

# Yu-Yang Zhang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6963904/publications.pdf>

Version: 2024-02-01

112  
papers

4,535  
citations

108046

37  
h-index

120465

65  
g-index

115  
all docs

115  
docs citations

115  
times ranked

8761  
citing authors



#	ARTICLE	IF	CITATIONS
19	Insulating SiO <sub>2</sub> under Centimeter-Scale, Single-Crystal Graphene Enables Electronic-Device Fabrication. Nano Letters, 2020, 20, 8584-8591.	4.5	19
20	Fabrication and manipulation of nanosized graphene homojunction with atomically-controlled boundaries. Nano Research, 2020, 13, 3286-3291.	5.8	3
21	Localized spin-orbit polaron in magnetic Weyl semimetal Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> . Nature Communications, 2020, 11, 5613.	5.8	53
22	Anisotropic High Carrier Mobilities of One-Third-Hydrogenated Group-V Elemental Monolayers. Journal of Physical Chemistry C, 2020, 124, 12628-12635.	1.5	1
23	Thickness-dependent magnetic order and phase transition in V <sub>5</sub> S <sub>8</sub> *. Chinese Physics B, 2020, 29, 077504.	0.7	5
24	Sizable Band Gap in Epitaxial Bilayer Graphene Induced by Silicene Intercalation. Nano Letters, 2020, 20, 2674-2680.	4.5	23
25	Airâ€stable Monolayer Cu <sub>2</sub> Se Exhibits a Purely Thermal Structural Phase Transition. Advanced Materials, 2020, 32, e1908314.	11.1	26
26	Prediction of structured void-containing 1T-PtTe <sub>2</sub> monolayer with potential catalytic activity for hydrogen evolution reaction*. Chinese Physics B, 2020, 29, 058104.	0.7	8
27	Tuning the Catalytic Activity of a Quantum Nutcracker for Hydrogen Dissociation. Surfaces, 2020, 3, 40-47.	1.0	2
28	Integration of graphene and two-dimensional ferroelectrics: properties and related functional devices. Nanoscale Horizons, 2020, 5, 1303-1308.	4.1	12
29	Experimental Synthesis of Strained Monolayer Silver Arsenide on Ag(111) Substrates. Chinese Physics Letters, 2020, 37, 068103.	1.3	10
30	Unusual anisotropic thermal expansion in multilayer SnSe leads to positive-to-negative crossover of Poisson's ratio. Applied Physics Letters, 2020, 116, 083101.	1.5	2
31	Visualizing Anisotropic Oxygen Diffusion in Ceria under Activated Conditions. Physical Review Letters, 2020, 124, 056002.	2.9	12
32	Quantum anomalous Hall effect in two-dimensional Cu-dicyanobenzene coloring-triangle lattice. Nano Research, 2020, 13, 1571-1575.	5.8	14
33	Epitaxial synthesis and electronic properties of monolayer Pd <sub>2</sub> Se <sub>3</sub> *. Chinese Physics B, 2020, 29, 098102.	0.7	7
34	Two-Dimensional Crystals: Graphene, Silicene, Germanene, and Stanene. Springer Handbooks, 2020, , 243-266.	0.3	0
35	Tunable giant magnetoresistance in a single-molecule junction. Nature Communications, 2019, 10, 3599.	5.8	50
36	Fabrication of large-scale graphene/2D-germanium heterostructure by intercalation. Chinese Physics B, 2019, 28, 078103.	0.7	6

#	ARTICLE	IF	CITATIONS
37	Centimeter-scale, single-crystalline, AB-stacked bilayer graphene on insulating substrates. 2D Materials, 2019, 6, 045044.	2.0	11
38	Atomically precise, custom-design origami graphene nanostructures. Science, 2019, 365, 1036-1040.	6.0	156
39	Low-temperature growth of large-scale, single-crystalline graphene on Ir(111)*. Chinese Physics B, 2019, 28, 056107.	0.7	9
40	Band engineering of B 2 H 2 nanoribbons. Chinese Physics B, 2019, 28, 046803.	0.7	12
41	Spectroscopic signatures of edge states in hexagonal boron nitride. Nano Research, 2019, 12, 1663-1667.	5.8	7
42	Direct Cation Exchange in Monolayer $\text{MoS}_2$ via Recombination-Enhanced Migration. Physical Review Letters, 2019, 122, 106101.	2.9	21
43	Spontaneous Formation of 1D Pattern in Monolayer $\text{VSe}_2$ with Dispersive Adsorption of Pt Atoms for HER Catalysis. Nano Letters, 2019, 19, 4897-4903.	4.5	42
44	Recovery of the Dirac states of graphene by intercalating two-dimensional traditional semiconductors. Journal of Physics Condensed Matter, 2019, 31, 194001.	0.7	8
45	Orbital design of topological insulators from two-dimensional semiconductors. Nanoscale, 2019, 11, 22743-22747.	2.8	11
46	Quantum nutcracker for near-room-temperature H2 dissociation. Science Bulletin, 2019, 64, 4-7.	4.3	3
47	Barrierless On-Surface Metal Incorporation in Phthalocyanine-Based Molecules. Journal of Physical Chemistry C, 2018, 122, 6678-6683.	1.5	11
48	Average Csl Neutron Density Distribution from COHERENT Data. Physical Review Letters, 2018, 120, 072501.	2.9	84
49	Epitaxial Growth of Honeycomb Monolayer CuSe with Dirac Nodal Line Fermions. Advanced Materials, 2018, 30, e1707055.	11.1	110
50	Recovery of edge states of graphene nanoislands on an iridium substrate by silicon intercalation. Nano Research, 2018, 11, 3722-3729.	5.8	10
51	Mo-Terminated Edge Reconstructions in Nanoporous Molybdenum Disulfide Film. Nano Letters, 2018, 18, 482-490.	4.5	105
52	Dislocation-driven growth of two-dimensional lateral quantum-well superlattices. Science Advances, 2018, 4, eaap9096.	4.7	38
53	Band engineering of double-wall Mo-based hybrid nanotubes. Chinese Physics B, 2018, 27, 076104.	0.7	4
54	Stable Silicene in Graphene/Silicene Van der Waals Heterostructures. Advanced Materials, 2018, 30, e1804650.	11.1	86

#	ARTICLE	IF	CITATIONS
55	Rhenium-Doped and Stabilized MoS <sub>2</sub> Atomic Layers with Basal Plane Catalytic Activity. <i>Advanced Materials</i> , 2018, 30, e1803477.	11.1	164
56	Construction of bilayer PdSe <sub>2</sub> on epitaxial graphene. <i>Nano Research</i> , 2018, 11, 5858-5865.	5.8	84
57	Water wettability of graphene: interplay between the interfacial water structure and the electronic structure. <i>RSC Advances</i> , 2018, 8, 16918-16926.	1.7	24
58	Fabrication of Millimeter-Scale, Single-Crystal One-Third-Hydrogenated Graphene with Anisotropic Electronic Properties. <i>Advanced Materials</i> , 2018, 30, 1801838.	11.1	19
59	Epitaxial growth and physical properties of 2D materials beyond graphene: from monatomic materials to binary compounds. <i>Chemical Society Reviews</i> , 2018, 47, 6073-6100.	18.7	97
60	Chemistry of 4-[(4-bromophenyl)ethynyl]pyridine at metal surfaces studied by STM. <i>Chemical Communications</i> , 2018, 54, 9305-9308.	2.2	23
61	Tuning the morphology of chevron-type graphene nanoribbons by choice of annealing temperature. <i>Nano Research</i> , 2018, 11, 6190-6196.	5.8	20
62	High quality PdTe <sub>2</sub> thin films grown by molecular beam epitaxy. <i>Chinese Physics B</i> , 2018, 27, 086804.	0.7	39
63	Dislocation-Driven Growth of Two-Dimensional Lateral Quantum Well Superlattices. <i>Microscopy and Microanalysis</i> , 2018, 24, 88-89.	0.2	0
64	Electronic properties of silicene in BN/silicene van der Waals heterostructures. <i>Chinese Physics B</i> , 2018, 27, 077302.	0.7	9
65	The construction and structure-property manipulation of "small-molecule machines". <i>Chinese Science Bulletin</i> , 2018, 63, 1255-1264.	0.4	2
66	Sequence of Silicon Monolayer Structures Grown on a Ru Surface: from a Herringbone Structure to Silicene. <i>Nano Letters</i> , 2017, 17, 1161-1166.	4.5	86
67	Defect-mediated leakage in lithium intercalated bilayer graphene. <i>AIP Advances</i> , 2017, 7, .	0.6	5
68	Molecular Beam Epitaxy of Highly Crystalline Monolayer Molybdenum Disulfide on Hexagonal Boron Nitride. <i>Journal of the American Chemical Society</i> , 2017, 139, 9392-9400.	6.6	167
69	Direct measurements of conductivity and mobility in millimeter-sized single-crystalline graphene via van der Pauw geometry. <i>Chinese Physics B</i> , 2017, 26, 066801.	0.7	14
70	Intrinsically patterned two-dimensional materials for selective adsorption of molecules and nanoclusters. <i>Nature Materials</i> , 2017, 16, 717-721.	13.3	150
71	From bidirectional rectifier to polarity-controllable transistor in black phosphorus by dual gate modulation. <i>2D Materials</i> , 2017, 4, 025056.	2.0	7
72	In situ atomic-scale observation of reversible sodium ions migration in layered metal dichalcogenide SnS <sub>2</sub> nanostructures. <i>Nano Energy</i> , 2017, 32, 302-309.	8.2	69

#	ARTICLE	IF	CITATIONS
73	Surface State Mediated Interlayer Excitons in a 2D Nonlayered "Layered Semiconductor Heterojunction. <i>Advanced Electronic Materials</i> , 2017, 3, 1700373.	2.6	15
74	Formation of Single-atom-thick Copper Oxide Monolayers. <i>Microscopy and Microanalysis</i> , 2017, 23, 1684-1685.	0.2	1
75	Evidence for Ultralow-Energy Vibrations in Large Organic Molecules. <i>Nano Letters</i> , 2017, 17, 4929-4933.	4.5	11
76	Design of Optimally Stable Molecular Coatings for Fe-Based Nanoparticles in Aqueous Environments. <i>ACS Omega</i> , 2017, 2, 4480-4487.	1.6	3
77	Direct Four-Probe Measurement of Grain-Boundary Resistivity and Mobility in Millimeter-Sized Graphene. <i>Nano Letters</i> , 2017, 17, 5291-5296.	4.5	59
78	Sulfur-doped graphene nanoribbons with a sequence of distinct band gaps. <i>Nano Research</i> , 2017, 10, 3377-3384.	5.8	44
79	Unsupported single-atom-thick copper oxide monolayers. <i>2D Materials</i> , 2017, 4, 011001.	2.0	44
80	Exchange of Re and Mo atoms in MoS <sub>2</sub> driven by Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2017, 23, 1702-1703.	0.2	0
81	Properties of Hydrogenated Nanoporous SiC: An Ab Initio Study. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-6.	1.5	5
82	Column-by-column observation of dislocation motion in CdTe: Dynamic scanning transmission electron microscopy. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	6
83	High-Resolution Tracking Asymmetric Lithium Insertion and Extraction and Local Structure Ordering in SnS <sub>2</sub> . <i>Nano Letters</i> , 2016, 16, 5582-5588.	4.5	58
84	Introduction of Interfacial Charges to Black Phosphorus for a Family of Planar Devices. <i>Nano Letters</i> , 2016, 16, 6870-6878.	4.5	69
85	Structural Flexibility and Alloying in Ultrathin Transition-Metal Chalcogenide Nanowires. <i>ACS Nano</i> , 2016, 10, 2782-2790.	7.3	53
86	Microscopic origin of chiral shape induction in achiral crystals. <i>Nature Chemistry</i> , 2016, 8, 326-330.	6.6	68
87	Ferromagnetism and perfect spin filtering in transition-metal-doped graphyne nanoribbons. <i>Physical Review B</i> , 2015, 92, .	1.1	39
88	Direct observation of oxygen-vacancy-enhanced polarization in a SrTiO <sub>3</sub> -buffered ferroelectric BaTiO <sub>3</sub> film on GaAs. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	23
89	Monolayer PtSe <sub>2</sub> , a New Semiconducting Transition-Metal-Dichalcogenide, Epitaxially Grown by Direct Selenization of Pt. <i>Nano Letters</i> , 2015, 15, 4013-4018.	4.5	560
90	The observation of square ice in graphene questioned. <i>Nature</i> , 2015, 528, E1-E2.	13.7	95

#	ARTICLE	IF	CITATIONS
91	Atomic-Scale Probing of the Dynamics of Sodium Transport and Intercalation-Induced Phase Transformations in MoS <sub>2</sub> . ACS Nano, 2015, 9, 11296-11301.	7.3	167
92	Oxygen Disorder, a Way to Accommodate Large Epitaxial Strains in Oxides. Advanced Materials Interfaces, 2015, 2, 1500344.	1.9	19
93	Magnetic anisotropy of van der Waals absorbed iron(II) phthalocyanine layer on Bi <sub>2</sub> Te <sub>3</sub> . Physical Review B, 2014, 89, .	1.1	10
94	Graphene cover-promoted metal-catalyzed reactions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17023-17028.	3.3	183
95	Direct observation of Pt nanocrystal coalescence induced by electron-excitation-enhanced van der Waals interactions. Nano Research, 2014, 7, 308-314.	5.8	22
96	Kondo Effect of Cobalt Adatoms on a Graphene Monolayer Controlled by Substrate-Induced Ripples. Nano Letters, 2014, 14, 4011-4015.	4.5	60
97	Thermally Controlled Adenine Dimer Chain Rotation on Cu(110): The Critical Role of van der Waals Interactions. Journal of Physical Chemistry C, 2014, 118, 6278-6282.	1.5	7
98	Impact of heterocirculene molecular symmetry upon two-dimensional crystallization. Scientific Reports, 2014, 4, 5415.	1.6	13
99	Origin of p-type conductivity in the earth-abundant solar-cell material Cu <sub>2</sub> ZnSnS <sub>4</sub> . Physical Review B, 2013, 87, .	1.1	110
100	Atomic and electronic structures of single-layer FeSe on SrTiO <sub>3</sub> (001): The role of oxygen deficiency. Physical Review B, 2013, 87, .	1.1	86
101	Electronic structures and vibrational properties of coronene on Ru(0001): first-principles study. Chinese Physics B, 2012, 21, 036801.	0.7	4
102	Organic salts as super-high rate capability materials for lithium-ion batteries. Applied Physics Letters, 2012, 100, .	1.5	33
103	Identifying Multiple Configurations of Complex Molecules on Metal Surfaces. Small, 2012, 8, 796-806.	5.2	5
104	Spatial imaging of individual vibronic states in the interior of single molecules. Journal of Chemical Physics, 2011, 135, 014705.	1.2	22
105	High resolution scanning-tunneling-microscopy imaging of individual molecular orbitals by eliminating the effect of surface charge. Surface Science, 2011, 605, 415-418.	0.8	27
106	Binding configuration, electronic structure, and magnetic properties of metal phthalocyanines on a Au(111) surface studied with <i>ab initio</i> calculations. Physical Review B, 2011, 84, .	1.1	66
107	Identifying Multiple Configurations of Complex Molecules in Dynamical Processes: Time Resolved Tunneling Spectroscopy and Density Functional Theory Calculation. Physical Review Letters, 2010, 104, 166101.	2.9	24
108	Mapping antibonding electron states of a Pb adatom on Pb(111). Physical Review B, 2010, 81, .	1.1	12

#	ARTICLE	IF	CITATIONS
109	Diffusivity Control in Molecule-on-Metal Systems Using Electric Fields. Nano Letters, 2010, 10, 1184-1188.	4.5	64
110	Polymorphism and chiral expression in two-dimensional subphthalocyanine crystals on Au(111). Physical Chemistry Chemical Physics, 2010, 12, 1318-1322.	1.3	40
111	Electrostatic field effect on molecular structures at metal surfaces. Surface Science, 2009, 603, 2815-2819.	0.8	13
112	Constructing an Array of Anchored Single-Molecule Rotors on Gold Surfaces. Physical Review Letters, 2008, 101, 197209.	2.9	127