

# 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	A correlated nickelate synaptic transistor. Nature Communications, 2013, 4, 2676.	12.8	426
2	Strongly correlated perovskite fuel cells. Nature, 2016, 534, 231-234.	27.8	387
3	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. Nature Nanotechnology, 2017, 12, 856-860.	31.5	270
4	Mott Memory and Neuromorphic Devices. Proceedings of the IEEE, 2015, 103, 1289-1310.	21.3	264
5	Electrical control of interlayer exciton dynamics in atomically thin heterostructures. Science, 2019, 366, 870-875.	12.6	255
6	Colossal resistance switching and band gap modulation in a perovskite nickelate by electron doping. Nature Communications, 2014, 5, 4860.	12.8	227
7	Voltage-Triggered Ultrafast Phase Transition in Vanadium Dioxide Switches. IEEE Electron Device Letters, 2013, 34, 220-222.	3.9	225
8	Active Optical Metasurfaces Based on Defect-Engineered Phase-Transition Materials. Nano Letters, 2016, 16, 1050-1055.	9.1	186
9	Large Excitonic Reflectivity of Monolayer $\text{MoSe}_2$ in Hexagonal Boron Nitride. Physical Review Letters, 2018, 120, 037402.	7.8	165
10	Electrical control of charged carriers and excitons in atomically thin materials. Nature Nanotechnology, 2018, 13, 128-132.	31.5	142
11	Excitons in a reconstructed moiré potential in twisted $\text{WSe}_2/\text{WSe}_2$ homobilayers. Nature Materials, 2021, 20, 480-487.	27.5	109
12	Broken mirror symmetry in excitonic response of reconstructed domains in twisted $\text{MoSe}_2/\text{MoSe}_2$ bilayers. Nature Nanotechnology, 2020, 15, 750-754.	31.5	106
13	Dynamic control of light emission faster than the lifetime limit using $\text{VO}_2$ phase-change. Nature Communications, 2015, 6, 8636.	12.8	101
14	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
15	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. Nature, 2021, 595, 48-52.	27.8	98
16	Electrical switching dynamics and broadband microwave characteristics of $\text{VO}_2$ radio frequency devices. Journal of Applied Physics, 2013, 113, .	2.5	95
17	Electrically Tunable Valley Dynamics in Twisted $\text{WSe}_2$ Bilayers. Physical Review Letters, 2020, 124, 217403.	7.8	89
18	Evolution of Metallicity in Vanadium Dioxide by Creation of Oxygen Vacancies. Physical Review Applied, 2017, 7, .	3.8	88

#	ARTICLE	IF	CITATIONS
19	Epsilon-Near-Zero Substrate Engineering for Ultrathin-Film Perfect Absorbers. <i>Physical Review Applied</i> , 2017, 8, .	3.8	88
20	Correlated Perovskites as a New Platform for Superbroadband-Tunable Photonics. <i>Advanced Materials</i> , 2016, 28, 9117-9125.	21.0	72
21	Relaxation dynamics of ionic liquid-VO <sub>2</sub> interfaces and influence in electric double-layer transistors. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	69
22	Temperature-independent thermal radiation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 26402-26406.	7.1	69
23	Controlling Excitons in an Atomically Thin Membrane with a Mirror. <i>Physical Review Letters</i> , 2020, 124, 027401.	7.8	55
24	Studies on room-temperature electric-field effect in ionic-liquid gated VO <sub>2</sub> three-terminal devices. <i>Journal of Applied Physics</i> , 2012, 111, 014506.	2.5	53
25	Tunable hyperbolic metamaterials utilizing phase change heterostructures. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	50
26	Single-Copies Estimation of Entanglement Negativity. <i>Physical Review Letters</i> , 2020, 125, 200502.	7.8	49
27	Quantum Simulation with Hybrid Tensor Networks. <i>Physical Review Letters</i> , 2021, 127, 040501.	7.8	47
28	Control of Emergent Properties at a Correlated Oxide Interface with Graphene. <i>Nano Letters</i> , 2015, 15, 1627-1634.	9.1	43
29	Limiting Optical Diodes Enabled by the Phase Transition of Vanadium Dioxide. <i>ACS Photonics</i> , 2018, 5, 2688-2692.	6.6	43
30	Heteroepitaxial VO <sub>2</sub> thin films on GaN: Structure and metal-insulator transition characteristics. <i>Journal of Applied Physics</i> , 2012, 112, 074114.	2.5	41
31	Epitaxial variants of VO <sub>2</sub> thin films on complex oxide single crystal substrates with 3m surface symmetry. <i>Journal of Crystal Growth</i> , 2013, 364, 74-80.	1.5	41
32	Current-modulated optical properties of vanadium dioxide thin films in the phase transition region. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	39
33	GaN/VO <sub>2</sub> heteroepitaxial p-n junctions: Band offset and minority carrier dynamics. <i>Journal of Applied Physics</i> , 2013, 113, 213703.	2.5	38
34	Sign reversal of magnetoresistance in a perovskite nickelate by electron doping. <i>Physical Review B</i> , 2016, 94, .	3.2	35
35	Suspended sub-50 nm vanadium dioxide membrane transistors: fabrication and ionic liquid gating studies. <i>Nanoscale</i> , 2012, 4, 7056.	5.6	34
36	Quick Switch: Strongly Correlated Electronic Phase Transition Systems for Cutting-Edge Microwave Devices. <i>IEEE Microwave Magazine</i> , 2014, 15, 32-44.	0.8	34

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37	Electrically Tunable Exciton-Plasmon Coupling in a $\text{WSe}_2$ Monolayer Embedded in a Plasmonic Crystal Cavity. Nano Letters, 2019, 19, 3543-3547.	9.1	32
38	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
39	Reconfigurable anisotropy and functional transformations with $\text{VO}_2$ metamaterial electric circuits. Physical Review B, 2015, 91, .	3.2	26
40	Electrically controlled emission from singlet and triplet exciton species in atomically thin light-emitting diodes. Physical Review B, 2021, 103, .	3.2	26
41	Self-limited kinetics of electron doping in correlated oxides. Applied Physics Letters, 2015, 107, .	3.3	24
42	Radiative Thermal Runaway Due to Negative-Differential Thermal Emission Across a Solid-Solid Phase Transition. Physical Review Applied, 2018, 10, .	3.8	20
43	Quantum scrambling with classical shadows. Physical Review Research, 2021, 3, .	3.6	20
44	Liquid Salt Transport Growth of Single Crystals of the Layered Dichalcogenides $\text{MoS}_2$ and $\text{WS}_2$ . Crystal Growth and Design, 2019, 19, 5762-5767.	3.0	16
45	Quantum gate verification and its application in property testing. Physical Review Research, 2020, 2, .	3.6	14
46	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
47	Beam steering at the nanosecond time scale with an atomically thin reflector. Nature Communications, 2022, 13, .	12.8	6
48	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
49	Electrical transportation performances of $\text{Nb-SrTiO}_3$ regulated by the anion related chemical atmospheres. Materials and Design, 2016, 97, 7-12.	7.0	4
50	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
51	Zero-Differential Thermal Emission Using Thermochromic Samarium Nickelate. , 2017, , .		2
52	Tunable hyperbolic metamaterials using metal-insulator transition in $\text{VO}_2$ . , 2014, , .		1
53	A critical examination of the Mott transistor and emergent phase switches for electronics. , 2014, , .		1
54	Computation and learning with metal-insulator transitions and emergent phases in correlated oxides. , 0, , 209-235.		1

#	ARTICLE	IF	CITATIONS
55	Harvard team demo transition from metal to ionic conductor. Fuel Cells Bulletin, 2016, 2016, 14.	0.1	1
56	Small signal characteristics of ionic liquid gated mott transistors. , 2013, , .		0
57	Metasurfaces based on artificially induced phase coexistence in phase-change materials. , 2015, , .		0
58	Active metasurface devices based on correlated perovskites. , 2016, , .		0
59	Correlated Perovskites as a New Platform for Super Broadband Tunable Photonics. , 2016, , .		0