Junhao Lin

List of Publications by Year
in descending order

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104 papers	11,895 citations	46918 47 h-index	33814 99 g-index
108 all docs	108 docs citations	108 times ranked	15970 citing authors

#	Article	IF	Citations
1	Phase-pure two-dimensional FexGeTe2 magnets with near-room-temperature TC. Nano Research, 2022, 15, 457-464.	5.8	21
2	Spin mapping of intralayer antiferromagnetism and field-induced spin reorientation in monolayer CrTe2. Nature Communications, 2022, 13, 257.	5.8	62
3	Growth of wafer-scale grapheneâ€“hexagonal boron nitride vertical heterostructures with clear interfaces for obtaining atomically thin electrical analogs. Nanoscale, 2022, 14, 4204-4215.	2.8	6
4	Hard ferromagnetic behavior in atomically thin CrSiTe₃ flakes. Nanoscale, 2022, 14, 5851-5858.	2.8	16
5	Nonlinear electronic and ultrafast optical signatures in chemical vapor-deposited ultrathin PtS2 ribbons. Nano Research, 2022, 15, 4366-4373.	5.8	3
6	Dative Epitaxy of Commensurate Monocrystalline Covalent van der Waals MoirÃ© Supercrystal. Advanced Materials, 2022, 34, e2200117.	11.1	20
7	Substitutional oxygen activated photoluminescence enhancement in monolayer transition metal dichalcogenides. Science China Materials, 2022, 65, 1034-1041.	3.5	6
8	Tuning of Optical Behavior in Monolayer and Bilayer Molybdenum Disulfide Using Hydrostatic Pressure. Journal of Physical Chemistry Letters, 2022, 13, 161-167.	2.1	10
9	Phase engineering of Cr5Te8 with colossal anomalous Hall effect. Nature Electronics, 2022, 5, 224-232.	13.1	68
10	Observation of Ultrastrong Coupling between Substrate and the Magnetic Topological Insulator MnBi₂Te₄. Nano Letters, 2022, 22, 3856-3864.	4.5	6
11	Constructing ambivalent imidazopyridinium-linked covalent organic frameworks. , 2022, 1, 382-392.		38
12	Engineering the Crack Structure and Fracture Behavior in Monolayer MoS₂ By Selective Creation of Point Defects. Advanced Science, 2022, 9, .	5.6	10
13	Femtomolarâ€Level Molecular Sensing of Monolayer Tungsten Diselenide Induced by Heteroatom Doping with Longâ€Term Stability. Advanced Functional Materials, 2022, 32, .	7.8	21
14	Dual-metal precursors for the universal growth of non-layered 2D transition metal chalcogenides with ordered cation vacancies. Science Bulletin, 2022, 67, 1649-1658.	4.3	10
15	Spaceâ€Confined Oneâ€Step Growth of 2D MoO₂/MoS₂ Vertical Heterostructures for Superior Hydrogen Evolution in Alkaline Electrolytes. Small, 2022, 18, .	5.2	20
16	One-Step Growth of Bilayer 2Hâ€“1Tâ€² MoTe₂ van der Waals Heterostructures with Interlayer-Coupled Resonant Phonon Vibration. ACS Nano, 2022, 16, 11268-11277.	7.3	7
17	Dissolution-precipitation growth of uniform and clean two dimensional transition metal dichalcogenides. National Science Review, 2021, 8, nwaa115.	4.6	42
18	Modulating Electronic Structure of Monolayer Transition Metal Dichalcogenides by Substitutional Nbâ€Doping. Advanced Functional Materials, 2021, 31, 2006941.	7.8	54

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19	Covalent 2D Cr₂Te₃ ferromagnet. Materials Research Letters, 2021, 9, 205-212.	4.1	25
20	Realization of a tunable surface Dirac gap in Sb-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>MnBi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2021, 103, .	3.7	27
21	Doping Concentration Modulation in Vanadium-Doped Monolayer Molybdenum Disulfide for Synaptic Transistors. ACS Nano, 2021, 15, 7340-7347.	7.3	53
22	Strained Epitaxy of Monolayer Transition Metal Dichalcogenides for Wrinkle Arrays. ACS Nano, 2021, 15, 6633-6644.	7.3	37
23	Preferential hole defect formation in monolayer WSe2 by electron-beam irradiation. Physical Review Materials, 2021, 5, .	0.9	4
24	Dissolutionâ€“precipitation growth of doped monolayer molybdenum disulfide through double-faced precursor supply. APL Materials, 2021, 9, .	2.2	6
25	Magnetic order in XY-type antiferromagnetic monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CoPS</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> revealed by Raman spectroscopy. Physical Review B, 2021, 103, .	3.7	20
26	Direct Visualization of Largeâ€Scale Intrinsic Atomic Lattice Structure and Its Collective Anisotropy in Airâ€Sensitive Monolayer 1Tâ€™â€•WTe₂. Advanced Science, 2021, 8, e2101563.	5.6	11
27	Synthesis and properties of free-standing monolayer amorphous carbon. Nature, 2020, 577, 199-203.	13.7	250
28	Enhanced Piezoelectric Effect Derived from Grain Boundary in MoS₂ Monolayers. Nano Letters, 2020, 20, 201-207.	4.5	66
29	Realization of BaZrS3 chalcogenide perovskite thin films for optoelectronics. Nano Energy, 2020, 68, 104317.	8.2	83
30	Unsaturated Single Atoms on Monolayer Transition Metal Dichalcogenides for Ultrafast Hydrogen Evolution. ACS Nano, 2020, 14, 767-776.	7.3	106
31	Orbital-fluctuation freezing and magnetic-nonmagnetic phase transition in Î±-TiBr3. Applied Physics Letters, 2020, 117, 133103.	1.5	6
32	Synthesis of Ultrahighâ€Quality Monolayer Molybdenum Disulfide through In Situ Defect Healing with Thiol Molecules. Small, 2020, 16, e2003357.	5.2	36
33	Te-Vacancy-Induced Surface Collapse and Reconstruction in Antiferromagnetic Topological Insulator MnBi₂Te₄. ACS Nano, 2020, 14, 11262-11272.	7.3	47
34	Surface-Modified Ultrathin InSe Nanosheets with Enhanced Stability and Photoluminescence for High-Performance Optoelectronics. ACS Nano, 2020, 14, 11373-11382.	7.3	34
35	Proton and Li-Ion Permeation through Graphene with Eight-Atom-Ring Defects. ACS Nano, 2020, 14, 7280-7286.	7.3	55
36	Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. Nature Communications, 2020, 11, 2253.	5.8	112

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37	Nano-patterning of a monolayer molybdenum disulfide with sub-nanometer helium ion beam: considering its shape, size and damage. Nanotechnology, 2020, 31, 345302.	1.3	7
38	Tuning Electrical Conductance in Bilayer MoS₂ through Defect-Mediated Interlayer Chemical Bonding. ACS Nano, 2020, 14, 10265-10275.	7.3	40
39	Synthesis of Coâ€Doped MoS₂ Monolayers with Enhanced Valley Splitting. Advanced Materials, 2020, 32, e1906536.	11.1	84
40	Phase Transition and Superconductivity Enhancement in Seâ€Substituted MoTe₂ Thin Films. Advanced Materials, 2019, 31, e1904641.	11.1	34
41	Epitaxial Synthesis of Monolayer PtSe₂ Single Crystal on MoSe₂ with Strong Interlayer Coupling. ACS Nano, 2019, 13, 10929-10938.	7.3	72
42	Controlled synthesis and room-temperature pyroelectricity of CuInP2S6 ultrathin flakes. Nano Energy, 2019, 58, 596-603.	8.2	52
43	Transport evidence of asymmetric spinâ€“orbit coupling in few-layer superconducting 1Td-MoTe2. Nature Communications, 2019, 10, 2044.	5.8	79
44	InSe monolayer: synthesis, structure and ultra-high second-harmonic generation. 2D Materials, 2018, 5, 025019.	2.0	92
45	AtomicallyÂthin noble metal dichalcogenide: a broadband mid-infrared semiconductor. Nature Communications, 2018, 9, 1545.	5.8	367
46	A library of atomically thin metal chalcogenides. Nature, 2018, 556, 355-359.	13.7	1,225
47	Electron-Beam-Induced Synthesis of Hexagonal 1H-MoSe2 from Square Î²-FeSe Decorated with Mo Adatoms. Nano Letters, 2018, 18, 2016-2020.	4.5	2
48	Extraordinary Interfacial Stitching between Single All-Inorganic Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2018, 10, 5984-5991.	4.0	27
49	Anisotropic Ordering in 1Tâ€² Molybdenum and Tungsten Ditelluride Layers Alloyed with Sulfur and Selenium. ACS Nano, 2018, 12, 894-901.	7.3	52
50	Auto-optimizing Hydrogen Evolution Catalytic Activity of ReS₂ through Intrinsic Charge Engineering. ACS Nano, 2018, 12, 4486-4493.	7.3	111
51	Efficient carrier multiplication in CsPbI3 perovskite nanocrystals. Nature Communications, 2018, 9, 4199.	5.8	101
52	Measuring the practical particle-in-a-box: orthorhombic perovskite nanocrystals. European Journal of Physics, 2018, 39, 055501.	0.3	2
53	Two-dimensional PdSe ₂ -Pd ₂ Se ₃ junctions can serve as nanowires. 2D Materials, 2018, 5, 035025.	2.0	18
54	Defect in 2D materials beyond graphene. , 2018, , 161-187.		4

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55	Chemical Growth of 1Tâ€TaS₂ Monolayer and Thin Films: Robust Charge Density Wave Transitions and High Bolometric Responsivity. Advanced Materials, 2018, 30, e1800074.	11.1	68
56	Highly Efficient Mass Production of Boron Nitride Nanosheets via a Borate Nitridation Method. Journal of Physical Chemistry C, 2018, 122, 17370-17377.	1.5	21
57	A topologically substituted boron nitride hybrid aerogel for highly selective CO2 uptake. Nano Research, 2018, 11, 6325-6335.	5.8	14
58	Morphology Engineering in Monolayer MoS₂â€WS₂ Lateral Heterostructures. Advanced Functional Materials, 2018, 28, 1801568.	7.8	67
59	Optical orientation and alignment of excitons in ensembles of inorganic perovskite nanocrystals. Physical Review B, 2018, 97, .	1.1	51
60	Preferential S/Se occupation in an anisotropic ReS_{2(1â^'x)}Se_{2x}monolayer alloy. Nanoscale, 2017, 9, 18275-18280.	2.8	10
61	Chemical vapor deposition of trigonal prismatic NbS₂ monolayers and 3R-polytype few-layers. Nanoscale, 2017, 9, 16607-16611.	2.8	67
62	High-quality monolayer superconductor NbSe2 grown by chemical vapour deposition. Nature Communications, 2017, 8, 394.	5.8	290
63	Fast kinetics of magnesium monochloride cations in interlayer-expanded titanium disulfide for magnesium rechargeable batteries. Nature Communications, 2017, 8, 339.	5.8	304
64	Controllable Synthesis of Atomically Thin Typeâ€II Weyl Semimetal WTe₂ Nanosheets: An Advanced Electrode Material for Allâ€Solidâ€State Flexible Supercapacitors. Advanced Materials, 2017, 29, 1701909.	11.1	107
65	Hybridization of Single Nanocrystals of Cs₄PbBr₆ and CsPbBr₃. Journal of Physical Chemistry C, 2017, 121, 19490-19496.	1.5	68
66	Novel <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Pd</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Two-Dimensional Phase Driven by Interlayer Fusion in Layered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>PdSe</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2017, 119, 016101.	2.9	111
67	Largeâ€Area and Highâ€Quality 2D Transition Metal Telluride. Advanced Materials, 2017, 29, 1603471.	11.1	181
68	Metalâ€“Semiconductor Phaseâ€Transition in WSe_{2(1â€“}_x₎Te₂_x Monolayer. Advanced Materials, 2017, 29, 1603991.	11.1	123
69	Pressureâ€Induced Phase Transition in Weyl Semimetallic WTe₂. Small, 2017, 13, 1701887.	5.2	37
70	Synthesis of Millimeterâ€Scale Transition Metal Dichalcogenides Single Crystals. Advanced Functional Materials, 2016, 26, 2009-2015.	7.8	152
71	MoS₂/TiO₂ Edgeâ€On Heterostructure for Efficient Photocatalytic Hydrogen Evolution. Advanced Energy Materials, 2016, 6, 1600464.	10.2	264
72	Gentle transfer method for water- and acid/alkali-sensitive 2D materials for (S)TEM study. APL Materials, 2016, 4, .	2.2	12

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73	Single Atom Imaging and Spectroscopy of Impurities in 2D Materials. Microscopy and Microanalysis, 2016, 22, 862-863.	0.2	0
74	Patterned Growth: Patterned Growth of P-Type MoS2Atomic Layers Using Sol-Gel as Precursor (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.8	0
75	Patterned Growth of Pâ€Type MoS₂ Atomic Layers Using Solâ€“Gel as Precursor. Advanced Functional Materials, 2016, 26, 6371-6379.	7.8	34
76	Direct Observation of Band Structure Modifications in Nanocrystals of CsPbBr₃ Perovskite. Nano Letters, 2016, 16, 7198-7202.	4.5	82
77	Room-temperature ferroelectricity in CuInP2S6 ultrathin flakes. Nature Communications, 2016, 7, 12357.	5.8	637
78	Two-dimensional GaSe/MoSe ₂ misfit bilayer heterojunctions by van der Waals epitaxy. Science Advances, 2016, 2, e1501882.	4.7	239
79	Controlled Synthesis of Atomically Thin 1T-TaS₂ for Tunable Charge Density Wave Phase Transitions. Chemistry of Materials, 2016, 28, 7613-7618.	3.2	75
80	Alloying in Flexible Transition-metal Chalcogenide Nanowires. Microscopy and Microanalysis, 2016, 22, 1424-1425.	0.2	0
81	Defects Engineered Monolayer MoS₂ for Improved Hydrogen Evolution Reaction. Nano Letters, 2016, 16, 1097-1103.	4.5	1,015
82	Structural Flexibility and Alloying in Ultrathin Transition-Metal Chalcogenide Nanowires. ACS Nano, 2016, 10, 2782-2790.	7.3	53
83	Interfaces in Two-Dimensional Heterostructures of Transition Metal Dichalcogenides. Microscopy and Microanalysis, 2015, 21, 105-106.	0.2	0
84	Rapid and Nondestructive Identification of Polytypism and Stacking Sequences in Fewâ€Layer Molybdenum Diselenide by Raman Spectroscopy. Advanced Materials, 2015, 27, 4502-4508.	11.1	96
85	Defect Dynamics in 2D Transition Metal Dichalcogenide Monolayers. Microscopy and Microanalysis, 2015, 21, 433-434.	0.2	1
86	Physical justification for ionic conductivity enhancement at strained coherent interfaces. Journal of Power Sources, 2015, 285, 37-42.	4.0	23
87	Vacancy-Induced Formation and Growth of Inversion Domains in Transition-Metal Dichalcogenide Monolayer. ACS Nano, 2015, 9, 5189-5197.	7.3	167
88	Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. Nature Nanotechnology, 2014, 9, 436-442.	15.6	228
89	Large-Area Synthesis of Monolayer and Few-Layer MoSe₂ Films on SiO₂ Substrates. Nano Letters, 2014, 14, 2419-2425.	4.5	376
90	Band Gap Engineering and Layer-by-Layer Mapping of Selenium-Doped Molybdenum Disulfide. Nano Letters, 2014, 14, 442-449.	4.5	463

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91	Vertical and in-plane heterostructures from WS2/MoS2 monolayers. Nature Materials, 2014, 13, 1135-1142.	13.3	1,918
92	Modelling and simulation of electron-rich effect on Li diffusion in group IVA elements (Si, Ge and Sn) for Li ion batteries. Journal of Materials Chemistry A, 2014, 2, 13976-13982.	5.2	55
93	Quantification of Dopant Distribution and the Local Band Gap in Selenium-Doped Molybdenum Disulfide. Microscopy and Microanalysis, 2014, 20, 1754-1755.	0.2	0
94	Flexible Metallic Nanowires with Self-Adaptive Contacts to Semiconducting Transition-Metal Dichalcogenide Monolayers. Microscopy and Microanalysis, 2014, 20, 1760-1761.	0.2	1
95	Probing excitonic states in suspended two-dimensional semiconductors by photocurrent spectroscopy. Scientific Reports, 2014, 4, 6608.	1.6	351
96	Surfactant induced colloidal growth and selective electrophoretic deposition of one-dimensional Te nanocrystals. Materials Letters, 2013, 110, 148-151.	1.3	7
97	Enhanced photoresponse in curled graphene ribbons. Nanoscale, 2013, 5, 12206.	2.8	8
98	Gas transport in porous electrodes of solid oxide fuel cells: A review on diffusion and diffusivity measurement. Journal of Power Sources, 2013, 237, 64-73.	4.0	73
99	AC/AB Stacking Boundaries in Bilayer Graphene. Nano Letters, 2013, 13, 3262-3268.	4.5	137
100	Growth of Solid and Hollow Gold Particles through the Thermal Annealing of Nanoscale Patterned Thin Films. ACS Applied Materials & Interfaces, 2013, 5, 11590-11596.	4.0	14
101	The evaluation of Coulombic interaction in the oriented-attachment growth of colloidal nanorods. Analyst, The, 2012, 137, 4917.	1.7	21
102	An analytical expression for the van der Waals interaction in oriented-attachment growth: a spherical nanoparticle and a growing cylindrical nanorod. Physical Chemistry Chemical Physics, 2012, 14, 4548.	1.3	35
103	Remarkable optical and magnetic properties of ultra-thin europium oxysulfide nanorods. Journal of Materials Chemistry, 2012, 22, 16728.	6.7	33
104	A facile synthesis of Te nanoparticles with binary size distribution by green chemistry. Nanoscale, 2011, 3, 1523.	2.8	27