

Zhengzong Sun

List of Publications by Year in Descending Order

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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.

75
papers

16,285
citations

39
h-index

81
g-index

81
ext. papers

18,104
ext. citations

13
avg, IF

6.36
L-index

#	Paper	IF	Citations
75	The mechanisms of friction enhancements on graphene surfaces with folds: The reinforcement of atomic pinning or attraction. <i>Tribology International</i> , 2022 , 165, 107297	4.9	0
74	Precise CO Reduction for Bilayer Graphene.. <i>ACS Central Science</i> , 2022 , 8, 394-401	16.8	1
73	Graphenization of Diamond. <i>Chemistry of Materials</i> , 2022 , 34, 3941-3947	9.6	1
72	Wafer-scale functional circuits based on two dimensional semiconductors with fabrication optimized by machine learning. <i>Nature Communications</i> , 2021 , 12, 5953	17.4	10
71	Strain-Induced Nonlinear Frictional Behavior of Graphene Nanowall Films. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 51608-51617	9.5	0
70	Direct electrosynthesis of 52% concentrated CO on silver's twin boundary. <i>Nature Communications</i> , 2021 , 12, 2139	17.4	9
69	Microscopic Mechanisms Behind the High Friction and Failure Initiation of Graphene Wrinkles. <i>Langmuir</i> , 2021 , 37, 6776-6782	4	1
68	Dichroic Photoelasticity in Black Phosphorus Revealed by Ultrafast Coherent Phonon Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 5871-5878	6.4	0
67	An in-memory computing architecture based on two-dimensional semiconductors for multiply-accumulate operations. <i>Nature Communications</i> , 2021 , 12, 3347	17.4	14
66	Reversing the Polarity of MoS with PTFE. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 46117-46124	9.5	1
65	Enhanced lubricity of CVD diamond films by in-situ synthetization of top-layered graphene sheets. <i>Carbon</i> , 2021 , 184, 680-688	10.4	1
64	Precise lateral control of graphene via living zigzag edges. <i>Carbon</i> , 2020 , 167, 718-723	10.4	3
63	Single Faceted Two-Dimensional Mo ₂ C Electrocatalyst for Highly Efficient Nitrogen Fixation. <i>ACS Catalysis</i> , 2020 , 10, 7864-7870	13.1	33
62	Metal-Organic Framework for Transparent Electronics. <i>Advanced Science</i> , 2020 , 7, 1903003	13.6	30
61	FIB-Patterned Nano-Supercapacitors: Minimized Size with Ultrahigh Performances. <i>Advanced Materials</i> , 2020 , 32, e1908072	24	11
60	CO ₂ Reduction on Copper's Twin Boundary. <i>ACS Catalysis</i> , 2020 , 10, 2026-2032	13.1	29
59	Revisiting the Role of Active Sites for Hydrogen Evolution Reaction through Precise Defect Adjusting. <i>Advanced Functional Materials</i> , 2019 , 29, 1901290	15.6	37

58	Epitaxial Growth and Integration of Insulating Metal-Organic Frameworks in Electrochemistry. <i>Journal of the American Chemical Society</i> , 2019 , 141, 11322-11327	16.4	61
57	Phase, Conductivity, and Surface Coordination Environment in Two-Dimensional Electrochemistry. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25108-25114	9.5	3
56	Large-area high quality PtSe ₂ thin film with versatile polarity. <i>Information Materials</i> , 2019 , 1, 260	23.1	26
55	Drastic enhancement of the Raman intensity in few-layer InSe by uniaxial strain. <i>Physical Review B</i> , 2019 , 99,	3.3	18
54	Layer-by-Layer AB-Stacked Bilayer Graphene Growth Through an Asymmetric Oxygen Gateway. <i>Chemistry of Materials</i> , 2019 , 31, 6105-6109	9.6	6
53	Ranking the relative CO ₂ electrochemical reduction activity in carbon materials. <i>Carbon</i> , 2019 , 154, 108-114	10.4	12
52	Vibrational Imaging and Quantification of Two-Dimensional Hexagonal Boron Nitride with Stimulated Raman Scattering. <i>ACS Nano</i> , 2019 , 13, 14033-14040	16.7	18
51	Single-Atom Electroplating on Two Dimensional Materials. <i>Chemistry of Materials</i> , 2019 , 31, 429-435	9.6	34
50	Wafer-scale transferred multilayer MoS for high performance field effect transistors. <i>Nanotechnology</i> , 2019 , 30, 174002	3.4	19
49	Controlled Doping of Wafer-Scale PtSe ₂ Films for Device Application. <i>Advanced Functional Materials</i> , 2019 , 29, 1805614	15.6	60
48	Largely Tunable Band Structures of Few-Layer InSe by Uniaxial Strain. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 3994-4000	9.5	59
47	Thalia dealbata Inspired Anisotropic Cellular Biomass Derived Carbonaceous Aerogel. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 17152-17159	8.3	32
46	High-Performance Wafer-Scale MoS Transistors toward Practical Application. <i>Small</i> , 2018 , 14, e1803465	11	48
45	Pristine Graphene Electrode in Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 4643-4648	9.5	39
44	Cation-Exchange Approach to Tuning the Flexibility of a Metal-Organic Framework for Gated Adsorption. <i>Inorganic Chemistry</i> , 2017 , 56, 5069-5075	5.1	15
43	Towards the standardization of graphene growth through carbon depletion, refilling and nucleation. <i>Carbon</i> , 2017 , 119, 350-354	10.4	16
42	Two-dimensional non-volatile programmable p-n junctions. <i>Nature Nanotechnology</i> , 2017 , 12, 901-906	28.7	196
41	Chemical and Bandgap Engineering in Monolayer Hexagonal Boron Nitride. <i>Scientific Reports</i> , 2017 , 7, 45584	4.9	49

40	Optimizing Nonlinear Optical Visibility of Two-Dimensional Materials. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 34448-34455	9.5	15
39	3D Printable Graphene Composite. <i>Scientific Reports</i> , 2015 , 5, 11181	4.9	275
38	Realization of controllable graphene p-n junctions through gate dielectric engineering. <i>RSC Advances</i> , 2015 , 5, 80496-80500	3.7	3
37	Nanoparticulate carbon black in cigarette smoke induces DNA cleavage and Th17-mediated emphysema. <i>ELife</i> , 2015 , 4, e09623	8.9	45
36	Biocompatibility of pristine graphene for neuronal interface. <i>Journal of Neurosurgery: Pediatrics</i> , 2013 , 11, 575-83	2.1	53
35	Effect of anchor and functional groups in functionalized graphene devices. <i>Nano Research</i> , 2013 , 6, 138-148	14.8	19
34	A seamless three-dimensional carbon nanotube graphene hybrid material. <i>Nature Communications</i> , 2012 , 3, 1225	17.4	390
33	Large-area Bernal-stacked bi-, tri-, and tetralayer graphene. <i>ACS Nano</i> , 2012 , 6, 9790-6	16.7	147
32	Toward the synthesis of wafer-scale single-crystal graphene on copper foils. <i>ACS Nano</i> , 2012 , 6, 9110-7	16.7	488
31	Closed-edged graphene nanoribbons from large-diameter collapsed nanotubes. <i>ACS Nano</i> , 2012 , 6, 6023-8	16.7	53
30	Terahertz and infrared spectroscopy of gated large-area graphene. <i>Nano Letters</i> , 2012 , 12, 3711-5	11.5	203
29	Controlled ambipolar-to-unipolar conversion in graphene field-effect transistors through surface coating with poly(ethylene imine)/poly(ethylene glycol) films. <i>Small</i> , 2012 , 8, 59-62	11	31
28	Quantitative analysis of structure and bandgap changes in graphene oxide nanoribbons during thermal annealing. <i>Journal of the American Chemical Society</i> , 2012 , 134, 11774-80	16.4	46
27	Supergrowth of nitrogen-doped single-walled carbon nanotube arrays: active species, dopant characterization, and doped/undoped heterojunctions. <i>ACS Nano</i> , 2011 , 5, 6925-34	16.7	35
26	High Throughput Preparation of Large Area Transparent Electrodes Using Non-Functionalized Graphene Nanoribbons. <i>Chemistry of Materials</i> , 2011 , 23, 935-939	9.6	19
25	Growth of bilayer graphene on insulating substrates. <i>ACS Nano</i> , 2011 , 5, 8187-92	16.7	243
24	In situ synthesis of polymer-modified mesoporous carbon CMK-3 composites for CO ₂ sequestration. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 4782-6	9.5	41
23	Rational design of hybrid graphene films for high-performance transparent electrodes. <i>ACS Nano</i> , 2011 , 5, 6472-9	16.7	265

22	Highly conductive graphene nanoribbons by longitudinal splitting of carbon nanotubes using potassium vapor. <i>ACS Nano</i> , 2011 , 5, 968-74	16.7	186
21	Growth of graphene from food, insects, and waste. <i>ACS Nano</i> , 2011 , 5, 7601-7	16.7	384
20	Direct growth of bilayer graphene on SiO ₂ substrates by carbon diffusion through nickel. <i>ACS Nano</i> , 2011 , 5, 8241-7	16.7	231
19	Towards hybrid superlattices in graphene. <i>Nature Communications</i> , 2011 , 2, 559	17.4	130
18	Layer-by-layer removal of graphene for device patterning. <i>Science</i> , 2011 , 331, 1168-72	33.3	199
17	Graphene Chemistry: Synthesis and Manipulation. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2425-2434	16.4	220
16	Controlled modulation of electronic properties of graphene by self-assembled monolayers on SiO ₂ substrates. <i>ACS Nano</i> , 2011 , 5, 1535-40	16.7	92
15	Three dimensional solid-state supercapacitors from aligned single-walled carbon nanotube array templates. <i>Carbon</i> , 2011 , 49, 4890-4897	10.4	70
14	Growth of graphene from solid carbon sources. <i>Nature</i> , 2010 , 468, 549-52	50.4	1106
13	Solution-phase synthesis of heteroatom-substituted carbon scaffolds for hydrogen storage. <i>Journal of the American Chemical Society</i> , 2010 , 132, 15246-51	16.4	42
12	Lower-defect graphene oxide nanoribbons from multiwalled carbon nanotubes. <i>ACS Nano</i> , 2010 , 4, 2059-69	16.7	488
11	Resistive switches and memories from silicon oxide. <i>Nano Letters</i> , 2010 , 10, 4105-10	11.5	255
10	Improved synthesis of graphene oxide. <i>ACS Nano</i> , 2010 , 4, 4806-14	16.7	8269
9	Reduction of graphene oxide via bacterial respiration. <i>ACS Nano</i> , 2010 , 4, 4852-6	16.7	449
8	Radical addition of perfluorinated alkyl iodides to multi-layered graphene and single-walled carbon nanotubes. <i>Nano Research</i> , 2010 , 3, 138-145	10	42
7	Soluble graphene through edge-selective functionalization. <i>Nano Research</i> , 2010 , 3, 117-125	10	114
6	Transforming carbon nanotube devices into nanoribbon devices. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13460-3	16.4	86
5	High-yield organic dispersions of unfunctionalized graphene. <i>Nano Letters</i> , 2009 , 9, 3460-2	11.5	445

- 4 Morphology-controlled synthesis of β -FeOOH and its derivatives. *Nanotechnology*, **2007**, 18, 455607 3-4 41
- 3 Synthesis of functional polypyrrole/prussian blue and polypyrrole/Ag composite microtubes by using a reactive template. *Nanotechnology*, **2007**, 18, 195603 3-4 46
- 2 A novel inorganic-organic polymer electrolyte with a high conductivity: insertion of poly(ethylene) oxide into LiV_3O_8 in one step. *Journal of Materials Chemistry*, **2005**, 15, 1369-1374 27
- 1 CO_2 reduction with coin catalyst. *Nano Research*, 1 10 1