Zhiping Xu

List of Publications by Year
in descending order

178 papers	12,316 citations	36303 51 h-index	26613 107 g-index
180 all docs	180 docs citations	180 times ranked	14872 citing authors

#	Article	IF	Citations
1	Nanoconfinement controls stiffness, strength and mechanical toughness of Î²-sheet crystals in silk. Nature Materials, 2010, 9, 359-367.	27.5	1,131
2	Carbonized Silk Fabric for Ultrastretchable, Highly Sensitive, and Wearable Strain Sensors. Advanced Materials, 2016, 28, 6640-6648.	21.0	749
3	Ultrafast viscous water flow through nanostrand-channelled graphene oxide membranes. Nature Communications, 2013, 4, 2979.	12.8	673
4	Selective Ion Penetration of Graphene Oxide Membranes. ACS Nano, 2013, 7, 428-437.	14.6	635
5	Understanding Water Permeation in Graphene Oxide Membranes. ACS Applied Materials & Interfaces, 2014, 6, 5877-5883.	8.0	415
6	Selective Trans-Membrane Transport of Alkali and Alkaline Earth Cations through Graphene Oxide Membranes Based on Cationâ^'Ï€ Interactions. ACS Nano, 2014, 8, 850-859.	14.6	333
7	Mechanical and thermal transport properties of graphene with defects. Applied Physics Letters, 2011, 99, .	3.3	321
8	Geometry Controls Conformation of Graphene Sheets: Membranes, Ribbons, and Scrolls. ACS Nano, 2010, 4, 3869-3876.	14.6	227
9	Fast water transport in graphene nanofluidic channels. Nature Nanotechnology, 2018, 13, 238-245.	31.5	220
10	Mechanical properties of graphene papers. Journal of the Mechanics and Physics of Solids, 2012, 60, 591-605.	4.8	218
11	Nanoengineering Heat Transfer Performance at Carbon Nanotube Interfaces. ACS Nano, 2009, 3, 2767-2775.	14.6	207
12	Interface structure and mechanics between graphene and metal substrates: a first-principles study. Journal of Physics Condensed Matter, 2010, 22, 485301.	1.8	206
13	Elastic straining of free-standing monolayer graphene. Nature Communications, 2020, 11, 284.	12.8	194
14	Wetting of Graphene Oxide: A Molecular Dynamics Study. Langmuir, 2014, 30, 3572-3578.	3.5	190
15	Mechanics of metal-catecholate complexes: The roles of coordination state and metal types. Scientific Reports, 2013, 3, 2914.	3.3	173
16	Pseudo Hallâ€"Petch Strength Reduction in Polycrystalline Graphene. Nano Letters, 2013, 13, 1829-1833.	9.1	172
17	Breakdown of fast water transport in graphene oxides. Physical Review E, 2014, 89, 012113.	2.1	164
18	Nanotomy-based production of transferable and dispersible graphene nanostructures of controlled shape and size. Nature Communications, 2012, 3, 844.	12.8	163

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19	Ionic Liquid Selectively Facilitates CO₂ Transport through Graphene Oxide Membrane. ACS Nano, 2018, 12, 5385-5393.	14.6	161
20	Molecular-channel driven actuator with considerations for multiple configurations and color switching. Nature Communications, 2018, 9, 590.	12.8	159
21	Multifunctional Pristine Chemically Modified Graphene Films as Strong as Stainless Steel. Advanced Materials, 2015, 27, 6708-6713.	21.0	157
22	Measuring Interlayer Shear Stress in Bilayer Graphene. Physical Review Letters, 2017, 119, 036101.	7.8	155
23	Self-organized graphene crystal patterns. NPG Asia Materials, 2013, 5, e36-e36.	7.9	153
24	Mechanical exfoliation of two-dimensional materials. Journal of the Mechanics and Physics of Solids, 2018, 115, 248-262.	4.8	143
25	Bending of Multilayer van der Waals Materials. Physical Review Letters, 2019, 123, 116101.	7.8	139
26	Selective Gas Diffusion in Graphene Oxides Membranes: A Molecular Dynamics Simulations Study. ACS Applied Materials & Interfaces, 2015, 7, 9052-9059.	8.0	137
27	Nearâ€Equilibrium Chemical Vapor Deposition of Highâ€Quality Singleâ€Crystal Graphene Directly on Various Dielectric Substrates. Advanced Materials, 2014, 26, 1348-1353.	21.0	132
28	Observation of High-Speed Microscale Superlubricity in Graphite. Physical Review Letters, 2013, 110, 255504.	7.8	131
29	Strain controlled thermomutability of single-walled carbon nanotubes. Nanotechnology, 2009, 20, 185701.	2.6	130
30	Alzheimer's AÎ²(1-40) Amyloid Fibrils Feature Size-Dependent Mechanical Properties. Biophysical Journal, 2010, 98, 2053-2062.	0.5	120
31	Rolling up transition metal dichalcogenide nanoscrolls via one drop of ethanol. Nature Communications, 2018, 9, 1301.	12.8	117
32	High-strength scalable graphene sheets by freezing stretch-induced alignment. Nature Materials, 2021, 20, 624-631.	27.5	117
33	Ultrastrong Graphene Films via Long-Chain Ï€-Bridging. Matter, 2019, 1, 389-401.	10.0	108
34	The interlayer shear effect on graphene multilayer resonators. Journal of the Mechanics and Physics of Solids, 2011, 59, 1613-1622.	4.8	102
35	Strain engineering water transport in graphene nanochannels. Physical Review E, 2011, 84, 056329.	2.1	101
36	Defect-Engineered Heat Transport in Graphene: A Route to High Efficient Thermal Rectification. Scientific Reports, 2015, 5, 11962.	3.3	96

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37	Engineering graphene by oxidation: a first-principles study. Nanotechnology, 2010, 21, 045704.	2.6	92
38	Super-durable ultralong carbon nanotubes. Science, 2020, 369, 1104-1106.	12.6	92
39	Graphene Nano-Ribbons Under Tension. Journal of Computational and Theoretical Nanoscience, 2009, 6, 625-628.	0.4	82
40	Non-Continuum Intercalated Water Diffusion Explains Fast Permeation through Graphene Oxide Membranes. ACS Nano, 2017, 11, 11152-11161.	14.6	81
41	Mechanics of carbon nanotube networks: microstructural evolution and optimal design. Soft Matter, 2011, 7, 10039.	2.7	74
42	Adhesion Energy of MoS₂ Thin Films on Silicon-Based Substrates Determined via the Attributes of a Single MoS₂ Wrinkle. ACS Applied Materials & Interfaces, 2017, 9, 7812-7818.	8.0	72
43	Cracks fail to intensify stress in nacreous composites. Composites Science and Technology, 2013, 81, 24-29.	7.8	66
44	Defect-Detriment to Graphene Strength Is Concealed by Local Probe: The Topological and Geometrical Effects. ACS Nano, 2015, 9, 401-408.	14.6	66
45	Intrinsic high water/ion selectivity of graphene oxide lamellar membranes in concentration gradient-driven diffusion. Chemical Science, 2016, 7, 6988-6994.	7.4	66
46	Multimodal and self-healable interfaces enable strong and tough graphene-derived materials. Journal of the Mechanics and Physics of Solids, 2014, 70, 30-41.	4.8	60
47	Microscale Schottky superlubric generator with high direct-current density and ultralong life. Nature Communications, 2021, 12, 2268.	12.8	57
48	Strength loss of carbon nanotube fibers explained in a three-level hierarchical model. Carbon, 2018, 138, 134-142.	10.3	56
49	Controlled Growth of Singleâ€Crystal Twelveâ€Pointed Graphene Grains on a Liquid Cu Surface. Advanced Materials, 2014, 26, 6423-6429.	21.0	55
50	Hierarchical Grapheneâ€Based Films with Dynamic Selfâ€Stiffening for Biomimetic Artificial Muscle. Advanced Functional Materials, 2016, 26, 7003-7010.	14.9	53
51	Facile growth of vertically-aligned graphene nanosheets via thermal CVD: The experimental and theoretical investigations. Carbon, 2017, 121, 1-9.	10.3	53
52	Intercalated water layers promote thermal dissipation at bioâ€"nano interfaces. Nature Communications, 2016, 7, 12854.	12.8	52
53	Primary Nucleation-Dominated Chemical Vapor Deposition Growth for Uniform Graphene Monolayers on Dielectric Substrate. Journal of the American Chemical Society, 2019, 141, 11004-11008.	13.7	52
54	Etching-Controlled Growth of Graphene by Chemical Vapor Deposition. Chemistry of Materials, 2017, 29, 1022-1027.	6.7	49

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55	Heat dissipation at a grapheneâ€“substrate interface. Journal of Physics Condensed Matter, 2012, 24, 475305.	1.8	48
56	Selectively tuning gas transport through ionic liquid filled graphene oxide nanoslits using an electric field. Journal of Materials Chemistry A, 2019, 7, 15062-15067.	10.3	48
57	Strain effects on basal-plane hydrogenation of graphene: A first-principles study. Applied Physics Letters, 2010, 96, .	3.3	47
58	Thermal Transfer in Graphene-Interfaced Materials: Contact Resistance and Interface Engineering. ACS Applied Materials & Interfaces, 2013, 5, 2599-2603.	8.0	47
59	Chemically modified graphene films with tunable negative Poissonâ€™s ratios. Nature Communications, 2019, 10, 2446.	12.8	46
60	Enhanced mechanical properties of carbon nanotube networks by mobile and discrete binders. Carbon, 2013, 64, 237-244.	10.3	44
61	Mechanics of coordinative crosslinks in graphene nanocomposites: a first-principles study. Journal of Materials Chemistry, 2011, 21, 6707.	6.7	42
62	Topology evolution of graphene in chemical vapor deposition, a combined theoretical/experimental approach toward shape control of graphene domains. Nanotechnology, 2012, 23, 115605.	2.6	42
63	Characterizing phonon thermal conduction in polycrystalline graphene. Journal of Materials Research, 2014, 29, 362-372.	2.6	42
64	Thin-Shell Thickness of Two-Dimensional Materials. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	2.2	40
65	Renormalization of Ionic Solvation Shells in Nanochannels. ACS Applied Materials & Interfaces, 2018, 10, 27801-27809.	8.0	40
66	Interphase Induced Dynamic Selfâ€Stiffening in Grapheneâ€Based Polydimethylsiloxane Nanocomposites. Small, 2016, 12, 3723-3731.	10.0	39
67	Heat transport in low-dimensional materials: A review and perspective. Theoretical and Applied Mechanics Letters, 2016, 6, 113-121.	2.8	39
68	Degradation and recovery of graphene/polymer interfaces under cyclic mechanical loading. Composites Science and Technology, 2017, 149, 220-227.	7.8	38
69	Voltage gated inter-cation selective ion channels from graphene nanopores. Nanoscale, 2019, 11, 9856-9861.	5.6	37
70	Nanoscale fluid-structure interaction: Flow resistance and energy transfer between water and carbon nanotubes. Physical Review E, 2011, 84, 046314.	2.1	36
71	Direct Topâ€Down Fabrication of Largeâ€Area Graphene Arrays by an In Situ Etching Method. Advanced Materials, 2015, 27, 4195-4199.	21.0	36
72	Confined, Oriented, and Electrically Anisotropic Graphene Wrinkles on Bacteria. ACS Nano, 2016, 10, 8403-8412.	14.6	35

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73	Rollerballâ€Penâ€Drawing Technology for Extremely Foldable Paperâ€Based Electronics. Advanced Electronic Materials, 2017, 3, 1700098.	5.1	35
74	Mechanotunable Microstructures of Carbon Nanotube Networks. ACS Macro Letters, 2012, 1, 1176-1179.	4.8	34
75	Can carbon nanotube fibers achieve the ultimate conductivity?â€"Coupled-mode analysis for electron transport through the carbon nanotube contact. Journal of Applied Physics, 2013, 114, 063714.	2.5	34
76	Van der Waals Force Isolation of Monolayer MoS₂. Advanced Materials, 2016, 28, 10055-10060.	21.0	34
77	Interlayer Coupling Behaviors of Boron Doped Multilayer Graphene. Journal of Physical Chemistry C, 2017, 121, 26034-26043.	3.1	33
78	Ultimate Osmosis Engineered by the Pore Geometry and Functionalization of Carbon Nanostructures. Scientific Reports, 2015, 5, 10597.	3.3	32
79	Mechanical Properties of Chitinâ€"Protein Interfaces: A Molecular Dynamics Study. BioNanoScience, 2013, 3, 312-320.	3.5	31
80	Optimizing Interfacial Cross-Linking in Graphene-Derived Materials, Which Balances Intralayer and Interlayer Load Transfer. ACS Applied Materials & Interfaces, 2017, 9, 24830-24839.	8.0	31
81	Ion Permeability and Selectivity in Composite Nanochannels: Engineering through the End Effects. Journal of Physical Chemistry C, 2020, 124, 4890-4898.	3.1	31
82	Enhanced Mechanical Properties of Prestressed Multiâ€Walled Carbon Nanotubes. Small, 2008, 4, 733-737.	10.0	30
83	Hierarchical Nanostructures Are Crucial To Mitigate Ultrasmall Thermal Point Loads. Nano Letters, 2009, 9, 2065-2072.	9.1	29
84	How graphene crumples are stabilized?. RSC Advances, 2013, 3, 2720.	3.6	29
85	Structure Evolution of Graphene Oxide during Thermally Driven Phase Transformation: Is the Oxygen Content Really Preserved?. PLoS ONE, 2014, 9, e111908.	2.5	29
86	Graphene Oxide Promoted Cadmium Uptake by Rice in Soil. ACS Sustainable Chemistry and Engineering, 2019, 7, 10283-10292.	6.7	29
87	Conformational Phase Map of Two-Dimensional Macromolecular Graphene Oxide in Solution. Matter, 2020, 3, 230-245.	10.0	29
88	Chemical vapor deposition of bilayer graphene with layer-resolved growth through dynamic pressure control. Journal of Materials Chemistry C, 2016, 4, 7464-7471.	5.5	28
89	Mechanical responses of boron-doped monolayer graphene. Carbon, 2019, 147, 594-601.	10.3	28
90	Hierarchical graphene nanoribbon assemblies feature unique electronic and mechanical properties. Nanotechnology, 2009, 20, 375704.	2.6	27

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91	Water Intercalation for Seamless, Electrically Insulating, and Thermally Transparent Interfaces. ACS Applied Materials & Interfaces, 2016, 8, 1970-1976.	8.0	27
92	Sunlightâ€Driven Water Transport via a Reconfigurable Pump. Angewandte Chemie - International Edition, 2018, 57, 15435-15440.	13.8	27
93	Mechanical energy transfer and dissipation in fibrous beta-sheet-rich proteins. Physical Review E, 2010, 81, 061910.	2.1	26
94	The critical power to maintain thermally stable molecular junctions. Nature Communications, 2014, 5, 4297.	12.8	26
95	Structures and thermodynamics of water encapsulated by graphene. Scientific Reports, 2017, 7, 2646.	3.3	26
96	Micro- and nano-mechanics in China: A brief review of recent progress and perspectives. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	26
97	Interfacial failure boosts mechanical energy dissipation in carbon nanotube films under ballistic impact. Carbon, 2019, 146, 139-146.	10.3	26
98	Realizing Spontaneously Regular Stacking of Pristine Graphene Oxide by a Chemical-Structure-Engineering Strategy for Mechanically Strong Macroscopic Films. ACS Nano, 2022, 16, 8869-8880.	14.6	25
99	Geometrical effect â€˜stiffensâ€™ graphene membrane at finite vacancy concentrations. Extreme Mechanics Letters, 2016, 6, 82-87.	4.1	24
100	Graphene buffered galvanic synthesis of grapheneâ€“metal hybrids. Journal of Materials Chemistry, 2011, 21, 13241.	6.7	23
101	From Selfâ€Assembly Hierarchical hâ€BN Patterns to Centimeterâ€Scale Uniform Monolayer hâ€BN Film. Advanced Materials Interfaces, 2019, 6, 1801493.	3.7	23
102	Large Elastic Deformation and Defect Tolerance of Hexagonal Boron Nitride Monolayers. Cell Reports Physical Science, 2020, 1, 100172.	5.6	23
103	Geometrical distortion leads to Griffith strength reduction in graphene membranes. Extreme Mechanics Letters, 2017, 14, 31-37.	4.1	22
104	How Universal Is the Wetting Aging in 2D Materials. Nano Letters, 2020, 20, 5670-5677.	9.1	22
105	Step driven competitive epitaxial and self-limited growth of graphene on copper surface. AIP Advances, 2011, 1, .	1.3	21
106	Viscous damping of nanobeam resonators: Humidity, thermal noise, and a paddling effect. Journal of Applied Physics, 2011, 110, .	2.5	21
107	Pattern evolution characterizes the mechanism and efficiency of CVD graphene growth. Carbon, 2019, 141, 316-322.	10.3	21
108	Nanoconfinement-Enforced Ion Correlation and Nanofluidic Ion Machinery. Nano Letters, 2020, 20, 8392-8398.	9.1	21

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109	Biomimetic Mechanically Enhanced Carbon Nanotube Fibers by Silk Fibroin Infiltration. Small, 2021, 17, e2100066.	10.0	21
110	Thermal transport in crystalline Si/Ge nano-composites: Atomistic simulations and microscopic models. Applied Physics Letters, 2012, 100, .	3.3	20
111	Effect of Acidity on Chitinâ€"Protein Interface: A Molecular Dynamics Study. BioNanoScience, 2014, 4, 207-215.	3.5	20
112	Transition of Graphene Oxide from Nanomembrane to Nanoscroll Mediated by Organic Solvent in Dispersion. Chemistry of Materials, 2018, 30, 5951-5960.	6.7	20
113	Experimental nanomechanics of 2D materials for strain engineering. Applied Nanoscience (Switzerland), 2021, 11, 1075-1091.	3.1	20
114	Topological Defects in Two-Dimensional Crystals: The Stress Buildup and Accumulation. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	19
115	Edge-Epitaxial Growth of Graphene on Cu with a Hydrogen-Free Approach. Chemistry of Materials, 2019, 31, 2555-2562.	6.7	19
116	Elastocapillary cleaning of twisted bilayer graphene interfaces. Nature Communications, 2021, 12, 5069.	12.8	19
117	Atomistic dynamics of sulfur-deficient high-symmetry grain boundaries in molybdenum disulfide. Nanoscale, 2017, 9, 10312-10320.	5.6	18
118	Confined Structures and Selective Mass Transport of Organic Liquids in Graphene Nanochannels. ACS Applied Materials & Interfaces, 2018, 10, 37014-37022.	8.0	18
119	On the Fracture of Supported Graphene Under Pressure. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	17
120	Mechanical responses of the bio-nano interface: A molecular dynamics study of graphene-coated lipid membrane. Theoretical and Applied Mechanics Letters, 2015, 5, 231-235.	2.8	17
121	Wearable Strain Sensors: Carbonized Silk Fabric for Ultrastretchable, Highly Sensitive, and Wearable Strain Sensors (Adv. Mater. 31/2016). Advanced Materials, 2016, 28, 6639-6639.	21.0	17
122	Thermal transport in oxidized polycrystalline graphene. Carbon, 2016, 108, 318-326.	10.3	17
123	Mechanics of network materials with responsive crosslinks. Comptes Rendus - Mecanique, 2014, 342, 264-272.	2.1	16
124	Assessment of Selfâ€Assembled Monolayers as Highâ€Performance Thermal Interface Materials. Advanced Materials Interfaces, 2017, 4, 1700355.	3.7	16
125	Hydrogen-dominated metal-free growth of graphitic-nitrogen doped graphene with n-type transport behaviors. Carbon, 2020, 161, 123-131.	10.3	16
126	Pattern Development and Control of Strained Solitons in Graphene Bilayers. Nano Letters, 2021, 21, 1772-1777.	9.1	16

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127	Largeâ€Area Growth of Fiveâ€Lobed and Triangular Graphene Grains on Textured Cu Substrate. Advanced Materials Interfaces, 2016, 3, 1600347.	3.7	15
128	Edges facilitate water evaporation through nanoporous graphene. Nanotechnology, 2019, 30, 165401.	2.6	15
129	Experimentally measuring weak fracture toughness anisotropy in graphene. Communications Materials, 2022, 3, .	6.9	15
130	Conformational Scaling Relations of Two-Dimensional Macromolecular Graphene Oxide in Solution. Macromolecules, 2020, 53, 10421-10430.	4.8	14
131	Understanding macroscopic assemblies of carbon nanostructures with microstructural complexity. Composites Part A: Applied Science and Manufacturing, 2021, 143, 106318.	7.6	14
132	The effect of material mixing on interfacial stiffness and strength of multi-material additive manufacturing. Additive Manufacturing, 2020, 36, 101502.	3.0	13
133	Microstructure- and concentration-dependence of lithium diffusion in the silicon anode: Kinetic Monte Carlo simulations and complex network analysis. Applied Physics Letters, 2018, 113, .	3.3	12
134	Flow-induced dynamics of carbon nanotubes. Nanoscale, 2011, 3, 4383.	5.6	11
135	Intrinsic mechanical properties of graphene oxide films: Strain characterization and the gripping effects. Carbon, 2017, 118, 467-474.	10.3	10
136	Sunlightâ€Driven Water Transport via a Reconfigurable Pump. Angewandte Chemie, 2018, 130, 15661-15666.	2.0	10
137	Field-enhanced selectivity in nanoconfined ionic transport. Nanoscale, 2020, 12, 6512-6521.	5.6	10
138	Theoretical prediction of effective stiffness of nonwoven fibrous networks with straight and curved nanofibers. Composites Part A: Applied Science and Manufacturing, 2021, 143, 106311.	7.6	10
139	Oxygen-Assisted Anisotropic Chemical Etching of MoSe₂ for Enhanced Phototransistors. Chemistry of Materials, 2022, 34, 4212-4223.	6.7	10
140	Geometrical control of ionic current rectification in a configurable nanofluidic diode. Biomicrofluidics, 2016, 10, 054102.	2.4	9
141	Lithiation-enhanced charge transfer and sliding strength at the silicon-graphene interface: A first-principles study. Acta Mechanica Solida Sinica, 2017, 30, 254-262.	1.9	9
142	Deciphering the nature of ion-graphene interaction. Physical Review Research, 2020, 2, .	3.6	9
143	Failure life prediction for carbon nanotubes. Journal of the Mechanics and Physics of Solids, 2022, 164, 104907.	4.8	9
144	Mechanics of Microtubules from a Coarse-Grained Model. BioNanoScience, 2011, 1, 173-182.	3.5	8

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145	Mechanistic transition of heat conduction in two-dimensional solids: A study of silica bilayers. Physical Review B, 2015, 92, .	3.2	8
146	Peeling Silicene From Model Silver Substrates in Molecular Dynamics Simulations. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	2.2	8
147	Fundamental Properties of Graphene. , 2018, , 73-102.		8
148	Bio-inspired graphene-derived membranes with strain-controlled interlayer spacing. Nanoscale, 2018, 10, 8585-8590.	5.6	7
149	<i>In situ</i>growth of large-area and self-aligned graphene nanoribbon arrays on liquid metal. National Science Review, 2021, 8, nwaa298.	9.5	7
150	Strain Characterization in Two-Dimensional Crystals. Materials, 2021, 14, 4460.	2.9	7
151	Directed self-assembly of end-functionalized nanofibers: from percolated networks to liquid crystal-like phases. Nanotechnology, 2015, 26, 205602.	2.6	6
152	Targeted Heating of Enzyme Systems Based on Photothermal Materials. ChemBioChem, 2019, 20, 2467-2473.	2.6	6
153	Defects in two-dimensional materials: Topological and geometrical effects. Chinese Science Bulletin, 2016, 61, 501-510.	0.7	6
154	Hierarchicalâ€structureâ€dependent high ductility of electrospun polyoxymethylene nanofibers. Journal of Applied Polymer Science, 2019, 136, 47086.	2.6	5
155	Robustness of structural superlubricity beyond rigid models. Friction, 2022, 10, 1382-1392.	6.4	5
156	Large-Size Superlattices Synthesized by Sequential Sulfur Substitution-Induced Transformation of Metastable MoTe₂. Chemistry of Materials, 2021, 33, 9760-9768.	6.7	5
157	Microstructural ordering of nanofibers in flow-directed assembly. Science China Technological Sciences, 2019, 62, 1545-1554.	4.0	4
158	Structure evolution of hBN grown on molten Cu by regulating precursor flux during chemical vapor deposition. 2D Materials, 2022, 9, 015004.	4.4	4
159	Enhanced Catalytic Mechanism of Twin-Structured BiVO₄. Journal of Physical Chemistry Letters, 2021, 12, 10610-10615.	4.6	4
160	Energy-conversion efficiency and power output of twisted-filament artificial muscles. Extreme Mechanics Letters, 2022, 50, 101531.	4.1	4
161	Unraveling the morphological complexity of two-dimensional macromolecules. Patterns, 2022, 3, 100497.	5.9	4
162	Graphene Arrays: Direct Top-Down Fabrication of Large-Area Graphene Arrays by an In Situ Etching Method (Adv. Mater. 28/2015). Advanced Materials, 2015, 27, 4194-4194.	21.0	3

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163	Predicting the lifetime of superlubricity. Europhysics Letters, 2015, 112, 60007.	2.0	3
164	Graphene Oxides in Filtration and Separation Applications. , 2015, , 129-147.		3
165	On the elastic rod models for mechanical tests of one-dimensional nanostructures under transverse loads. Journal of Applied Physics, 2020, 128, .	2.5	3
166	Electronic excitation in graphene under single-particle irradiation. Nanotechnology, 2021, 32, 165702.	2.6	3
167	Edge-enhanced ultrafast water evaporation from graphene nanopores. Cell Reports Physical Science, 2022, 3, 100900.	5.6	3
168	Comment on â€œAnharmonicity and Universal Response of Linear Carbon Chain Mechanical Properties under Hydrostatic Pressureâ€. Physical Review Letters, 2022, 128, .	7.8	3
169	Molecular dynamics simulations of silicon carbide nanowires under single-ion irradiation. Journal of Applied Physics, 2019, 126, 125902.	2.5	2
170	On the applicability of carbon nanotubes as nanomechanical probes and manipulators. Nanotechnology, 2012, 23, 415502.	2.6	1
171	The mechanism of selective molecular capture in carbon nanotube networks. Physical Chemistry Chemical Physics, 2014, 16, 14894-14898.	2.8	1
172	Graphene: Near-Equilibrium Chemical Vapor Deposition of High-Quality Single-Crystal Graphene Directly on Various Dielectric Substrates (Adv. Mater. 9/2014). Advanced Materials, 2014, 26, 1471-1471.	21.0	1
173	Graphene: Controlled Growth of Single-Crystal Twelve-Pointed Graphene Grains on a Liquid Cu Surface (Adv. Mater. 37/2014). Advanced Materials, 2014, 26, 6519-6519.	21.0	1
174	Graphene Composites. , 2018, , 201-214.		1
175	Scaling and Classification of Ion-Substrate Interaction. Journal of Physical Chemistry C, 2021, 125, 26778-26784.	3.1	1
176	Two-step heat fusion kinetics and mechanical performance of thermoplastic interfaces. Scientific Reports, 2022, 12, 5701.	3.3	1
177	Nanoscale Biological Materials. Journal of Nanomaterials, 2016, 2016, 1-2.	2.7	0
178	Energy transfer and motion synchronization between mechanical oscillators through microhydrodynamic coupling. Physics of Fluids, 2017, 29, .	4.0	0