

S Jon Chapman

List of Publications by Year in descending order

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198
papers

6,931
citations

71004

43
h-index

84171

75
g-index

205
all docs

205
docs citations

205
times ranked

6812
citing authors

#	ARTICLE	IF	CITATIONS
1	Homogenization of Spirally Wound High-Contrast Layered Materials. SIAM Journal on Applied Mathematics, 2022, 82, 168-193.	0.8	3
2	Multiple-scales analysis of wave evolution in the presence of rigid vegetation. Journal of Fluid Mechanics, 2022, 935, .	1.4	1
3	Modeling Electrode Heterogeneity in Lithium-Ion Batteries: Unimodal and Bimodal Particle-Size Distributions. SIAM Journal on Applied Mathematics, 2022, 82, 625-653.	0.8	6
4	A spectral analysis of the nonlinear Schrödinger equation in the co-exploding frame. Physica D: Nonlinear Phenomena, 2022, 439, 133396.	1.3	2
5	Python Battery Mathematical Modelling (PyBaMM). Journal of Open Research Software, 2021, 9, 14.	2.7	120
6	Homogenization of Flow Through Periodic Networks. SIAM Journal on Applied Mathematics, 2021, 81, 1034-1051.	0.8	0
7	Asymptotic Reduction of a Lithium-Ion Pouch Cell Model. SIAM Journal on Applied Mathematics, 2021, 81, 765-788.	0.8	10
8	Physical Modelling of the Slow Voltage Relaxation Phenomenon in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 060554.	1.3	11
9	Normal form for the onset of collapse: The prototypical example of the nonlinear Schrödinger equation. Physical Review E, 2021, 104, 044202.	0.8	3
10	Probing Heterogeneity in Li-Ion Batteries with Coupled Multiscale Models of Electrochemistry and Thermal Transport using Tomographic Domains. Journal of the Electrochemical Society, 2020, 167, 110538.	1.3	27
11	Interactions of Anisotropic Inclusions on a Fluid Membrane. SIAM Journal on Applied Mathematics, 2020, 80, 2448-2471.	0.8	2
12	Modeling Osteocyte Network Formation: Healthy and Cancerous Environments. Frontiers in Bioengineering and Biotechnology, 2020, 8, 757.	2.0	4
13	Shear-induced instabilities of flows through submerged vegetation. Journal of Fluid Mechanics, 2020, 891, .	1.4	13
14	A four-compartment multiscale model of fluid and drug distribution in vascular tumours. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3315.	1.0	12
15	A dynamic network model for the action of low salinity on two-phase flow. Advances in Water Resources, 2020, 137, 103520.	1.7	3
16	A Suite of Reduced-Order Models of a Single-Layer Lithium-Ion Pouch Cell. Journal of the Electrochemical Society, 2020, 167, 140513.	1.3	22
17	Faster Lead-Acid Battery Simulations from Porous-Electrode Theory: Part I. Physical Model. Journal of the Electrochemical Society, 2019, 166, A2363-A2371.	1.3	16
18	Faster Lead-Acid Battery Simulations from Porous-Electrode Theory: Part II. Asymptotic Analysis. Journal of the Electrochemical Society, 2019, 166, A2372-A2382.	1.3	16

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19	An Asymptotic Derivation of a Single Particle Model with Electrolyte. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3693-A3706.	1.3	96
20	A MULTIPHASE MULTISCALE MODEL FOR NUTRIENT-LIMITED TISSUE GROWTH, PART II: A SIMPLIFIED DESCRIPTION. <i>ANZIAM Journal</i> , 2019, 61, 368-381.	0.3	1
21	Three-dimensional capillary waves due to a submerged source with small surface tension. <i>Journal of Fluid Mechanics</i> , 2019, 863, 670-701.	1.4	5
22	A simple mechanochemical model for calcium signalling in embryonic epithelial cells. <i>Journal of Mathematical Biology</i> , 2019, 78, 2059-2092.	0.8	15
23	Modelling Low-Salinity Oil Recovery Mechanisms Using an Ion Dissociation Model. <i>Transport in Porous Media</i> , 2019, 127, 685-709.	1.2	7
24	The effect of ions on the motion of an oil slug through a charged capillary. <i>Journal of Fluid Mechanics</i> , 2018, 841, 310-350.	1.4	10
25	Risk of nontyphoidal <i>Salmonella</i> bacteraemia in African children is modified by STAT4. <i>Nature Communications</i> , 2018, 9, 1014.	5.8	29
26	The effect of weak inertia in rotating high-aspect-ratio vessel bioreactors. <i>Journal of Fluid Mechanics</i> , 2018, 835, 674-720.	1.4	4
27	Influence of correlated antigen presentation on T-cell negative selection in the thymus. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180311.	1.5	1
28	Role of Grain Boundaries under Long-Time Radiation. <i>Physical Review Letters</i> , 2018, 120, 222501.	2.9	11
29	Slip flow through channels with varying elliptic cross section. <i>IMA Journal of Applied Mathematics</i> , 2018, 83, 874-893.	0.8	3
30	Topological data analysis of continuum percolation with disks. <i>Physical Review E</i> , 2018, 98, 012318.	0.8	28
31	Self-assembly of a filament by curvature-inducing proteins. <i>Physica D: Nonlinear Phenomena</i> , 2017, 344, 68-80.	1.3	2
32	Causes of binder damage in porous battery electrodes and strategies to prevent it. <i>Journal of Power Sources</i> , 2017, 350, 140-151.	4.0	49
33	Effective Transport Properties of Lattices. <i>SIAM Journal on Applied Mathematics</i> , 2017, 77, 1631-1652.	0.8	3
34	A Mathematical Model for Mechanically-Induced Deterioration of the Binder in Lithium-Ion Electrodes. <i>SIAM Journal on Applied Mathematics</i> , 2017, 77, 2172-2198.	0.8	8
35	Analysis of Carrier's Problem. <i>SIAM Journal on Applied Mathematics</i> , 2017, 77, 924-950.	0.8	3
36	Mean-field approach to evolving spatial networks, with an application to osteocyte network formation. <i>Physical Review E</i> , 2017, 96, 012301.	0.8	13

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37	Diffusion of Particles with Short-Range Interactions. SIAM Journal on Applied Mathematics, 2017, 77, 2294-2316.	0.8	12
38	On the boundary layer structure near a highly permeable porous interface. Journal of Fluid Mechanics, 2016, 798, 88-139.	1.4	9
39	Homogenization of a Row of Dislocation Dipoles from Discrete Dislocation Dynamics. SIAM Journal on Applied Mathematics, 2016, 76, 750-775.	0.8	12
40	Reactive Boundary Conditions as Limits of Interaction Potentials for Brownian and Langevin Dynamics. SIAM Journal on Applied Mathematics, 2016, 76, 368-390.	0.8	11
41	DNA double-strand break repair: a theoretical framework and its application. Journal of the Royal Society Interface, 2016, 13, 20150679.	1.5	11
42	Integral constraints in multiple-scales problems. European Journal of Applied Mathematics, 2015, 26, 595-614.	1.4	6
43	Exponential asymptotics with coalescing singularities. Nonlinearity, 2015, 28, 1229-1256.	0.6	5
44	Variants in the Mannose-binding Lectin Gene <i>MBL2</i> do not Associate With Sepsis Susceptibility or Survival in a Large European Cohort. Clinical Infectious Diseases, 2015, 61, 695-703.	2.9	24
45	Genome-wide association study of survival from sepsis due to pneumonia: an observational cohort study. Lancet Respiratory Medicine, 2015, 3, 53-60.	5.2	166
46	Influence of constraints on axial growth reduction of cylindrical Li-ion battery electrode particles. Journal of Power Sources, 2015, 279, 746-758.	4.0	11
47	The effective flux through a thin-film composite membrane. Europhysics Letters, 2015, 110, 40005.	0.7	17
48	The Graetz-Nusselt problem extended to continuum flows with finite slip. Journal of Fluid Mechanics, 2015, 764, .	1.4	16
49	Genetic variants associated with non-typhoidal Salmonella bacteraemia in African children. Lancet, The, 2015, 385, S13.	6.3	5
50	From Birds to Bacteria: Generalised Velocity Jump Processes with Resting States. Bulletin of Mathematical Biology, 2015, 77, 1213-1236.	0.9	15
51	Mathematics of the Faraday Cage. SIAM Review, 2015, 57, 398-417.	4.2	44
52	Diffusion in Spatially Varying Porous Media. SIAM Journal on Applied Mathematics, 2015, 75, 1648-1674.	0.8	55
53	Combining mechanical and chemical effects in the deformation and failure of a cylindrical electrode particle in a Li-ion battery. International Journal of Solids and Structures, 2015, 54, 66-81.	1.3	61
54	Controlling coverage of solution cast materials with unfavourable surface interactions. Applied Physics Letters, 2014, 104, .	1.5	34

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55	Unsteady flow over a submerged source with low Froude number. <i>European Journal of Applied Mathematics</i> , 2014, 25, 655-680.	1.4	9
56	Motion of screw segments in the early stage of fatigue testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 589, 132-139.	2.6	4
57	Diffusion of Finite-Size Particles in Confined Geometries. <i>Bulletin of Mathematical Biology</i> , 2014, 76, 947-982.	0.9	27
58	A Natural Transition Between Equilibrium Patterns of Dislocation Dipoles. <i>Journal of Elasticity</i> , 2014, 117, 51-61.	0.9	7
59	Model reduction for slow-fast stochastic systems with metastable behaviour. <i>Journal of Chemical Physics</i> , 2014, 140, 174107.	1.2	29
60	Curvature suppresses the Rayleigh-Taylor instability. <i>Physics of Fluids</i> , 2014, 26, .	1.6	33
61	From Brownian Dynamics to Markov Chain: An Ion Channel Example. <i>SIAM Journal on Applied Mathematics</i> , 2014, 74, 208-235.	0.8	7
62	Analysis of the Two-Regime Method on Square Meshes. <i>SIAM Journal of Scientific Computing</i> , 2014, 36, B561-B588.	1.3	19
63	Metastable behavior in Markov processes with internal states. <i>Journal of Mathematical Biology</i> , 2014, 69, 941-976.	0.8	30
64	The wake of a two-dimensional ship in the low-speed limit: results for multi-cornered hulls. <i>Journal of Fluid Mechanics</i> , 2014, 741, 492-513.	1.4	13
65	Analytical Results for Front Pinning between an Hexagonal Pattern and a Uniform State in Pattern-Formation Systems. <i>Physical Review Letters</i> , 2013, 111, 054501.	2.9	17
66	Exponential Asymptotics for Thin Film Rupture. <i>SIAM Journal on Applied Mathematics</i> , 2013, 73, 232-253.	0.8	14
67	Steady gravity waves due to a submerged source. <i>Journal of Fluid Mechanics</i> , 2013, 732, 660-686.	1.4	14
68	The study of asymptotically fine wrinkling in nonlinear elasticity using a boundary layer analysis. <i>Journal of the Mechanics and Physics of Solids</i> , 2013, 61, 1691-1711.	2.3	2
69	New gravity-capillary waves at low speeds. Part 2. Nonlinear geometries. <i>Journal of Fluid Mechanics</i> , 2013, 724, 392-424.	1.4	15
70	New gravity-capillary waves at low speeds. Part 1. Linear geometries. <i>Journal of Fluid Mechanics</i> , 2013, 724, 367-391.	1.4	17
71	Multiscale Reaction-Diffusion Algorithms: PDE-Assisted Brownian Dynamics. <i>SIAM Journal on Applied Mathematics</i> , 2013, 73, 1224-1247.	0.8	58
72	Dislocation motion and instability. <i>Journal of the Mechanics and Physics of Solids</i> , 2013, 61, 1835-1853.	2.3	9

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73	Exponential asymptotics of free surface flow due to a line source. <i>IMA Journal of Applied Mathematics</i> , 2013, 78, 697-713.	0.8	15
74	Diffusion of multiple species with excluded-volume effects. <i>Journal of Chemical Physics</i> , 2012, 137, 204116.	1.2	55
75	The buckling of capillaries in solid tumours. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 4123-4145.	1.0	27
76	The two-regime method for optimizing stochastic reaction-diffusion simulations. <i>Journal of the Royal Society Interface</i> , 2012, 9, 859-868.	1.5	85
77	An Asymptotic Theory for the Re-Equilibration of a Micellar Surfactant Solution. <i>SIAM Journal on Applied Mathematics</i> , 2012, 72, 201-215.	0.8	10
78	Excluded-volume effects in the diffusion of hard spheres. <i>Physical Review E</i> , 2012, 85, 011103.	0.8	82
79	Modeling Growth in Biological Materials. <i>SIAM Review</i> , 2012, 54, 52-118.	4.2	102
80	Human genetic susceptibility to infectious disease. <i>Nature Reviews Genetics</i> , 2012, 13, 175-188.	7.7	413
81	Modelling the role of the basement membrane beneath a growing epithelial monolayer. <i>Journal of Theoretical Biology</i> , 2012, 298, 82-91.	0.8	30
82	Mathematical modeling of monoclonal conversion in the colonic crypt. <i>Journal of Theoretical Biology</i> , 2012, 300, 118-133.	0.8	61
83	Elementary observations on the averaging of dislocation mechanics: Dislocation origin of aspects of anisotropic yield and plastic spin. <i>Procedia IUTAM</i> , 2012, 3, 301-313.	1.2	8
84	Do waveless ships exist? Results for single-cornered hulls. <i>Journal of Fluid Mechanics</i> , 2011, 685, 413-439.	1.4	25
85	Analysis of Brownian Dynamics Simulations of Reversible Bimolecular Reactions. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 714-730.	0.8	58
86	A Unified Multiple-Scales Approach to One-Dimensional Composite Materials and Multiphase Flow. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 200-217.	0.8	1
87	Derivation of the Bidomain Equations for a Beating Heart with a General Microstructure. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 657-675.	0.8	39
88	Four bugs on a rectangle. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 881-896.	1.0	5
89	On liquid films on an inclined plate. <i>Journal of Fluid Mechanics</i> , 2010, 663, 53-69.	1.4	26
90	On the proportion of cancer stem cells in a tumour. <i>Journal of Theoretical Biology</i> , 2010, 266, 708-711.	0.8	59

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91	Modelling apical constriction in epithelia using elastic shell theory. <i>Biomechanics and Modeling in Mechanobiology</i> , 2010, 9, 247-261.	1.4	6
92	Multiscale Modelling of Fluid and Drug Transport in Vascular Tumours. <i>Bulletin of Mathematical Biology</i> , 2010, 72, 1464-1491.	0.9	127
93	Motion of spiral waves in the complex Ginzburg-Landau equation. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 348-365.	1.3	15
94	Mannose-binding lectin genotypes: lack of association with susceptibility to thoracic empyema. <i>BMC Medical Genetics</i> , 2010, 11, 5.	2.1	7
95	NFKBIZ polymorphisms and susceptibility to pneumococcal disease in European and African populations. <i>Genes and Immunity</i> , 2010, 11, 319-325.	2.2	33
96	Variable renewal rate and growth properties of cell populations in colon crypts. <i>Physical Review E</i> , 2010, 81, 061909.	0.8	12
97	Cardiac Electromechanics: The Effect of Contraction Model on the Mathematical Problem and Accuracy of the Numerical Scheme. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2010, 63, 375-399.	0.5	41
98	A Note on the Effect of the Choice of Weak Form on GMRES Convergence for Incompressible Nonlinear Elasticity Problems. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2010, 77, .	1.1	0
99	Common NFKBIL2 polymorphisms and susceptibility to pneumococcal disease: a genetic association study. <i>Critical Care</i> , 2010, 14, R227.	2.5	21
100	Asymptotic Analysis of a System of Algebraic Equations Arising in Dislocation Theory. <i>SIAM Journal on Applied Mathematics</i> , 2010, 70, 2729-2749.	0.8	16
101	Matched asymptotic expansion in modelling of edge dislocation pile-ups. <i>IOP Conference Series: Materials Science and Engineering</i> , 2009, 3, 012017.	0.3	0
102	A computational study of discrete mechanical tissue models. <i>Physical Biology</i> , 2009, 6, 036001.	0.8	99
103	Asymptotics of Edge Dislocation Pile-Up against a Bimetallic Interface. <i>Mathematics and Mechanics of Solids</i> , 2009, 14, 284-295.	1.5	14
104	Chaste: A test-driven approach to software development for biological modelling. <i>Computer Physics Communications</i> , 2009, 180, 2452-2471.	3.0	207
105	An integrative computational model for intestinal tissue renewal. <i>Cell Proliferation</i> , 2009, 42, 617-636.	2.4	142
106	Exponential asymptotics of localised patterns and snaking bifurcation diagrams. <i>Physica D: Nonlinear Phenomena</i> , 2009, 238, 319-354.	1.3	95
107	Stochastic modelling of reaction-diffusion processes: algorithms for bimolecular reactions. <i>Physical Biology</i> , 2009, 6, 046001.	0.8	235
108	Influence of Boundaries on Localized Patterns. <i>Physical Review Letters</i> , 2009, 103, 164501.	2.9	27

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109	Asymptotic Analysis of a Buckling Problem for an Embedded Spherical Shell. <i>SIAM Journal on Applied Mathematics</i> , 2009, 70, 901-922.	0.8	6
110	Analysis of a Stochastic Chemical System Close to a SNIPER Bifurcation of Its Mean-Field Model. <i>SIAM Journal on Applied Mathematics</i> , 2009, 70, 984-1016.	0.8	39
111	Multiscale Modeling of Fluid Transport in Tumors. <i>Bulletin of Mathematical Biology</i> , 2008, 70, 2334-2357.	0.9	67
112	Reply to "Analysis of association of the TIRAP (MAL) S180L variant and tuberculosis in three populations". <i>Nature Genetics</i> , 2008, 40, 262-263.	9.4	11
113	Predicting Tumor Location by Modeling the Deformation of the Breast. <i>IEEE Transactions on Biomedical Engineering</i> , 2008, 55, 2471-2480.	2.5	77
114	Axisymmetric buckling of a spherical shell embedded in an elastic medium under uniaxial stress at infinity. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2008, 61, 475-495.	0.5	16
115	Inverse membrane problems in elasticity. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2008, 62, 67-88.	0.5	2
116	Modelling multiscale aspects of colorectal cancer. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	1
117	Kozyreff and Chapman Reply:. <i>Physical Review Letters</i> , 2008, 100, .	2.9	1
118	Interaction of Spiral Waves in the Complex Ginzburg-Landau Equation. <i>Physical Review Letters</i> , 2008, 101, 224101.	2.9	6
119	DYNAMICS OF POLYDISPERSE IRREVERSIBLE ADSORPTION: A PHARMACOLOGICAL EXAMPLE. <i>Mathematical Models and Methods in Applied Sciences</i> , 2007, 17, 759-781.	1.7	9
120	Continuum and discrete models of dislocation pile-ups. II. Pile-up of screw dislocations at the interface in a bimetallic solid. <i>Philosophical Magazine Letters</i> , 2007, 87, 669-676.	0.5	12
121	The Kelly criterion for spread bets. <i>IMA Journal of Applied Mathematics</i> , 2007, 72, 43-51.	0.8	9
122	Non-linear modelling of breast tissue. <i>Mathematical Medicine and Biology</i> , 2007, 24, 327-345.	0.8	19
123	Examples of Mathematical Modeling: Tales from the Crypt. <i>Cell Cycle</i> , 2007, 6, 2106-2112.	1.3	54
124	ÎB Genetic Polymorphisms and Invasive Pneumococcal Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2007, 176, 181-187.	2.5	80
125	Time scale of random sequential adsorption. <i>Physical Review E</i> , 2007, 75, 041116.	0.8	21
126	Mathematical Models of Avascular Tumor Growth. <i>SIAM Review</i> , 2007, 49, 179-208.	4.2	469

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127	Mathematical modeling of cell population dynamics in the colonic crypt and in colorectal cancer. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4008-4013.	3.3	253
128	Why is a shock not a caustic? The higher-order Stokes phenomenon and smoothed shock formation. Nonlinearity, 2007, 20, 2425-2452.	0.6	20
129	A nonlinear model of age and size-structured populations with applications to cell cycles. ANZIAM Journal, 2007, 49, 151-169.	0.3	13
130	Functional polymorphisms in the FCN2 gene are not associated with invasive pneumococcal disease. Molecular Immunology, 2007, 44, 3267-3270.	1.0	40
131	Reactive boundary conditions for stochastic simulations of reaction-diffusion processes. Physical Biology, 2007, 4, 16-28.	0.8	157
132	Continuum and discrete models of dislocation pile-ups. I. Pile-up at a lock. Journal of the Mechanics and Physics of Solids, 2007, 55, 2007-2025.	2.3	22
133	On Chemisorption of Polymers to Solid Surfaces. Journal of Statistical Physics, 2007, 127, 1255-1277.	0.5	6
134	Biomechanical Modelling of Colorectal Crypt Budding and Fission. Bulletin of Mathematical Biology, 2007, 69, 1927-1942.	0.9	43
135	Exponential asymptotics and gravity waves. Journal of Fluid Mechanics, 2006, 567, 299.	1.4	46
136	A Mathematical Model for Simultaneous Spatio-Temporal Dynamics of Calcium and Inositol 1,4,5-Trisphosphate in Madin-Darby Canine Kidney Epithelial Cells. Bulletin of Mathematical Biology, 2006, 68, 2027-2051.	0.9	2
137	Asymptotics of Large Bound States of Localized Structures. Physical Review Letters, 2006, 97, 044502.	2.9	92
138	Exponentially slow transitions on a Markov chain: the frequency of Calcium Sparks. European Journal of Applied Mathematics, 2005, 16, 427-446.	1.4	46
139	Asymptotic approximation of eigenvalues of vector equations. European Journal of Applied Mathematics, 2005, 16, 447-466.	1.4	0
140	Exponential asymptotics and Stokes lines in a partial differential equation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2005, 461, 2385-2421.	1.0	25
141	Wave packet pseudomodes of twisted Toeplitz matrices. Communications on Pure and Applied Mathematics, 2004, 57, 1233-1264.	1.2	20
142	The selection of Saffman-Taylor fingers by kinetic undercooling. Journal of Engineering Mathematics, 2003, 46, 1-32.	0.6	27
143	A Hierarchy of Models for Superconducting Thin Films. SIAM Journal on Applied Mathematics, 2003, 63, 2087-2127.	0.8	8
144	Interaction of modulational instabilities in semiconductor resonators. , 2003, , .		0

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145	Interaction of two modulational instabilities in a semiconductor resonator. <i>Physical Review E</i> , 2003, 68, 015201.	0.8	22
146	The flow and solidification of a thin fluid film on an arbitrary three-dimensional surface. <i>Physics of Fluids</i> , 2002, 14, 2788-2803.	1.6	122
147	Subcritical transition in channel flows. <i>Journal of Fluid Mechanics</i> , 2002, 451, 35-97.	1.4	144
148	Exponential Asymptotics and Capillary Waves. <i>SIAM Journal on Applied Mathematics</i> , 2002, 62, 1872-1898.	0.8	28
149	Asymptotic Analysis of Models of Superconductivity. , 2002, , 375-398.		0
150	Pile-Up Solutions for Some Systems of Conservation Laws Modelling Dislocation Interaction in Crystals. <i>SIAM Journal on Applied Mathematics</i> , 2001, 61, 2168-2199.	0.8	4
151	Edge diffraction of complex rays. <i>Wave Motion</i> , 2001, 33, 41-49.	1.0	9
152	Vortex velocity laws to I-V data for flat superconductors. <i>IEEE Transactions on Applied Superconductivity</i> , 2001, 11, 3943-3946.	1.1	1
153	Asymptotics beyond all orders and Stokes lines in nonlinear differential-difference equations. <i>European Journal of Applied Mathematics</i> , 2001, 12, 433-463.	1.4	44
154	Wave solutions for a discrete reaction-diffusion equation. <i>European Journal of Applied Mathematics</i> , 2000, 11, 399-412.	1.4	33
155	Convergence of Meissner minimisers of the Ginzburg-Landau energy as $\epsilon \rightarrow 0$. <i>Comptes Rendus Mathématique</i> , 2000, 331, 971-975.	0.5	0
156	Scalar wave diffraction by tangent rays. <i>Wave Motion</i> , 2000, 32, 363-380.	1.0	18
157	Edge diffraction of creeping rays. <i>Journal of the Acoustical Society of America</i> , 2000, 107, 1841-1845.	0.5	0
158	Asymptotic Analysis of a Secondary Bifurcation of the One-Dimensional Ginzburg-Landau Equations of Superconductivity. <i>SIAM Journal on Applied Mathematics</i> , 2000, 60, 1157-1176.	0.8	7
159	Convergence of Meissner Minimizers of the Ginzburg-Landau Energy of Superconductivity as $\epsilon \rightarrow 0$. <i>SIAM Journal on Mathematical Analysis</i> , 2000, 31, 1374-1395.	0.9	17
160	A Hierarchy of Models for Type-II Superconductors. <i>SIAM Review</i> , 2000, 42, 555-598.	4.2	63
161	On the Theory of Complex Rays. <i>SIAM Review</i> , 1999, 41, 417-509.	4.2	89
162	Ray Theory for High-Péclet-Number Convection-Diffusion. <i>SIAM Journal on Applied Mathematics</i> , 1999, 60, 121-135.	0.8	18

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163	On the approximation of the eigenvalues of an annulus using complex rays. <i>European Journal of Applied Mathematics</i> , 1999, 10, 225-236.	1.4	4
164	On the rôle of Stokes lines in the selection of Saffman-Taylor fingers with small surface tension. <i>European Journal of Applied Mathematics</i> , 1999, 10, 513-534.	1.4	31
165	Asymptotic analysis of the bifurcation diagram for symmetric one-dimensional solutions of the Ginzburg-Landau equations. <i>European Journal of Applied Mathematics</i> , 1999, 10, 477-495.	1.4	6
166	Vacuum moulding of a superplastic in two dimensions. <i>IMA Journal of Applied Mathematics</i> , 1999, 63, 217-246.	0.8	1
167	The Motion of Superconducting Vortices in Thin Films of Varying Thickness. <i>SIAM Journal on Applied Mathematics</i> , 1998, 58, 1808-1825.	0.8	9
168	Motion and Homogenization of Vortices in Anisotropic Type II Superconductors. <i>SIAM Journal on Applied Mathematics</i> , 1998, 58, 587-606.	0.8	6
169	Exponential asymptotics and Stokes lines in nonlinear ordinary differential equations. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 1998, 454, 2733-2755.	1.0	73
170	On the modelling of instabilities in dislocation interactions. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1998, 78, 155-157.	0.6	2
171	Vortices and boundaries. <i>Quarterly of Applied Mathematics</i> , 1998, 56, 507-519.	0.5	10
172	Asymptotics of violent surface motion. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1997, 355, 679-685.	1.6	5
173	Preface to Vortices, dislocations, and line singularities in partial differential equations, the proceedings of a Discussion held at The Royal Society. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1997, 355, 1947-1947.	1.6	1
174	Dynamics of line singularities. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1997, 355, 2013-2024.	1.6	10
175	Bifurcation to vortex solutions in superconducting films. <i>European Journal of Applied Mathematics</i> , 1997, 8, 125-148.	1.4	5
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