

# Wengen Ouyang

## List of Publications by Year in descending order

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Version: 2024-02-01

33  
papers

785  
citations

516710

16  
h-index

526287

27  
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docs citations

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times ranked

655  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Superplastic Nanomolding of Highly Ordered Metallic Submicrometer Pillars Arrays for Surface Enhanced Raman Scattering. <i>Advanced Materials Technologies</i> , 2022, 7, 2100891.                                | 5.8  | 8         |
| 2  | Finite temperature mechanics of multilayer 2D materials. <i>Extreme Mechanics Letters</i> , 2022, 52, 101612.   | 4.1  | 5         |
| 3  | Catalytic Growth of Ultralong Graphene Nanoribbons on Insulating Substrates. <i>Advanced Materials</i> , 2022, 34, e2200956.  | 21.0 | 12        |
| 4  | Thermodynamic model of twisted bilayer graphene: Entropy matters. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 167, 104972.  | 4.8  | 7         |
| 5  | Microscopic mechanisms of frictional aging. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 166, 104944.  | 4.8  | 3         |
| 6  | The Origin of Moiré Level Stick-Slip Behavior on Graphene/h-BN Heterostructures. <i>Advanced Functional Materials</i> , 2022, 32, .   | 14.9 | 20        |
| 7  | Spontaneous Movement of a Droplet on a Conical Substrate: Theoretical Analysis of the Driving Force. <i>ACS Omega</i> , 2022, 7, 20975-20982.   | 3.5  | 5         |
| 8  | Mechanisms of frictional energy dissipation at graphene grain boundaries. <i>Physical Review B</i> , 2021, 103, .   | 3.2  | 16        |
| 9  | Parity-Dependent Moiré Superlattices in $\text{Graphene/h-BN}$ Heterostructures: A Route to Mechanomutable Metamaterials. <i>Physical Review Letters</i> , 2021, 126, 216101.                                     |      |           |
| 10 | Computational Prediction of Superlubric Layered Heterojunctions. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 33600-33608.   | 8.0  | 11        |
| 11 | Registry-Dependent Peeling of Layered Material Interfaces: The Case of Graphene Nanoribbons on Hexagonal Boron Nitride. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 43533-43539.                    | 8.0  | 6         |
| 12 | Superlubric polycrystalline graphene interfaces. <i>Nature Communications</i> , 2021, 12, 5694.   | 12.8 | 14        |
| 13 | Registry-Dependent Potential for Interfaces of Gold with Graphitic Systems. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7215-7223.  | 5.3  | 5         |
| 14 | Anisotropic Interlayer Force Field for Transition Metal Dichalcogenides: The Case of Molybdenum Disulfide. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7237-7245.                               | 5.3  | 12        |
| 15 | Temperature and velocity dependent friction of a microscale graphite-DLC heterostructure. <i>Friction</i> , 2020, 8, 462-470.   | 6.4  | 27        |
| 16 | Mechanical and Tribological Properties of Layered Materials under High Pressure: Assessing the Importance of Many-Body Dispersion Effects. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 666-676. | 5.3  | 39        |
| 17 | Controllable Thermal Conductivity in Twisted Homogeneous Interfaces of Graphene and Hexagonal Boron Nitride. <i>Nano Letters</i> , 2020, 20, 7513-7518.   | 9.1  | 50        |
| 18 | Load-velocity-temperature relationship in frictional response of microscopic contacts. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 137, 103880.   | 4.8  | 16        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | The Princess and the Nanoscale Pea: Long-Range Penetration of Surface Distortions into Layered Materials Stacks. <i>ACS Nano</i> , 2019, 13, 7603-7609.   | 14.6 | 23        |
| 20 | Strain Engineering Modulates Graphene Interlayer Friction by Moiré Pattern Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 36169-36176.  | 8.0  | 47        |
| 21 | Load and Velocity Dependence of Friction Mediated by Dynamics of Interfacial Contacts. <i>Physical Review Letters</i> , 2019, 123, 116102.  | 7.8  | 26        |
| 22 | Robust superlubricity by strain engineering. <i>Nanoscale</i> , 2019, 11, 2186-2193.  | 5.6  | 67        |
| 23 | Negative Friction Coefficients in Superlubric Graphite-Hexagonal Boron Nitride Heterojunctions. <i>Physical Review Letters</i> , 2019, 122, 076102.   | 7.8  | 63        |
| 24 | Atomic-scale sliding friction on a contaminated surface. <i>Nanoscale</i> , 2018, 10, 6375-6381.  | 5.6  | 26        |
| 25 | 4-node unsymmetric quadrilateral membrane element with drilling DOFs insensitive to severe mesh distortion. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 113, 1589-1606. | 2.8  | 25        |
| 26 | Bilayer MoS <sub>2</sub> quantum dots with tunable magnetism and spin. <i>AIP Advances</i> , 2018, 8, 115103.   | 1.3  | 2         |
| 27 | Nanoserpents: Graphene Nanoribbon Motion on Two-Dimensional Hexagonal Materials. <i>Nano Letters</i> , 2018, 18, 6009-6016.   | 9.1  | 104       |
| 28 | Static friction boost in edge-driven incommensurate contacts. <i>Physical Review Materials</i> , 2018, 2, .   | 2.4  | 7         |
| 29 | Energy corrugation in atomic-scale friction on graphite revisited by molecular dynamics simulations. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016, 32, 604-610.                                   | 3.4  | 19        |
| 30 | Frictional Properties of Nanojunctions Including Atomically Thin Sheets. <i>Nano Letters</i> , 2016, 16, 1878-1883.   | 9.1  | 39        |
| 31 | Single-Molecule Tribology: Force Microscopy Manipulation of a Porphyrin Derivative on a Copper Surface. <i>ACS Nano</i> , 2016, 10, 713-722.  | 14.6 | 40        |
| 32 | Optical methods for determining thicknesses of few-layer graphene flakes. <i>Nanotechnology</i> , 2013, 24, 505701.   | 2.6  | 19        |
| 33 | Pointwise Plucking of Suspended Carbon Nanotubes. <i>Nano Letters</i> , 2012, 12, 3663-3667.  | 9.1  | 5         |