Quanhui Liu

List of Publications by Year
in descending order

98	2,143	304743	243625
papers	citations	22 h-index	44 g-index

99	99	99	2863
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Gradient Solid Electrolyte Interphase and Lithiumâ€Ion Solvation Regulated by Bisfluoroacetamide for Stable Lithium Metal Batteries. Angewandte Chemie - International Edition, 2021, 60, 6600-6608.	13.8	249
2	Oxygen-deficient anatase TiO₂@C nanospindles with pseudocapacitive contribution for enhancing lithium storage. Journal of Materials Chemistry A, 2018, 6, 4013-4022.	10.3	206
3	Nitrogen, Fluorine, and Boron Ternary Doped Carbon Fibers as Cathode Electrocatalysts for Zincâ€“Air Batteries. Small, 2018, 14, e1800737.	10.0	159
4	Recent advances in cathode materials for rechargeable lithiumâ€“sulfur batteries. Nanoscale, 2019, 11, 15418-15439.	5.6	125
5	Shape factor of nonspherical nanoparticles. Journal of Materials Science, 2005, 40, 2737-2739.	3.7	94
6	Recent progress in Zn-based anodes for advanced lithium ion batteries. Materials Chemistry Frontiers, 2018, 2, 1414-1435.	5.9	91
7	Porous ultrathin carbon nanobubbles formed carbon nanofiber webs for high-performance flexible supercapacitors. Journal of Materials Chemistry A, 2017, 5, 14801-14810.	10.3	89
8	Quantum measurements with preselection and postselection. Physical Review A, 2011, 84, .	2.5	84
9	High-performance ethanol sensing based on an aligned assembly of ZnO nanorods. Sensors and Actuators B: Chemical, 2008, 135, 57-60.	7.8	83
10	A Sb₂S₃ Nanoflower/MXene Composite as an Anode for Potassium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 57907-57915.	8.0	82
11	Enhancement of charge transport in porous carbon nanofiber networks via ZIF-8-enabled welding for flexible supercapacitors. Chemical Engineering Journal, 2020, 382, 122979.	12.7	76
12	Mesoporous Carbonâ€Coated Bismuth Nanorods as Anode for Potassiumâ€Ion Batteries. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900209.	2.4	47
13	Geometric momentum: The proper momentum for a free particle on a two-dimensional sphere. Physical Review A, 2011, 84, .	2.5	44
14	Electrochemical CO2 reduction over nitrogen-doped SnO2 crystal surfaces. Journal of Energy Chemistry, 2019, 33, 22-30.	12.9	38
15	Strain engineering the D-band center for Janus MoSSe edge: Nitrogen fixation. Journal of Energy Chemistry, 2019, 33, 155-159.	12.9	32
16	Substrate-free growth, characterization and growth mechanism of ZnO nanorod close-packed arrays. Nanotechnology, 2008, 19, 035704.	2.6	31
17	Current-driven magnetization dynamics in magnetic trilayers with a tilted spin polarizer. European Physical Journal B, 2010, 73, 417-421.	1.5	31
18	Inâ€Situ Synthesis of 3D Carbon Coated Zincâ€Cobalt Bimetallic Oxide Networks as Anode in Lithiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 1708-1716.	3.4	28

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19	Constraint-induced mean curvature dependence of Cartesian momentum operators. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 4161-4168.	2.1	27
20	Quantum motion on a torus as a submanifold problem in a generalized Diracâ€™s theory of second-class constraints. Annals of Physics, 2013, 338, 123-133.	2.8	26
21	Can Dirac quantization of constrained systems be fulfilled within the intrinsic geometry?. Annals of Physics, 2014, 341, 132-141.	2.8	26
22	Geometric momentum for a particle constrained on a curved hypersurface. Journal of Mathematical Physics, 2013, 54, .	1.1	24
23	Gradient Solid Electrolyte Interphase and Lithiumâ€ion Solvation Regulated by Bisfluoroacetamide for Stable Lithium Metal Batteries. Angewandte Chemie, 2021, 133, 6674-6682.	2.0	23
24	Geometric Momentum and a Probe of Embedding Effects. Journal of the Physical Society of Japan, 2013, 82, 104002.	1.6	21
25	Phase diagram of magnetic multilayers with tilted dual spin torques. Journal of Applied Physics, 2011, 109, .	2.5	19
26	Recent progresses on SnO₂ anode materials for sodium storage. Journal Physics D: Applied Physics, 2020, 53, 353001.	2.8	18
27	Spheres and prolate and oblate ellipsoids from an analytical solution of the spontaneous-curvature fluid-membrane model. Physical Review E, 1999, 60, 3227-3233.	2.1	15
28	Fluids in porous media. I. A hard sponge model. Journal of Chemical Physics, 2006, 125, 244703.	3.0	15
29	An Enlarged Canonical Quantization Scheme and Quantization of a Free Particle on Two-Dimensional Sphere. Communications in Theoretical Physics, 2015, 63, 19-24.	2.5	15
30	Orientational Imaging of a Single Gold Nanorod at the Liquid/Solid Interface with Polarized Evanescent Field Illumination. Analytical Chemistry, 2016, 88, 1995-1999.	6.5	15
31	The structural and optical properties of ZnO nanorods via citric acid-assisted annealing route. Journal of Materials Science, 2008, 43, 6527-6530.	3.7	14
32	Kinetic details of crystallization in supercooled liquid Pb during the isothermal relaxation. Physica B: Condensed Matter, 2012, 407, 240-245.	2.7	13
33	GEOMETRIC MOMENTUM IN THE MONGE PARAMETRIZATION OF TWO-DIMENSIONAL SPHERE. International Journal of Geometric Methods in Modern Physics, 2013, 10, 1220031.	2.0	13
34	Constructive-interference-enhanced Fano resonance of silver plasmonic heptamers with a substrate mirror: a numerical study. Optics Express, 2017, 25, 9938.	3.4	13
35	The hydrogen atom's quantum-to-classical correspondence in Heisenberg's correspondence principle. Journal of Physics A, 2001, 34, 5713-5719.	1.6	12
36	Geometric Potential and Dirac Quantization. Annalen Der Physik, 2018, 530, 1700415.	2.4	12

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37	Controllable synthesis and optical characterizations of ZnO nanostructures by citric acid-assisted annealing process. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 531-535.	2.7	11
38	Tilted spin torque-driven ferromagnetic resonance in a perpendicular-analyzer magnetic trilayer. Journal of Magnetism and Magnetic Materials, 2010, 322, 2264-2267.	2.3	11
39	Formation and evolution characteristics of bcc phase during isothermal relaxation processes of supercooled liquid and amorphous metal Pb. Transactions of Nonferrous Metals Society of China, 2011, 21, 588-597.	4.2	11
40	The classical limit of quantum mechanics and the FejÃ©r sum of the Fourier series expansion of a classical quantity. Journal of Physics A, 1999, 32, L57-L62.	1.6	10
41	Quantum Motion on 2D Surface of Nonspherical Topology. International Journal of Theoretical Physics, 2004, 43, 1011-1017.	1.2	10
42	Microstructural evolution and martensitic transformation mechanisms during solidification processes of liquid metal Pb. Philosophical Magazine, 2012, 92, 571-585.	1.6	10
43	The centripetal force law and the equation of motion for a particle on a curved hypersurface. European Physical Journal C, 2016, 76, 1.	3.9	9
44	The complete Schwarzschild interior and exterior solution in the harmonic coordinate system. Journal of Mathematical Physics, 1998, 39, 6086-6090.	1.1	8
45	Quantum Hamiltonian for the Rigid Rotator. International Journal of Theoretical Physics, 2003, 42, 2877-2880.	1.2	7
46	WAVE PACKETS ON SPHERICAL SURFACE VIEWED FROM EXPECTATION VALUES OF CARTESIAN VARIABLES. International Journal of Geometric Methods in Modern Physics, 2010, 07, 411-423.	2.0	7
47	The classicality and quantumness of a quantum ensemble. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 1855-1859.	2.1	7
48	ON RELATION BETWEEN GEOMETRIC MOMENTUM AND ANNIHILATION OPERATORS ON A TWO-DIMENSIONAL SPHERE. International Journal of Geometric Methods in Modern Physics, 2013, 10, 1320007.	2.0	7
49	Generalized centripetal force law and quantization of motion constrained on 2D surfaces. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 87, 123-128.	2.7	7
50	The FejÃ©r average and the mean value of a quantity in a quasiclassical wave packet. Journal of Mathematical Physics, 2002, 43, 170-181.	1.1	6
51	A self-adjoint decomposition of the radial momentum operator. International Journal of Geometric Methods in Modern Physics, 2015, 12, 1550028.	2.0	6
52	Fourth order elastic chiral filament model and the centerline of uniform Kirchhoff elastic rod. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 352, 358-361.	2.1	5
53	Fluids in porous media. II. A new model of templated matrices. Journal of Chemical Physics, 2007, 127, 144701.	3.0	5
54	Boseâ€“Einstein condensation of bouncing balls. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 2383-2388.	2.6	5

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55	Raising and Lowering Operators for Orbital Angular Momentum Quantum Numbers. International Journal of Theoretical Physics, 2010, 49, 2164-2171.	1.2	5
56	A Particle Interacting with V-shaped Potential Decorated by a Dirac Delta Function Interaction at Center. Communications in Theoretical Physics, 2010, 53, 247-249.	2.5	5
57	Transformation Between Eigenfunctions of Three Components of Geometric Momentum on Two-Dimensional Sphere. Communications in Theoretical Physics, 2012, 58, 31-33.	2.5	5
58	Distribution of xp in some molecular rotational states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 785-789.	2.1	5
59	Cylindrical configurations of classical string with rigidity. Journal of Physics A, 1999, 32, 5493-5497.	1.6	4
60	Universality of Operator Ordering in Kinetic Energy Operator for Particles Moving on two Dimensional Surfaces. International Journal of Theoretical Physics, 2006, 45, 2137-2142.	1.2	4
61	Dependence of the existence of thermal equilibrium on the number of particles at low temperatures. American Journal of Physics, 2007, 75, 431-433.	0.7	4
62	A new model of templated porous materials. Journal of Molecular Liquids, 2007, 136, 241-248.	4.9	4
63	Ultraâ€Stable Asymmetric Supercapacitors Constructed by Inâ€Situ Electroâ€Oxidation Activated Ni@CNTs Composites. ChemElectroChem, 2018, 5, 3213-3221.	3.4	4
64	Static bistable helices in generalized Helfrich elastic theory of a chiral filament. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 317, 401-405.	2.1	3
65	Self-consistent theory for dynamic responses of mesoscopic systems. Physical Review B, 2007, 75, .	3.2	3
66	Information gain versus coupling strength in quantum measurements. Physical Review A, 2012, 85, .	2.5	3
67	Negative probabilities and information gain in weak measurements. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 2505-2509.	2.1	3
68	Negative differential resistance induced by SiNx co-dopant in armchair graphene nanoribbon. Modern Physics Letters B, 2014, 28, 1450229.	1.9	3
69	Split-orientation-modulated plasmon coupling in disk/sector dimers. Journal of Applied Physics, 2017, 121, .	2.5	3
70	Heisenberg equation for a nonrelativistic particle on a hypersurface: From the centripetal force to a curvature induced force. AIP Advances, 2017, 7, 125118.	1.3	3
71	Charge nonconservation of molecular devices in the presence of a nonlocal potential. Physical Review B, 2019, 100, .	3.2	3
72	Generally covariant geometric momentum, gauge potential and a Dirac fermion on a two-dimensional sphere. European Physical Journal C, 2019, 79, 1.	3.9	3

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73	APEX SHIFT OF CIRCULAR BICONCAVE VESICLES. International Journal of Modern Physics B, 2003, 17, 4661-4665.	2.0	2
74	Temperature fluctuations for a finite system of classical spin-1/2 particles. Annals of Physics, 2007, 322, 2168-2178.	2.8	2
75	An alternative quantum theory for single particles and a proposed experimental test. Frontiers of Physics in China, 2007, 2, 273-278.	1.0	2
76	Negative specific heat, phase transition and particles spilling from a potential well. Annals of Physics, 2008, 323, 1415-1423.	2.8	2
77	Chemical potential for the Bose gases in a one-dimensional harmonic trap. European Journal of Physics, 2010, 31, L51-L53.	0.6	2
78	On the existence of a local dipolar plasmon mode in doped small gold atomic arrays. Physical Review B, 2020, 101, .	3.2	2
79	Classical Limit of Expectation Values in a Wave Packet Involving Few Stationary States. International Journal of Theoretical Physics, 2003, 42, 783-791.	1.2	1
80	PERELOMOV AND BARUTâ€“GIRARDELLO SU(1, 1) COHERENT STATES FOR HARMONIC OSCILLATOR IN ONE-DIMENSIONAL HALF SPACE. International Journal of Modern Physics A, 2006, 21, 2635-2644.	1.5	1
81	Temperature definition for a finite number of classical spin-half particles: A canonical ensemble approach. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 574-578.	2.1	1
82	A notable difference between ideal gas and infinite molar volume limit of van der Waals gas. European Journal of Physics, 2010, 31, 671-673.	0.6	1
83	On Equivalence of Two Realizations for a Nonlinear Lie Algebra. Communications in Theoretical Physics, 2012, 57, 575-576.	2.5	1
84	Exponential functions of perturbative series and elimination of secular divergences in time-dependent perturbation theory in quantum mechanics. Results in Physics, 2017, 7, 890-894.	4.1	1
85	Geometric momentum and angular momentum for charge-monopole system. Modern Physics Letters A, 2018, 33, 1850125.	1.2	1
86	Josephson effect in the strontium titanate/lanthanum aluminate junction*. Chinese Physics B, 2019, 28, 097401.	1.4	1
87	Gravitational major-axis contraction of Mercuryâ€™s elliptical orbit. Modern Physics Letters A, 2019, 34, 1950159.	1.2	1
88	Role of long-range interaction on the photon-excited Î·-pairing of electrons. Physica Scripta, 2020, 95, 075803.	2.5	1
89	Substrate polarization effects on the plasmon excitations of small Na atomic chains on Si surfaces. Physical Review B, 2021, 103, .	3.2	1
90	Curvature-induced noncommutativity of two different components of momentum for a particle on a hypersurface. Communications in Theoretical Physics, 2021, 73, 025104.	2.5	1

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91	TEMPERATURE FLUCTUATIONS FOR FINITE CLASSICAL SPIN-HALF PARTICLES. International Journal of Modern Physics B, 2007, 21, 4007-4012.	2.0	0
92	Total Current Operator and its Classical Correspondence for Particles Bounded in Central Force Fields. International Journal of Theoretical Physics, 2007, 46, 424-429.	1.2	0
93	Publisher's Note: Information gain versus coupling strength in quantum measurements [Phys. Rev. A85, 042330 (2012)]. Physical Review A, 2012, 85, .	2.5	0
94	Crossover from Quantum to Boltzmann Statistics for Free Particles in a Single Harmonic Trap. International Journal of Theoretical Physics, 2012, 51, 390-398.	1.2	0
95	Distribution of x â‹… p for quantum states on a circle. International Journal of Geometric Methods in Modern Physics, 2015, 12, 1550078.	2.0	0
96	The influence of addition of citric acid on the physical properties of metallic oxide nanorods via Sol-Gel route preparation. International Journal of Materials Research, 2021, 106, 195-198.	0.3	0
97	Enhancement of transport properties introduced complex defect in (6, 3) carbon nanotubes. Modern Physics Letters B, 2015, 29, 1550031.	1.9	0
98	The curvature-induced gauge potential and the geometric momentum for a particle on a hypersphere. Annals of Physics, 2021, 432, 168566.	2.8	0