Tianshu Li

List of Publications by Year
in descending order

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Version: 2024-02-01

42	11,016	236925	276875
papers	citations	25 h-index	41 g-index

43	43	43	15363
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Emerging Photoluminescence in Monolayer MoS₂. Nano Letters, 2010, 10, 1271-1275.	9.1	7,897
2	Electronic Properties of MoS₂ Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 16192-16196.	3.1	634
3	Ideal strength and phonon instability in single-layer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 85, .	3.2	337
4	Homogeneous ice nucleation from supercooled water. Physical Chemistry Chemical Physics, 2011, 13, 19807.	2.8	226
5	â€œIdealâ€•Engineering Alloys. Physical Review Letters, 2007, 98, 105503.	7.8	181
6	Flexible and high-performance electrochromic devices enabled by self-assembled 2D TiO2/MXene heterostructures. Nature Communications, 2021, 12, 1587.	12.8	143
7	Pressure-Modulated Conductivity, Carrier Density, and Mobility of Multilayered Tungsten Disulfide. ACS Nano, 2015, 9, 9117-9123.	14.6	120
8	Enhanced heterogeneous ice nucleation by special surface geometry. Nature Communications, 2017, 8, 15372.	12.8	120
9	Ice nucleation at the nanoscale probes no manâ€™s land of water. Nature Communications, 2013, 4, 1887.	12.8	112
10	Heterogeneous Ice Nucleation Controlled by the Coupling of Surface Crystallinity and Surface Hydrophilicity. Journal of Physical Chemistry C, 2016, 120, 1507-1514.	3.1	104
11	Ice nucleation on carbon surface supports the classical theory for heterogeneous nucleation. Physical Review E, 2015, 91, 052402.	2.1	93
12	Surface-induced crystallization in supercooled tetrahedral liquids. Nature Materials, 2009, 8, 726-730.	27.5	84
13	Probing Methane Hydrate Nucleation through the Forward Flux Sampling Method. Journal of Physical Chemistry B, 2014, 118, 13324-13332.	2.6	83
14	Microscopic Mechanism and Kinetics of Ice Formation at Complex Interfaces: Zooming in on Kaolinite. Journal of Physical Chemistry Letters, 2016, 7, 2350-2355.	4.6	77
15	Realization of 2D crystalline metal nitrides via selective atomic substitution. Science Advances, 2020, 6, eaax8784.	10.3	66
16	Microstructure and nanoindentation hardness of Ti/TiN multilayered films. Surface and Coatings Technology, 2001, 137, 225-229.	4.8	64
17	Free energy landscape and molecular pathways of gas hydrate nucleation. Journal of Chemical Physics, 2016, 145, 211909.	3.0	62
18	Effect of hydrophilic silica nanoparticles on hydrate formation: Insight from the experimental study. Journal of Energy Chemistry, 2019, 30, 90-100.	12.9	61

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19	Spin-induced linear polarization of photoluminescence in antiferromagnetic van der Waals crystals. Nature Materials, 2021, 20, 964-970.	27.5	59
20	Probing the Domain Architecture in 2D Î±â€Mo₂C via Polarized Raman Spectroscopy. Advanced Materials, 2019, 31, e1807160.	21.0	58
21	Ideal tensile strength ofB2transition-metal aluminides. Physical Review B, 2004, 70, .	3.2	52
22	Spreading of dislocation cores in elastically anisotropic body-centered-cubic materials: The case of gum metal. Physical Review B, 2010, 82, .	3.2	46
23	Nucleation of tetrahedral solids: A molecular dynamics study of supercooled liquid silicon. Journal of Chemical Physics, 2009, 131, 224519.	3.0	34
24	Anisotropic Phonon Response of Fewâ€Layer PdSe₂ under Uniaxial Strain. Advanced Functional Materials, 2020, 30, 2003215.	14.9	26
25	First-principles investigations of the dielectric properties of crystalline and amorphous Si3N4 thin films. Applied Physics Letters, 2010, 96, 062902.	3.3	25
26	Interlayer Electronic Coupling in Arbitrarily Stacked MoS₂ Bilayers Controlled by Interlayer Sâ€“S Interaction. Journal of Physical Chemistry C, 2015, 119, 1247-1252.	3.1	25
27	Semiconducting cubic titanium nitride in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Th</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">P</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>structure. Physical Review Materials, 2018, 2, .	2.4	24
28	Band offsets and dielectric properties of the amorphous Si3N4/Si(100) interface: A first-principles study. Applied Physics Letters, 2013, 102, .	3.3	23
29	Mechanical Response of Nanocrystalline Ice-Contained Methane Hydrates: Key Role of Water Ice. ACS Applied Materials & Interfaces, 2020, 12, 14016-14028.	8.0	23
30	Tailored Nanoheterojunctions for Optimized Light Emission. Physical Review Letters, 2011, 107, 206805.	7.8	22
31	Ab initiostudy of the ideal shear strength and elastic deformation behaviors of B2FeAlandNiAl. Physical Review B, 2006, 73, .	3.2	20
32	Short-Range Order in GeSn Alloy. ACS Applied Materials & Interfaces, 2020, 12, 57245-57253.	8.0	20
33	Anomalous Stability of Two-Dimensional Ice Confined in Hydrophobic Nanopores. ACS Nano, 2019, 13, 4712-4719.	14.6	19
34	Microscopic modeling of the dielectric properties of silicon nitride. Physical Review B, 2011, 84, .	3.2	14
35	Mechanical properties of bi- and poly-crystalline ice. AIP Advances, 2018, 8, .	1.3	14
36	Reply to â€œComment on â€˜Ideal strength and phonon instability in single-layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="bold">MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>â€™ â€• Physical Review B, 2014, 90, .	3.2	12

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37	Mechanical Instability of Methane Hydrateâ€“Mineral Interface Systems. ACS Applied Materials & Interfaces, 2021, 13, 46043-46054.	8.0	12
38	Phase-Controllable Synthesis of Ultrathin Molybdenum Nitride Crystals Via Atomic Substitution of MoS₂. Chemistry of Materials, 2022, 34, 351-357.	6.7	12
39	Formation of inclusion type silicon phases induced by inert gases. Communications Chemistry, 2018, 1, .	4.5	6
40	Short-range order in SiSn alloy enriched by second-nearest-neighbor repulsion. Physical Review Materials, 2021, 5, .	2.4	3
41	Homogeneous ice nucleation rate at negative pressures: The role of the density anomaly. Chemical Physics Letters, 2022, 789, 139289.	2.6	3
42	Partial Local Atomic Ordering in Ge-Sn Alloy. , 2019, , .		0