	Analysis of limits for sapphire growth in a micro-pulling-down system. <i>Journal of Crystal Growth</i> , <b>2011</b> , 335, 148-159	1.6	17
95	Effects of a traveling magnetic field on vertical gradient freeze growth of cadmium zinc telluride <b>2011</b> ,		1
94	Anomalous segregation during electrodynamic gradient freeze growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2011</b> , 325, 10-19	1.6	40
93	Existence, stability, and nonlinear dynamics of detached Bridgman growth states under zero gravity. <i>Journal of Crystal Growth</i> , <b>2011</b> , 314, 310-323	1.6	17
92	Computer Modelling of Bulk Crystal Growth <b>2010</b> , 73-119		8
91	Modeling and bulk crystal growth processes: What is to be learned? 2010,		2
90	A Schur complement formulation for solving free-boundary, Stefan problems of phase change. <i>Journal of Computational Physics</i> , <b>2010</b> , 229, 7942-7955	4.1	3
89	Multi-scale crystal growth computations via an approximate block Newton method. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 1463-1467	1.6	5
88	Modeling the Crystal Growth of Cadmium Zinc Telluride: Accomplishments and Future Challenges. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1164, 1		5
87	An approximate block Newton method for coupled iterations of nonlinear solvers: Theory and conjugate heat transfer applications. <i>Journal of Computational Physics</i> , <b>2009</b> , 228, 8566-8588	4.1	19
86	On crucible effects during the growth of cadmium zinc telluride in an electrodynamic gradient freeze furnace. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2327-2335	1.6	21
85	Influence of thermal phenomena on crystal reattachment during dewetted Bridgman growth. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2572-2579	1.6	12
84	On favorable thermal fields for detached Bridgman growth. Journal of Crystal Growth, 2009, 311, 3337	-3 <u>3.4</u> 6	7
83	Transport mechanisms and densification during sintering: I. Viscous flow versus vacancy diffusion. <i>Chemical Engineering Science</i> , <b>2009</b> , 64, 3799-3809	4.4	50
82	Transport mechanisms and densification during sintering: II. Grain boundaries. <i>Chemical Engineering Science</i> , <b>2009</b> , 64, 3810-3816	4.4	23
81	ProteinBaltWater Solution Phase Diagram Determination by a Combined Experimental Computational Scheme Crystal Growth and Design, 2008, 8, 4208-4214	3.5	4
80	Modeling the growth of CZT by the EDG process 2008,		1

#### (2005-2008)

79	The role of fluid flow and convective steering during the assembly of colloidal crystals. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 131-139	1.6	31
78	Permeability calculations in three-dimensional isotropic and oriented fiber networks. <i>Physics of Fluids</i> , <b>2008</b> , 20, 123601	4.4	68
77	Control of interface shape of cadmium zinc telluride grown via an electrodynamic gradient freeze furnace <b>2007</b> ,		3
76	Assessing the dynamics of liquid-phase solution growth via step growth models: From BCF to FEM. <i>Progress in Crystal Growth and Characterization of Materials</i> , <b>2007</b> , 53, 167-206	3.5	11
75	Strategies for the coupling of global and local crystal growth models. <i>Journal of Crystal Growth</i> , <b>2007</b> , 303, 114-123	1.6	16
74	Computational Models for Crystal Growth of Radiation Detector Materials: Growth of CZT by the EDG Method. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1038, 1		1
73	Large-Scale Numerical Modeling of Melt and Solution Crystal Growth. <i>AIP Conference Proceedings</i> , <b>2007</b> ,	0	4
72	Fixed-point convergence of modular, steady-state heat transfer models coupling multiple scales and phenomena for meltarystal growth. <i>International Journal for Numerical Methods in Engineering</i> , <b>2006</b> , 67, 1768-1789	2.4	16
71	Mass transfer limitations at crystallizing interfaces in an atomic force microscopy fluid cell: a finite element analysis. <i>Langmuir</i> , <b>2006</b> , 22, 6578-86	4	30
70	On the effects of furnace gradients on interface shape during the growth of cadmium zinc telluride in EDG furnaces. <i>Journal of Crystal Growth</i> , <b>2006</b> , 290, 35-43	1.6	20
69	Decreasing lateral segregation in cadmium zinc telluride via ampoule tilting during vertical Bridgman growth. <i>Journal of Crystal Growth</i> , <b>2006</b> , 291, 348-357	1.6	13
68	Developing quantitative, multiscale models for microgravity crystal growth. <i>Annals of the New York Academy of Sciences</i> , <b>2006</b> , 1077, 124-45	6.5	4
67	Analysis of the growth of cadmium zinc telluride in an electrodynamic gradient freeze furnace via a self-consistent, multi-scale numerical model. <i>Journal of Crystal Growth</i> , <b>2005</b> , 276, 133-147	1.6	35
66	Time-dependent, three-dimensional flow and mass transport during solution growth of potassium titanyl phosphate. <i>Journal of Crystal Growth</i> , <b>2005</b> , 281, 391-406	1.6	20
65	On the validity of boundary layer analysis for flow and mass transfer caused by rotation during the solution growth of large, single crystals. <i>Journal of Crystal Growth</i> , <b>2005</b> , 283, 479-489	1.6	4
64	Hopf bifurcation and solution multiplicity in a model for destabilized Bridgman crystal growth. <i>Chemical Engineering Science</i> , <b>2005</b> , 60, 1323-1336	4.4	10
63	The feedback control of the vertical Bridgman crystal growth process by crucible rotation: two case studies. <i>Computers and Chemical Engineering</i> , <b>2005</b> , 29, 887-896	4	7
62	Three-Dimensional Finite-Element Analysis of Viscous Sintering. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 533-540	3.8	41

61	Ab Initio simulations of nonstoichiometric Cd(x)Te(1-x) liquids. <i>Journal of Chemical Physics</i> , <b>2005</b> , 123, 084508	3.9	8
60	Modeling of Crystal Growth Processes <b>2004</b> , 143-167		3
59	Experimental and numerical analysis of coupled interfacial kinetics and heat transport during the axial heat flux close to the phase interface growth of BGO single crystals. <i>Journal of Crystal Growth</i> , <b>2004</b> , 266, 246-256	1.6	4
58	Feasibility study of cadmium zinc telluride growth using a submerged heater in a vertical bridgman system. <i>Journal of Electronic Materials</i> , <b>2004</b> , 33, 488-497	1.9	10
57	Improved radial segregation via the destabilizing vertical Bridgman configuration. <i>Journal of Crystal Growth</i> , <b>2004</b> , 260, 263-276	1.6	8
56	Dynamics of three-dimensional convection in microgravity crystal growth: g-jitter with steady magnetic fields. <i>Journal of Crystal Growth</i> , <b>2004</b> , 263, 40-52	1.6	13
55	Three-dimensional imperfections in a model vertical Bridgman growth system for cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2004</b> , 263, 629-644	1.6	37
54	Development of model-based control for Bridgman crystal growth. <i>Journal of Crystal Growth</i> , <b>2004</b> , 266, 182-189	1.6	10
53	A diffusion-reaction model for DNA microarray assays. <i>Journal of Biotechnology</i> , <b>2004</b> , 114, 31-45	3.7	42
52	Complex dynamics within the vertical Bridgman crystal growth process. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2001</b> , 34, 517-522		
51	Transient polymeric drop extension and retraction in uniaxial extensional flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , <b>2001</b> , 98, 141-168	2.7	50
50	An assessment of a parallel, finite element method for three-dimensional, moving-boundary flows driven by capillarity for simulation of viscous sintering. <i>International Journal for Numerical Methods in Fluids</i> , <b>2001</b> , 36, 841-865	1.9	24
49	A comparison of boundary element and finite element methods for modeling axisymmetric polymeric drop deformation. <i>International Journal for Numerical Methods in Fluids</i> , <b>2001</b> , 37, 837-864	1.9	11
48	On stable algorithms and accurate solutions for convection-dominated mass transfer in crystal growth modeling. <i>Journal of Crystal Growth</i> , <b>2001</b> , 230, 202-209	1.6	9
47	Modeling the coupled effects of interfacial and bulk phenomena during solution crystal growth. Journal of Crystal Growth, <b>2001</b> , 230, 328-335	1.6	28
46	Buoyancy and rotation in small-scale vertical Bridgman growth of cadmium zinc telluride using accelerated crucible rotation. <i>Journal of Crystal Growth</i> , <b>2001</b> , 233, 599-608	1.6	38
45	Ab initiosimulations of liquid semiconductors using the pseudopotential-density functional method. <i>Journal of Physics Condensed Matter</i> , <b>2001</b> , 13, R817-R854	1.8	26
44	First-principles simulations of liquid ZnTe. <i>Physical Review B</i> , <b>2001</b> , 65,	3.3	15

43	On equilibration and sparse factorization of matrices arising in finite element solutions of partial differential equations. <i>Numerical Methods for Partial Differential Equations</i> , <b>2000</b> , 16, 11-29	2.5	8	
42	Assessing a flow-based finite element model for the sintering of viscoelastic particles. <i>Chemical Engineering Science</i> , <b>2000</b> , 55, 5733-5746	4.4	14	
41	Effect of accelerated crucible rotation on melt composition in high-pressure vertical Bridgman growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>2000</b> , 209, 734-750	1.6	76	
40	An analysis of flow and mass transfer during the solution growth of potassium titanyl phosphate. <i>Journal of Crystal Growth</i> , <b>2000</b> , 210, 704-718	1.6	30	
39	Construction of Solution Curves for Large Two-Dimensional Problems of Steady-State Flows of Incompressible Fluids. <i>SIAM Journal of Scientific Computing</i> , <b>2000</b> , 22, 285-311	2.6	8	
38	On the formation of rotational spoke patterns during the Czochralski growth of bismuth silicon oxide. <i>Journal of Crystal Growth</i> , <b>1999</b> , 198-199, 154-160	1.6	19	
37	A heat shield to control thermal gradients, melt convection, and interface shape during shouldering in Czochralski oxide growth. <i>Journal of Crystal Growth</i> , <b>1999</b> , 200, 329-334	1.6	11	
36	Effect of steady crucible rotation on segregation in high-pressure vertical Bridgman growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>1999</b> , 203, 87-102	1.6	54	
35	Transient effects during the horizontal Bridgman growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>1999</b> , 206, 37-50	1.6	22	
34	On setting a pressure datum when computing incompressible flows. <i>International Journal for Numerical Methods in Fluids</i> , <b>1999</b> , 29, 19-34	1.9	7	
33	Finite Element Modeling of 3D Fluid Dynamics in Crystal Growth Systems. <i>International Journal of Computational Fluid Dynamics</i> , <b>1999</b> , 12, 225-240	1.2	2	
32	First-principles calculations of liquid CdTe at temperatures above and below the melting point. <i>Physical Review B</i> , <b>1999</b> , 60, 8640-8649	3.3	32	
31	Three-dimensional computations of solution hydrodynamics during the growth of potassium dihydrogen phosphate. <i>Journal of Crystal Growth</i> , <b>1998</b> , 191, 206-224	1.6	34	
30	The diffusion and P1 approximations for modeling buoyant flow of an optically thick fluid.  International Journal of Heat and Mass Transfer, 1998, 41, 1405-1415	4.9	18	
29	Ab Initio Molecular Dynamics Simulation of Liquid CdTe and GaAs: Semiconducting versus Metallic Behavior. <i>Physical Review Letters</i> , <b>1998</b> , 81, 4959-4962	7.4	60	
28	Parallel computation of incompressible flows in materials processing: Numerical experiments in diagonal preconditioning. <i>Parallel Computing</i> , <b>1997</b> , 23, 1379-1400	1	19	
27	Parallel finite element calculation of flow in a three-dimensional lid-driven cavity using the CM-5 and T3D. <i>International Journal for Numerical Methods in Fluids</i> , <b>1997</b> , 24, 1449-1461	1.9	13	
26	Designing thermal environments to promote convex interface shapes during the vertical Bridgman growth of cadmium zinc telluride. <i>Journal of Crystal Growth</i> , <b>1997</b> , 172, 350-360	1.6	55	

25	Understanding horizontal Bridgman shelf growth of cadmium telluride and cadmium zinc telluride. I. Heat and momentum transfer. <i>Journal of Crystal Growth</i> , <b>1997</b> , 179, 120-132	1.6	23
24	Understanding horizontal Bridgman shelf growth of cadmium telluride and cadmium zinc telluride. II. Thermoelastic stresses. <i>Journal of Crystal Growth</i> , <b>1997</b> , 179, 133-143	1.6	16
23	Three-dimensional computations of solution hydrodynamics during the growth of potassium dihydrogen phosphate I. Spin up and steady rotation. <i>Journal of Crystal Growth</i> , <b>1997</b> , 180, 497-509	1.6	37
22	Analysis of interrupted growth strategies for cadmium telluride in an unseeded vertical Bridgman system. <i>Journal of Crystal Growth</i> , <b>1996</b> , 158, 459-470	1.6	38
21	On the effects of ampoule tilting during vertical Bridgman growth: three-dimensional computations via a massively parallel, finite element method. <i>Journal of Crystal Growth</i> , <b>1996</b> , 167, 292-3	<del>1</del> 04	32
20	Viscous Sintering of Spherical Particles via Finite Element Analysis. <i>Journal of the American Ceramic Society</i> , <b>1995</b> , 78, 645-649	3.8	70
19	Theoretical analysis and design considerations for float-zone refinement of electronic grade silicon sheets. <i>Journal of Crystal Growth</i> , <b>1995</b> , 152, 51-64	1.6	20
18	Three-dimensional melt flows in Czochralski oxide growth: high-resolution, massively parallel, finite element computations. <i>Journal of Crystal Growth</i> , <b>1995</b> , 152, 169-181	1.6	65
17	Modeling the vertical Bridgman growth of cadmium zinc telluride I. Quasi-steady analysis of heat transfer and convection. <i>Journal of Crystal Growth</i> , <b>1995</b> , 155, 93-102	1.6	80
16	Modeling the vertical Bridgman growth of cadmium zinc telluride II. Transient analysis of zinc segregation. <i>Journal of Crystal Growth</i> , <b>1995</b> , 155, 103-111	1.6	67
15	Macroscopic Transport Processes During the Growth of Single Crystals from the Melt <b>1995</b> , 97-110		5
14	Massively parallel finite element analysis of coupled, incompressible flows: A benchmark computation of baroclinic annulus waves. <i>International Journal for Numerical Methods in Fluids</i> , <b>1995</b> , 21, 1007-1014	1.9	10
13	The cathode design problem in electrochemical machining. <i>Chemical Engineering Science</i> , <b>1995</b> , 50, 2679	- <b>2.6</b> 89	27
12	Modeling the spontaneous ignition of coal stockpiles. AICHE Journal, 1994, 40, 991-1004	3.6	39
11	Analysis of capillary-driven viscous flows during the sintering of ceramic powders. <i>AICHE Journal</i> , <b>1994</b> , 40, 1794-1803	3.6	44
10	Massively parallel finite element computations of three-dimensional, time-dependent, incompressible flows in materials processing systems. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>1994</b> , 119, 139-156	5.7	35
9	Large-scale numerical analysis of materials processing systems: High-temperature crystal growth and molten glass flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>1994</b> , 112, 69-89	5.7	23
8	Heat transfer and interface inversion during the Czochralski growth of yttrium aluminum garnet and gadolinium gallium garnet. <i>Journal of Crystal Growth</i> , <b>1994</b> , 139, 147-157	1.6	108

#### LIST OF PUBLICATIONS

7	FINITE-ELEMENT FORMULATIONS FOR ACCURATE CALCULATION OF RADIANT HEAT TRANSFER IN DIFFUSE-GRAY ENCLOSURES. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , <b>1993</b> , 24, 431-454	1.3	19	
6	Three-dimensional heat transfer effects during the growth of LiCaAlF6 in a modified Bridgman furnace. <i>Journal of Crystal Growth</i> , <b>1993</b> , 132, 261-279	1.6	13	
5	The role of internal radiation and melt convection in Czochralski oxide growth: deep interfaces, interface inversion, and spiraling. <i>Journal of Crystal Growth</i> , <b>1993</b> , 128, 188-194	1.6	77	
4	Bulk-flow versus thermal-capillary models for Czochralski growth of semiconductors. <i>Journal of Crystal Growth</i> , <b>1993</b> , 129, 593-609	1.6	22	
3	Theoretical Modeling of Czochralski Crystal Growth. MRS Bulletin, 1988, 13, 29-35	3.2	17	
2	A fully implicit method for simulation of the one-dimensional solidification of a binary alloy. <i>Chemical Engineering Science</i> , <b>1986</b> , 41, 37-46	4.4	30	
1	Computational Simulations of the Growth of Crystals from Liquids115-137		1	