Shuze Zhu

List of Publications by Year
in descending order

30 papers	3,653 citations	304743 22 h-index	477307 29 g-index
32 all docs	32 docs citations	32 times ranked	4673 citing authors

#	Article	IF	Citations
1	Processing bulk natural wood into a high-performance structural material. Nature, 2018, 554, 224-228.	27.8	970
2	Structureâ€“propertyâ€“function relationships of natural and engineered wood. Nature Reviews Materials, 2020, 5, 642-666.	48.7	616
3	Anomalous scaling law of strength and toughness of cellulose nanopaper. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8971-8976.	7.1	296
4	Anisotropic, Transparent Films with Aligned Cellulose Nanofibers. Advanced Materials, 2017, 29, 1606284.	21.0	202
5	Reduced Graphene Oxide Films with Ultrahigh Conductivity as Li-Ion Battery Current Collectors. Nano Letters, 2016, 16, 3616-3623.	9.1	187
6	Hydrogenation-Assisted Graphene Origami and Its Application in Programmable Molecular Mass Uptake, Storage, and Release. ACS Nano, 2014, 8, 2864-2872.	14.6	176
7	Transparent, Anisotropic Biofilm with Aligned Bacterial Cellulose Nanofibers. Advanced Functional Materials, 2018, 28, 1707491.	14.9	142
8	Celluloseâ€Nanofiberâ€Enabled 3D Printing of a Carbonâ€Nanotube Microfiber Network. Small Methods, 2017, 1, 1700222.	8.6	130
9	Ultra-fast self-assembly and stabilization of reactive nanoparticles in reduced graphene oxide films. Nature Communications, 2016, 7, 12332.	12.8	123
10	Programmable Extreme Pseudomagnetic Fields in Graphene by a Uniaxial Stretch. Physical Review Letters, 2015, 115, 245501.	7.8	100
11	Hybridizing wood cellulose and graphene oxide toward high-performance fibers. NPG Asia Materials, 2015, 7, e150-e150.	7.9	95
12	Carbon Welding by Ultrafast Joule Heating. Nano Letters, 2016, 16, 7282-7289.	9.1	88
13	Millisecond synthesis of CoS nanoparticles for highly efficient overall water splitting. Nano Research, 2019, 12, 2259-2267.	10.4	85
14	Mechanics Design in Celluloseâ€Enabled Highâ€Performance Functional Materials. Advanced Materials, 2021, 33, e2002504.	21.0	77
15	Extreme Environmental Thermal Shock Induced Dislocationâ€Rich Pt Nanoparticles Boosting Hydrogen Evolution Reaction. Advanced Materials, 2022, 34, e2106973.	21.0	68
16	Multiple Twin Boundaryâ€Regulated Metastable Pd for Ethanol Oxidation Reaction. Advanced Energy Materials, 2022, 12, 2103505.	19.5	51
17	Extremely compliant and highly stretchable patterned graphene. Applied Physics Letters, 2014, 104, .	3.3	41
18	Pseudomagnetic fields in a locally strained graphene drumhead. Physical Review B, 2014, 90, .	3.2	40

#	Article	IF	Citations
19	Mechanical Control of Graphene on Engineered Pyramidal Strain Arrays. ACS Nano, 2015, 9, 5799-5806.	14.6	37
20	MoirÃ©-templated strain patterning in transition-metal dichalcogenides and application in twisted bilayer MoS₂. Nanoscale, 2018, 10, 20689-20701.	5.6	27
21	Controlling Rotation of Two-Dimensional Material Flakes. ACS Nano, 2019, 13, 6925-6931.	14.6	27
22	Wrinkling Instability of Graphene on Substrate-Supported Nanoparticles. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	25
23	Effects of surface compliance and relaxation on the frictional properties of lamellar materials. RSC Advances, 2014, 4, 26721-26728.	3.6	14
24	Reversible Mechanical and Electrical Properties of Ripped Graphene. Physical Review Applied, 2015, 3, .	3.8	12
25	Catalyst-Free In Situ Carbon Nanotube Growth in Confined Space via High Temperature Gradient. Research, 2018, 2018, 1793784.	5.7	7
26	Line defects guided molecular patterning on graphene. Applied Physics Letters, 2014, 104, 093102.	3.3	6
27	Critical Dispersion Distance of Silicon Nanoparticles Intercalated between Graphene Layers. Journal of Nanomaterials, 2012, 2012, 1-4.	2.7	4
28	Molecular Mechanism Underpinning Stable Mechanical Performance and Enhanced Conductivity of Air-Aged Ionic Conductive Elastomers. Macromolecules, 2022, 55, 4665-4674.	4.8	4
29	Selection rules of twistronic angles in two-dimensional material flakes via dislocation theory. Physical Review B, 2021, 103, .	3.2	3
30	Extreme Environmental Thermal Shock Induced Dislocationâ€Rich Pt Nanoparticles Boosting Hydrogen Evolution Reaction (Adv. Mater. 2/2022). Advanced Materials, 2022, 34, .	21.0	0