Tianyi Zhang

List of Publications by Citations

40 papers	945 citations	17 h-index	30 g-index
44 ext. papers	1,304 ext. citations	13.2 avg, IF	4.32 L-index

#	Paper	IF	Citations
40	Angstrom-Size Defect Creation and Ionic Transport through Pores in Single-Layer MoS. *Nano Letters*, **2018**, 18, 1651-1659	11.5	86
39	Monolayer WS Nanopores for DNA Translocation with Light-Adjustable Sizes. *ACS Nano*, **2017**, 11, 1937-1945	13.7	70
38	Carbon doping of WS monolayers: Bandgap reduction and p-type doping transport. *Science Advances*, **2019**, 5, eaav5003	14.3	70
37	Defect-Controlled Nucleation and Orientation of WSe on hBN: A Route to Single-Crystal Epitaxial Monolayers. *ACS Nano*, **2019**, 13, 3341-3352	16.7	70
36	Tunable Fano Resonance and Plasmon-Exciton Coupling in Single Au Nanotriangles on Monolayer WS at Room Temperature. *Advanced Materials*, **2018**, 30, e1705779	24	56
35	Ultrasensitive Pressure Detection of Few-Layer MoS. *Advanced Materials*, **2017**, 29, 1603266	24	56
34	Tunable Resonance Coupling in Single Si Nanoparticle-Monolayer WS Structures. *ACS Applied Materials & Interfaces*, **2018**, 10, 16690-16697	9.5	54
33	Highly conductive, twistable and bendable polypyrrole–carbon nanotube fiber for efficient supercapacitor electrodes. *RSC Advances*, **2015**, 5, 22015-22021	3.7	52
32	Wafer-Scale Epitaxial Growth of Unidirectional WS Monolayers on Sapphire. *ACS Nano*, **2021**, 15, 2532-2541	16.7	51
31	Universal Substitutional Doping of Transition Metal Dichalcogenides by Liquid-Phase Precursor-Assisted Synthesis. *ACS Nano*, **2020**, 14, 4326-4335	16.7	44
30	Transfer of monolayer TMD WS and Raman study of substrate effects. *Scientific Reports*, **2017**, 7, 43037	4.9	41
29	High-energy-density, all-solid-state microsupercapacitors with three-dimensional interdigital electrodes of carbon/polymer electrolyte composite. *Nanotechnology*, **2016**, 27, 045701	3.4	34
28	Monolayer Vanadium-Doped Tungsten Disulfide: A Room-Temperature Dilute Magnetic Semiconductor. *Advanced Science*, **2020**, 7, 2001174	13.6	33
27	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS. *Science Advances*, **2020**, 6,	14.3	22
26	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. *Nano Letters*, **2020**, 20, 284-291	11.5	21
25	Nanoscale mapping of quasiparticle band alignment. *Nature Communications*, **2019**, 10, 3283	17.4	19
24	Clean Transfer of 2D Transition Metal Dichalcogenides Using Cellulose Acetate for Atomic Resolution Characterizations. *ACS Applied Nano Materials*, **2019**, 2, 5320-5328	5.6	17

23	Electrochemical Polishing of Two-Dimensional Materials. *ACS Nano*, **2019**, 13, 78-86	16.7	17
22	Dark-Exciton-Mediated Fano Resonance from a Single Gold Nanostructure on Monolayer WS at Room Temperature. *Small*, **2019**, 15, e1900982	11	16
21	2D Materials for Universal Thermal Imaging of Micro- and Nanodevices: An Application to Gallium Oxide Electronics. *ACS Applied Electronic Materials*, **2020**, 2, 2945-2953	4	14
20	Pressure Sensors: Ultrasensitive Pressure Detection of Few-Layer MoS2 (Adv. Mater. 4/2017). *Advanced Materials*, **2017**, 29,	24	11
19	Quantification and Healing of Defects in Atomically Thin Molybdenum Disulfide: Beyond the Controlled Creation of Atomic Defects. *ACS Nano*, **2021**, 15, 9658-9669	16.7	11
18	Intentional carbon doping reveals CH as an abundant charged impurity in nominally undoped synthetic WS2 and WSe2. *2D Materials*, **2020**, 7, 031003	5.9	11
17	Functional hetero-interfaces in atomically thin materials. *Materials Today*, **2020**, 37, 74-92	21.8	10
16	Second- and third-order optical susceptibilities across excitons states in 2D monolayer transition metal dichalcogenides. *2D Materials*, **2021**, 8, 035010	5.9	9
15	One-step solid-state pyrolysis of bio-wastes to synthesize multi-hierarchical porous carbon for ultra-long life supercapacitors. *Materials Chemistry Frontiers*, **2021**, 5, 2320-2327	7.8	7
14	Second harmonic generation in two-dimensional transition metal dichalcogenides with growth and post-synthesis defects. *2D Materials*, **2020**, 7, 045020	5.9	6
13	Confined Crack Propagation in MoS Monolayers by Creating Atomic Vacancies. *ACS Nano*, **2021**, 15, 1210-1216	16.7	6
12	Directional Modulation of Exciton Emission Using Single Dielectric Nanospheres. *Advanced Materials*, **2021**, 33, e2007236	24	5
11	Photodegradation Protection in 2D In-Plane Heterostructures Revealed by Hyperspectral Nanoimaging: The Role of Nanointerface 2D Alloys. *ACS Nano*, **2021**, 15, 2447-2457	16.7	5
10	Superconductivity enhancement in phase-engineered molybdenum carbide/disulfide vertical heterostructures. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 19685-19693	11.5	4
9	Catalysis-free transformation of non-graphitising carbons into highly crystalline graphite. *Communications Materials*, **2020**, 1,	6	4
8	Direct growth of monolayer 1T⁄2H MoS2 heterostructures using KCl-assisted CVD process. *2D Materials*, **2021**, 8, 025033	5.9	4
7	Multiple excitations and temperature study of the disorder-induced Raman bands in MoS2. *2D Materials*, **2021**, 8, 035042	5.9	2
6	Room-temperature Observation of Near-intrinsic Exciton Linewidth in Monolayer WS.. *Advanced Materials*, **2022**, e2108721	24	2

5	Spin-dependent vibronic response of a carbon radical ion in two-dimensional WS.. *Nature Communications*, **2021**, 12, 7287	17.4	2
4	Dielectric Nanospheres: Directional Modulation of Exciton Emission Using Single Dielectric Nanospheres (Adv. Mater. 20/2021). *Advanced Materials*, **2021**, 33, 2170153	24	0
3	Dark Excitons: Dark-Exciton-Mediated Fano Resonance from a Single Gold Nanostructure on Monolayer WS2 at Room Temperature (Small 31/2019). *Small*, **2019**, 15, 1970164	11	
2	Fano Resonances: Tunable Fano Resonance and Plasmon Exciton Coupling in Single Au Nanotriangles on Monolayer WS2 at Room Temperature (Adv. Mater. 22/2018). *Advanced Materials*, **2018**, 30, 1870155	24	
1	Room-Temperature Observation of Near-Intrinsic Exciton Linewidth in Monolayer WS 2 (Adv. Mater. 15/2022). *Advanced Materials*, **2022**, 34, 2270115	24	