R Tao

List of Publications by Year
in descending order

87 papers	2,765 citations	236612 25 h-index	174990 52 g-index
88 all docs	88 docs citations	88 times ranked	1165 citing authors

#	Article	IF	Citations
1	Electric field suppressed turbulence and reduced viscosity of asphaltene base crude oil sample. Fuel, 2018, 220, 358-362.	3.4	19
2	Bunker diesel viscosity is dramatically reduced by electrorheological treatment. International Journal of Modern Physics B, 2018, 32, 1850012.	1.0	4
3	Application of Electrorheology to Improve Crude Oil Flowing Properties Through Pipeline. , 2016, , .		0
4	Suppressing turbulence and enhancing liquid suspension flow in pipelines with electrorheology. Physical Review E, 2015, 91, 012304.	0.8	13
5	Can we eliminate major tornadoes in Tornado Alley? â€" Response to the Comments. International Journal of Modern Physics B, 2014, 28, 1475005.	1.0	0
6	Reducing viscosity of paraffin base crude oil with electric field for oil production and transportation. Fuel, 2014, 118, 69-72.	3.4	59
7	Eliminating the major tornado threat in Tornado Alley. International Journal of Modern Physics B, 2014, 28, 1450175.	1.0	2
8	Neutron scattering studies of crude oil viscosity reduction with electric field. Fuel, 2014, 134, 493-498.	3.4	36
9	Comment on â€œSpherical agglomeration of superconducting and normal microparticles with and without applied electric fieldâ€. Physical Review B, 2013, 87, .	1.1	1
10	Electrorheology for Efficient Energy Production and Conservation. Journal of Intelligent Material Systems and Structures, 2011, 22, 1667-1671.	1.4	16
11	Reducing blood viscosity with magnetic fields. Physical Review E, 2011, 84, 011905.	0.8	66
12	ELECTRORHEOLOGY FOR EFFICIENT ENERGY PRODUCTION AND CONSERVATION. , 2011, , .		0
13	Reducing the Viscosity of Diesel Fuel with Electrorheological Effect. Journal of Intelligent Material Systems and Structures, 2011, 22, 1713-1716.	1.4	8
14	Electrorheology Improves Transportation of Crude Oil. Journal of Intelligent Material Systems and Structures, 2011, 22, 1673-1676.	1.4	23
15	Electrorheology Improves E85 Engine Efficiency and Performance. Journal of Intelligent Material Systems and Structures, 2011, 22, 1707-1711.	1.4	6
16	ELECTRORHEOLOGY IMPROVES TRANSPORTATION OF CRUDE OIL. , 2011, , .		0
17	REDUCING THE VISCOSITY OF DIESEL FUEL WITH ELECTROREHOLOGICAL EFFECT. , 2011, , .		1
18	ELECTRORHEOLOGY IMPROVES E85-ENGINE PERFORMANCE AND EFFICIENCY. , 2011, , .		0

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19	Response to the Comments: Fuel Efficiency of Internal Combustion Engines. Energy & Fuels, 2009, 23, 3339-3342.	2.5	10
20	Electrorheology improves engine efficiency. Journal of Physics: Conference Series, 2009, 149, 012030.	0.3	1
21	Electrorheology Leads to Efficient Combustion. Energy & Fuels, 2008, 22, 3785-3788.	2.5	41
22	Structure of Polydisperse Inverse Ferrofluids:Â Theory and Computer Simulation. Journal of Physical Chemistry B, 2008, 112, 715-721.	1.2	10
23	THE PHYSICAL MECHANISM TO REDUCE VISCOSITY OF LIQUID SUSPENSIONS. International Journal of Modern Physics B, 2007, 21, 4767-4773.	1.0	21
24	The Physical Mechanism to Reduce Viscosity of Liquid Suspensions. , 2007, , .		2
25	Reducing the Viscosity of Crude Oil by Pulsed Electric or Magnetic Field. Energy & Fuels, 2006, 20, 2046-2051.	2.5	160
26	Structure and dynamics of dipolar fluids under strong shear. Chemical Engineering Science, 2006, 61, 2186-2190.	1.9	10
27	Electrostatic separation of superconducting particles from a mixture. Applied Physics Letters, 2006, 88, 082503.	1.5	2
28	INTERACTIONS BETWEEN TWO ROTATING POLARIZED SPHERES. , 2005, , .		0
29	Interactions between a rotating polarized sphere and a stationary one in an electric field. Physical Review E, 2005, 72, 041508.	0.8	13
30	INTERACTIONS BETWEEN TWO ROTATING POLARIZED SPHERES. International Journal of Modern Physics B, 2005, 19, 1215-1221.	1.0	0
31	VISCOSITY REDUCTION IN LIQUID SUSPENSIONS BY ELECTRIC OR MAGNETIC FIELDS. International Journal of Modern Physics B, 2005, 19, 1283-1289.	1.0	9
32	VISCOSITY REDUCTION IN LIQUID SUSPENSIONS BY ELECTRIC OR MAGNETIC FIELDS. , 2005, , .		0
33	MgB2 superconducting particles in a strong electric field. Physica C: Superconductivity and Its Applications, 2003, 398, 78-84.	0.6	10
34	High temperature superconducting ball formation in low frequency ac fields. Physical Review B, 2003, 68, .	1.1	9
35	Structure and Dynamics of Dipolar Fluids Under Strong Shear. International Journal of Modern Physics B, 2003, 17, 3057-3063.	1.0	4
36	Three-dimensional dielectric photonic crystals of body-centered-tetragonal lattice structure. Applied Physics Letters, 2002, 80, 4702-4704.	1.5	19

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37	STRUCTURE-ENHANCED YIELD SHEAR STRESS IN ELECTRORHEOLOGICAL FLUIDS. International Journal of Modern Physics B, 2002, 16, 2622-2628.	1.0	7
38	Electric-Field Induced Formation of Superconducting Granular Balls. International Journal of Modern Physics B, 2002, 16, 2529-2535.	1.0	3
39	STRUCTURE-ENHANCED YIELD SHEAR STRESS IN ELECTRORHEOLOGICAL FLUIDS. , 2002, , .		1
40	Electric-Field Induced Formation of Superconducting Granular Balls. , 2002, , .		0
41	Electric-field induced low temperature superconducting granular balls. Physica C: Superconductivity and Its Applications, 2002, 377, 357-361.	0.6	20
42	Path-Integral Approach to the Statistical Physics of One-Dimensional Random Systems. , 2001, 103, 575-588.		2
43	Super-strong magnetorheological fluids. Journal of Physics Condensed Matter, 2001, 13, R979-R999.	0.7	147
44	Structures of a Magnetorheological Fluid. International Journal of Modern Physics B, 2001, 15, 851-858.	1.0	28
45	Enhance the Yield Shear Stress of Magnetorheological Fluids. International Journal of Modern Physics B, 2001, 15, 549-556.	1.0	23
46	ELECTRORHEOLOGICAL FLUIDS UNDER SHEAR. International Journal of Modern Physics B, 2001, 15, 918-929.	1.0	12
47	High temperature superconducting granular balls. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1575-1578.	0.6	3
48	Flexible Fixturing with Phase-Change Materials. Part 1. Experimental Study on Magnetorheological Fluids. International Journal of Advanced Manufacturing Technology, 2000, 16, 822-829.	1.5	43
49	Structure-enhanced yield stress of magnetorheological fluids. Journal of Applied Physics, 2000, 87, 2634-2638.	1.1	190
50	Electrorheological Effect at Cryogenic Temperature. International Journal of Modern Physics B, 1999, 13, 1697-1704.	1.0	6
51	Formation of High Temperature Superconducting Balls. Physical Review Letters, 1999, 83, 5575-5578.	2.9	41
52	Apply the Electrorheological Effect to Produce Three-Dimensional Photonic Crystals for Laser Applications. International Journal of Modern Physics B, 1999, 13, 2189-2196.	1.0	8
53	Flexible Fixture Device with Magneto-Rheological Fluids. Journal of Intelligent Material Systems and Structures, 1999, 10, 690-694.	1.4	25
54	Constitutive equations for electrorheological fluids based on molecular dynamics. Rheology Series, 1999, , 659-676.	0.1	1

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55	Structural transitions of an electrorheological and magnetorheological fluid. Physical Review E, 1998, 57, 5761-5765.	0.8	35
56	Structures of an electrorheological fluid. Physical Review E, 1997, 56, 4328-4336.	0.8	58
57	Shear flow of one-component polarizable fluid in a strong electric field. Physical Review E, 1996, 53, 3732-3737.	0.8	16
58	Finite Element Analysis of Electrorheological Fluids. International Journal of Modern Physics B, 1996, 10, 2877-2884.	1.0	1
59	Effective Viscosity of an Electrorheological Fluid. Journal of Intelligent Material Systems and Structures, 1996, 7, 555-559.	1.4	0
60	Finite-element analysis of electrostatic interactions in electrorheological fluids. Physical Review E, 1995, 52, 2727-2735.	0.8	54
61	Viscosity of a one-component polarizable fluid. Physical Review E, 1995, 52, 813-818.	0.8	16
62	SIMULATION OF SOLID STRUCTURE FORMATION IN AN ELECTRORHEOLOGICAL FLUID. International Journal of Modern Physics B, 1994, 08, 2721-2730.	1.0	2
63	FLUID FLOW AND FALLING BALL EXPERIMENTS IN ER FLUIDS. International Journal of Modern Physics B, 1994, 08, 2823-2833.	1.0	2
64	Falling ball experiments in a dilute electrorheological fluid. Journal of Applied Physics, 1994, 75, 193-196.	1.1	0
65	Simulation of structure formation in an electrorheological fluid. Physical Review Letters, 1994, 73, 205-208.	2.9	147
66	Electric-field-induced phase transition in electrorheological fluids. Physical Review E, 1993, 47, 423-426.	0.8	53
67	Static shear stress of electrorheological fluids. Physical Review E, 1993, 48, 2744-2751.	0.8	35
68	Deformation of an electrorheological chain under flow. Journal of Applied Physics, 1993, 74, 942-944.	1.1	6
69	ORDER PARAMETERS AND PHASE TRANSITIONS IN ELECTRORHEOLOGICAL FLUIDS. International Journal of Modern Physics B, 1992, 06, 2635-2649.	1.0	3
70	Laser diffraction determination of the crystalline structure of an electrorheological fluid. Physical Review Letters, 1992, 68, 2555-2558.	2.9	183
71	Three-dimensional structure of induced electrorheological solid. Physical Review Letters, 1991, 67, 398-401.	2.9	462
72	Ground state of electrorheological fluids from Monte Carlo simulations. Physical Review A, 1991, 44, R6181-R6184.	1.0	77

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73	Electric Field Induced Solidification â€" Theory of Electro-Rheology Fluids. , 1991, , 155-160.		1
74	Symmetry Breaking and Fractional Quantization of Quantum Systems. , 1991, , 519-525.		0
75	THERMODYNAMIC STABILITY OF THE TWO-DIMENSIONAL JELLIUM MODEL IN A STRONG MAGNETIC FIELD. International Journal of Modern Physics B, 1989, 03, 129-134.	1.0	0
76	Electric field induced solidification. Applied Physics Letters, 1989, 55, 1844-1846.	1.5	64
77	Integral and fractional quantization of a class of quantum systems. Physical Review B, 1987, 35, 9853-9855.	1.1	2
78	Dynamic current oscillations in the quantum hall effect. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 117, 481-484.	0.9	3
79	Theory of the fractional quantum Hall effect. Journal of Physics C: Solid State Physics, 1986, 19, 173-180.	1.5	3
80	Impurity effect, degeneracy, and topological invariant in the quantum Hall effect. Physical Review B, 1986, 33, 3844-3850.	1.1	68
81	Fractional statistics and fractional quantized Hall effect. Physical Review B, 1985, 31, 6859-6860.	1.1	33
82	Ground state energy of the fractional quantised Hall system. Journal of Physics C: Solid State Physics, 1984, 17, L419-L423.	1.5	5
83	Comment on Laughlin's wavefunction for the quantised Hall effect. Journal of Physics C: Solid State Physics, 1984, 17, L53-L58.	1.5	11
84	Response to the comment by N d'Ambrumenil. Journal of Physics C: Solid State Physics, 1984, 17, L977-L978.	1.5	1
85	Fractional quantization of Hall conductance. II. Physical Review B, 1984, 29, 636-644.	1.1	36
86	Gauge invariance and fractional quantum Hall effect. Physical Review B, 1984, 30, 1097-1098.	1.1	101
87	Fractional quantization of Hall conductance. Physical Review B, 1983, 28, 1142-1144.	1.1	151