Rongjia Tao

List of Publications by Year
in descending order

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82	2,550	257450 24	189892 50
papers	citations	h-index	g-index

86	86	86	1199
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-dimensional structure of induced electrorheological solid. Physical Review Letters, 1991, 67, 398-401.	7.8	462
2	Laser diffraction determination of the crystalline structure of an electrorheological fluid. Physical Review Letters, 1992, 68, 2555-2558.	7.8	183
3	Reducing the Viscosity of Crude Oil by Pulsed Electric or Magnetic Field. Energy & Fuels, 2006, 20, 2046-2051.	5.1	160
4	Fractional quantization of Hall conductance. Physical Review B, 1983, 28, 1142-1144.	3.2	151
5	Simulation of structure formation in an electrorheological fluid. Physical Review Letters, 1994, 73, 205-208.	7.8	147
6	Super-strong magnetorheological fluids. Journal of Physics Condensed Matter, 2001, 13, R979-R999.	1.8	147
7	Gauge invariance and fractional quantum Hall effect. Physical Review B, 1984, 30, 1097-1098.	3.2	101
8	Ground state of electrorheological fluids from Monte Carlo simulations. Physical Review A, 1991, 44, R6181-R6184.	2.5	77
9	Impurity effect, degeneracy, and topological invariant in the quantum Hall effect. Physical Review B, 1986, 33, 3844-3850.	3.2	68
10	Reducing blood viscosity with magnetic fields. Physical Review E, 2011, 84, 011905.	2.1	66
11	Electric field induced solidification. Applied Physics Letters, 1989, 55, 1844-1846.	3.3	64
12	Reducing viscosity of paraffin base crude oil with electric field for oil production and transportation. Fuel, 2014, 118, 69-72.	6.4	59
13	Finite-element analysis of electrostatic interactions in electrorheological fluids. Physical Review E, 1995, 52, 2727-2735.	2.1	54
14	Electrorheology leads to healthier and tastier chocolate. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7399-7402.	7.1	54
15	Electric-field-induced phase transition in electrorheological fluids. Physical Review E, 1993, 47, 423-426.	2.1	53
16	Flexible Fixturing with Phase-Change Materials. Part 1. Experimental Study on Magnetorheological Fluids. International Journal of Advanced Manufacturing Technology, 2000, 16, 822-829.	3.0	43
17	Electrorheology Leads to Efficient Combustion. Energy & Fuels, 2008, 22, 3785-3788.	5.1	41
18	Electronic density of levels in a disordered system. Annals of Physics, 1983, 145, 185-203.	2.8	37

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19	Diffusion-limited aggregation with surface tension. Physical Review A, 1988, 38, 1019-1026.	2.5	37
20	Fractional quantization of Hall conductance. II. Physical Review B, 1984, 29, 636-644.	3.2	36
21	Neutron scattering studies of crude oil viscosity reduction with electric field. Fuel, 2014, 134, 493-498.	6.4	36
22	Static shear stress of electrorheological fluids. Physical Review E, 1993, 48, 2744-2751.	2.1	35
23	Fractional statistics and fractional quantized Hall effect. Physical Review B, 1985, 31, 6859-6860.	3.2	33
24	Exact Solution for Diffusion in a Random Potential. Physical Review Letters, 1988, 61, 2405-2408.	7.8	26
25	Flexible Fixture Device with Magneto-Rheological Fluids. Journal of Intelligent Material Systems and Structures, 1999, 10, 690-694.	2.5	25
26	Ground-state energy of charged quantum fluids in two dimensions. Physical Review B, 1986, 34, 7123-7128.	3.2	24
27	Electrorheology Improves Transportation of Crude Oil. Journal of Intelligent Material Systems and Structures, 2011, 22, 1673-1676.	2.5	23
28	Electric-field induced low temperature superconducting granular balls. Physica C: Superconductivity and Its Applications, 2002, 377, 357-361.	1.2	20
29	Three-dimensional dielectric photonic crystals of body-centered-tetragonal lattice structure. Applied Physics Letters, 2002, 80, 4702-4704.	3.3	19
30	Viscosity of a one-component polarizable fluid. Physical Review E, 1995, 52, 813-818.	2.1	16
31	Electrorheology for Efficient Energy Production and Conservation. Journal of Intelligent Material Systems and Structures, 2011, 22, 1667-1671.	2.5	16
32	Interactions between a rotating polarized sphere and a stationary one in an electric field. Physical Review E, 2005, 72, 041508.	2.1	13
33	Suppressing turbulence and enhancing liquid suspension flow in pipelines with electrorheology. Physical Review E, 2015, 91, 012304.	2.1	13
34	Path-integral approach to diffusion in random media. Physical Review A, 1991, 43, 5284-5288.	2.5	12
35	Comment on Laughlin's wavefunction for the quantised Hall effect. Journal of Physics C: Solid State Physics, 1984, 17, L53-L58.	1.5	11
36	Fractional statistics and the quantum Hall effect of two-dimensional fermion and boson systems. Physical Review B, 1986, 33, 2937-2940.	3.2	11

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37	Exact Solution for Diffusion in a Random Potential. Physical Review Letters, 1989, 63, 2695-2695.	7.8	11
38	MgB2 superconducting particles in a strong electric field. Physica C: Superconductivity and Its Applications, 2003, 398, 78-84.	1.2	10
39	Structure and dynamics of dipolar fluids under strong shear. Chemical Engineering Science, 2006, 61, 2186-2190.	3.8	10
40	Structure of Polydisperse Inverse Ferrofluids:Â Theory and Computer Simulation. Journal of Physical Chemistry B, 2008, 112, 715-721.	2.6	10
41	Response to the Comments: Fuel Efficiency of Internal Combustion Engines. Energy & Fuels, 2009, 23, 3339-3342.	5.1	10
42	Second-harmonic generation of nonlinear optical crystals in vacuum-ultraviolet and x-ray regions. Physical Review A, 1995, 51, 706-711.	2.5	9
43	VISCOSITY REDUCTION IN LIQUID SUSPENSIONS BY ELECTRIC OR MAGNETIC FIELDS. International Journal of Modern Physics B, 2005, 19, 1283-1289.	2.0	9
44	Exact evaluation of Green's functions for a class of one-dimensional disordered systems. Physical Review B, 1983, 27, 935-944.	3.2	8
45	Coulomb energy and correlations of inversion-layer electrons in metal-oxide-semiconductor field-effect transistor devices. Physical Review B, 1988, 38, 10787-10790.	3.2	8
46	Testing and Modeling a Cone-Shaped Squeeze-Film Mode Electrorheological Damper. Journal of Intelligent Material Systems and Structures, 1999, 10, 748-752.	2.5	8
47	Reducing the Viscosity of Diesel Fuel with Electrorheological Effect. Journal of Intelligent Material Systems and Structures, 2011, 22, 1713-1716.	2.5	8
48	Radiative impedance of one-dimensional ballistic channels in FET devices. Journal of Physics C: Solid State Physics, 1988, 21, L1061-L1063.	1.5	7
49	Relaxation in DLA with surface tension. Journal of Physics A, 1990, 23, 3271-3278.	1.6	7
50	Deformation of an electrorheological chain under flow. Journal of Applied Physics, 1993, 74, 942-944.	2.5	6
51	Electrorheology Improves E85 Engine Efficiency and Performance. Journal of Intelligent Material Systems and Structures, 2011, 22, 1707-1711.	2.5	6
52	Ground state energy of the fractional quantised Hall system. Journal of Physics C: Solid State Physics, 1984, 17, L419-L423.	1.5	5
53	Completeness of the localised Landau orbits. Journal of Physics C: Solid State Physics, 1986, 19, L619-L625.	1.5	4
54	Structure and Dynamics of Dipolar Fluids Under Strong Shear. International Journal of Modern Physics B, 2003, 17, 3057-3063.	2.0	4

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55	Dynamic current oscillations in the quantum hall effect. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 117, 481-484.	2.1	3
56	Theory of the fractional quantum Hall effect. Journal of Physics C: Solid State Physics, 1986, 19, 173-180.	1.5	3
57	Multidimensional diffusion in random potentials. Physical Review A, 1989, 39, 3748-3750.	2.5	3
58	Optical constants of lithium triborate crystals in the 55â€“71 eV region. Physical Review B, 1995, 52, 13703-13706.	3.2	3
59	Spin statistics connection and selection rule in the quantum Hall effect. Journal of Physics C: Solid State Physics, 1985, 18, L1003-L1006.	1.5	2
60	The vicious neighbour problem. Journal of Physics A, 1987, 20, L299-L306.	1.6	2
61	Integral and fractional quantization of a class of quantum systems. Physical Review B, 1987, 35, 9853-9855.	3.2	2
62	Imaging analysis by means of fractional fourier transform. Journal of Shanghai University, 2001, 5, 292-294.	0.1	2
63	Path-Integral Approach to the Statistical Physics of One-Dimensional Random Systems. Journal of Statistical Physics, 2001, 103, 575-588.	1.2	2
64	Electrostatic separation of superconducting particles from a mixture. Applied Physics Letters, 2006, 88, 082503.	3.3	2
65	Eliminating the major tornado threat in Tornado Alley. International Journal of Modern Physics B, 2014, 28, 1450175.	2.0	2
66	Reply to Ziegler et al.: Electrorheological technology to make chocolate healthier and tastier. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6319-E6320.	7.1	2
67	Response to the comment by N d'Ambrumenil. Journal of Physics C: Solid State Physics, 1984, 17, L977-L978.	1.5	1
68	Quantum hall effect of two-dimensional interacting boson systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 116, 277-280.	2.1	1
69	Comment on "Experimental Determination of Fractional Chargeeqfor Quasiparticle Excitations in the Fractional Quantum Hall Effect". Physical Review Letters, 1988, 61, 2972-2972.	7.8	1
70	Fifth International Conference on Electrorheological Fluids, Magnetorheological Suspensions, and Associated Technology. Materials Technology, 1995, 10, 156-158.	3.0	1
71	Constitutive equations for electrorheological fluids based on molecular dynamics. Rheology Series, 1999, , 659-676.	0.1	1
72	Comment on â€œSpherical agglomeration of superconducting and normal microparticles with and without applied electric fieldâ€• Physical Review B, 2013, 87, .	3.2	1

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73	Reply to Smith: Electrorheological technology reduces the chocolate viscosity and fat level. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5255-E5256.	7.1	1
74	Critical volume in diffusion through random media. Physical Review A, 1990, 42, 994-996.	2.5	0
75	Theory of the voltage biased Josephson model. Journal of Physics Condensed Matter, 1991, 3, 3505-3509.	1.8	0
76	International Conference on Electrorheological Fluids. Materials and Processing Report, 1992, 7, 5-7.	0.0	0
77	Fourth International Conference on Electrorheological Fluids. Materials Technology, 1993, 8, 259-261.	3.0	0
78	Falling ball experiments in a dilute electrorheological fluid. Journal of Applied Physics, 1994, 75, 193-196.	2.5	0
79	Theorists succumb to Tao. Physics World, 2005, 18, 24-25.	0.0	0
80	INTERACTIONS BETWEEN TWO ROTATING POLARIZED SPHERES. International Journal of Modern Physics B, 2005, 19, 1215-1221.	2.0	0
81	Special issueâ€”12th International Conference on Electrorheological Fluids and Magnetorheological Suspensionsâ€”part 2. Journal of Intelligent Material Systems and Structures, 2012, 23, 947-948.	2.5	0
82	Can we eliminate major tornadoes in Tornado Alley? â€” Response to the Comments. International Journal of Modern Physics B, 2014, 28, 1475005.	2.0	0