

Vaughan R Voller

List of Publications by Year in descending order

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183
papers

10,842
citations

66343

42
h-index

32842

100
g-index

199
all docs

199
docs citations

199
times ranked

5363
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurement and Scaling of Lake Surface Skin Temperatures. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	5
2	A theoretical modeling framework for motile and colonial harmful algae. <i>Ecology and Evolution</i> , 2022, 12, .	1.9	3
3	Some comments on using fractional derivative operators in modeling non-local diffusion processes. <i>Journal of Computational and Applied Mathematics</i> , 2021, 381, 113040.	2.0	6
4	Determining effective conductivities of fractal objects. <i>International Journal of Thermal Sciences</i> , 2021, 159, 106577.	4.9	6
5	Reduced complexity solidification models. <i>International Journal of Heat and Mass Transfer</i> , 2021, 169, 120923.	4.8	2
6	Abiotic Drivers of a Deep Cyanobacteria Layer in a Stratified and Eutrophic Lake. <i>Water Resources Research</i> , 2021, 57, e2020WR027987.	4.2	4
7	Conductivity Estimates of Fractal Models of Geological Media. <i>Water Resources Research</i> , 2021, 57, e2021WR029953.	4.2	2
8	The thin blue line: A review of shoreline dynamics across time scales and environments. <i>Earth Surface Processes and Landforms</i> , 2020, 45, 96-108.	2.5	6
9	Chaos in a simple model of a delta network. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 27179-27187.	7.1	8
10	A generalized Stefan model accounting for system memory and non-locality. <i>International Communications in Heat and Mass Transfer</i> , 2020, 114, 104584.	5.6	5
11	Nonlinear simulation of shape-preserving delta growth. <i>Journal of Computational and Applied Mathematics</i> , 2020, 380, 112967.	2.0	0
12	Can the growth of deltaic shorelines be unstable?. <i>Earth Surface Dynamics</i> , 2019, 7, 505-513.	2.4	5
13	How does the downstream boundary affect avulsion dynamics in a laboratory bifurcation?. <i>Earth Surface Dynamics</i> , 2019, 7, 911-927.	2.4	11
14	The Effect of Modifying a CFD-AB Approach on Fish Passage through a Model Hydraulic Dam. <i>Water (Switzerland)</i> , 2019, 11, 1776.	2.7	6
15	A geomorphic enthalpy method: Description and application to the evolution of fluvial-deltas under sea-level cycles. <i>Computers and Geosciences</i> , 2019, 130, 1-10.	4.2	10
16	Models of infiltration into homogeneous and fractal porous media with localized sources. <i>Physical Review E</i> , 2019, 99, 042111.	2.1	6
17	Modeling anomalous heat diffusion: Comparing fractional derivative and non-linear diffusivity treatments. <i>International Journal of Thermal Sciences</i> , 2019, 137, 584-588.	4.9	15
18	Hyporheic exchange in a gravel bed flume with and without traveling surface waves. <i>Advances in Water Resources</i> , 2019, 123, 120-133.	3.8	13

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19	Control of Delta Avulsion by Downstream Sediment Sinks. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018, 123, 142-166.	2.8	30
20	Anomalous behaviors during infiltration into heterogeneous porous media. <i>Advances in Water Resources</i> , 2018, 113, 180-188.	3.8	14
21	Hydromechanical Impacts of Pleistocene Glaciations on Pore Fluid Pressure Evolution, Rock Failure, and Brine Migration Within Sedimentary Basins and the Crystalline Basement. <i>Water Resources Research</i> , 2018, 54, 7577-7602.	4.2	13
22	A physiologically inspired agent-based approach to model upstream passage of invasive fish at a lock-and-dam. <i>Ecological Modelling</i> , 2018, 382, 18-32.	2.5	20
23	Anomalous Heat Transfer. <i>Advances in Heat Transfer</i> , 2018, , 333-380.	0.9	10
24	The St. Anthony Falls Laboratory: 80 Years of Progress Part 2A Transition to Environmental Research. , 2018, , .		0
25	Deployment of the Next Generation Concrete Surface in Minnesota. <i>Transportation Research Record</i> , 2017, 2640, 95-103.	1.9	1
26	Self-similar growth of a bimodal laboratory fan. <i>Earth Surface Dynamics</i> , 2017, 5, 239-252.	2.4	16
27	Experimental migration of knickpoints: influence of style of base-level fall and bed lithology. <i>Earth Surface Dynamics</i> , 2016, 4, 11-23.	2.4	59
28	Simple metrics for verification and validation of macrosegregation model predictions. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 117, 012062.	0.6	0
29	Infiltration experiments demonstrate an explicit connection between heterogeneity and anomalous diffusion behavior. <i>Water Resources Research</i> , 2016, 52, 5167-5178.	4.2	29
30	Best practice for measuring grid convergence in numerical models of alloy solidification. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2016, 26, 427-439.	2.8	3
31	Reduced-complexity probabilistic reconstruction of alluvial aquifer stratigraphy, and application to sedimentary fans in northwestern India. <i>Journal of Hydrology</i> , 2016, 541, 1241-1257.	5.4	21
32	A control volume finite element method with spines for solutions of fractional heat conduction equations. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2016, 70, 503-516.	0.9	7
33	Computations of anomalous phase change. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2016, 26, 624-638.	2.8	12
34	A direct simulation demonstrating the role of spacial heterogeneity in determining anomalous diffusive transport. <i>Water Resources Research</i> , 2015, 51, 2119-2127.	4.2	21
35	A reduced-complexity model for river delta formation “ Part 1: Modeling deltas with channel dynamics. <i>Earth Surface Dynamics</i> , 2015, 3, 67-86.	2.4	66
36	Modeling of Solute Transport in Pore Scale Sediment Beds: A Summary of Hydrodynamic Interactions Induced by Surface Wave, Bed Form, and Near Bed Turbulence. , 2014, , .		0

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37	Mathematical evaluation of behavioral deterrent systems to disrupt fish movement. <i>Ecological Modelling</i> , 2014, 272, 150-159.	2.5	10
38	Calculation of particle heating times of reclaimed asphalt pavement material. <i>Road Materials and Pavement Design</i> , 2014, 15, 721-732.	4.0	12
39	Frequency analysis of macrosegregation measurements and simulations. <i>International Journal of Heat and Mass Transfer</i> , 2014, 79, 468-471.	4.8	15
40	Fractional Stefan problems. <i>International Journal of Heat and Mass Transfer</i> , 2014, 74, 269-277.	4.8	51
41	Laboratory experiments demonstrate that bubble curtains can effectively inhibit movement of common carp. <i>Ecological Engineering</i> , 2014, 67, 95-103.	3.6	37
42	Understanding Channel Segregates in Numerical Models of Alloy Solidification: A Case of Converge First and Ask Questions Later. <i>Materials Science Forum</i> , 2014, 790-791, 73-78.	0.3	9
43	A combined nonlinear and nonlocal model for topographic evolution in channelized depositional systems. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 1617-1627.	2.8	11
44	A geometric model for the dynamics of a fluviially dominated deltaic system under base-level change. <i>Computers and Geosciences</i> , 2013, 53, 39-47.	4.2	12
45	A random walk solution for fractional diffusion equations. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2013, 23, 7-22.	2.8	8
46	Two exact solutions of a Stefan problem with varying diffusivity. <i>International Journal of Heat and Mass Transfer</i> , 2013, 58, 80-85.	4.8	37
47	Fractional Stefan problems exhibiting lumped and distributed latent-heat memory effects. <i>Physical Review E</i> , 2013, 87, 042401.	2.1	33
48	Experimental Study of the Solute Transport in the Interfacial Exchange Zone (IEZ) of a Gravel Stream Bed. , 2013, , .		1
49	Development and validation of a tenable process for quantifying texture spikiness for pavement noise prediction. <i>International Journal of Pavement Engineering</i> , 2013, 14, 190-205.	4.4	5
50	Estimating and scaling stream ecosystem metabolism along channels with heterogeneous substrate. <i>Ecohydrology</i> , 2013, 6, 679-688.	2.4	19
51	Introducing Non-locality into Solidification Models. <i>Transactions of the Indian Institute of Metals</i> , 2012, 65, 515-519.	1.5	2
52	Does the flow of information in a landscape have direction?. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	19
53	Characterization of river delta shorelines. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	22
54	Exploring the role of organic matter accumulation on delta evolution. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	35

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55	Natural Processes in Delta Restoration: Application to the Mississippi Delta. Annual Review of Marine Science, 2011, 3, 67-91.	11.6	246
56	A Dual Scale Model for Macroseggregation in Alloy Solidification. Numerical Heat Transfer; Part A: Applications, 2011, 59, 934-953.	2.1	1
57	Designing Graduate Curriculum for Stream Restoration. , 2011, , .		0
58	A new framework for modeling the migration of meandering rivers. Earth Surface Processes and Landforms, 2011, 36, 70-86.	2.5	267
59	On a fractional derivative form of the Green&Amp infiltration model. Advances in Water Resources, 2011, 34, 257-262.	3.8	32
60	Fixed and Deforming Grid Solutions of Solidification in an Undercooled Melt: A Benchmark Problem. Numerical Heat Transfer, Part B: Fundamentals, 2011, 60, 1-17.	0.9	2
61	The Control-Volume Weighted Flux Scheme (CVWFS) for Nonlocal Diffusion and Its Relationship to Fractional Calculus. Numerical Heat Transfer, Part B: Fundamentals, 2011, 59, 421-441.	0.9	9
62	A model of sedimentary delta growth: a novel application of numerical heat transfer methods. International Journal of Numerical Methods for Heat and Fluid Flow, 2010, 20, 570-586.	2.8	6
63	Analytical and numerical solution of a generalized Stefan problem exhibiting two moving boundaries with application to ocean delta formation. Journal of Mathematical Analysis and Applications, 2010, 366, 538-549.	1.0	42
64	An exact solution of a limit case Stefan problem governed by a fractional diffusion equation. International Journal of Heat and Mass Transfer, 2010, 53, 5622-5625.	4.8	73
65	Conditions when anisotropy is negligible for solute transfer in sediment beds of lakes or streams. Advances in Water Resources, 2010, 33, 1542-1550.	3.8	3
66	Enhanced Latent Heat Method to Incorporate Superheat Effects into Fixed-Grid Multiphysics Simulations. Numerical Heat Transfer, Part B: Fundamentals, 2010, 57, 396-413.	0.9	19
67	Can anomalous diffusion describe depositional fluvial profiles?. Journal of Geophysical Research, 2010, 115, .	3.3	42
68	A similarity solution for a dual moving boundary problem associated with a coastal-plain depositional system. Journal of Fluid Mechanics, 2009, 628, 427-443.	3.4	32
69	Analytical models of solidification phenomena. Transactions of the Indian Institute of Metals, 2009, 62, 279-283.	1.5	6
70	Modeling of Vertical Solute Dispersion in a Sediment Bed Enhanced by Wave&Amp Induced Interstitial Flow¹. Journal of the American Water Resources Association, 2009, 45, 343-354.	2.4	8
71	Morphology of a melt front under a condition of spatial varying latent heat. International Communications in Heat and Mass Transfer, 2009, 36, 535-538.	5.6	9
72	Two-dimensional numerical model for the analysis of macroseggregation during solidification. Computational Materials Science, 2009, 46, 358-366.	3.0	16

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73	Depth-Dependent Dispersion Coefficient for Modeling of Vertical Solute Exchange in a Lake Bed under Surface Waves. <i>Journal of Hydraulic Engineering</i> , 2009, 135, 187-197.	1.5	26
74	A numerical method for the Rubinstein binary-alloy problem in the presence of an under-cooled liquid. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 696-706.	4.8	12
75	An enthalpy method for modeling dendritic growth in a binary alloy. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 823-834.	4.8	77
76	An explicit-implicit time stepping scheme for solidification models. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 3399-3409.	4.8	38
77	A vertical dispersion model for solute exchange induced by underflow and periodic hyporheic flow in a stream gravel bed. <i>Water Resources Research</i> , 2008, 44, .	4.2	37
78	An image-based method for shoreline mapping on complex coasts. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	43
79	Modeling of Transport Phenomena and Electromagnetics. , 2008, , 425-434.		0
80	Role of Ponded Turbidity Currents in Reservoir Trap Efficiency. <i>Journal of Hydraulic Engineering</i> , 2007, 133, 579-595.	1.5	62
81	A physically based flux limiter for QUICK calculations of advective scalar transport. <i>International Journal for Numerical Methods in Fluids</i> , 2007, 55, 899-915.	1.6	11
82	Modeling of solute transport into sub-aqueous sediments. <i>Applied Mathematical Modelling</i> , 2007, 31, 1461-1478.	4.2	10
83	Effects of overburden on joint spacing in layered rocks. <i>Journal of Structural Geology</i> , 2007, 29, 288-297.	2.3	15
84	Toward a unified science of the Earth's surface: Opportunities for synthesis among hydrology, geomorphology, geochemistry, and ecology. <i>Water Resources Research</i> , 2006, 42, .	4.2	83
85	Shoreline response to autogenic processes of sediment storage and release in the fluvial system. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	93
86	Experimental Measurement of the Relative Importance of Controls on Shoreline Migration. <i>Journal of Sedimentary Research</i> , 2006, 76, 270-283.	1.6	87
87	A similarity solution for solidification of an under-cooled binary alloy. <i>International Journal of Heat and Mass Transfer</i> , 2006, 49, 1981-1985.	4.8	26
88	An enthalpy method for moving boundary problems on the earth's surface. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2006, 16, 641-654.	2.8	35
89	Modeling Microsegregation in Metal Alloys. <i>Materials Science Forum</i> , 2006, 508, 349-360.	0.3	1
90	Fluvial and marine controls on combined subaerial and subaqueous delta progradation: Morphodynamic modeling of compound-clinof orm development. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	138

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91	A generalized Exner equation for sediment mass balance. Journal of Geophysical Research, 2005, 110, n/a-n/a.	3.3	201
92	Crack spacing in strained films. European Physical Journal Special Topics, 2004, 120, 201-208.	0.2	0
93	Time-temperature Superposition and AASHTO MP1a Critical Temperature for Low-temperature Cracking. International Journal of Pavement Engineering, 2004, 5, 31-38.	4.4	23
94	Analytical, numerical, and experimental analysis of inverse macrosegregation during upward unidirectional solidification of Al-Cu alloys. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 285-297.	2.1	47
95	An explicit scheme for coupling temperature and concentration fields in solidification models. Applied Mathematical Modelling, 2004, 28, 79-94.	4.2	44
96	An analytical solution for a Stefan problem with variable latent heat. International Journal of Heat and Mass Transfer, 2004, 47, 5387-5390.	4.8	115
97	A Monte Carlo scheme for tracking filling fronts. Journal of Computational Physics, 2004, 200, 399-411.	3.8	2
98	Two Numerical Methods for Modeling Variably Saturated Flow in Layered Media. Vadose Zone Journal, 2004, 3, 1031-1037.	2.2	3
99	Two Numerical Methods for Modeling Variably Saturated Flow in Layered Media. Vadose Zone Journal, 2004, 3, 1031-1037.	2.2	10
100	Prediction of thermal crack spacing. International Journal of Solids and Structures, 2003, 40, 125-142.	2.7	73
101	APPROXIMATE MODEL OF THERMAL RESIDUAL STRESS IN AN INJECTION MOLDED PART. Journal of Thermal Stresses, 2002, 25, 523-538.	2.0	16
102	Closure to "Modeling Biofilms on Gas-Permeable Supports: Concentration and Activity Profiles" by Neil J. Essila, Michael J. Semmens, and Vaughan R. Voller. Journal of Environmental Engineering, ASCE, 2002, 128, 202-203.	1.4	0
103	A control volume finite element solution of unsaturated flow in layered soils. Developments in Water Science, 2002, 47, 105-112.	0.1	0
104	Moore's Law and Numerical Modeling. Journal of Computational Physics, 2002, 179, 698-703.	3.8	63
105	Creep in injection molded starch/synthetic polymer blends. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 338, 60-69.	5.6	30
106	Calcool: A multi-layer Asphalt Pavement Cooling Tool for Temperature Prediction During Construction. International Journal of Pavement Engineering, 2001, 2, 169-185.	4.4	42
107	On a general back-diffusion parameter. Journal of Crystal Growth, 2001, 226, 562-568.	1.5	21
108	Numerical treatment of rapidly changing and discontinuous conductivities. International Journal of Heat and Mass Transfer, 2001, 44, 4553-4556.	4.8	23

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109	A General Method for Coupling Macro and Micro Phenomena During the Solidification of an Alloy. , 2001, , 91-98.		0
110	Fluvio-deltaic sedimentation: A generalized Stefan problem. European Journal of Applied Mathematics, 2000, 11, 433-452.	2.9	136
111	A model of microsegregation during binary alloy solidification. International Journal of Heat and Mass Transfer, 2000, 43, 2047-2052.	4.8	33
112	An explicit scheme for tracking the filling front during polymer mold filling. Applied Mathematical Modelling, 2000, 24, 575-590.	4.2	16
113	A two-diffusion model of fluvial stratigraphy in closed depositional basins. Basin Research, 2000, 12, 381-398.	2.7	29
114	Modeling Biofilms on Gas-Permeable Supports: Concentration and Activity Profiles. Journal of Environmental Engineering, ASCE, 2000, 126, 250-257.	1.4	46
115	A two-diffusion model of fluvial stratigraphy in closed depositional basins. Basin Research, 2000, 12, 381-398.	2.7	67
116	An aqueous concentration model for riverine spills. Journal of Hazardous Materials, 1999, 64, 37-53.	12.4	12
117	A semi-analytical model of microsegregation in a binary alloy. Journal of Crystal Growth, 1999, 197, 325-332.	1.5	24
118	A semi-analytical model of microsegregation and coarsening in a binary alloy. Journal of Crystal Growth, 1999, 197, 333-340.	1.5	15
119	A unified model of microsegregation and coarsening. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2183-2189.	2.2	92
120	Approximate models of microsegregation with coarsening. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 3016-3019.	2.2	23
121	Exploring the Commonality Between Filling: Porous Media and Phase Change. Solid Mechanics and Its Applications, 1999, , 113-119.	0.2	0
122	An identification and control strategy for a liquid composite molding process. Applied Mathematical Modelling, 1998, 22, 207-218.	4.2	4
123	ESTIMATING THE LAST POINT TO SOLIDIFY IN A CASTING. Numerical Heat Transfer, Part B: Fundamentals, 1998, 33, 417-432.	0.9	3
124	A Numerical Scheme for Solidification of an Alloy. Canadian Metallurgical Quarterly, 1998, 37, 169-177.	1.2	28
125	A numerical scheme for solidification of an alloy. Canadian Metallurgical Quarterly, 1998, 37, 169-177.	1.2	17
126	Computational issues in using a dual-scale model of the segregation process in a binary alloy. International Journal of Numerical Methods for Heat and Fluid Flow, 1997, 7, 181-199.	2.8	4

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127	The Phase-Field Method in the Sharp-Interface Limit: A Comparison between Model Potentials. Journal of Computational Physics, 1997, 130, 256-265.	3.8	36
128	Towards a general numerical scheme for solidification systems. International Journal of Heat and Mass Transfer, 1997, 40, 2859-2868.	4.8	113
129	A similarity solution for the solidification of a multicomponent alloy. International Journal of Heat and Mass Transfer, 1997, 40, 2869-2877.	4.8	42
130	A TWO-PHASE RIVERINE SPILL MODEL. International Oil Spill Conference Proceedings, 1997, 1997, 567-571.	0.1	4
131	NUMERICAL SOLUTION OF TRANSIENT, FREE SURFACE PROBLEMS IN POROUS MEDIA. International Journal for Numerical Methods in Engineering, 1996, 39, 2889-2906.	2.8	18
132	PREDICTION OF FILLING TIMES OF POROUS CAVITIES. International Journal for Numerical Methods in Fluids, 1996, 23, 661-672.	1.6	32
133	Time-implicit fixed and deforming grid solutions for compression mold filling. Polymer Composites, 1996, 17, 414-422.	4.6	2
134	Cyclic phase change with fluid flow. International Journal of Numerical Methods for Heat and Fluid Flow, 1996, 6, 57-64.	2.8	10
135	PREDICTION OF FILLING TIMES OF POROUS CAVITIES. , 1996, 23, 661.		1
136	A model of inverse segregation: the role of microporosity. International Journal of Heat and Mass Transfer, 1995, 38, 1009-1018.	4.8	49
137	An algorithm for analysis of polymer filling of molds. Polymer Engineering and Science, 1995, 35, 1758-1765.	3.1	62
138	An enthalpy formulation based on an arbitrarily deforming mesh for solution of the Stefan problem. Computational Mechanics, 1994, 14, 492-502.	4.0	20
139	Effect of macro scale phenomena on microsegregation. International Communications in Heat and Mass Transfer, 1994, 21, 189-197.	5.6	6
140	A time-implicit filling algorithm. Applied Mathematical Modelling, 1994, 18, 101-108.	4.2	37
141	A knowledge-based computer tool for casting process design. Jom, 1994, 46, 27-30.	1.9	3
142	The binary alloy problem in an expanding domain: the microsegregation problem. International Journal of Heat and Mass Transfer, 1993, 36, 713-723.	4.8	32
143	A streamline upwind control volume finite element method for modeling fluid flow and heat transfer problems. Finite Elements in Analysis and Design, 1993, 13, 169-184.	3.2	14
144	ON THE ENTHALPY METHOD. International Journal of Numerical Methods for Heat and Fluid Flow, 1993, 3, 233-244.	2.8	158

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145	Modelling of microsegregation. <i>Materials Science and Technology</i> , 1993, 9, 474-482.	1.6	51
146	TREATMENT OF DISCONTINUOUS THERMAL CONDUCTIVITY IN CONTROL-VOLUME SOLUTIONS OF PHASE-CHANGE PROBLEMS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1993, 24, 161-180.	0.9	42
147	Modelling of microsegregation. <i>Materials Science and Technology</i> , 1993, 9, 474-482.	1.6	12
148	STREAMLINE UPWIND SCHEME FOR CONTROL-VOLUME FINITE ELEMENTS, PART II. IMPLEMENTATION AND COMPARISON WITH THE SUPG FINITE-ELEMENT SCHEME. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1992, 22, 109-124.	0.9	15
149	STREAMLINE UPWIND SCHEME FOR CONTROL-VOLUME FINITE ELEMENTS, PART I. FORMULATIONS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1992, 22, 95-107.	0.9	39
150	ENTHALPY METHOD FOR INVERSE STEFAN PROBLEMS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1992, 21, 41-55.	0.9	17
151	A general enthalpy method for modeling solidification processes. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , 1992, 23, 651-664.	0.4	213
152	Some comments on: Benchmark problems and testing of a finite element code for solidification in investment castings. <i>International Journal for Numerical Methods in Engineering</i> , 1992, 33, 213-215.	2.8	1
153	ERAL SOURCE-BASED METHOD FOR SOLIDIFICATION PHASE CHANGE. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1991, 19, 175-189.	0.9	474
154	Analysis of Flow Patterns and Solidification Phenomena in the Die Casting Process. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 1991, 113, 296-302.	1.4	17
155	Recent Developments in the Modelling of Solidification Processes. , 1991, , 3-20.		2
156	The symposium on materials processing in the computer age. <i>Jom</i> , 1991, 43, 6-6.	1.9	0
157	An efficient algorithm for mineral processing data adjustment. <i>International Journal of Mineral Processing</i> , 1991, 31, 73-96.	2.6	19
158	The Stefan Problem Solved Via Conjugate Gradientâ€™Like Iterative Methods On a Parallel Vector Machine. <i>The International Journal of Supercomputer Applications</i> , 1991, 5, 74-91.	0.5	1
159	FINITE DIFFERENCE SOLUTIONS OF SOLIDIFICATION PHASE CHANGE PROBLEMS: TRANSFORMED VERSUS FIXED GRIDS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1990, 17, 25-41.	0.9	99
160	Fixed grid techniques for phase change problems: A review. <i>International Journal for Numerical Methods in Engineering</i> , 1990, 30, 875-898.	2.8	443
161	Modelling the mushy region in a binary alloy. <i>Applied Mathematical Modelling</i> , 1990, 14, 320-326.	4.2	82
162	FAST IMPLICIT FINITE-DIFFERENCE METHOD FOR THE ANALYSIS OF PHASE CHANGE PROBLEMS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 1990, 17, 155-169.	0.9	299

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163	The modelling of heat, mass and solute transport in solidification systems. International Journal of Heat and Mass Transfer, 1989, 32, 1719-1731.	4.8	435
164	Development and application of a heat balance integral method for analysis of metallurgical solidification. Applied Mathematical Modelling, 1989, 13, 3-11.	4.2	24
165	Fluoride Absorption from the Gastrointestinal Tract of Rats. Journal of Nutrition, 1989, 119, 1411-1417.	2.9	37
166	Biophysical stress analysis of restored teeth: modelling and analysis. Dental Materials, 1988, 4, 77-84.	3.5	44
167	Computer simulation of moving-interface, convective, phase-change processes. International Journal of Heat and Mass Transfer, 1988, 31, 1785-1795.	4.8	28
168	Reducing the number of unknowns in a constrained minimisation problem—an application to material balances. Applied Mathematical Modelling, 1988, 12, 204-212.	4.2	11
169	ENTHALPY-POROSITY TECHNIQUE FOR MODELING CONVECTION-DIFFUSION PHASE CHANGE: APPLICATION TO THE MELTING OF A PURE METAL. Numerical Heat Transfer, 1988, 13, 297-318.	0.5	978
170	A heat balance integral method based on an enthalpy formulation. International Journal of Heat and Mass Transfer, 1987, 30, 604-607.	4.8	22
171	A fixed grid numerical modelling methodology for convection-diffusion mushy region phase-change problems. International Journal of Heat and Mass Transfer, 1987, 30, 1709-1719.	4.8	1,886
172	An enthalpy method for convection/diffusion phase change. International Journal for Numerical Methods in Engineering, 1987, 24, 271-284.	2.8	509
173	An implicit enthalpy solution for phase change problems: with application to a binary alloy solidification. Applied Mathematical Modelling, 1987, 11, 110-116.	4.2	45
174	A Heat Balance Integral Method for Estimating Practical Solidification Parameters. IMA Journal of Applied Mathematics, 1985, 35, 223-232.	1.6	8
175	Implicit Finite-difference Solutions of the Enthalpy Formulation of Stefan Problems. IMA Journal of Numerical Analysis, 1985, 5, 201-214.	2.9	76
176	Enthalpy methods for tracking a phase change boundary in two dimensions. International Communications in Heat and Mass Transfer, 1984, 11, 239-249.	5.6	34
177	Automated material balance and assay data adjustment around a piece of mineral processing equipment. International Journal of Mineral Processing, 1983, 10, 279-288.	2.6	4
178	Interpretation of the enthalpy in a discretised multidimensional region undergoing a melting/freezing phase change. International Communications in Heat and Mass Transfer, 1983, 10, 323-328.	5.6	17
179	A note on energy-size reduction relationships in comminution. Powder Technology, 1983, 36, 281-286.	4.2	14
180	Modification of mathematical analyses and related physical descriptions used to describe channel segregation. Metals Technology, 1983, 10, 81-84.	0.3	11

#	ARTICLE	IF	CITATIONS
181	A model of thermally induced strain development in coke oven walls during carbonization. Mathematical Modelling, 1982, 3, 279-291.	0.2	2
182	Estimating the solidification/melting times of cylindrically symmetric regions. International Journal of Heat and Mass Transfer, 1981, 24, 1457-1462.	4.8	51
183	Accurate solutions of moving boundary problems using the enthalpy method. International Journal of Heat and Mass Transfer, 1981, 24, 545-556.	4.8	427