Wengen Ouyang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1772986/publications.pdf

Version: 2024-02-01

33 papers	785 citations	516710 16 h-index	526287 27 g-index
34 all docs	34 docs citations	34 times ranked	655 citing authors

#	Article	IF	Citations
1	Nanoserpents: Graphene Nanoribbon Motion on Two-Dimensional Hexagonal Materials. Nano Letters, 2018, 18, 6009-6016.	9.1	104
2	Robust superlubricity by strain engineering. Nanoscale, 2019, 11, 2186-2193.	5.6	67
3	Negative Friction Coefficients in Superlubric Graphiteâ€“Hexagonal Boron Nitride Heterojunctions. Physical Review Letters, 2019, 122, 076102.	7.8	63
4	Controllable Thermal Conductivity in Twisted Homogeneous Interfaces of Graphene and Hexagonal Boron Nitride. Nano Letters, 2020, 20, 7513-7518.	9.1	50
5	Strain Engineering Modulates Graphene Interlayer Friction by MoirÃ© Pattern Evolution. ACS Applied Materials & Interfaces, 2019, 11, 36169-36176.	8.0	47
6	Single-Molecule Tribology: Force Microscopy Manipulation of a Porphyrin Derivative on a Copper Surface. ACS Nano, 2016, 10, 713-722.	14.6	40
7	Frictional Properties of Nanojunctions Including Atomically Thin Sheets. Nano Letters, 2016, 16, 1878-1883.	9.1	39
8	Mechanical and Tribological Properties of Layered Materials under High Pressure: Assessing the Importance of Many-Body Dispersion Effects. Journal of Chemical Theory and Computation, 2020, 16, 666-676.	5.3	39
9	Temperature and velocity dependent friction of a microscale graphite-DLC heterostructure. Friction, 2020, 8, 462-470.	6.4	27
10	Atomic-scale sliding friction on a contaminated surface. Nanoscale, 2018, 10, 6375-6381.	5.6	26
11	Load and Velocity Dependence of Friction Mediated by Dynamics of Interfacial Contacts. Physical Review Letters, 2019, 123, 116102.	7.8	26
12	4â€node unsymmetric quadrilateral membrane element with drilling DOFs insensitive to severe meshâ€distortion. International Journal for Numerical Methods in Engineering, 2018, 113, 1589-1606.	2.8	25
13	The Princess and the Nanoscale Pea: Long-Range Penetration of Surface Distortions into Layered Materials Stacks. ACS Nano, 2019, 13, 7603-7609.	14.6	23
14	The Origin of MoirÃ©â€Level Stickâ€Slip Behavior on Graphene/hâ€BN Heterostructures. Advanced Functional Materials, 2022, 32, .	14.9	20
15	Optical methods for determining thicknesses of few-layer graphene flakes. Nanotechnology, 2013, 24, 505701.	2.6	19
16	Energy corrugation in atomic-scale friction on graphite revisited by molecular dynamics simulations. Acta Mechanica Sinica/Lixue Xuebao, 2016, 32, 604-610.	3.4	19
17	Parity-Dependent MoirÃ© Superlattices in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Graphene</mml:mi><mml:mo>/</mml:mo><mml:mi>h</mml:mi><mml:mtext>â€”</mml:mtext> Heterostructures: A Route to Mechanomutable Metamaterials. Physical Review Letters, 2021, 126, 216101.	7.8	17
18	Load-velocity-temperature relationship in frictional response of microscopic contacts. Journal of the Mechanics and Physics of Solids, 2020, 137, 103880.	4.8	16

#	Article	IF	Citations
19	Mechanisms of frictional energy dissipation at graphene grain boundaries. Physical Review B, 2021, 103, .	3.2	16
20	Superlubric polycrystalline graphene interfaces. Nature Communications, 2021, 12, 5694.	12.8	14
21	Anisotropic Interlayer Force Field for Transition Metal Dichalcogenides: The Case of Molybdenum Disulfide. Journal of Chemical Theory and Computation, 2021, 17, 7237-7245.	5.3	12
22	Catalytic Growth of Ultralong Graphene Nanoribbons on Insulating Substrates. Advanced Materials, 2022, 34, e2200956.	21.0	12
23	Computational Prediction of Superlubric Layered Heterojunctions. ACS Applied Materials & Interfaces, 2021, 13, 33600-33608.	8.0	11
24	Superplastic Nanomolding of Highly Ordered Metallic Subâ€Micrometer Pillars Arrays for Surface Enhanced Raman Scattering. Advanced Materials Technologies, 2022, 7, 2100891.	5.8	8
25	Static friction boost in edge-driven incommensurate contacts. Physical Review Materials, 2018, 2, .	2.4	7
26	Thermodynamic model of twisted bilayer graphene: Entropy matters. Journal of the Mechanics and Physics of Solids, 2022, 167, 104972.	4.8	7
27	Registry-Dependent Peeling of Layered Material Interfaces: The Case of Graphene Nanoribbons on Hexagonal Boron Nitride. ACS Applied Materials & Interfaces, 2021, 13, 43533-43539.	8.0	6
28	Pointwise Plucking of Suspended Carbon Nanotubes. Nano Letters, 2012, 12, 3663-3667.	9.1	5
29	Registry-Dependent Potential for Interfaces of Gold with Graphitic Systems. Journal of Chemical Theory and Computation, 2021, 17, 7215-7223.	5.3	5
30	Finite temperature mechanics of multilayer 2D materials. Extreme Mechanics Letters, 2022, 52, 101612.	4.1	5
31	Spontaneous Movement of a Droplet on a Conical Substrate: Theoretical Analysis of the Driving Force. ACS Omega, 2022, 7, 20975-20982.	3.5	5
32	Microscopic mechanisms of frictional aging. Journal of the Mechanics and Physics of Solids, 2022, 166, 104944.	4.8	3
33	Bilayer MoS2 quantum dots with tunable magnetism and spin. AIP Advances, 2018, 8, 115103.	1.3	2