

Jin-Wu Jiang

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6361332/jin-wu-jiang-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

102
papers

4,244
citations

37
h-index

64
g-index

107
ext. papers

4,945
ext. citations

4.7
avg, IF

6.47
L-index

#	Paper	IF	Citations
102	Negative poisson's ratio in single-layer black phosphorus. <i>Nature Communications</i> , 2014 , 5, 4727	17.4	478
101	Molecular dynamics simulations of single-layer molybdenum disulphide (MoS ₂): Stillinger-Weber parametrization, mechanical properties, and thermal conductivity. <i>Journal of Applied Physics</i> , 2013 , 114, 064307	2.5	263
100	Mechanical properties of single-layer black phosphorus. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 385304	3.04	157
99	Parametrization of Stillinger-Weber potential based on valence force field model: application to single-layer MoS ₂ and black phosphorus. <i>Nanotechnology</i> , 2015 , 26, 315706	3.4	154
98	A high performance wearable strain sensor with advanced thermal management for motion monitoring. <i>Nature Communications</i> , 2020 , 11, 3530	17.4	141
97	Graphene versus MoS ₂ : A short review. <i>Frontiers of Physics</i> , 2015 , 10, 287-302	3.7	137
96	Thermal conductivities of single- and multi-layer phosphorene: a molecular dynamics study. <i>Nanoscale</i> , 2016 , 8, 483-91	7.7	129
95	Manipulating the Thermal Conductivity of Monolayer MoS ₂ via Lattice Defect and Strain Engineering. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 16358-16365	3.8	112
94	Elastic bending modulus of single-layer molybdenum disulfide (MoS ₂): finite thickness effect. <i>Nanotechnology</i> , 2013 , 24, 435705	3.4	109
93	Mechanical properties of MoS ₂ /graphene heterostructures. <i>Applied Physics Letters</i> , 2014 , 105, 033108	3.4	102
92	Twin graphene: A novel two-dimensional semiconducting carbon allotrope. <i>Carbon</i> , 2017 , 118, 370-375	10.4	97
91	Negative Poisson's Ratio in Single-Layer Graphene Ribbons. <i>Nano Letters</i> , 2016 , 16, 2657-62	11.5	90
90	Modelling heat conduction in polycrystalline hexagonal boron-nitride films. <i>Scientific Reports</i> , 2015 , 5, 13228	4.9	90
89	Mechanical properties and fracture behavior of single-layer phosphorene at finite temperatures. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 395303	3	86
88	A theoretical analysis of cohesive energy between carbon nanotubes, graphene and substrates. <i>Carbon</i> , 2013 , 57, 108-119	10.4	84
87	Intrinsic Negative Poisson's Ratio for Single-Layer Graphene. <i>Nano Letters</i> , 2016 , 16, 5286-90	11.5	77
86	Interfacial thermal conductance in graphene/MoS ₂ heterostructures. <i>Carbon</i> , 2016 , 96, 888-896	10.4	77

85	Auxetic nanomaterials: Recent progress and future development. <i>Applied Physics Reviews</i> , 2016 , 3, 041101,3	7.3	71
84	A Stillinger-Weber potential for single-layered black phosphorus, and the importance of cross-pucker interactions for a negative Poisson's ratio and edge stress-induced bending. <i>Nanoscale</i> , 2015 , 7, 6059-68	7.7	69
83	Raman and infrared properties and layer dependence of the phonon dispersions in multilayered graphene. <i>Physical Review B</i> , 2008 , 77,	3.3	65
82	First principle study of the thermal conductance in graphene nanoribbon with vacancy and substitutional silicon defects. <i>Applied Physics Letters</i> , 2011 , 98, 113114	3.4	61
81	MoS2 nanoresonators: intrinsically better than graphene?. <i>Nanoscale</i> , 2014 , 6, 3618-25	7.7	59
80	Interfacial thermal conductance in graphene/black phosphorus heterogeneous structures. <i>Carbon</i> , 2017 , 117, 399-410	10.4	58
79	Coarse-grained potentials of single-walled carbon nanotubes. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 71, 197-218	5	56
78	A review on the flexural mode of graphene: lattice dynamics, thermal conduction, thermal expansion, elasticity and nanomechanical resonance. <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 083001	1.8	55
77	Orientation dependent thermal conductance in single-layer MoS2. <i>Scientific Reports</i> , 2013 , 3, 2209	4.9	55
76	Modulation of thermal conductivity in kinked silicon nanowires: phonon interchanging and pinching effects. <i>Nano Letters</i> , 2013 , 13, 1670-4	11.5	54
75	Analytic study of strain engineering of the electronic bandgap in single-layer black phosphorus. <i>Physical Review B</i> , 2015 , 91,	3.3	54
74	Thermal conduction in single-layer black phosphorus: highly anisotropic?. <i>Nanotechnology</i> , 2015 , 26, 055301	3.1	50
73	Multiscale computational understanding and growth of 2D materials: a review. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	49
72	Morphology and in-plane thermal conductivity of hybrid graphene sheets. <i>Applied Physics Letters</i> , 2012 , 101, 211909	3.4	47
71	A Gaussian treatment for the friction issue of Lennard-Jones potential in layered materials: Application to friction between graphene, MoS2, and black phosphorus. <i>Journal of Applied Physics</i> , 2015 , 117, 124304	2.5	46
70	Thermal conductivity of silicene nanosheets and the effect of isotopic doping. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 165301	3	41
69	Thermal conductivity of freestanding single wall carbon nanotube sheet by Raman spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 19958-65	9.5	39
68	Negative Poisson's ratio in graphene oxide. <i>Nanoscale</i> , 2017 , 9, 4007-4012	7.7	38

67	Phonon bandgap engineering of strained monolayer MoS ₂ . <i>Nanoscale</i> , 2014 , 6, 8326-33	7.7	38
66	Topology-induced thermal rectification in carbon nanodevice. <i>Europhysics Letters</i> , 2010 , 89, 46005	1.6	37
65	Joule heating and thermoelectric properties in short single-walled carbon nanotubes: Electron-phonon interaction effect. <i>Journal of Applied Physics</i> , 2011 , 110, 124319	2.5	35
64	Machine learning-based design of porous graphene with low thermal conductivity. <i>Carbon</i> , 2020 , 157, 262-269	10.4	35
63	Thermal conductivity dependence on chain length in amorphous polymers. <i>Journal of Applied Physics</i> , 2013 , 113, 184304	2.5	33
62	The buckling of single-layer MoS ₂ under uniaxial compression. <i>Nanotechnology</i> , 2014 , 25, 355402	3.4	32
61	Tension-induced phase transition of single-layer molybdenum disulphide (MoS ₂) at low temperatures. <i>Nanotechnology</i> , 2014 , 25, 295701	3.4	32
60	Enhancing the mass sensitivity of graphene nanoresonators via nonlinear oscillations: the effective strain mechanism. <i>Nanotechnology</i> , 2012 , 23, 475501	3.4	32
59	Molecular dynamics simulations for mechanical properties of borophene: parameterization of valence force field model and Stillinger-Weber potential. <i>Scientific Reports</i> , 2017 , 7, 45516	4.9	30
58	The art of designing carbon allotropes. <i>Frontiers of Physics</i> , 2019 , 14, 1	3.7	30
57	High thermoelectric figure of merit in silicon-germanium superlattice structured nanowires. <i>Applied Physics Letters</i> , 2012 , 101, 233114	3.4	29
56	Temperature-dependent mechanical properties of single-layer molybdenum disulphide: Molecular dynamics nanoindentation simulations. <i>Applied Physics Letters</i> , 2013 , 103, 231913	3.4	28
55	Tunable negative Poisson's ratio in hydrogenated graphene. <i>Nanoscale</i> , 2016 , 8, 15948-53	7.7	27
54	Thermal conductivity of carbon nanocoils. <i>Applied Physics Letters</i> , 2013 , 103, 233511	3.4	27
53	A surface stacking fault energy approach to predicting defect nucleation in surface-dominated nanostructures. <i>Journal of the Mechanics and Physics of Solids</i> , 2013 , 61, 1915-1934	5	27
52	Chiral symmetry analysis and rigid rotational invariance for the lattice dynamics of single-wall carbon nanotubes. <i>Physical Review B</i> , 2006 , 73,	3.3	27
51	Superior thermal conductivity and extremely high mechanical strength in polyethylene chains from ab initio calculation. <i>Journal of Applied Physics</i> , 2012 , 111, 124304	2.5	26
50	Effects of electron-phonon interaction on thermal and electrical transport through molecular nano-conductors. <i>AIP Advances</i> , 2015 , 5, 053204	1.5	24

49	Mechanical strain effects on black phosphorus nanoresonators. <i>Nanoscale</i> , 2016 , 8, 901-5	7.7	24
48	Misfit Strain-Induced Buckling for Transition-Metal Dichalcogenide Lateral Heterostructures: A Molecular Dynamics Study. <i>Acta Mechanica Solida Sinica</i> , 2019 , 32, 17-28	2	24
47	A comparative study of two molecular mechanics models based on harmonic potentials. <i>Journal of Applied Physics</i> , 2013 , 113, 063509	2.5	22
46	Elastic bending modulus for single-layer black phosphorus. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 455305	3	21
45	Acoustic and breathing phonon modes in bilayer graphene with Moiré patterns. <i>Applied Physics Letters</i> , 2012 , 101, 023113	3.4	21
44	Topologically protected interface phonons in two-dimensional nanomaterials: hexagonal boron nitride and silicon carbide. <i>Nanoscale</i> , 2018 , 10, 13913-13923	7.7	20
43	Manipulation of heat current by the interface between graphene and white graphene. <i>Europhysics Letters</i> , 2011 , 96, 16003	1.6	18
42	A full spd tight-binding treatment for electronic bands of graphitic tubes. <i>Solid State Communications</i> , 2009 , 149, 82-86	1.6	17
41	The effects of vacancy and oxidation on black phosphorus nanoresonators. <i>Nanotechnology</i> , 2017 , 28, 135202	3.4	13
40	Strain engineering for thermal conductivity of single-walled carbon nanotube forests. <i>Carbon</i> , 2015 , 81, 688-693	10.4	13
39	Phonon modes in single-walled molybdenum disulphide nanotubes: lattice dynamics calculation and molecular dynamics simulation. <i>Nanotechnology</i> , 2014 , 25, 105706	3.4	12
38	The third principal direction besides armchair and zigzag in single-layer black phosphorus. <i>Nanotechnology</i> , 2015 , 26, 365702	3.4	11
37	Adsorbate migration effects on continuous and discontinuous temperature-dependent transitions in the quality factors of graphene nanoresonators. <i>Nanotechnology</i> , 2014 , 25, 025501	3.4	10
36	Mechanical oscillation of kinked silicon nanowires: A natural nanoscale spring. <i>Applied Physics Letters</i> , 2013 , 102, 123104	3.4	10
35	The strain rate effect on the buckling of single-layer MoS ₂ . <i>Scientific Reports</i> , 2015 , 5, 7814	4.9	9
34	Interlayer breathing and shear modes in few-layer black phosphorus. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 165401	1.8	8
33	Polar surface effects on the thermal conductivity of ZnO nanowires: a shell-like surface reconstruction-induced preserving mechanism. <i>Nanoscale</i> , 2013 , 5, 11035-43	7.7	7
32	Modulation of thermal conductivity in single-walled carbon nanotubes by fullerene encapsulation: enhancement or reduction?. <i>Nanoscale</i> , 2018 , 10, 18249-18256	7.7	7

31	Why twisting angles are diverse in graphene Moiré patterns?. <i>Journal of Applied Physics</i> , 2013 , 113, 194304-5	4.5	6
30	Thermal contraction in silicon nanowires at low temperatures. <i>Nanoscale</i> , 2010 , 2, 2864-7	7.7	6
29	Registry effect on the thermal conductivity of few-layer graphene. <i>Journal of Applied Physics</i> , 2014 , 116, 164313	2.5	5
28	Self-assembly of water molecules using graphene nanoresonators. <i>RSC Advances</i> , 2016 , 6, 110466-110470	3.7	5
27	Strain tunable phononic topological bandgaps in two-dimensional hexagonal boron nitride. <i>Journal of Applied Physics</i> , 2019 , 125, 082511	2.5	5
26	Size-sensitive Young's modulus of kinked silicon nanowires. <i>Nanotechnology</i> , 2013 , 24, 185702	3.4	4
25	Graphene-based torsional resonator from molecular-dynamics simulation. <i>Europhysics Letters</i> , 2011 , 96, 66007	1.6	4
24	Strain engineering for thermal conductivity of diamond nanothread forests. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 085301	3	4
23	Self-cleaning by harnessing wrinkles in two-dimensional layered crystals. <i>Nanoscale</i> , 2017 , 10, 312-318	7.7	4
22	Intrinsic twisting instability of kinked silicon nanowires for intracellular recording. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 28515-24	3.6	3
21	Tunable thermal expansion coefficient of transition-metal dichalcogenide lateral heterostructures. <i>Nanotechnology</i> , 2020 , 31, 405709	3.4	3
20	An analytic investigation for the edge effect on mechanical properties of graphene nanoribbons. <i>Journal of Applied Physics</i> , 2018 , 123, 064301	2.5	3
19	Nanomechanical resonators based on group IV element monolayers. <i>Nanotechnology</i> , 2018 , 29, 165503	3.4	3
18	Effect of interlayer space on the structure and Poisson's ratio of a graphene/MoS ₂ tubular van der Waals heterostructure. <i>Journal of Applied Physics</i> , 2018 , 124, 084302	2.5	3
17	Misfit strain-induced energy dissipation for graphene/MoS heterostructure nanomechanical resonators. <i>Nanotechnology</i> , 2019 , 30, 265701	3.4	2
16	Buckling of cylindrical shells subjected to a finite number of lateral loads: application to single-walled carbon nanotubes. <i>Nanotechnology</i> , 2020 , 31, 205711	3.4	2
15	Irreversible crumpling of graphene from hydrostatic and biaxial compression. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 015302	3	2
14	Reply to the Comment on "Parametrization of Stillinger-Weber potential based on valence force field model: application to single-layer MoS ₂ and black phosphorus" <i>Nanotechnology</i> , 2016 , 27, 238002	3.4	2

13	Preserving the Q-factors of ZnO nanoresonators via polar surface reconstruction. <i>Nanotechnology</i> , 2013 , 24, 405705	3.4	2
12	Strain engineering for mechanical properties in graphene nanoribbons revisited: The warping edge effect. <i>Journal of Applied Physics</i> , 2016 , 119, 234301	2.5	2
11	Buckled graphene for efficient energy harvest, storage and conversion. <i>Nanotechnology</i> , 2016 , 27, 4054024	3.4	2
10	A universal exponential factor in the dimensional crossover from graphene to graphite. <i>Journal of Applied Physics</i> , 2010 , 108, 124311	2.5	1
9	Bright and dark modes induced by graphene bubbles. <i>Europhysics Letters</i> , 2012 , 97, 36004	1.6	1
8	Diameter-dependent polygonal cross section for holey phenine nanotubes. <i>Nanotechnology</i> , 2019 , 31, 085702	3.4	1
7	Physical description of the monoclinic phase of zirconia based on the bond-order characteristic of the Tersoff potential. <i>Frontiers of Physics</i> , 2021 , 16, 1	3.7	1
6	Edge-modeBased graphene nanomechanical resonators for high-sensitivity mass sensor. <i>Europhysics Letters</i> , 2018 , 123, 36002	1.6	1
5	Strain Engineering for the Kapitza Resistance of the $ZrO_{2}/(\alpha)-Al_{2}O_{3}$ and $YSZ/(\alpha)-Al_{2}O_{3}$ Interfaces. <i>Acta Mechanica Sinica</i> , 1	2	0
4	Thermal-fluctuation gradient induced tangential entropic forces in layered two-dimensional materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2022 , 163, 104871	5	0
3	An empirical description for the hinge-like mechanism in single-layer black phosphorus: The angle-angle cross interaction. <i>Acta Mechanica Sinica</i> , 2017 , 30, 227-233	2	
2	Carbon rings as building blocks for single-walled carbon nanotubes. <i>Nano Futures</i> , 2020 , 4, 025001	3.6	
1	Tuning the shell structure deformation of APS thermal barrier coatings: A molecular dynamics study. <i>AIP Advances</i> , 2022 , 12, 035001	1.5	