Xing Zhou

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1931374/publications.pdf

Version: 2024-02-01

66 papers	4,827 citations	101496 36 h-index	110317 64 g-index
68 all docs	68 docs citations	68 times ranked	5396 citing authors

#	Article	IF	Citations
1	Ultrathin SnSe₂ Flakes Grown by Chemical Vapor Deposition for Highâ€Performance Photodetectors. Advanced Materials, 2015, 27, 8035-8041.	11.1	460
2	Tunneling Diode Based on WSe₂/SnS₂ Heterostructure Incorporating High Detectivity and Responsivity. Advanced Materials, 2018, 30, 1703286.	11.1	293
3	Largeâ€Size Growth of Ultrathin SnS₂ Nanosheets and High Performance for Phototransistors. Advanced Functional Materials, 2016, 26, 4405-4413.	7.8	279
4	2D Layered Materialâ€Based van der Waals Heterostructures for Optoelectronics. Advanced Functional Materials, 2018, 28, 1706587.	7.8	279
5	Self-powered photovoltaic photodetector established on lateral monolayer MoS2-WS2 heterostructures. Nano Energy, 2018, 51, 45-53.	8.2	209
6	Vertical heterostructures based on SnSe ₂ /MoS ₂ for high performance photodetectors. 2D Materials, 2017, 4, 025048.	2.0	183
7	Booming Development of Group IVâ€“VI Semiconductors: Fresh Blood of 2D Family. Advanced Science, 2016, 3, 1600177.	5.6	181
8	Highâ€”Performance Solarâ€Blind Deep Ultraviolet Photodetector Based on Individual Singleâ€Crystalline Zn₂GeO₄ Nanowire. Advanced Functional Materials, 2016, 26, 704-712.	7.8	163
9	Highly Anisotropic GeSe Nanosheets for Phototransistors with Ultrahigh Photoresponsivity. Advanced Science, 2018, 5, 1800478.	5.6	163
10	Decorating Perovskite Quantum Dots in TiO₂ Nanotubes Array for Broadband Response Photodetector. Advanced Functional Materials, 2017, 27, 1703115.	7.8	142
11	Broadband convolutional processing using band-alignment-tunable heterostructures. Nature Electronics, 2022, 5, 248-254.	13.1	131
12	Spaceâ€Confined Chemical Vapor Deposition Synthesis of Ultrathin HfS₂ Flakes for Optoelectronic Application. Advanced Functional Materials, 2017, 27, 1702918.	7.8	122
13	Strong In-Plane Anisotropies of Optical and Electrical Response in Layered Dimetal Chalcogenide. ACS Nano, 2017, 11, 10264-10272.	7.3	116
14	2D Ternary Chalcogenides. Advanced Optical Materials, 2018, 6, 1800058.	3.6	114
15	High performance near-infrared photodetectors based on ultrathin SnS nanobelts grown via physical vapor deposition. Journal of Materials Chemistry C, 2016, 4, 2111-2116.	2.7	113
16	Van der Waals Integration Based on Twoâ€Dimensional Materials for Highâ€Performance Infrared Photodetectors. Advanced Functional Materials, 2021, 31, 2103106.	7.8	112
17	Synergistic additive-mediated CVD growth and chemical modification of 2D materials. Chemical Society Reviews, 2019, 48, 4639-4654.	18.7	108
18	Highly Inâ€Plane Anisotropic 2D PdSe₂ for Polarized Photodetection with Orientation Selectivity. Advanced Functional Materials, 2021, 31, 2006774.	7.8	100

#	Article	IF	Citations
19	Ultrathin 2D GeSe₂ Rhombic Flakes with High Anisotropy Realized by Van der Waals Epitaxy. Advanced Functional Materials, 2017, 27, 1703858.	7.8	95
20	Two-dimensional inorganic molecular crystals. Nature Communications, 2019, 10, 4728.	5.8	91
21	Liquidâ€Alloyâ€Assisted Growth of 2D Ternary Ga₂In₄S₉ toward Highâ€Performance UV Photodetection. Advanced Materials, 2019, 31, e1806306.	11.1	90
22	Pâ€GaSe/Nâ€MoS₂ Vertical Heterostructures Synthesized by van der Waals Epitaxy for Photoresponse Modulation. Small, 2018, 14, 1702731.	5.2	87
23	Selfâ€Limited Epitaxial Growth of Ultrathin Nonlayered CdS Flakes for Highâ€Performance Photodetectors. Advanced Functional Materials, 2018, 28, 1800181.	7.8	86
24	Halide-Induced Self-Limited Growth of Ultrathin Nonlayered Ge Flakes for High-Performance Phototransistors. Journal of the American Chemical Society, 2018, 140, 12909-12914.	6.6	85
25	Airâ€Stable 2D Cr₅Te₈ Nanosheets with Thicknessâ€Tunable Ferromagnetism. Advanced Materials, 2022, 34, e2107512.	11.1	77
26	Hydrogenâ€Assisted Growth of Ultrathin Te Flakes with Giant Gateâ€Dependent Photoresponse. Advanced Functional Materials, 2019, 29, 1906585.	7.8	62
27	Junction Fieldâ€Effect Transistors Based on PdSe₂/MoS₂ Heterostructures for Photodetectors Showing High Responsivity and Detectivity. Advanced Functional Materials, 2021, 31, 2106105.	7.8	61
28	Epitaxial Growth of Rectangle Shape MoS₂ with Highly Aligned Orientation on Twofold Symmetry aâ€Plane Sapphire. Small, 2020, 16, e2000596.	5.2	53
29	Growth of Ultrathin Ternary Teallite (PbSnS2) Flakes for Highly Anisotropic Optoelectronics. Matter, 2020, 2, 977-987.	5.0	53
30	Giantâ€Enhanced SnS₂ Photodetectors with Broadband Response through Oxygen Plasma Treatment. Advanced Functional Materials, 2020, 30, 2001650.	7.8	48
31	Strong In-Plane Anisotropic SiP₂ as a IVâ€“V 2D Semiconductor for Polarized Photodetection. ACS Nano, 2021, 15, 20442-20452.	7.3	45
32	Synthesis of 2Hâ€Tâ€² WS₂â€ReS₂ Heterophase Structures with Atomically Sharp Interface via Hydrogenâ€Triggered Oneâ€Pot Growth. Advanced Functional Materials, 2020, 30, 1910169.	7.8	42
33	Saltâ€Assisted Growth of Pâ€type Cu₉S₅ Nanoflakes for Pâ€N Heterojunction Photodetectors with High Responsivity. Advanced Functional Materials, 2020, 30, 1908382.	7.8	40
34	One-step synthesis of p-type GaSe nanoribbons and their excellent performance in photodetectors and phototransistors. Journal of Materials Chemistry C, 2016, 4, 7817-7823.	2.7	39
35	Salt-Assisted Growth of Ultrathin GeSe Rectangular Flakes for Phototransistors with Ultrahigh Responsivity. ACS Applied Materials & Interfaces, 2019, 11, 23353-23360.	4.0	38
36	Excellent Excitonic Photovoltaic Effect in 2D CsPbBr₃/CdS Heterostructures. Advanced Functional Materials, 2020, 30, 2006166.	7.8	38

#	Article	IF	Citations
37	Recent Advances in 2D Rare Earth Materials. Advanced Functional Materials, 2021, 31, .	7.8	37
38	Large-scale synthesis of 2D metal dichalcogenides. Journal of Materials Chemistry C, 2018, 6, 4627-4640.	2.7	35
39	Intercalation Strategy in 2D Materials for Electronics and Optoelectronics. Small Methods, 2021, 5, e2100567.	4.6	32
40	Lowâ€Symmetry and Nontoxic 2D SiP with Strong Polarizationâ€Sensitivity and Fast Photodetection. Advanced Optical Materials, 2021, 9, 2100198.	3.6	29
41	Nonlayered CdSe Flakes Homojunctions. Advanced Functional Materials, 2020, 30, 1908902.	7.8	28
42	High-T_C Two-Dimensional Ferroelectric CuCrS₂ Grown via Chemical Vapor Deposition. ACS Nano, 2022, 16, 8141-8149.	7.3	23
43	2D semiconductors towards high-performance ultraviolet photodetection. Journal Physics D: Applied Physics, 2019, 52, 303002.	1.3	22
44	Geometry dependent photoconductivity of In2S3 kinks synthesized by kinetically controlled thermal deposition. Nano Research, 2016, 9, 3848-3857.	5.8	20
45	Controllable Carrier Type in Boron Phosphide Nanowires Toward Homostructural Optoelectronic Devices. ACS Applied Materials & Interfaces, 2018, 10, 10296-10303.	4.0	20
46	Synergistic Additiveâ€Assisted Growth of 2D Ternary In₂SnS₄ with Giant Gateâ€Tunable Polarizationâ€Sensitive Photoresponse. Small, 2021, 17, e2008078.	5.2	18
47	Synthesis of Large-Area Uniform MoS₂â€“WS₂ Lateral Heterojunction Nanosheets for Photodetectors. ACS Applied Nano Materials, 2021, 4, 5522-5530.	2.4	17
48	Universal p-Type Doping via Lewis Acid for 2D Transition-Metal Dichalcogenides. ACS Nano, 2022, 16, 4884-4891.	7.3	17
49	Spaceâ€Confined Growth of 2D InI Showing High Sensitivity in Photodetection. Advanced Electronic Materials, 2020, 6, 2000284.	2.6	14
50	Stoichiometric Effect on Optoelectronic Properties of Compositionâ€Tunable CdS_{1â^'}_xSe_x Nanowires. Advanced Optical Materials, 2017, 5, 1600877.	3.6	13
51	Growth of Highly Anisotropic 2D Ternary CaTe 2 O 5 Flakes on Molten Glass. Advanced Functional Materials, 2019, 29, 1903216.	7.8	13
52	2D Rare Earth Material (EuOCl) with Ultraâ€Narrow Photoluminescence at Room Temperature. Small, 2021, 17, e2100137.	5.2	12
53	Flexible Photodetectors with High Responsivity and Broad Spectral Response Employing Ternary Sn_xCd_{1â€“x}S Micronanostructures. ACS Applied Electronic Materials, 2021, 3, 4151-4161.	2.0	12
54	Room-Temperature Ferroelectricity in 2D Metalâ€“Telluriumâ€“Oxyhalide Cd₇Te₇Cl₈O₁₇ via Selenium-Induced Selective-Bonding Growth. ACS Nano, 2021, 15, 16525-16532.	7.3	12

#	Article	IF	Citations
55	Programmable Polarization of 2D Anisotropic Rare Earth Material for Images Transmission and Encryption. Advanced Optical Materials, 2022, 10, .	3.6	10
56	GeSe/MoTe2 vdW heterostructure for UVâ€“VISâ€“NIR photodetector with fast response. Applied Physics Letters, 2022, 121, .	1.5	10
57	Photodetectors: Ultrathin SnSe2Flakes Grown by Chemical Vapor Deposition for High-Performance Photodetectors (Adv. Mater. 48/2015). Advanced Materials, 2015, 27, 8119-8119.	11.1	6
58	2D Van der Waals Rare Earth Material Based Ratiometric Luminescence Thermography Integrated on Microâ€“Nano Devices Vertically. Advanced Optical Materials, 2022, 10, .	3.6	6
59	An improved inverse kinematics solution for 6-DOF robot manipulators with offset wrists. Robotica, 2022, 40, 2275-2294.	1.3	5
60	Electricâ€Tunable Photoluminescence of 2D ErOCl for Highâ€Security Encryption of Programmable Information. Advanced Optical Materials, 2022, 10, .	3.6	4
61	Electrical Characteristics: High-Performance Solar-Blind Deep Ultraviolet Photodetector Based on Individual Single-Crystalline Zn2GeO4Nanowire (Adv. Funct. Mater. 5/2016). Advanced Functional Materials, 2016, 26, 804-804.	7.8	3
62	Twoâ€Dimensional Metal Chalcogenide Heterostructures: Designed Growth and Emerging Novel Applications. Advanced Materials Interfaces, 2021, 8, 2100515.	1.9	3
63	Two-dimensional metal halides. Journal Physics D: Applied Physics, 2021, 54, 013002.	1.3	3
64	Optical Logic Operation Encryption on ZnTe Flake. Advanced Optical Materials, 0, , 2200560.	3.6	2
65	Recent advances in 2D graphene reinforced metal matrix composites. Nanotechnology, 2022, 33, 062003.	1.3	0
66	Fresh Blood of Two-Dimensional Materials: Group IV-VI Semiconductors. Zhongguo Jiguang/Chinese Journal of Lasers, 2017, 44, 0703006.	0.2	0