Andrey Kuznetsov

List of Publications by Year
in descending order

195 papers	3,503 citations	196777 29 h-index	223390 49 g-index
202 all docs	202 docs citations	202 times ranked	1615 citing authors

#	Article	IF	Citations
1	Can the lack of fibrillar form of alpha-synuclein in Lewy bodies be explained by its catalytic activity?. Mathematical Biosciences, 2022, 344, 108754.	0.9	2
2	An analytical solution simulating growth of Lewy bodies. Mathematical Medicine and Biology, 2022, 39, 299-312.	0.8	1
3	Prediction of pore-scale-property dependent natural convection in porous media at high Rayleigh numbers. International Journal of Thermal Sciences, 2022, 179, 107635.	2.6	3
4	Bidirectional, unlike unidirectional transport, allows transporting axonal cargos against their concentration gradient. Journal of Theoretical Biology, 2022, 546, 111161.	0.8	7
5	The evolution of turbulent micro-vortices and their effect on convection heat transfer in porous media. Journal of Fluid Mechanics, 2022, 942, .	1.4	3
6	EFFECT OF MICROSCALE TURBULENT STRUCTURES DYNAMICS ON FORCED CONVECTION IN TURBULENT POROUS MEDIA FLOW. , 2021, , .		1
7	A macroscopic two-length-scale model for natural convection in porous media driven by a species-concentration gradient. Journal of Fluid Mechanics, 2021, 926, .	1.4	12
8	Simulation of a sudden dropâ€off in distal dense core vesicle concentration in <i>Drosophila</i> type <scp>II</scp> motoneuron terminals. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3523.	1.0	0
9	Symmetry breaking of turbulent flow in porous media composed of periodically arranged solid obstacles. Journal of Fluid Mechanics, 2021, 929, .	1.4	4
10	Model of Drug Delivery to Populations Composed of Two Cell Types. Journal of Theoretical Biology, 2021, 534, 110947.	0.8	0
11	Modeling tau transport in the axon initial segment. Mathematical Biosciences, 2020, 329, 108468.	0.9	5
12	How old are dense-core vesicles residing in <i>en passant</i> boutons: simulation of the mean age of dense-core vesicles in axonal arbours accounting for resident and transiting vesicle populations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200454.	1.0	8
13	Numerical Modeling of Momentum Dispersion in Porous Media Based on the Pore Scale Prevalence Hypothesis. Transport in Porous Media, 2020, 133, 271-292.	1.2	8
14	Effects of pore scale on the macroscopic properties of natural convection in porous media. Journal of Fluid Mechanics, 2020, 891, .	1.4	18
15	A Novel Porcine Model for the Study of Cerebrospinal Fluid Dynamics: Development and Preliminary Results. Frontiers in Neurology, 2019, 10, 1137.	1.1	8
16	Modelling transport and mean age of dense core vesicles in large axonal arbours. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190284.	1.0	8
17	Marangoni convection of a viscous fluid over a vibrating plate. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190214.	1.0	0
18	Investigating sensitivity coefficients characterizing the response of a model of tau protein transport in an axon to model parameters. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 71-83.	0.9	25

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19	A Numerical Study of Sensitivity Coefficients for a Model of Amyloid Precursor Protein and Tubulin-Associated Unit Protein Transport and Agglomeration in Neurons at the Onset of Alzheimer's Disease. Journal of Biomechanical Engineering, 2019, 141, .	0.6	5
20	The Onset of Convection in an Anisotropic Heterogeneous Porous Medium: A New Hydrodynamic Boundary Condition. Transport in Porous Media, 2019, 127, 549-558.	1.2	8
21	Effect of Microscopic Vortices Caused by Flow Interaction With Solid Obstacles on Heat Transfer in Turbulent Porous Media Flows. , 2019, , .		1
22	How the formation of amyloid plaques and neurofibrillary tangles may be related: a mathematical modelling study. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170777.	1.0	18
23	Simulating Reversibility of Dense Core Vesicles Capture in En Passant Boutons: Using Mathematical Modeling to Understand the Fate of Dense Core Vesicles in En Passant Boutons. Journal of Biomechanical Engineering, 2018, 140, .	0.6	4
24	A new mechanism for buoyancy driven convection in pulsating viscous flows: A theoretical study. International Journal of Heat and Mass Transfer, 2018, 118, 340-348.	2.5	2
25	Simulating the effect of formation of amyloid plaques on aggregation of tau protein. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180511.	1.0	18
26	A STUDY OF THE EFFECTS OF THE PORE SIZE ON TURBULENCE INTENSITY AND TURBULENCE LENGTH SCALE IN FORCED CONVECTION FLOW IN POROUS MEDIA. , 2018, , .		2
27	What mechanisms of tau protein transport could be responsible for the inverted tau concentration gradient in degenerating axons?. Mathematical Medicine and Biology, 2017, 34, dqv041.	0.8	5
28	Utilization of the bootstrap method for determining confidence intervals of parameters for a model of MAP1B protein transport in axons. Journal of Theoretical Biology, 2017, 419, 350-361.	0.8	11
29	Turbulence modeling for flows in wall bounded porous media: An analysis based on direct numerical simulations. Physics of Fluids, 2017, 29, .	1.6	45
30	Simulating tubulin-associated unit transport in an axon: using bootstrapping for estimating confidence intervals of best-fit parameter values obtained from indirect experimental data. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170045.	1.0	15
31	Using Resampling Residuals for Estimating Confidence Intervals of the Effective Viscosity and Forchheimer Coefficient. Transport in Porous Media, 2017, 119, 451-459.	1.2	3
32	Free Convection: Cavities and Layers. , 2017, , 1-43.		0
33	The Effect of Spatially Nonuniform Internal Heating on the Onset of Convection in a Horizontal Fluid Layer. Journal of Heat Transfer, 2016, 138, .	1.2	7
34	A direct numerical simulation study on the possibility of macroscopic turbulence in porous media: Effects of different solid matrix geometries, solid boundaries, and two porosity scales. Physics of Fluids, 2016, 28, .	1.6	42
35	What can trigger the onset of Parkinson's disease â€“ A modeling study based on a compartmental model of Î±-synuclein transport and aggregation in neurons. Mathematical Biosciences, 2016, 278, 22-29.	0.9	19
36	Modeling of submicron particle filtration in an electret monolith filter with rectangular cross-section microchannels. Aerosol Science and Technology, 2016, 50, 1033-1043.	1.5	3

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37	Do Isoflux Boundary Conditions Inhibit Oscillatory Double-Diffusive Convection?. Transport in Porous Media, 2016, 112, 609-618.	1.2	11
38	The Onset of Convection in a Sloping Layered Porous Medium: Effects of Local Thermal Non-equilibrium and Heterogeneity. Transport in Porous Media, 2016, 114, 87-97.	1.2	12
39	Can numerical modeling help understand the fate of tau protein in the axon terminal?. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 115-125.	0.9	12
40	Unstable Forced Convection in a Plane Porous Channel With Variable-Viscosity Dissipation. Journal of Heat Transfer, 2016, 138, .	1.2	8
41	The Effect of Pulsating Throughflow on the Onset of Convection in a Horizontal Porous Layer. Transport in Porous Media, 2016, 111, 731-740.	1.2	6
42	The Onset of Convection in a Horizontal Porous Layer with Spatially Non-Uniform Internal Heating. Transport in Porous Media, 2016, 111, 541-553.	1.2	16
43	Mathematical models of Î±-synuclein transport in axons. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 515-526.	0.9	12
44	Numerical investigation of the possibility of macroscopic turbulence in porous media: a direct numerical simulation study. Journal of Fluid Mechanics, 2015, 766, 76-103.	1.4	82
45	Modeling neuropeptide transport in various types of nerve terminals containing en passant boutons. Mathematical Biosciences, 2015, 261, 27-36.	0.9	8
46	The Effect of Vertical Throughflow on Thermal Instability in a Porous Medium Layer Saturated by a Nanofluid: A Revised Model. Journal of Heat Transfer, 2015, 137, .	1.2	19
47	A coupled model of fast axonal transport of organelles and slow axonal transport of tau protein. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1485-1494.	0.9	12
48	Can an increase in neuropeptide production in the soma lead to DCV circulation in axon terminals with type III en passant boutons?. Mathematical Biosciences, 2015, 267, 61-78.	0.9	6
49	Modelling organelle transport after traumatic axonal injury. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 583-591.	0.9	4
50	Can a death signal half-life be used to sense the distance to a lesion site in axons?. Journal of Biological Physics, 2015, 41, 23-35.	0.7	0
51	Local Thermal Non-equilibrium and Heterogeneity Effects on the Onset of Double-Diffusive Convection in an Internally Heated and Soluted Porous Medium. Transport in Porous Media, 2015, 109, 393-409.	1.2	12
52	The Effects of Double Diffusion and Local Thermal Non-equilibrium on the Onset of Convection in a Layered Porous Medium: Non-oscillatory Instability. Transport in Porous Media, 2015, 107, 261-279.	1.2	18
53	A comparison between the diffusionâ€“reaction and slow axonal transport models for predicting tau distribution along an axon. Mathematical Medicine and Biology, 2015, 32, 263-283.	0.8	21
54	LOCAL THERMAL NON-EQUILIBRIUM AND HETEROGENEITY EFFECTS ON THE ONSET OF CONVECTION IN A LAYERED POROUS MEDIUM WITH VERTICAL THROUGHFLOW. Journal of Porous Media, 2015, 18, 125-136.	1.0	9

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55	The Onset of Convection in an Internally Heated Nanofluid Layer. Journal of Heat Transfer, 2014, 136, .	1.2	14
56	Modeling anterograde and retrograde transport of short mobile microtubules from the site of axonal branch formation. Journal of Biological Physics, 2014, 40, 41-53.	0.7	3
57	Local Thermal Non-Equilibrium and Heterogeneity Effects on the Onset of Convection in a Layered Porous Medium. Transport in Porous Media, 2014, 102, 1-13.	1.2	17
58	Local Thermal Non-equilibrium and Heterogeneity Effects on the Onset of Convection in an Internally Heated Porous Medium. Transport in Porous Media, 2014, 102, 15-30.	1.2	12
59	Approximate modelling of the leftward flow and morphogen transport in the embryonic node by specifying vorticity at the ciliated surface. Journal of Fluid Mechanics, 2014, 738, 492-521.	1.4	5
60	A two population model of prion transport through a tunnelling nanotube. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 1705-1715.	0.9	2
61	What tau distribution maximizes fast axonal transport toward the axonal synapse?. Mathematical Biosciences, 2014, 253, 19-24.	0.9	7
62	Sorting of cargos between axons and dendrites: modelling of differences in cargo transport in these two types of neurites. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 792-799.	0.9	3
63	Deep Saline Fluids in Geologic Basins: The Possible Role of the Soret Effect. Transport in Porous Media, 2013, 99, 297-305.	1.2	1
64	Optimization of Forced Convection Heat Transfer in a Composite Porous Medium Channel. Transport in Porous Media, 2013, 99, 349-357.	1.2	5
65	The Effect of Vertical Throughflow on the Onset of Convection Induced by Internal Heating in a Layered Porous Medium. Transport in Porous Media, 2013, 100, 101-114.	1.2	10
66	The Effect of Heterogeneity on the Onset of Double-Diffusive Convection Induced by Internal Heating in a Porous Medium: A Layered Model. Transport in Porous Media, 2013, 100, 83-99.	1.2	19
67	Onset of Convection with Internal Heating in a Porous Medium Saturated by a Nanofluid. Transport in Porous Media, 2013, 99, 73-83.	1.2	33
68	The Effect of Strong Heterogeneity on the Onset of Convection Induced by Internal Heating in a Porous Medium: A Layered Model. Transport in Porous Media, 2013, 99, 85-100.	1.2	27
69	Onset of Convection with Internal Heating in a Weakly Heterogeneous Porous Medium. Transport in Porous Media, 2013, 98, 543-552.	1.2	22
70	The Effect of Pulsating Deformation on the Onset of Convection in a Porous Medium. Transport in Porous Media, 2013, 98, 713-724.	1.2	8
71	The Onset of Convection in a Layered Porous Medium with Vertical Throughflow. Transport in Porous Media, 2013, 98, 363-376.	1.2	19
72	Protein transport in the connecting cilium of a photoreceptor cell: Modeling the effects of bidirectional protein transitions between the diffusion-driven and motor-driven kinetic states. Computers in Biology and Medicine, 2013, 43, 758-764.	3.9	2

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73	Modeling of Flow Through a Sandwiched Monolith Filter. Particulate Science and Technology, 2013, 31, 226-233.	1.1	0
74	Modeling transport of a pulse of radiolabeled organelles in a Drosophila unipolar motor neuron. Journal of Biological Physics, 2013, 39, 145-158.	0.7	0
75	A Note on Modeling High Speed Flow in a Bidisperse Porous Medium. Transport in Porous Media, 2013, 96, 495-499.	1.2	38
76	Analytical comparison between Nixonâ€“Logvinenkoâ€™s and Jungâ€“Brownâ€™s theories of slow neurofilament transport in axons. Mathematical Biosciences, 2013, 245, 331-339.	0.9	4
77	Numerical investigation of axonal cargo rerouting in a dendrite: A three kinetic state model. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 428-443.	1.0	2
78	Modelling of axonal cargo rerouting in a dendrite. Mathematical Medicine and Biology, 2013, 30, 273-285.	0.8	5
79	An analytical solution describing the propagation of positive injury signals in an axon: effect of dynein velocity distribution. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 699-706.	0.9	10
80	An exact solution of transient equations describing slow axonal transport. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 1232-1239.	0.9	3
81	A compartmental model of neuropeptide circulation and capture between the axon soma and nerve terminals. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 574-585.	1.0	9
82	Analytical modelling of retrograde transport of nerve growth factors in an axon: a transient problem. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 95-102.	0.9	5
83	Modeling Prion Transport in a Tunneling Nanotube. , 2013, , .		0
84	An exact solution describing slow axonal transport of cytoskeletal elements: the effect of aÂfinite half-life. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 3384-3397.	1.0	7
85	Heterogeneity and Onset of Instability in Darcyâ€™s Flow With a Prescribed Horizontal Temperature Gradient. Journal of Heat Transfer, 2012, 134, .	1.2	17
86	A THREE-KINETIC-STATE MODEL OF AXONAL TRANSPORT DRUG DELIVERY. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250044.	0.3	3
87	MODELING OF ORGANELLE ENTRY IN AN AXON AND DENDRITE. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250026.	0.3	1
88	Modeling of Cross-Flow Across an Electrostatically Charged Monolith Filter. Particulate Science and Technology, 2012, 30, 461-473.	1.1	3
89	Modeling of Transient Transport of Soluble Proteins in the Connecting Cilium of a Photoreceptor Cell. Journal of Nanotechnology in Engineering and Medicine, 2012, 3, .	0.8	1
90	A minimal model of prion transport through a tunneling nanotube. Nanotube Therapy, 2012, 1, .	0.0	2

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91	The Onset of Double-Diffusive Convection in a Vertical Cylinder Occupied by a Heterogeneous Porous Medium with Vertical Throughflow. Transport in Porous Media, 2012, 95, 327-336.	1.2	20
92	Modelling transport of layered double hydroxide nanoparticles in axons and dendrites of cortical neurons. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 1263-1271.	0.9	3
93	Symmetry analysis and self-similar forms of fluid flow and heat-mass transfer in turbulent boundary layer flow of a nanofluid. Physics of Fluids, 2012, 24, .	1.6	44
94	Error correction in intracellular transport: Numerical investigation of rerouting of a pulse of misdirected axonal cargos in a dendrite. Computers in Biology and Medicine, 2012, 42, 1196-1203.	3.9	0
95	A model of axonal transport drug delivery: effects of diffusivity. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 1083-1092.	1.0	3
96	A model of axonal transport drug delivery. Open Physics, 2012, 10, .	0.8	3
97	Effect of kinesin velocity distribution on slow axonal transport. Open Physics, 2012, 10, .	0.8	0
98	Nanofluid bioconvection: interaction of microorganisms oxytactic upswimming, nanoparticle distribution, and heating/cooling from below. Theoretical and Computational Fluid Dynamics, 2012, 26, 291-310.	0.9	49
99	The Effect of Strong Heterogeneity and Strong Throughflow on the Onset of Convection in a Porous Medium: Non-Periodic Global Variation. Transport in Porous Media, 2012, 91, 927-938.	1.2	7
100	The Effect of Strong Heterogeneity and Strong Throughflow on the Onset of Convection in a Porous Medium: Periodic and Localized Variation. Transport in Porous Media, 2012, 92, 289-298.	1.2	4
101	The Onset of Convection in a Layer of a Porous Medium Saturated by a Nanofluid: Effects of Conductivity and Viscosity Variation and Cross-Diffusion. Transport in Porous Media, 2012, 92, 837-846.	1.2	32
102	Method of modelling intracellular transport in branching neurites: application to axons and dendrites ofDrosophilasensory neurons. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 239-251.	0.9	3
103	Modeling bidirectional transport of quantum dot nanoparticles in membrane nanotubes. Mathematical Biosciences, 2011, 232, 101-109.	0.9	7
104	A four kinetic state model of fast axonal transport: Model formulation and perturbation solution. Open Physics, 2011, 9, .	0.8	2
105	Analytical solution of equations describing slow axonal transport based on the stop-and-go hypothesis. Open Physics, 2011, 9, .	0.8	5
106	Effect of cytoskeletal element degradation on merging of concentration waves in slow axonal transport. Open Physics, 2011, 9, 898-908.	0.8	5
107	Analytical investigation of various regimes of retrograde trafficking of neurotropic viruses in axons. Open Physics, 2011, 9, .	0.8	7
108	Merging of viral concentration waves in retrograde viral transport in axons. Open Physics, 2011, 9, .	0.8	2

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109	The Onset of Convection in a Strongly Heterogeneous Porous Medium with Transient Temperature Profile. Transport in Porous Media, 2011, 86, 851-865.	1.2	14
110	The Effect of Vertical Throughflow on Thermal Instability in a Porous Medium Layer Saturated by a Nanofluid. Transport in Porous Media, 2011, 87, 765-775.	1.2	77
111	The Onset of Convection in a Heterogeneous Porous Medium with Vertical Throughflow. Transport in Porous Media, 2011, 88, 347-355.	1.2	21
112	The Effects of Combined Horizontal and Vertical Heterogeneity on the Onset of Convection in a Porous Medium with Vertical Throughflow. Transport in Porous Media, 2011, 90, 465-478.	1.2	16
113	Onset of Convection in a Porous Medium with Strong Vertical Throughflow. Transport in Porous Media, 2011, 90, 883-888.	1.2	10
114	The Effect of Vertical Throughflow on the Onset of Convection in a Porous Medium in a Rectangular Box. Transport in Porous Media, 2011, 90, 993-1000.	1.2	21
115	Nanofluid bioconvection in water-based suspensions containing nanoparticles and oxytactic microorganisms: oscillatory instability. Nanoscale Research Letters, 2011, 6, 100.	3.1	193
116	Investigation of the role of diffusivity on spreading, rate, and merging of the bell-shaped waves in slow axonal transport. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1040-1053.	1.0	10
117	Coupling a dynein transport model with a model of anterograde and retrograde transport of intracellular organelles. International Communications in Heat and Mass Transfer, 2011, 38, 833-837.	2.9	1
118	Forced Convection in a Channel Partly Occupied by a Bidisperse Porous Medium: Symmetric Case. Journal of Heat Transfer, 2011, 133, .	1.2	35
119	Special Issue on Heat and Mass Transfer in Biosystems. Journal of Heat Transfer, 2011, 133, .	1.2	0
120	Transverse Heterogeneity Effects in the Dissipation-Induced Instability of a Horizontal Porous Layer. Journal of Heat Transfer, 2011, 133, .	1.2	15
121	Modelling active transport in Drosophila unipolar motor neurons. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 1117-1131.	0.9	4
122	Comparison Between Numerically Simulated and Experimentally Measured Flowfield Quantities Behind a Pulsejet. Flow, Turbulence and Combustion, 2010, 84, 653-667.	1.4	22
123	Modeling organelle transport in branching dendrites with a variable cross-sectional area. Journal of Biological Physics, 2010, 36, 385-403.	0.7	2
124	The Effect of Strong Heterogeneity on the Onset of Convection in a Porous Medium: Periodic and Localized Variation. Transport in Porous Media, 2010, 81, 123-139.	1.2	16
125	Thermal Instability in a Porous Medium Layer Saturated by a Nanofluid: Brinkman Model. Transport in Porous Media, 2010, 81, 409-422.	1.2	218
126	Effect of Local Thermal Non-equilibrium on the Onset of Convection in a Porous Medium Layer Saturated by a Nanofluid. Transport in Porous Media, 2010, 83, 425-436.	1.2	166

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127	The Effect of Strong Heterogeneity on the Onset of Convection in a Porous Medium: 2D/3D Localization and Spatially Correlated Random Permeability Fields. Transport in Porous Media, 2010, 83, 465-477.	1.2	24
128	The Onset of Convection in a Heterogeneous Porous Medium with Transient Temperature Profile. Transport in Porous Media, 2010, 85, 691-702.	1.2	16
129	The Onset of Double-Diffusive Nanofluid Convection in a Layer of a Saturated Porous Medium. Transport in Porous Media, 2010, 85, 941-951.	1.2	161
130	Corrigendum to â€˜Forced Convection with Slip-Flow in a Channel Occupied by a Hyperporous Medium Saturated by a Rarefied Gasâ€™, Transport in Porous Media, 64, 161â€“170, 2006, and â€˜Thermally Developing Forced Convection in a Porous Medium Occupied by a Rarefied Gas: Parallel Plate Channel or Circular Tube with Walls at Constant Heat Fluxâ€™, Transport in Porous Media, 76, 345â€“362, 2009. Transport in Porous Media, 2010, 85, 657-658.	1.2	3
131	Effect of the degree of polar mismatching on traffic jam formation in fast axonal transport. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 711-722.	0.9	11
132	MODELING TRAFFIC JAMS IN SLOW AXONAL TRANSPORT. Journal of Mechanics in Medicine and Biology, 2010, 10, 445-465.	0.3	3
133	Effect of strong heterogeneity on the onset of convection in a porous medium: Importance of spatial dimensionality and geologic controls. Water Resources Research, 2010, 46, .	1.7	29
134	Effect of vesicle traps on traffic jam formation in fast axonal transport. Mathematical Biosciences, 2010, 226, 147-155.	0.9	10
135	Comparison of active transport in neuronal axons and dendrites. Mathematical Biosciences, 2010, 228, 195-202.	0.9	5
136	Modeling of particle trajectories in an electrostatically charged channel. Physics of Fluids, 2010, 22, .	1.6	35
137	Forced Convection With Laminar Pulsating Counterflow in a Saturated Porous Channel. Journal of Heat Transfer, 2009, 131, .	1.2	4
138	Thermally Developing Forced Convection in a Porous Medium Occupied by a Rarefied Gas: Parallel Plate Channel or Circular Tube with Walls at Constant Heat Flux. Transport in Porous Media, 2009, 76, 345-362.	1.2	35
139	Forced Convection with Laminar Pulsating Counterflow in a Saturated Porous Circular Tube. Transport in Porous Media, 2009, 77, 447-462.	1.2	8
140	The Effect of Strong Heterogeneity on the Onset of Convection in a Porous Medium. Transport in Porous Media, 2009, 77, 169-186.	1.2	27
141	The effect of a transition layer between a fluid and a porous medium: shear flow in a channel. Transport in Porous Media, 2009, 78, 477-487.	1.2	53
142	A macroscopic model of traffic jams in axons. Mathematical Biosciences, 2009, 218, 142-152.	0.9	27
143	Experimental and numerical investigation of the peeling force required for the detachment of fabric from the forming belt in the hydroentanglement process. Journal of the Textile Institute, 2009, 100, 99-110.	1.0	2
144	Combined numerical and experimental investigation on the effect of jet pressure and forming belt geometry on the hydroentanglement process. Journal of the Textile Institute, 2009, 100, 293-304.	1.0	6

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145	The effects of combined horizontal and vertical heterogeneity on the onset of convection in a porous medium: double diffusive case. Transport in Porous Media, 2008, 72, 157-170.	1.2	36
146	Investigation of a particulate flow containing spherical particles subjected to microwave heating. Heat and Mass Transfer, 2008, 44, 481-493.	1.2	12
147	Analytical investigation of transient molecular-motor-assisted transport in elongated cells. Open Physics, 2008, 6, 45-51.	0.8	3
148	On the evolution of salt lakes: Episodic convection beneath an evaporating salt lake. Water Resources Research, 2008, 44, .	1.7	37
149	The Effect of a Transition Layer Between a Fluid and a Porous Medium: Forced Convection in a Channel. Journal of Heat Transfer, 2008, 130, .	1.2	4
150	Numerical modeling of molecular-motor-assisted transport of adenoviral vectors in a spherical cell. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 215-222.	0.9	7
151	Applications of the Minimum Principle of Pontryagin for Solving Optimal Control Problems. Contemporary Food Engineering, 2008, , .	0.2	0
152	The Onset of Convection in a Porous Medium Occupying an Enclosure of Variable Width or Height. Journal of Heat Transfer, 2007, 129, 1714-1718.	1.2	9
153	Numerical Modeling of a Moving Particle in a Continuous Flow Subjected to Microwave Heating. Numerical Heat Transfer; Part A: Applications, 2007, 52, 417-439.	1.2	16
154	Fibers Caught in the Knuckles of the Forming Wires: Experimental Measurements and Physical Origins of the Force of Peeling in the Hydroentanglement Process. Journal of Engineered Fibers and Fabrics, 2007, 2, 155892500700200.	0.5	0
155	Dynamics of large solid particles in bioconvective sedimentation. International Journal for Numerical Methods in Fluids, 2007, 53, 713-733.	0.9	6
156	The onset of convection in a shallow box occupied by a heterogeneous porous medium with constant flux boundaries. Transport in Porous Media, 2007, 67, 441-451.	1.2	19
157	Reply to comments on â€˜Forced convection with slip-flow in a channel or duct occupied by a hyper-porous medium saturated by a rarefied gasâ€™. Transport in Porous Media, 2007, 67, 169-170.	1.2	7
158	Flow instability in a curved porous channel formed by two concentric cylindrical surfaces. Transport in Porous Media, 2007, 69, 373-381.	1.2	4
159	Modeling of the Hydroentanglement Process. Journal of Engineered Fibers and Fabrics, 2006, 1, 155892500600100.	0.5	9
160	Forced Convection with Slip-flow in a Channel or Duct Occupied by a Hyper-porous Medium Saturated by a Rarefied Gas. Transport in Porous Media, 2006, 64, 161-170.	1.2	43
161	Renormalization Group Model of Large-Scale Turbulence in Porous Media. Transport in Porous Media, 2006, 63, 175-193.	1.2	11
162	The Onset of Convection in a Suspension of Gyrotactic Microorganisms in Superimposed Fluid and Porous Layers: Effect of Vertical Throughflow. Transport in Porous Media, 2006, 65, 159-176.	1.2	30

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163	Forced Convection with Laminar Pulsating Flow in a Saturated Porous Channel or Tube. Transport in Porous Media, 2006, 65, 505-523.	1.2	26
164	Combined Numerical and Experimental Investigation of a 15-cm Valveless Pulsejet. Flow, Turbulence and Combustion, 2006, 78, 17-33.	1.4	23
165	Investigation of the onset of bioconvection in a suspension of oxytactic microorganisms subjected to high-frequency vertical vibration. Theoretical and Computational Fluid Dynamics, 2006, 20, 73-87.	0.9	23
166	Numerical simulation of forced convection in a duct subjected to microwave heating. Heat and Mass Transfer, 2006, 43, 255-264.	1.2	34
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