Jefferson Zhe Liu

List of Publications by Year in descending order

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36303 36028 10,144 170 51 97 citations h-index g-index papers 175 175 175 13575 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Biomimetic superelastic graphene-based cellular monoliths. Nature Communications, 2012, 3, 1241.	12.8	1,091
2	Periodic Segregation of Solute Atoms in Fully Coherent Twin Boundaries. Science, 2013, 340, 957-960.	12.6	659
3	Observation of Microscale Superlubricity in Graphite. Physical Review Letters, 2012, 108, 205503.	7.8	431
4	Ultrafast selective transport of alkali metal ions in metal organic frameworks with subnanometer pores. Science Advances, 2018, 4, eaaq0066.	10.3	368
5	Discriminative Separation of Gases by a "Molecular Trapdoor―Mechanism in Chabazite Zeolites. Journal of the American Chemical Society, 2012, 134, 19246-19253.	13.7	321
6	Efficient metal ion sieving in rectifying subnanochannels enabled by metal–organic frameworks. Nature Materials, 2020, 19, 767-774.	27.5	275
7	Room temperature in-plane ferroelectricity in van der Waals In ₂ Se ₃ . Science Advances, 2018, 4, eaar7720.	10.3	224
8	Excess van der Waals interaction energy of a multiwalled carbon nanotube with an extruded core and the induced core oscillation. Physical Review B, 2002, 65, .	3.2	220
9	Interlayer binding energy of graphite: A mesoscopic determination from deformation. Physical Review B, 2012, 85, .	3.2	203
10	Ion transport in complex layered graphene-based membranes with tuneable interlayer spacing. Science Advances, 2016, 2, e1501272.	10.3	203
11	Low-voltage electrostatic modulation of ion diffusion through layered graphene-based nanoporous membranes. Nature Nanotechnology, 2018, 13, 685-690.	31.5	196
12	Ultrafast Dynamic Piezoresistive Response of Grapheneâ€Based Cellular Elastomers. Advanced Materials, 2016, 28, 194-200.	21.0	171
13	Fast and selective fluoride ion conduction in sub-1-nanometer metal-organic framework channels. Nature Communications, 2019, 10, 2490.	12.8	158
14	Size Dependence of the Thin-Shell Model for Carbon Nanotubes. Physical Review Letters, 2005, 95, 105501.	7.8	157
15	A simulation study of the shape of β′ precipitates in Mg–Y and Mg–Gd alloys. Acta Materialia, 2013, 61, 453-466.	7.9	150
16	Oriented two-dimensional zeolitic imidazolate framework-L membranes and their gas permeation properties. Journal of Materials Chemistry A, 2015, 3, 15715-15722.	10.3	149
17	Water transport inside carbon nanotubes mediated by phonon-induced oscillating friction. Nature Nanotechnology, 2015, 10, 692-695.	31.5	142
18	Field-Effect Tuned Adsorption Dynamics of VSe ₂ Nanosheets for Enhanced Hydrogen Evolution Reaction. Nano Letters, 2017, 17, 4109-4115.	9.1	134

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19	Extremely Low Density and Superâ€Compressible Graphene Cellular Materials. Advanced Materials, 2017, 29, 1701553.	21.0	126
20	Effect of a Rippling Mode on Resonances of Carbon Nanotubes. Physical Review Letters, 2001, 86, 4843-4846.	7.8	120
21	Structure, energetics, and mechanical stability of Fe-Cu bcc alloys from first-principles calculations. Physical Review B, 2005, 72, .	3.2	120
22	Highâ€Qualityâ€Factor Midâ€Infrared Toroidal Excitation in Folded 3D Metamaterials. Advanced Materials, 2017, 29, 1606298.	21.0	117
23	Tunable mid-infrared coherent perfect absorption in a graphene meta-surface. Scientific Reports, 2015, 5, 13956.	3.3	115
24	Directly patterned substrate-free plasmonic "nanograter―structures with unusual Fano resonances. Light: Science and Applications, 2015, 4, e308-e308.	16.6	105
25	Determination of Composition Range for "Molecular Trapdoor―Effect in Chabazite Zeolite. Journal of Physical Chemistry C, 2013, 117, 12841-12847.	3.1	104
26	Rapid synthesis of ultrathin, defect-free ZIF-8 membranes via chemical vapour modification of a polymeric support. Chemical Communications, 2015, 51, 11474-11477.	4.1	103
27	Graphene Actuators: Quantum-Mechanical and Electrostatic Double-Layer Effects. Journal of the American Chemical Society, 2011, 133, 10858-10863.	13.7	101
28	Strain engineering water transport in graphene nanochannels. Physical Review E, 2011, 84, 056329.	2.1	101
29	Strain Relaxation of Monolayer WS ₂ on Plastic Substrate. Advanced Functional Materials, 2016, 26, 8707-8714.	14.9	97
30	Aqueous Phase Synthesis of ZIF-8 Membrane with Controllable Location on an Asymmetrically Porous Polymer Substrate. ACS Applied Materials & Samp; Interfaces, 2016, 8, 6236-6244.	8.0	95
31	Spin-Selective Transmission in Chiral Folded Metasurfaces. Nano Letters, 2019, 19, 3432-3439.	9.1	89
32	Interlayer shear strength of single crystalline graphite. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 978-982.	3.4	86
33	Mechanical properties of single-walled carbon nanotube bundles as bulk materials. Journal of the Mechanics and Physics of Solids, 2005, 53, 123-142.	4.8	80
34	Friction of water slipping in carbon nanotubes. Physical Review E, 2011, 83, 036316.	2.1	80
35	An unsolved mystery: The composition of bcc Cu alloy precipitates in bcc Fe and steels. Materials Science & Science & Science and Processing, 2007, 463, 271-274.	5.6	77
36	Molecular dynamics simulations of the electric double layer capacitance of graphene electrodes in mono-valent aqueous electrolytes. Nano Research, 2016, 9, 174-186.	10.4	77

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37	Mechanical properties of wrinkled graphene generated by topological defects. Carbon, 2016, 108, 204-214.	10.3	72
38	Controllable optical activity with non-chiral plasmonic metasurfaces. Light: Science and Applications, 2016, 5, e16096-e16096.	16.6	70
39	Negative Poisson's ratio in rippled graphene. Nanoscale, 2017, 9, 4135-4142.	5. 6	70
40	Highâ€Performance Broadband Circularly Polarized Beam Deflector by Mirror Effect of Multinanorod Metasurfaces. Advanced Functional Materials, 2015, 25, 5428-5434.	14.9	69
41	Universal Approach to Fabricating Graphene-Supported Single-Atom Catalysts from Doped ZnO Solid Solutions. ACS Central Science, 2020, 6, 1431-1440.	11.3	69
42	Electrolyte gating in graphene-based supercapacitors and its use for probing nanoconfined charging dynamics. Nature Nanotechnology, 2020, 15, 683-689.	31.5	66
43	Thermodynamic states and phase diagrams for bulk-incoherent, bulk-coherent, and epitaxially-coherent semiconductor alloys: Application to cubic (Ga,In)N. Physical Review B, 2008, 77, .	3.2	62
44	Solvationâ€Involved Nanoionics: New Opportunities from 2D Nanomaterial Laminar Membranes. Advanced Materials, 2020, 32, e1904562.	21.0	61
45	Temperature-regulated guest admission and release in microporous materials. Nature Communications, 2017, 8, 15777.	12.8	60
46	Three Dimensional Hybrids of Vertical Graphene-nanosheet Sandwiched by Ag-nanoparticles for Enhanced Surface Selectively Catalytic Reactions. Scientific Reports, 2015, 5, 16019.	3.3	59
47	Single Grain Boundary Break Junction for Suspended Nanogap Electrodes with Gapwidth Down to 1–2 nm by Focused Ion Beam Milling. Advanced Materials, 2015, 27, 3002-3006.	21.0	59
48	Piezoelectric properties of graphene oxide: A first-principles computational study. Applied Physics Letters, 2014, 105, .	3.3	58
49	Finite element models of natural fibers and their composites: A review. Journal of Reinforced Plastics and Composites, 2018, 37, 617-635.	3.1	58
50	Fano resonance Rabi splitting of surface plasmons. Scientific Reports, 2017, 7, 8010.	3.3	57
51	Porous diffusion dialysis membranes for rapid acid recovery. Journal of Membrane Science, 2016, 502, 76-83.	8.2	52
52	Fabrication of asymmetrical diffusion dialysis membranes for rapid acid recovery with high purity. Journal of Materials Chemistry A, 2015, 3, 24000-24007.	10.3	49
53	Integrating polarization conversion and nearly perfect absorption with multifunctional metasurfaces. Applied Physics Letters, 2017, 110, .	3.3	49
54	Oxygen evolution reaction dynamics monitored by an individual nanosheet-based electronic circuit. Nature Communications, 2017, 8, 645.	12.8	49

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55	Effect of bending instabilities on the measurements of mechanical properties of multiwalled carbon nanotubes. Physical Review B, 2003, 67, .	3.2	48
56	Metal–Organic Polyhedra Cages Immobilized on a Plasmonic Substrate for Sensitive Detection of Trace Explosives. Advanced Functional Materials, 2015, 25, 6009-6017.	14.9	47
57	Potassium Chabazite: A Potential Nanocontainer for Gas Encapsulation. Journal of Physical Chemistry C, 2010, 114, 22025-22031.	3.1	45
58	Ultrafast water evaporation through graphene membranes with subnanometer pores for desalination. Journal of Membrane Science, 2021, 621, 118934.	8.2	45
59	Transferable force-constant modeling of vibrational thermodynamic properties in fcc-basedAlâ^'TM(TM=Ti, Zr, Hf) alloys. Physical Review B, 2007, 75, .	3.2	44
60	High-Performance Graphene Oxide Electromechanical Actuators. Journal of the American Chemical Society, 2012, 134, 1250-1255.	13.7	44
61	Composite ultrafiltration membranes from polymer and its quaternary phosphonium-functionalized derivative with enhanced water flux. Journal of Membrane Science, 2015, 482, 67-75.	8.2	44
62	Separation of CO ₂ and CH ₄ by Pressure Swing Adsorption Using a Molecular Trapdoor Chabazite Adsorbent for Natural Gas Purification. Industrial & Engineering Chemistry Research, 2020, 59, 7857-7865.	3.7	44
63	Adsorption of CO2, N2, and CH4 in Cs-exchanged chabazite: A combination of van der Waals density functional theory calculations and experiment study. Journal of Chemical Physics, 2014, 140, 084705.	3.0	43
64	3D conductive coupling for efficient generation of prominent Fano resonances in metamaterials. Scientific Reports, 2016, 6, 27817.	3.3	43
65	Tunable auxetic properties in group-IV monochalcogenide monolayers. Physical Review B, 2018, 98, .	3.2	42
66	Influence of Electric Field on SERS: Frequency Effects, Intensity Changes, and Susceptible Bonds. Journal of the American Chemical Society, 2012, 134, 4646-4653.	13.7	41
67	Relative stability, electronic structure, and magnetism of MnN and (Ga,Mn)N alloys. Physical Review B, 2008, 78, .	3.2	39
68	Bridging the gap between atomic microstructure and electronic properties of alloys: The case of $(In,Ga)N$. Physical Review B, 2010, 82, .	3.2	39
69	Excitation of ultrasharp trapped-mode resonances in mirror-symmetric metamaterials. Physical Review B, 2016, 93, .	3.2	39
70	Ferromagnetism of 1T′-MoS ₂ Nanoribbons Stabilized by Edge Reconstruction and Its Periodic Variation on Nanoribbons Width. Journal of the American Chemical Society, 2018, 140, 16206-16212.	13.7	39
71	Folding 2D Structures into 3D Configurations at the Micro/Nanoscale: Principles, Techniques, and Applications. Advanced Materials, 2019, 31, e1802211.	21.0	39
72	The Role of Nanowrinkles in Mass Transport across Grapheneâ€Based Membranes. Advanced Functional Materials, 2020, 30, 2003159.	14.9	39

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73	Nanoscale fluid-structure interaction: Flow resistance and energy transfer between water and carbon nanotubes. Physical Review E, 2011, 84, 046314.	2.1	36
74	Intrinsic Chirality and Multispectral Spinâ€Selective Transmission in Folded Etaâ€Shaped Metamaterials. Advanced Optical Materials, 2020, 8, 1901448.	7.3	36
75	<i>Ab Initio</i> Simulations To Understand the Leaf-Shape Crystal Morphology of ZIF-L with Two-Dimensional Layered Network. Journal of Physical Chemistry C, 2017, 121, 2221-2227.	3.1	35
76	Diverse electronic and magnetic properties of CrS2 enabling strain-controlled 2D lateral heterostructure spintronic devices. Npj Computational Materials, 2021, 7, .	8.7	35
77	Temperature controlled invertible selectivity for adsorption of N2 and CH4 by molecular trapdoor chabazites. Chemical Communications, 2014, 50, 4544.	4.1	33
78	Two-dimensional shape memory graphene oxide. Nature Communications, 2016, 7, 11972.	12.8	33
79	Slow hydrophobic hydration induced polymer ultrafiltration membranes with high water flux. Journal of Membrane Science, 2014, 471, 27-34.	8.2	32
80	The activation of twinning and texture evolution during bending of friction stir welded magnesium alloys. Materials Science & Description of Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 145-153.	5.6	30
81	Band engineering of Ni $1\hat{a}$ °xMgxO alloys for photocathodes of high efficiency dye-sensitized solar cells. Journal of Applied Physics, 2012, 112, .	2.5	27
82	Asymmetrically porous anion exchange membranes with an ultrathin selective layer for rapid acid recovery. Journal of Membrane Science, 2016, 510, 437-446.	8.2	27
83	Tunable near-infrared perfect absorber based on the hybridization of phase-change material and nanocross-shaped resonators. Applied Physics Letters, 2018, 113, .	3.3	27
84	Strain-Minimizing Tetrahedral Networks of Semiconductor Alloys. Physical Review Letters, 2007, 99, 145501.	7.8	26
85	Enhanced lithium adsorption and diffusion on silicene nanoribbons. RSC Advances, 2013, 3, 20338.	3.6	26
86	Monolayer graphene oxide as a building block for artificial muscles. Applied Physics Letters, 2013, 102, 021903.	3.3	26
87	Electric Field Induced Reversible Phase Transition in Li Doped Phosphorene: Shape Memory Effect and Superelasticity. Journal of the American Chemical Society, 2016, 138, 4772-4778.	13.7	26
88	A density functional theory study for the adsorption of various gases on a caesium-exchanged trapdoor chabazite. Computational Materials Science, 2016, 122, 307-313.	3.0	25
89	Ultrafast, Stable Ionic and Molecular Sieving through Functionalized Boron Nitride Membranes. ACS Applied Materials & Samp; Interfaces, 2019, 11, 30430-30436.	8.0	25
90	Anomalous elastic buckling of layered crystalline materials in the absence of structure slenderness. Journal of the Mechanics and Physics of Solids, 2016, 88, 83-99.	4.8	24

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91	Broadband and Polarization-Insensitive Absorption Based on a Set of Multisized Fabry–Perot-like Resonators. Journal of Physical Chemistry C, 2019, 123, 13856-13862.	3.1	24
92	Phase inversion spinning of ultrafine hollow fiber membranes through a single orifice spinneret. Journal of Membrane Science, 2012, 421-422, 8-14.	8.2	23
93	lon-beam-induced bending of freestanding amorphous nanowires: The importance of the substrate material and charging. Applied Physics Letters, 2013, 102, .	3.3	22
94	Hydrophilic Nanowire Modified Polymer Ultrafiltration Membranes with High Water Flux. ACS Applied Materials & Samp; Interfaces, 2014, 6, 19161-19167.	8.0	22
95	Viscous damping of nanobeam resonators: Humidity, thermal noise, and a paddling effect. Journal of Applied Physics, 2011, 110, .	2.5	21
96	Edge stresses of non-stoichiometric edges in two-dimensional crystals. Applied Physics Letters, 2012, 100, .	3.3	21
97	Binding and interlayer force in the near-contact region of two graphite slabs: Experiment and theory. Journal of Chemical Physics, 2013, 139, 224704.	3.0	21
98	Mass Production of Nanogap Electrodes toward Robust Resistive Random Access Memory. Advanced Materials, 2016, 28, 8227-8233.	21.0	20
99	Broadband cross-polarization conversion by symmetry-breaking ultrathin metasurfaces. Applied Physics Letters, 2017, 111, 241108.	3.3	20
100	Van der Waals force-induced intralayer ferroelectric-to-antiferroelectric transition via interlayer sliding in bilayer group-IV monochalcogenides. Npj Computational Materials, 2022, 8, .	8.7	20
101	Stripe/kink microstructures formed in mechanical peeling of highly orientated pyrolytic graphite. Applied Physics Letters, 2010, 96, .	3.3	19
102	Control of surface wettability via strain engineering. Acta Mechanica Sinica/Lixue Xuebao, 2013, 29, 543-549.	3.4	19
103	Charge doping induced reversible multistep structural phase transitions and electromechanical actuation in two-dimensional 1T′-MoS⟨sub⟩2⟨ sub⟩. Nanoscale, 2020, 12, 12541-12550.	5.6	19
104	Nitrogen Rejection from Methane via a "Trapdoor―K-ZSM-25 Zeolite. Journal of the American Chemical Society, 2021, 143, 15195-15204.	13.7	19
105	Freestanding nanostructures for three-dimensional superconducting nanodevices. Applied Physics Letters, 2012, 100, .	3.3	18
106	Influence of Parameters of Cold Isostatic Pressing on TiO ₂ Films for Flexible Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2011, 2011, 1-7.	2.5	14
107	Role of hydrostatic pressure on the phase stability, the ground state, and the transformation pathways of NiTi alloy. Scripta Materialia, 2018, 151, 57-60.	5 . 2	14
108	Tuning capacitance of graphene films via a robust routine of adjusting their hierarchical structures. Electrochimica Acta, 2019, 298, 254-264.	5.2	14

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109	Thermodynamic theory of epitaxial alloys: first-principles mixed-basis cluster expansion of (In, Ga)N alloy film. Journal of Physics Condensed Matter, 2009, 21, 295402.	1.8	13
110	Comparison of continuum-based and atomistic-based modeling of axial buckling of carbon nanotubes subject to hydrostatic pressure. Computational Materials Science, 2013, 79, 619-626.	3.0	13
111	Comparative study on twinning characteristics during two post-weld compression paths and their effects on joint enhancement. Scientific Reports, 2016, 6, 39779.	3.3	13
112	Visible transmission response of nanoscale complementary metamaterials for sensing applications. Nanotechnology, 2012, 23, 275503.	2.6	12
113	Spatially oriented plasmonic †nanograter' structures. Scientific Reports, 2016, 6, 28764.	3.3	12
114	Rapid Bending Origami in Micro/Nanoscale toward a Versatile 3D Metasurface. Laser and Photonics Reviews, 2020, 14, 1900179.	8.7	12
115	Enhanced light extraction in n-GaN-based light-emitting diodes with three-dimensional semi-spherical structure. Applied Physics Letters, 2014, 104, .	3.3	11
116	Polysulfone and Its Quaternary Phosphonium Derivative Composite Membranes with High Water Flux. Industrial & Engineering Chemistry Research, 2015, 54, 3333-3340.	3.7	11
117	Fast Liquid Jet Mixing in Millimeter Channels with Various Multislits Designs. Industrial & Designs. Industria	3.7	10
118	Tunable resonant frequencies for determining Young's moduli of nanowires. Journal of Applied Physics, 2009, 105, .	2.5	10
119	Fabrication of GaN hexagonal cones by inductively coupled plasma reactive ion etching. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	1.2	10
120	Design and commissioning of an aberration-corrected ultrafast spin-polarized low energy electron microscope with multiple electron sources. Ultramicroscopy, 2017, 174, 89-96.	1.9	10
121	Tailoring the Microstructure and Mechanical Property of AZ80 Alloys by Multiple Twinning and Aging Precipitation. Advanced Engineering Materials, 2017, 19, 1700332.	3.5	10
122	Revealing Atomic Structure and Oxidation States of Dopants in Charge-Ordered Nanoparticles for Migration-Promoted Oxygen-Exchange Capacity. Chemistry of Materials, 2019, 31, 5769-5777.	6.7	10
123	Graphite flake self-retraction response based on potential seeking. Nanoscale Research Letters, 2012, 7, 185.	5.7	9
124	Cooperative Reformable Channel System with Unique Recognition of Gas Molecules in a Zeolitic Imidazolate Framework with Multilevel Flexible Ligands. Journal of Physical Chemistry C, 2015, 119, 16762-16768.	3.1	9
125	Tuning the oxygen functional groups in reduced graphene oxide papers to enhance the electromechanical actuation. RSC Advances, 2015, 5, 68052-68060.	3.6	9
126	Evaluation of support loss in micro-beam resonators: A revisit. Journal of Sound and Vibration, 2017, 411, 148-164.	3.9	9

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127	An equivalent 1D nanochannel model to describe ion transport in multilayered graphene membranes. Progress in Natural Science: Materials International, 2018, 28, 246-250.	4.4	9
128	A Raman spectroscopy study of MBE-grown Hg1â^'Cd Se alloys grown on GaSb (2 1 1) by molecular beam epitaxy. Infrared Physics and Technology, 2019, 97, 365-370.	2.9	9
129	Direct identification of HMX via guest-induced fluorescence turn-on of molecular cage. Chinese Chemical Letters, 2021, 32, 4006-4010.	9.0	9
130	Light emitting enhancement and angle-resolved property of surface textured GaN-based vertical LED. Journal of Optics (India), 2016, 45, 81-86.	1.7	8
131	Lead-free molecular ferroelectric [N,N-dimethylimidazole]3Bi2I9 with narrow bandgap. Materials and Design, 2020, 193, 108868.	7.0	8
132	Reversible high-pressure carbon nanotube vessel. Physical Review B, 2010, 81, .	3.2	7
133	Tuning the oscillation of nested carbon nanotubes by insertion of an additional inner tube. Journal of Applied Physics, 2013, 114, 214302.	2.5	7
134	Density Functional Theory Computational Study of Alkali Cation-Exchanged Sodalite-like Zeolitelike Metal–Organic Framework for CO2, N2, and CH4 Adsorption. Journal of Physical Chemistry C, 2015, 119, 27449-27456.	3.1	7
135	A density functional theory computational study of adsorption of Di-Meta-Cyano Azobenzene molecules on Si (111) surfaces. Applied Surface Science, 2017, 422, 557-565.	6.1	7
136	Silica-assisted pyro-hydrolysis of CaCl2 waste for the recovery of hydrochloric acid (HCl): Reaction pathways with the evolution of Ca(OH)Cl intermediate by experimental investigation and DFT modelling. Journal of Hazardous Materials, 2022, 439, 129620.	12.4	7
137	Cation ordering induced polarization enhancement for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>PbTiO</mml:mi><mml:mn>3<td>nl:1:13:12><td>mkmsub><n< td=""></n<></td></td></mml:mn></mml:msub></mml:math>	nl:1 :13:12 > <td>mkmsub><n< td=""></n<></td>	m k msub> <n< td=""></n<>
138	Enhanced in-plane mechanical properties of nanoporous graphene-carbon nanotube network. Journal of Applied Physics, 2017, 121, .	2.5	6
139	Risk assessment through multivariate analysis on the magnitude and occurrence date of daily storm events in the Shenzhen bay area. Stochastic Environmental Research and Risk Assessment, 2020, 34, 669-689.	4.0	5
140	Brownian motion-induced water slip inside carbon nanotubes. Microfluidics and Nanofluidics, 2014, 16, 305-313.	2.2	4
141	Mechanical buckling induced periodic kinking/stripe microstructures in mechanically peeled graphite flakes from HOPG. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 494-499.	3.4	4
142	Thermal induced single grain boundary break junction for suspended nanogap electrodes. Science China Materials, 2015, 58, 769-774.	6.3	4
143	Nanogap Electrodes: Single Grain Boundary Break Junction for Suspended Nanogap Electrodes with Gapwidth Down to 1–2 nm by Focused Ion Beam Milling (Adv. Mater. 19/2015). Advanced Materials, 2015, 27, 3095-3095.	21.0	4
144	Two-way actuation of graphene oxide arising from quantum mechanical effects. Applied Physics Letters, 2016, 109, 143902.	3.3	4

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145	An ICME Framework for Design of Stainless Steel for Sintering. Integrating Materials and Manufacturing Innovation, 2018, 7, 136-147.	2.6	4
146	Monoclinic angle, shear response, and minimum energy pathways of NiTiCu martensite phases from ab initio calculations. Acta Materialia, 2019, 178, 59-67.	7.9	4
147	Computational Design of Functionally Graded Materials from Sintered Powders. Integrating Materials and Manufacturing Innovation, 2019, 8, 82-94.	2.6	4
148	Can CO ₂ and Steam React in the Absence of Electrolysis at High Temperatures?. ChemSusChem, 2020, 13, 6660-6667.	6.8	4
149	Thermodynamic, Structural, and Piezoelectric Properties of Adatom-Doped Phosphorene and Its Applications in Smart Surfaces. Physical Review Applied, 2020, 13, .	3.8	4
150	Detecting subtle yet fast skeletal muscle contractions with ultrasoft and durable graphene-based cellular materials. National Science Review, 2022, 9, nwab184.	9.5	4
151	Ferromagnetic and nonmagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:msup><mml:mcharge 105<="" 2022.="" and="" b.="" charge="" density="" dichalcogenides:="" doping="" in="" induced="" mechanisms="" metal="" physical="" reversible="" review="" states="" td="" transition="" transition.="" wave=""><td>ni>T3.2</td><td>:mi><mml:n< td=""></mml:n<></td></mml:mcharge></mml:msup></mml:mrow></mml:math>	ni>T3.2	:mi> <mml:n< td=""></mml:n<>
152	Quadrupling the stored charge by extending the accessible density of states. CheM, 2022, 8, 2410-2418.	11.7	4
153	Prediction of ordering and spontaneous rotation of epitaxial habits in substrate-coherent InGaN and GaAsSb. Applied Physics Letters, 2009, 95, 081901.	3.3	3
154	Friction law for water flowing in carbon nanotubes. , 2010, , .		3
155	Sustaining GHz oscillation of carbon nanotube based oscillators via a MHz frequency excitation. Nanotechnology, 2016, 27, 205501.	2.6	3
156	The interfacial adhesion of contacting pairs in van der Waals materials. Applied Surface Science, 2022, 598, 153739.	6.1	3
157	Effects of vacancies on interwall spacings of multi-walled carbon nanotubes. Journal of Zhejiang University: Science A, 2010, 11, 714-721.	2.4	2
158	Plasmonic Coupling: Wafer-Scale Double-Layer Stacked Au/Al2O3@Au Nanosphere Structure with Tunable Nanospacing for Surface-Enhanced Raman Scattering (Small 19/2014). Small, 2014, 10, 3932-3932.	10.0	2
159	Evaluation of Textural Effect on the Rollability of AZ31 Alloys by Wedgeâ€Shaped Sample Design. Advanced Engineering Materials, 2017, 19, 1700035.	3.5	2
160	Ab initio prediction of phase stability of martensitic structures in binary NiTi under hydrostatic tension. Physica Scripta, 2020, 95, 035701.	2.5	2
161	Sensing properties of infrared nanostructured plasmonic crystals fabricated by electron beam lithography and argon ion milling. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 06FE02.	1.2	1
162	The concept and realization of nanostructure fabrication using free-standing metallic wires with rapid thermal annealing. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-7.	5.1	1

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163	Density functional theory computational study of ferroelectricity and piezoelectricity in BaTiO ₃ /PbTiO ₃ (0 1 1) superlattices. Journal of Physics Condensed Matter, 201 30, 155401.	8,8	1
164	3D Micro/Nano Structures: Folding 2D Structures into 3D Configurations at the Micro/Nanoscale: Principles, Techniques, and Applications (Adv. Mater. 4/2019). Advanced Materials, 2019, 31, 1970025.	21.0	1
165	Circular Dichroism: Intrinsic Chirality and Multispectral Spinâ€Selective Transmission in Folded Etaâ€Shaped Metamaterials (Advanced Optical Materials 4/2020). Advanced Optical Materials, 2020, 8, 2070014.	7.3	1
166	Graphene Electromechanical Actuation; Origins, Optimization and Applications. Materials Research Society Symposia Proceedings, 2012, 1407, 39.	0.1	0
167	Fabrication of indium tin oxide bump/pit structures on GaN-based light emitting diodes. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	1.2	0
168	Beam Deflectors: Highâ€Performance Broadband Circularly Polarized Beam Deflector by Mirror Effect of Multinanorod Metasurfaces (Adv. Funct. Mater. 34/2015). Advanced Functional Materials, 2015, 25, 5567-5567.	14.9	0
169	Metamaterials: Highâ€Qualityâ€Factor Midâ€Infrared Toroidal Excitation in Folded 3D Metamaterials (Adv.) Tj ETQ)q1 1 0.78 21.0	34314 rgB <mark>T</mark>
170	Reply to 'On phonons and water flow enhancement in carbon nanotubes'. Nature Nanotechnology, 2017, 12, 1108-1108.	31.5	0