

# You Zhou

## List of Publications by Year in descending order

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59  
papers

4,470  
citations

117625

34  
h-index

182427

51  
g-index

60  
all docs

60  
docs citations

60  
times ranked

6759  
citing authors

#	ARTICLE	IF	CITATIONS
1	Beam steering at the nanosecond time scale with an atomically thin reflector. Nature Communications, 2022, 13, .	12.8	6
2	Excitons in a reconstructed moiré potential in twisted WSe <sub>2</sub> /WSe <sub>2</sub> homobilayers. Nature Materials, 2021, 20, 480-487.	27.5	109
3	Electrically controlled emission from singlet and triplet exciton species in atomically thin light-emitting diodes. Physical Review B, 2021, 103, .	3.2	26
4	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. Nature, 2021, 595, 48-52.	27.8	98
5	Quantum Simulation with Hybrid Tensor Networks. Physical Review Letters, 2021, 127, 040501.	7.8	47
6	Quantum scrambling with classical shadows. Physical Review Research, 2021, 3, .	3.6	20
7	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe <sub>2</sub> /MoSe <sub>2</sub> bilayers. Nature Nanotechnology, 2020, 15, 750-754.	31.5	106
8	Single-Copies Estimation of Entanglement Negativity. Physical Review Letters, 2020, 125, 200502.	7.8	49
9	Electrically Tunable Valley Dynamics in Twisted $WSe_2$ Bilayers. Physical Review Letters, 2020, 124, 217403.	7.8	89
10	Controlling Excitons in an Atomically Thin Membrane with a Mirror. Physical Review Letters, 2020, 124, 027401.	7.8	55
11	Quantum gate verification and its application in property testing. Physical Review Research, 2020, 2, .	3.6	14
12	Electrical control of interlayer exciton dynamics in atomically thin heterostructures. Science, 2019, 366, 870-875.	12.6	255
13	Liquid Salt Transport Growth of Single Crystals of the Layered Dichalcogenides MoS <sub>2</sub> and WS <sub>2</sub> . Crystal Growth and Design, 2019, 19, 5762-5767.	3.0	16
14	Electrically Tunable Exciton-Plasmon Coupling in a WSe <sub>2</sub> Monolayer Embedded in a Plasmonic Crystal Cavity. Nano Letters, 2019, 19, 3543-3547.	9.1	32
15	Temperature-independent thermal radiation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26402-26406.	7.1	69
16	Large Excitonic Reflectivity of Monolayer MoSe <sub>2</sub> in Hexagonal Boron Nitride. Physical Review Letters, 2018, 120, 037402.	7.8	165
17	Electrical control of charged carriers and excitons in atomically thin materials. Nature Nanotechnology, 2018, 13, 128-132.	31.5	142
18	Radiative Thermal Runaway Due to Negative-Differential Thermal Emission Across a Solid-Solid Phase Transition. Physical Review Applied, 2018, 10, .	3.8	20

#	ARTICLE	IF	CITATIONS
19	Limiting Optical Diodes Enabled by the Phase Transition of Vanadium Dioxide. ACS Photonics, 2018, 5, 2688-2692.	6.6	43
20	Evolution of Metallicity in Vanadium Dioxide by Creation of Oxygen Vacancies. Physical Review Applied, 2017, 7, .	3.8	88
21	Epsilon-Near-Zero Substrate Engineering for Ultrathin-Film Perfect Absorbers. Physical Review Applied, 2017, 8, .	3.8	88
22	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. Nature Nanotechnology, 2017, 12, 856-860.	31.5	270
23	Zero-Differential Thermal Emission Using Thermochromic Samarium Nickelate. , 2017, , .		2
24	Harvard team demo transition from metal to ionic conductor. Fuel Cells Bulletin, 2016, 2016, 14.	0.1	1
25	Sign reversal of magnetoresistance in a perovskite nickelate by electron doping. Physical Review B, 2016, 94, .	3.2	35
26	Active metasurface devices based on correlated perovskites. , 2016, , .		0
27	Strongly correlated perovskite fuel cells. Nature, 2016, 534, 231-234.	27.8	387
28	Electrical transportation performances of Nbâ€“SrTiO3 regulated by the anion related chemical atmospheres. Materials and Design, 2016, 97, 7-12.	7.0	4
29	Correlated Perovskites as a New Platform for Superâ€“Broadbandâ€“Tunable Photonics. Advanced Materials, 2016, 28, 9117-9125.	21.0	72
30	Active Optical Metasurfaces Based on Defect-Engineered Phase-Transition Materials. Nano Letters, 2016, 16, 1050-1055.	9.1	186
31	Correlated Perovskites as a New Platform for Super Broadband Tunable Photonics. , 2016, , .		0
32	Reconfigurable anisotropy and functional transformations with $\text{VO}_2$ metamaterial electric circuits. Physical Review B, 2015, 91, .	3.4	26
33	Self-limited kinetics of electron doping in correlated oxides. Applied Physics Letters, 2015, 107, .	3.3	24
34	Control of Emergent Properties at a Correlated Oxide Interface with Graphene. Nano Letters, 2015, 15, 1627-1634.	9.1	43
35	Mott Memory and Neuromorphic Devices. Proceedings of the IEEE, 2015, 103, 1289-1310.	21.3	264
36	Dynamic control of light emission faster than the lifetime limit using VO2 phase-change. Nature Communications, 2015, 6, 8636.	12.8	101

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37	Metasurfaces based on artificially induced phase coexistence in phase-change materials. , 2015, , .		0
38	Tunable hyperbolic metamaterials using metal-insulator transition in VO <sub>2</sub> . , 2014, , .		1
39	Current-modulated optical properties of vanadium dioxide thin films in the phase transition region. Applied Physics Letters, 2014, 105, .	3.3	39
40	Tunable hyperbolic metamaterials utilizing phase change heterostructures. Applied Physics Letters, 2014, 104, .	3.3	50
41	Abrupt Insertion Loss Drop by RF-Triggering of the Phase Transition in $\text{VO}_2$ CPW Switches. IEEE Microwave and Wireless Components Letters, 2014, 24, 575-577.	3.2	4
42	Quick Switch: Strongly Correlated Electronic Phase Transition Systems for Cutting-Edge Microwave Devices. IEEE Microwave Magazine, 2014, 15, 32-44.	0.8	34
43	Colossal resistance switching and band gap modulation in a perovskite nickelate by electron doping. Nature Communications, 2014, 5, 4860.	12.8	227
44	A critical examination of the Mott transistor and emergent phase switches for electronics. , 2014, , .		1
45	Epitaxial variants of VO <sub>2</sub> thin films on complex oxide single crystal substrates with 3m surface symmetry. Journal of Crystal Growth, 2013, 364, 74-80.	1.5	41
46	A correlated nickelate synaptic transistor. Nature Communications, 2013, 4, 2676.	12.8	426
47	Correlated Electron Materials and Field Effect Transistors for Logic: A Review. Critical Reviews in Solid State and Materials Sciences, 2013, 38, 286-317.	12.3	100
48	Voltage-Triggered Ultrafast Phase Transition in Vanadium Dioxide Switches. IEEE Electron Device Letters, 2013, 34, 220-222.	3.9	225
49	Small signal characteristics of ionic liquid gated mott transistors. , 2013, , .		0
50	Electrical switching dynamics and broadband microwave characteristics of VO <sub>2</sub> radio frequency devices. Journal of Applied Physics, 2013, 113, .	2.5	95
51	GaN/VO <sub>2</sub> heteroepitaxial p-n junctions: Band offset and minority carrier dynamics. Journal of Applied Physics, 2013, 113, 213703.	2.5	38
52	Studies on room-temperature electric-field effect in ionic-liquid gated VO <sub>2</sub> three-terminal devices. Journal of Applied Physics, 2012, 111, 014506.	2.5	53
53	Probing compositional disorder in vanadium oxide thin films grown on atomic layer deposited hafnia on silicon by capacitance spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	2
54	Heteroepitaxial VO <sub>2</sub> thin films on GaN: Structure and metal-insulator transition characteristics. Journal of Applied Physics, 2012, 112, 074114.	2.5	41

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55	Relaxation dynamics of ionic liquid-VO <sub>2</sub> interfaces and influence in electric double-layer transistors. Journal of Applied Physics, 2012, 111, .	2.5	69
56	Multi-Resistance States Through Electrically Driven Phase Transitions in $\text{VO}_2/\text{HfO}_2/\text{VO}_2$ Heterostructures on Silicon. IEEE Electron Device Letters, 2012, 33, 101-103.	3.9	9
57	Suspended sub-50 nm vanadium dioxide membrane transistors: fabrication and ionic liquid gating studies. Nanoscale, 2012, 4, 7056.	5.6	34
58	Synthesis of vanadium dioxide thin films on conducting oxides and metal-insulator transition characteristics. Journal of Crystal Growth, 2012, 338, 96-102.	1.5	28
59	Computation and learning with metal-insulator transitions and emergent phases in correlated oxides. , 0, , 209-235.		1