

# Guangfu Luo

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2748201/publications.pdf>

Version: 2024-02-01

70  
papers

2,754  
citations

218592

26  
h-index

175177

52  
g-index

71  
all docs

71  
docs citations

71  
times ranked

4289  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quasiparticle energies and excitonic effects of the two-dimensional carbon allotrope graphdiyne: Theory and experiment. <i>Physical Review B</i> , 2011, 84, .	1.1	305
2	Giant magnetoresistance in silicene nanoribbons. <i>Nanoscale</i> , 2012, 4, 3111.	2.8	216
3	Tunable and sizable band gap of single-layer graphene sandwiched between hexagonal boron nitride. <i>NPG Asia Materials</i> , 2012, 4, e6-e6.	3.8	158
4	Structural and electronic properties of bilayer and trilayer graphdiyne. <i>Nanoscale</i> , 2012, 4, 3990.	2.8	156
5	Dynamic layer rearrangement during growth of layered oxide films by molecular beam epitaxy. <i>Nature Materials</i> , 2014, 13, 879-883.	13.3	133
6	Nanometre-thick single-crystalline nanosheets grown at the water-air interface. <i>Nature Communications</i> , 2016, 7, 10444.	5.8	133
7	Novel One-Dimensional Organometallic Half Metals: Vanadium-Cyclopentadienyl, Vanadium-Cyclopentadienyl-Benzene, and Vanadium-Anthracene Wires. <i>Nano Letters</i> , 2008, 8, 3640-3644.	4.5	131
8	Functionalized Graphene for High-Performance Two-Dimensional Spintronics Devices. <i>ACS Nano</i> , 2011, 5, 2601-2610.	7.3	116
9	Magnetic Properties of Fully Bare and Half-Bare Boron Nitride Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2273-2276.	1.5	102
10	Structural, Electronic, and Optical Properties of Bulk Graphdiyne. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13072-13079.	1.5	101
11	A Co-Crystal Composed of the Paramagnetic Endohedral Metallofullerene $\text{La@C}_{82}$ and a Nickel Porphyrin with High Electron Mobility. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1589-1591.	7.2	75
12	Atomic Structure and Electrical Activity of Grain Boundaries and Ruddlesden-Popper Faults in Cesium Lead Bromide Perovskite. <i>Advanced Materials</i> , 2019, 31, e1805047.	11.1	72
13	Why Semiconducting Single-Walled Carbon Nanotubes are Separated from their Metallic Counterparts. <i>Small</i> , 2007, 3, 1566-1576.	5.2	68
14	Ab Initio Modeling of Electrolyte Molecule Ethylene Carbonate Decomposition Reaction on $\text{Li}(\text{Ni}, \text{Mn}, \text{Co})\text{O}_2$ Cathode Surface. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 20545-20553.	4.0	65
15	Materials Discovery of Stable and Nontoxic Halide Perovskite Materials for High-Efficiency Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1804354.	7.8	61
16	Semi-metallic Single-Component Crystal of Soluble $\text{La@C}_{82}$ Derivative with High Electron Mobility. <i>Journal of the American Chemical Society</i> , 2011, 133, 2766-2771.	6.6	53
17	Mechanism Study of Unsaturated Tripropargyl Phosphate as an Efficient Electrolyte Additive Forming Multifunctional Interphases in Lithium Ion and Lithium Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 10443-10451.	4.0	47
18	A Facile, Low-Cost, and Scalable Method of Selective Etching of Semiconducting Single-Walled Carbon Nanotubes by a Gas Reaction. <i>Advanced Materials</i> , 2009, 21, 813-816.	11.1	44

#	ARTICLE	IF	CITATIONS
19	Room-temperature giant magnetoresistance over one billion percent in a bare graphene nanoribbon device. <i>Physical Review B</i> , 2010, 81, .	1.1	44
20	Significantly Enhanced Emission Stability of CsPbBr <sub>3</sub> Nanocrystals via Chemically Induced Fusion Growth for Optoelectronic Devices. <i>ACS Applied Nano Materials</i> , 2018, 1, 6091-6098.	2.4	42
21	Lithium Storage in Bowl-like Carbon: The Effect of Surface Curvature and Space Geometry on Li Metal Deposition. <i>ACS Energy Letters</i> , 2021, 6, 2145-2152.	8.8	41
22	Electron transport through single endohedral Ce@C <sub>82</sub> metallofullerenes. <i>Physical Review B</i> , 2012, 86, .	1.1	35
23	Tunable Charge-Transport Properties of I <sub>h</sub> -C <sub>80</sub> Endohedral Metallofullerenes: Investigation of La <sub>2</sub> @C <sub>80</sub> , Sc <sub>3</sub> N@C <sub>80</sub> , and Sc <sub>3</sub> C <sub>2</sub> @C <sub>80</sub> . <i>Journal of the American Chemical Society</i> , 2012, 134, 11681-11686.	6.6	33
24	Negative differential resistance in parallel single-walled carbon nanotube contacts. <i>Physical Review B</i> , 2011, 83, .	1.1	31
25	Family-Dependent Rectification Characteristics in Ultra-Short Graphene Nanoribbon p-n Junctions. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8547-8554.	1.5	28
26	Origin of p-Type Doping in Zinc Oxide Nanowires Induced by Phosphorus Doping: A First Principles Study. <i>Journal of Physical Chemistry C</i> , 2009, 113, 9541-9545.	1.5	26
27	Polarity-driven oxygen vacancy formation in ultrathin LaNiO <sub>3</sub> films on SrTiO <sub>3</sub> . <i>Physical Review Materials</i> , 2017, 1, .	0.9	25
28	Understanding and reducing deleterious defects in the metastable alloy GaAsBi. <i>NPG Asia Materials</i> , 2017, 9, e345-e345.	3.8	24
29	GaAs <sub>1-x</sub> Py <sub>x</sub> , an alternative reduced band gap alloy system lattice-matched to GaAs. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	23
30	First-principles study of the formation mechanisms of nitrogen molecule in annealed ZnO. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 3546-3550.	0.9	19
31	Structural, Electronic, and Transport Properties of Gd/Eu Atomic Chains Encapsulated in Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15347-15353.	1.5	19
32	First-Principles Calculation of <sup>13</sup> C NMR Chemical Shifts of Infinite Single-Walled Carbon Nanotubes: New Data for Large-Diameter and Four-Helical Nanotubes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 16417-16421.	1.5	18
33	First-principles study of hydrogen-passivated single-crystalline silicon nanotubes: electronic and optical properties. <i>Nanotechnology</i> , 2007, 18, 505707.	1.3	17
34	The local structure of transition metal doped semiconducting boron carbides. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 085403.	1.3	15
35	Phase stabilization in nitrogen-implanted nanocrystalline cubic zirconia. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 19517.	1.3	15
36	Electronic-Type- and Diameter-Dependent Reduction of Single-Walled Carbon Nanotubes Induced by Adsorption of Electron-Donor Molecules. <i>Small</i> , 2009, 5, 244-255.	5.2	14

#	ARTICLE	IF	CITATIONS
37	Mechanistic Probing of Encapsulation and Confined Growth of Lithium Crystals in Carbonaceous Nanotubes. <i>Advanced Materials</i> , 2021, 33, e2105228.	11.1	14
38	Selection of single-walled carbon nanotubes according to both their diameter and chirality via nanotweezers. <i>Nano Research</i> , 2010, 3, 296-306.	5.8	13
39	Functionalized Metallic Single-Walled Carbon Nanotubes as a High-Performance Single-Molecule Organic Field Effect Transistor: An ab Initio Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15816-15822.	1.5	13
40	Tale of Three Phosphate Additives for Stabilizing NCM811/Graphite Pouch Cells: Significance of Molecular Structure in Dictating Interphases and Cell Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 29676-29690.	4.0	13
41	Atomistic Mechanism and Long-Term Stability of Using Chlorinated Graphdiyne Film to Reduce Lithium Dendrites in Rechargeable Lithium Metal Batteries. <i>Nano Letters</i> , 2021, 21, 7284-7290.	4.5	12
42	Optical Absorption Spectra and Polarizabilities of Silicon Carbide Nanotubes: A First Principles Study. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18864-18870.	1.5	11
43	Magnetism in carbon nanoscrolls: Quasi-half-metals and half-metals in pristine hydrocarbons. <i>Nano Research</i> , 2009, 2, 844-850.	5.8	11
44	Insights into the local electronic structure of semiconducting boron carbides in the vicinity of transition metal dopants. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 175, 1-8.	1.7	11
45	Polarized Nonresonant Raman Spectra of Graphene Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24463-24468.	1.5	11
46	First-principles studies on molecular beam epitaxy growth of GaAs <sub>1-x</sub> Bi <sub>x</sub> nanoribbons. <i>Physical Review B</i> , 2015, 92, .	1.1	11
47	Polarized Vibrational Infrared Absorption of Graphene Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2010, 114, 6959-6965.	1.5	10
48	Negative rectification and negative differential resistance in nanoscale single-walled carbon nanotube p-n junctions. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 353-359.	0.5	10
49	Selective adsorption of cations on single-walled carbon nanotubes: A density functional theory study. <i>Computational Materials Science</i> , 2008, 43, 886-891.	1.4	8
50	Strain-compensated GaAs <sub>1-x</sub> Bi <sub>x</sub> /P/GaAs <sub>1-x</sub> Bi <sub>x</sub> /GaAs <sub>1-x</sub> Bi <sub>x</sub> quantum wells for laser applications. <i>Semiconductor Science and Technology</i> , 2015, 30, 094011.	1.1	8
51	Cathode-anode reaction products interplay enabling high performance of LiNi <sub>0.8</sub> Co <sub>0.1</sub> Mn <sub>0.1</sub> O <sub>2</sub> /artificial graphite pouch batteries at elevated temperature. <i>Journal of Power Sources</i> , 2021, 514, 230583.	4.0	8
52	Enhanced many-body effects in one-dimensional linear atomic chains. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 1636-1643.	0.7	7
53	First-principles predictions of electronic properties of GaAs <sub>1-x</sub> Bi <sub>x</sub> and GaAs <sub>1-x</sub> Bi <sub>x</sub> -based heterojunctions. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	7
54	Single copper sites dispersed on defective TiO <sub>2-x</sub> as a synergistic oxygen reduction reaction catalyst. <i>Journal of Chemical Physics</i> , 2021, 154, 034705.	1.2	7

#	ARTICLE	IF	CITATIONS
55	Sign-changeable spin-filter efficiency and giant magnetoresistance in seamless graphene nanoribbon junctions. <i>Computational Materials Science</i> , 2011, 50, 2886-2890.	1.4	6
56	Thermodynamic stability analysis of Bi-containing III-V quaternary alloys and the effect of epitaxial strain. <i>Journal of Physics and Chemistry of Solids</i> , 2020, 138, 109245.	1.9	6
57	Substitutional oxygen activated photoluminescence enhancement in monolayer transition metal dichalcogenides. <i>Science China Materials</i> , 2022, 65, 1034-1041.	3.5	6
58	Electronic structures and properties of lanthanide hexaboride nanowires. <i>Journal of Applied Physics</i> , 2013, 114, 143709.	1.1	5
59	Shaping and Edge Engineering of Few-Layered Freestanding Graphene Sheets in a Transmission Electron Microscope. <i>Nano Letters</i> , 2020, 20, 2279-2287.	4.5	5
60	Diameter, strength and resistance tuning of double-walled carbon nanotubes in a transmission electron microscope. <i>Carbon</i> , 2020, 160, 98-106.	5.4	5
61	A direct measurement method of quantum relaxation time. <i>National Science Review</i> , 2021, 8, nwaa242.	4.6	4
62	Monolayer, Bilayer, and Bulk BSi as Potential Anode Materials of Li-ion Batteries. <i>ChemPhysChem</i> , 2022, 23, .	1.0	4
63	Optical properties of antiferroelectric Cs <sub>2</sub> Nb <sub>4</sub> O <sub>11</sub> : Absorption spectra and first-principles calculations. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	3
64	Transition state redox during dynamical processes in semiconductors and insulators. <i>NPG Asia Materials</i> , 2018, 10, 45-51.	3.8	3
65	Optical Absorption Spectra of Charge-Doped Single-Walled Carbon Nanotubes from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7058-7064.	1.5	2
66	Study on the Dispersion of Charged Single-Wall Carbon Nanotube Bundles by First Principles Calculation. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 5170-5172.	0.9	2
67	Atomic-Scale Identification of Planar Defects in Cesium Lead Bromide Perovskite Nanocrystals. <i>Microscopy and Microanalysis</i> , 2018, 24, 100-101.	0.2	2
68	Ignition Threshold of Perovskite-Based Oxides for Solid Fuel Oxidation from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2019, 123, 17644-17649.	1.5	2
69	The Local Structure and I-V Characteristics of Chromium Doped Semiconducting Boron Carbide. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1307, 1.	0.1	1
70	Defect-Induced Electronic Structure Changes in Cesium Lead Halide Nanocrystals. <i>Microscopy and Microanalysis</i> , 2019, 25, 660-661.	0.2	0