

# Zheng Yan

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

72  
papers

10,019  
citations

44  
h-index

80  
g-index

80  
ext. papers

11,174  
ext. citations

15.4  
avg, IF

5.99  
L-index

#	Paper	IF	Citations
72	Growth of graphene from solid carbon sources. <i>Nature</i> , <b>2010</b> , 468, 549-52	50.4	1106
71	3-Dimensional graphene carbon nanotube carpet-based microsupercapacitors with high electrochemical performance. <i>Nano Letters</i> , <b>2013</b> , 13, 72-8	11.5	588
70	Materials science. Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. <i>Science</i> , <b>2015</b> , 347, 154-9	33.3	587
69	Coal as an abundant source of graphene quantum dots. <i>Nature Communications</i> , <b>2013</b> , 4, 2943	17.4	556
68	Toward the synthesis of wafer-scale single-crystal graphene on copper foils. <i>ACS Nano</i> , <b>2012</b> , 6, 9110-7	16.7	488
67	A seamless three-dimensional carbon nanotube graphene hybrid material. <i>Nature Communications</i> , <b>2012</b> , 3, 1225	17.4	390
66	Graphene nanoribbon and nanostructured SnO <sub>2</sub> composite anodes for lithium ion batteries. <i>ACS Nano</i> , <b>2013</b> , 7, 6001-6	16.7	384
65	Printing, folding and assembly methods for forming 3D mesostructures in advanced materials. <i>Nature Reviews Materials</i> , <b>2017</b> , 2,	73.3	372
64	A mechanically driven form of Kirigami as a route to 3D mesostructures in micro/nanomembranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 11757-64	11.5	344
63	Rational design of hybrid graphene films for high-performance transparent electrodes. <i>ACS Nano</i> , <b>2011</b> , 5, 6472-9	16.7	265
62	Growth of bilayer graphene on insulating substrates. <i>ACS Nano</i> , <b>2011</b> , 5, 8187-92	16.7	243
61	Direct growth of bilayer graphene on SiO <sub>2</sub> substrates by carbon diffusion through nickel. <i>ACS Nano</i> , <b>2011</b> , 5, 8241-7	16.7	231
60	Morphable 3D mesostructures and microelectronic devices by multistable buckling mechanics. <i>Nature Materials</i> , <b>2018</b> , 17, 268-276	27	216
59	Three-dimensional piezoelectric polymer microsystems for vibrational energy harvesting, robotic interfaces and biomedical implants. <i>Nature Electronics</i> , <b>2019</b> , 2, 26-35	28.4	209
58	Terahertz and infrared spectroscopy of gated large-area graphene. <i>Nano Letters</i> , <b>2012</b> , 12, 3711-5	11.5	203
57	Controlled mechanical buckling for origami-inspired construction of 3D microstructures in advanced materials. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2629-2639	15.6	188
56	Three-dimensional metal-graphene-nanotube multifunctional hybrid materials. <i>ACS Nano</i> , <b>2013</b> , 7, 58-64	16.7	185

55	Gas-Permeable, Multifunctional On-Skin Electronics Based on Laser-Induced Porous Graphene and Sugar-Templated Elastomer Sponges. <i>Advanced Materials</i> , <b>2018</b> , 30, e1804327	24	177
54	Chemical vapor deposition of graphene single crystals. <i>Accounts of Chemical Research</i> , <b>2014</b> , 47, 1327-37	24.3	170
53	Large flake graphene oxide fibers with unconventional 100% knot efficiency and highly aligned small flake graphene oxide fibers. <i>Advanced Materials</i> , <b>2013</b> , 25, 4592-7	24	158
52	High thermal conductivity of suspended few-layer hexagonal boron nitride sheets. <i>Nano Research</i> , <b>2014</b> , 7, 1232-1240	10	157
51	Rebar graphene. <i>ACS Nano</i> , <b>2014</b> , 8, 5061-8	16.7	155
50	Mechanical assembly of complex, 3D mesostructures from releasable multilayers of advanced materials. <i>Science Advances</i> , <b>2016</b> , 2, e1601014	14.3	152
49	Large-area Bernal-stacked bi-, tri-, and tetralayer graphene. <i>ACS Nano</i> , <b>2012</b> , 6, 9790-6	16.7	147
48	Highly transparent nonvolatile resistive memory devices from silicon oxide and graphene. <i>Nature Communications</i> , <b>2012</b> , 3, 1101	17.4	146
47	Iron Oxide Nanoparticle and Graphene Nanoribbon Composite as an Anode Material for High-Performance Li-Ion Batteries. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2044-2048	15.6	142
46	Two-dimensional materials in functional three-dimensional architectures with applications in photodetection and imaging. <i>Nature Communications</i> , <b>2018</b> , 9, 1417	17.4	136
45	Towards hybrid superlattices in graphene. <i>Nature Communications</i> , <b>2011</b> , 2, 559	17.4	130
44	Functionalized low defect graphene nanoribbons and polyurethane composite film for improved gas barrier and mechanical performances. <i>ACS Nano</i> , <b>2013</b> , 7, 10380-6	16.7	109
43	Inorganic semiconducting materials for flexible and stretchable electronics. <i>Npj Flexible Electronics</i> , <b>2017</b> , 1,	10.7	107
42	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E9455-E9464	11.5	104
41	Thickness-dependent patterning of MoS <sub>2</sub> sheets with well-oriented triangular pits by heating in air. <i>Nano Research</i> , <b>2013</b> , 6, 703-711	10	92
40	Controlled modulation of electronic properties of graphene by self-assembled monolayers on SiO <sub>2</sub> substrates. <i>ACS Nano</i> , <b>2011</b> , 5, 1535-40	16.7	92
39	Experimental and Theoretical Studies of Serpentine Interconnects on Ultrathin Elastomers for Stretchable Electronics. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1702589	15.6	85
38	Mesoporous silicas functionalized with a high density of carboxylate groups as efficient absorbents for the removal of basic dyestuffs. <i>Journal of Materials Chemistry</i> , <b>2006</b> , 16, 2347		73

37	Carbon nanotube and graphene nanoribbon-coated conductive Kevlar fibers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 131-6	9.5	72
36	Pyridine-functionalized mesoporous silica as an efficient adsorbent for the removal of acid dyestuffs. <i>Journal of Materials Chemistry</i> , <b>2006</b> , 16, 1717		72
35	Large hexagonal bi- and trilayer graphene single crystals with varied interlayer rotations. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 1565-9	16.4	63
34	Multiscale porous elastomer substrates for multifunctional on-skin electronics with passive-cooling capabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 205-213	11.5	60
33	Laser-Induced Graphene for Electrothermally Controlled, Mechanically Guided, 3D Assembly and Human-Soft Actuators Interaction. <i>Advanced Materials</i> , <b>2020</b> , 32, e1908475	24	57
32	Guided Formation of 3D Helical Mesostructures by Mechanical Buckling: Analytical Modeling and Experimental Validation. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2909-2918	15.6	57
31	Deterministic assembly of 3D mesostructures in advanced materials via compressive buckling: A short review of recent progress. <i>Extreme Mechanics Letters</i> , <b>2017</b> , 11, 96-104	3.9	56
30	Pencil-paper on-skin electronics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 18292-18301	11.5	52
29	Circular polarization dependent cyclotron resonance in large-area graphene in ultrahigh magnetic fields. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	44
28	Laser reprogramming magnetic anisotropy in soft composites for reconfigurable 3D shaping. <i>Nature Communications</i> , <b>2020</b> , 11, 6325	17.4	41
27	Engineered elastomer substrates for guided assembly of complex 3D mesostructures by spatially nonuniform compressive buckling. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604281	15.6	41
26	Three-Dimensional Multiscale, Multistable, and Geometrically Diverse Microstructures with Tunable Vibrational Dynamics Assembled by Compressive Buckling. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605914	15.6	39
25	Mechanically Assembled, Three-Dimensional Hierarchical Structures of Cellular Graphene with Programmed Geometries and Outstanding Electromechanical Properties. <i>ACS Nano</i> , <b>2018</b> , 12, 12456-12463	16.7	37
24	Three-Dimensional Objects Consisting of Hierarchically Assembled Nanofibers with Controlled Alignments for Regenerative Medicine. <i>Nano Letters</i> , <b>2019</b> , 19, 2059-2065	11.5	36
23	Chemical Makeup and Hydrophilic Behavior of Graphene Oxide Nanoribbons after Low-Temperature Fluorination. <i>ACS Nano</i> , <b>2015</b> , 9, 7009-18	16.7	34
22	Graphene on Metal Grids as the Transparent Conductive Material for Dye Sensitized Solar Cell. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 25863-25868	3.8	32
21	Controlled ambipolar-to-unipolar conversion in graphene field-effect transistors through surface coating with poly(ethylene imine)/poly(ethylene glycol) films. <i>Small</i> , <b>2012</b> , 8, 59-62	11	31
20	Hexagonal graphene onion rings. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 10755-62	16.4	28

19	Mechanically-Guided Deterministic Assembly of 3D Mesostructures Assisted by Residual Stresses. <i>Small</i> , <b>2017</b> , 13, 1700151	11	25
18	Crystalline and micellar properties of amphiphilic biodegradable chitooligosaccharide-graft-poly( $\epsilon$ -caprolactone) copolymers. <i>Carbohydrate Polymers</i> , <b>2006</b> , 64, 466-472	10.3	25
17	Large Hexagonal Bi- and Trilayer Graphene Single Crystals with Varied Interlayer Rotations. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 1591-1595	3.6	24
16	Reversible Self-Assembly of 3D Architectures Actuated by Responsive Polymers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 41505-41511	9.5	23
15	Rebar graphene from functionalized boron nitride nanotubes. <i>ACS Nano</i> , <b>2015</b> , 9, 532-8	16.7	22
14	Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 9001-9019	16.4	22
13	Fabrication and Deformation of 3D Multilayered Kirigami Microstructures. <i>Small</i> , <b>2018</b> , 14, e1703852	11	21
12	Outdoor-Useable, Wireless/Battery-Free Patch-Type Tissue Oximeter with Radiative Cooling. <i>Advanced Science</i> , <b>2021</b> , 8, 2004885	13.6	21
11	Effect of anchor and functional groups in functionalized graphene devices. <i>Nano Research</i> , <b>2013</b> , 6, 138-148	14.8	19
10	Deterministic Integration of Biological and Soft Materials onto 3D Microscale Cellular Frameworks. <i>Advanced Biology</i> , <b>2017</b> , 1, 1700068	3.5	12
9	Laser-induced graphene for bioelectronics and soft actuators. <i>Nano Research</i> , <b>2021</b> , 14, 1-18	10	12
8	Paper-based wearable electronics. <i>iScience</i> , <b>2021</b> , 24, 102736	6.1	11
7	Adsorption of atrazine by laser induced graphitic material: An efficient, scalable and green alternative for pollution abatement. <i>Journal of Environmental Chemical Engineering</i> , <b>2020</b> , 8, 104407	6.8	9
6	4D Printing Elastic Composites for Strain-Tailored Multistable Shape Morphing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12719-12725	9.5	9
5	An analytic model of two-level compressive buckling with applications in the assembly of free-standing 3D mesostructures. <i>Soft Matter</i> , <b>2018</b> , 14, 8828-8837	3.6	6
4	Bioinspired elastomer composites with programmed mechanical and electrical anisotropies.. <i>Nature Communications</i> , <b>2022</b> , 13, 524	17.4	5
3	Synthesis, Assembly, and Applications of Semiconductor Nanomembranes <b>2016</b> , 1-36		1
2	3D Assembly: Controlled Mechanical Buckling for Origami-Inspired Construction of 3D Microstructures in Advanced Materials (Adv. Funct. Mater. 16/2016). <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2586-2586	15.6	

- 1 Advances in Modeling Alzheimer's Disease In Vitro. *Advanced NanoBiomed Research*,2100097 ○