

# Xiaoyi Liu

## List of Publications by Year in descending order

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27  
papers

643  
citations

623188

14  
h-index

580395

25  
g-index

27  
all docs

27  
docs citations

27  
times ranked

892  
citing authors

#	ARTICLE	IF	CITATIONS
1	Opening the band gap of graphene through silicon doping for the improved performance of graphene/GaAs heterojunction solar cells. <i>Nanoscale</i> , 2016, 8, 226-232.	2.8	92
2	Quasi-Two-Dimensional SiC and SiC <sub>2</sub> : Interaction of Silicon and Carbon at Atomic Thin Lattice Plane. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19772-19779.	1.5	87
3	Interfacial strengthening and self-healing effect in graphene-copper nanolayered composites under shear deformation. <i>Carbon</i> , 2016, 107, 680-688.	5.4	83
4	Strengthening metal nanolaminates under shock compression through dual effect of strong and weak graphene interface. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	65
5	Novel Polygonal Vanadium Oxide Nanoscrolls as Stable Cathode for Lithium Storage. <i>Advanced Functional Materials</i> , 2015, 25, 1773-1779.	7.8	54
6	Super-elasticity and deformation mechanism of three-dimensional pillared graphene network structures. <i>Carbon</i> , 2017, 118, 588-596.	5.4	36
7	Defecting controllability of bombarding graphene with different energetic atoms via reactive force field model. <i>Journal of Applied Physics</i> , 2013, 114, 054313.	1.1	25
8	Anisotropic growth of buckling-driven wrinkles in graphene monolayer. <i>Nanotechnology</i> , 2015, 26, 065701.	1.3	23
9	Effects of temperature and grain size on deformation of polycrystalline copper-graphene nanolayered composites. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 4741-4748.	1.3	23
10	Anomalous twisting strength of tilt grain boundaries in armchair graphene nanoribbons. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31911-31916.	1.3	17
11	Interfacial anti-fatigue effect in graphene-copper nanolayered composites under cyclic shear loading. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 7875-7884.	1.3	16
12	Anisotropic propagation and upper frequency limitation of terahertz waves in graphene. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	15
13	Deformation of high density polyethylene by dynamic equal-channel-angular pressing. <i>RSC Advances</i> , 2018, 8, 22583-22591.	1.7	15
14	Competing roles of interfaces and matrix grain size in the deformation and failure of polycrystalline Cu-graphene nanolayered composites under shear loading. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 23694-23701.	1.3	15
15	Radiation damage in gallium-stabilized $\delta$ -plutonium with helium bubbles. <i>Journal of Nuclear Materials</i> , 2017, 484, 7-15.	1.3	11
16	Tuning electromechanics of dynamic ripple pattern in graphene monolayer. <i>Carbon</i> , 2016, 98, 510-518.	5.4	10
17	Interfacial effect on deformation and failure of Al/Cu nanolaminates under shear loading. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 335301.	1.3	10
18	Unusually high flexibility of graphene-Cu nanolayered composites under bending. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 17393-17399.	1.3	9

#	ARTICLE	IF	CITATIONS
19	Transformation between divacancy defects induced by an energy pulse in graphene. <i>Nanotechnology</i> , 2016, 27, 274004.	1.3	6
20	Elasticâ€‘plastic properties of graphene engineered by oxygen functional groups. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 385305.	1.3	6
21	Theoretical analysis of high strength and anti-buckling of three-dimensional carbon honeycombs under shear loading. <i>Composites Part B: Engineering</i> , 2021, 219, 108967.	5.9	6
22	Crack propagation in graphene monolayer under tear loading. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 2659-2664.	1.3	5
23	Nanomechanics of Graphene and Design of Graphene Composites. Springer Theses, 2019, , .	0.0	5
24	Mesoscopic numerical computation model of air-diffusion electrode of metal/air batteries. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2013, 34, 571-576.	1.9	4
25	Grain size effects on dynamic fracture instability in polycrystalline graphene under tear loading. <i>Journal of Materials Research</i> , 2019, 34, 2209-2217.	1.2	4
26	Tunable Poissonâ€™s ratio and tension-compression asymmetry of graphene-copper nanolayered composites. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 165303.	1.3	1
27	Energy Storage: Novel Polygonal Vanadium Oxide Nanoscrolls as Stable Cathode for Lithium Storage ( <i>Adv. Funct. Mater.</i> 12/2015). <i>Advanced Functional Materials</i> , 2015, 25, 1766-1766.	7.8	0