Yuanxi Wang

List of Publications by Year
in descending order

39 papers	2,258 citations	304743 22 h-index	302126 39 g-index
40 all docs	40 docs citations	40 times ranked	4544 citing authors

#	Article	IF	Citations
1	Extraordinary Second Harmonic Generation in Tungsten Disulfide Monolayers. Scientific Reports, 2014, 4, 5530.	3.3	262
2	Optical identification of sulfur vacancies: Bound excitons at the edges of monolayer tungsten disulfide. Science Advances, 2017, 3, e1602813.	10.3	213
3	Intervalley scattering by acoustic phonons in two-dimensional MoS2 revealed by double-resonance Raman spectroscopy. Nature Communications, 2017, 8, 14670.	12.8	196
4	Non-oxidative intercalation and exfoliation of graphite by BrÃ¸nsted acids. Nature Chemistry, 2014, 6, 957-963.	13.6	175
5	ReaxFF Reactive Force-Field Study of Molybdenum Disulfide (MoS₂). Journal of Physical Chemistry Letters, 2017, 8, 631-640.	4.6	126
6	Atomically thin half-van der Waals metals enabled by confinement heteroepitaxy. Nature Materials, 2020, 19, 637-643.	27.5	114
7	Defect-Controlled Nucleation and Orientation of WSe₂ on hBN: A Route to Single-Crystal Epitaxial Monolayers. ACS Nano, 2019, 13, 3341-3352.	14.6	107
8	Monolayer Vanadiumâ€Doped Tungsten Disulfide: A Roomâ€Temperature Dilute Magnetic Semiconductor. Advanced Science, 2020, 7, 2001174.	11.2	104
9	Multiscale computational understanding and growth of 2D materials: a review. Npj Computational Materials, 2020, 6, .	8.7	89
10	Reversible Intercalation of Hexagonal Boron Nitride with BrÃ¸nsted Acids. Journal of the American Chemical Society, 2013, 135, 8372-8381.	13.7	88
11	Lowâ€Temperature Solution Synthesis of Fewâ€Layer 1Tâ€‰â€²â€MoTe₂ Nanostructures Exhibiting Lattice Compression. Angewandte Chemie - International Edition, 2016, 55, 2830-2834.	13.8	84
12	Interface-mediated noble metal deposition on transition metal dichalcogenide nanostructures. Nature Chemistry, 2020, 12, 284-293.	13.6	73
13	Intricate Resonant Raman Response in Anisotropic ReS₂. Nano Letters, 2017, 17, 5897-5907.	9.1	66
14	Multi-scale modeling of gas-phase reactions in metal-organic chemical vapor deposition growth of WSe2. Journal of Crystal Growth, 2019, 527, 125247.	1.5	59
15	Spontaneous Formation of Atomically Thin Stripes in Transition Metal Dichalcogenide Monolayers. Nano Letters, 2016, 16, 6982-6987.	9.1	48
16	Controllable Edge Exposure of MoS₂ for Efficient Hydrogen Evolution with High Current Density. ACS Applied Energy Materials, 2018, 1, 1268-1275.	5.1	44
17	Defect Coupling and Sub-Angstrom Structural Distortions in W_{1â€“x}Mo_xS₂ Monolayers. Nano Letters, 2017, 17, 2802-2808.	9.1	42
18	Dynamics of cleaning, passivating and doping monolayer MoS ₂ by controlled laser irradiation. 2D Materials, 2019, 6, 045031.	4.4	40

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19	Full orientation control of epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm on hBN assisted by substrate defects. Physical Review B, 2019, 99, .	3.2	37
20	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. Nano Letters, 2020, 20, 284-291.	9.1	34
21	Research Update: Recent progress on 2D materials beyond graphene: From ripples, defects, intercalation, and valley dynamics to straintronics and power dissipation. APL Materials, 2018, 6, .	5.1	30
22	Illuminating Invisible Grain Boundaries in Coalesced Single-Orientation WS₂ Monolayer Films. Nano Letters, 2021, 21, 6487-6495.	9.1	26
23	Lowâ€Temperature Solution Synthesis of Fewâ€Layer 1Tâ€‰â€²â€MoTe 2 Nanostructures Exhibiting Lattice Compression. Angewandte Chemie, 2016, 128, 2880-2884.	2.0	22
24	Unexpected Near-Infrared to Visible Nonlinear Optical Properties from 2-D Polar Metals. Nano Letters, 2020, 20, 8312-8318.	9.1	22
25	Theory of Finite-Length Grain Boundaries of Controlled Misfit Angle in Two-Dimensional Materials. Nano Letters, 2017, 17, 5297-5303.	9.1	20
26	Modeling for Structural Engineering and Synthesis of Two-Dimensional WSe₂ Using a Newly Developed ReaxFF Reactive Force Field. Journal of Physical Chemistry C, 2020, 124, 28285-28297.	3.1	20
27	Tuning Transport and Chemical Sensitivity via Niobium Doping of Synthetic MoS₂. Advanced Materials Interfaces, 2020, 7, 2000856.	3.7	19
28	Tuning transport across MoS2/graphene interfaces via as-grown lateral heterostructures. Npj 2D Materials and Applications, 2020, 4, .	7.9	12
29	Strong exciton regulation of Raman scattering in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2018, 98, .	3.2	11
30	Theoretical modeling of edge-controlled growth kinetics and structural engineering of 2D-MoSe2. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 271, 115263.	3.5	11
31	SnP₂S₆: A Promising Infrared Nonlinear Optical Crystal with Strong Nonresonant Second Harmonic Generation and Phase-Matchability. ACS Photonics, 2022, 9, 1724-1732.	6.6	11
32	A ReaxFF Force Field for 2D-WS₂ and Its Interaction with Sapphire. Journal of Physical Chemistry C, 2021, 125, 17950-17961.	3.1	10
33	Enhanced Emission from Defect Levels in Multilayer MoS₂. Advanced Optical Materials, 2022, 10, .	7.3	9
34	NanoVelcro: Theory of Guided Folding in Atomically Thin Sheets with Regions of Complementary Doping. Nano Letters, 2017, 17, 6708-6714.	9.1	8
35	Photoluminescence Induced by Substitutional Nitrogen in Single-Layer Tungsten Disulfide. ACS Nano, 2022, 16, 7428-7437.	14.6	7
36	Geometry and chiral symmetry breaking of ripple junctions in 2D materials. Journal of the Mechanics and Physics of Solids, 2019, 131, 337-343.	4.8	6

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37	Probing the origin of lateral heterogeneities in synthetic monolayer molybdenum disulfide. 2D Materials, 2019, 6, 025008.	4.4	6
38	Momentum-Space Spin Antivortex and Spin Transport in Monolayer Pb. Physical Review Letters, 2022, 128, 166601.	7.8	6
39	Observation of a Quasi-ordered Structure in Monolayer W x Mo (1-x) S 2 Alloys. Microscopy and Microanalysis, 2016, 22, 1548-1549.	0.4	1