

Tian-You Zhai

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467
papers

27,028
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86
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145
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517
ext. papers

32,355
ext. citations

12.5
avg, IF

7.56
L-index

#	Paper	IF	Citations
467	ZnS nanostructures: From synthesis to applications. <i>Progress in Materials Science</i> , 2011 , 56, 175-287	42.2	957
466	Reviving Lithium-Metal Anodes for Next-Generation High-Energy Batteries. <i>Advanced Materials</i> , 2017 , 29, 1700007	24	641
465	N-Doped Graphene-SnO ₂ Sandwich Paper for High-Performance Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2012 , 22, 2682-2690	15.6	479
464	Single-Crystalline ZnS Nanobelts as Ultraviolet-Light Sensors. <i>Advanced Materials</i> , 2009 , 21, 2034-2039	24	479
463	A comprehensive review of one-dimensional metal-oxide nanostructure photodetectors. <i>Sensors</i> , 2009 , 9, 6504-29	3.8	421
462	Highly Emissive and Color-Tunable CuInS ₂ -Based Colloidal Semiconductor Nanocrystals: Off-Stoichiometry Effects and Improved Electroluminescence Performance. <i>Advanced Functional Materials</i> , 2012 , 22, 2081-2088	15.6	390
461	Ultrathin and Porous Ni ₃ S ₂ /CoNi ₂ S ₄ 3D-Network Structure for Superhigh Energy Density Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , 2017 , 7, 1700983	21.8	370
460	Ultrathin SnSe ₂ Flakes Grown by Chemical Vapor Deposition for High-Performance Photodetectors. <i>Advanced Materials</i> , 2015 , 27, 8035-41	24	369
459	One-dimensional inorganic nanostructures: synthesis, field-emission and photodetection. <i>Chemical Society Reviews</i> , 2011 , 40, 2986-3004	58.5	321
458	Centimeter-long V ₂ O ₅ nanowires: from synthesis to field-emission, electrochemical, electrical transport, and photoconductive properties. <i>Advanced Materials</i> , 2010 , 22, 2547-52	24	312
457	Single-crystalline CdS nanobelts for excellent field-emitters and ultrahigh quantum-efficiency photodetectors. <i>Advanced Materials</i> , 2010 , 22, 3161-5	24	311
456	Core-shell structured Co ₃ O ₄ @NiCo ₂ O ₄ electrodes grown on flexible carbon fibers with superior electrochemical properties. <i>Nano Energy</i> , 2017 , 31, 410-417	17.1	280
455	Recent Developments in One-Dimensional Inorganic Nanostructures for Photodetectors. <i>Advanced Functional Materials</i> , 2010 , 20, 4233-4248	15.6	277
454	One-dimensional CdS nanostructures: synthesis, properties, and applications. <i>Nanoscale</i> , 2010 , 2, 168-877.7		276
453	ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2009 , 34, 190-223	10.1	274
452	Distinctive defects engineering in graphitic carbon nitride for greatly extended visible light photocatalytic hydrogen evolution. <i>Nano Energy</i> , 2018 , 44, 73-81	17.1	272
451	All-Inorganic Bismuth-Based Perovskite Quantum Dots with Bright Blue Photoluminescence and Excellent Stability. <i>Advanced Functional Materials</i> , 2018 , 28, 1704446	15.6	268

450	Fabrication of high-quality In ₂ Se ₃ nanowire arrays toward high-performance visible-light photodetectors. <i>ACS Nano</i> , 2010 , 4, 1596-602	16.7	253
449	Two-dimensional layered nanomaterials for gas-sensing applications. <i>Inorganic Chemistry Frontiers</i> , 2016 , 3, 433-451	6.8	248
448	Controllable assembly of WO ₃ nanorods/nanowires into hierarchical nanostructures. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 23829-36	3.4	245
447	Low-cost fully transparent ultraviolet photodetectors based on electrospun ZnO-SnO ₂ heterojunction nanofibers. <i>Advanced Materials</i> , 2013 , 25, 4625-30	24	243
446	Flexible ultraviolet photodetectors with broad photoresponse based on branched ZnS-ZnO heterostructure nanofilms. <i>Advanced Materials</i> , 2014 , 26, 3088-93	24	229
445	Ultrahigh-performance solar-blind photodetectors based on individual single-crystalline InTeO ₂ nanobelts. <i>Advanced Materials</i> , 2010 , 22, 5145-9	24	217
444	Large-Size Growth of Ultrathin SnS ₂ Nanosheets and High Performance for Phototransistors. <i>Advanced Functional Materials</i> , 2016 , 26, 4405-4413	15.6	216
443	ZnO hollow spheres with double-yolk egg structure for high-performance photocatalysts and photodetectors. <i>Advanced Materials</i> , 2012 , 24, 3421-5	24	211
442	Template Deformation-Tailored ZnO Nanorod/Nanowire Arrays: Full Growth Control and Optimization of Field-Emission. <i>Advanced Functional Materials</i> , 2009 , 19, 3165-3172	15.6	211
441	An Efficient Way to Assemble ZnS Nanobelts as Ultraviolet-Light Sensors with Enhanced Photocurrent and Stability. <i>Advanced Functional Materials</i> , 2010 , 20, 500-508	15.6	206
440	High-Performance Blue/Ultraviolet-Light-Sensitive ZnSe-Nanobelt Photodetectors. <i>Advanced Materials</i> , 2009 , 21, 5016-5021	24	199
439	2D Layered Material-Based van der Waals Heterostructures for Optoelectronics. <i>Advanced Functional Materials</i> , 2018 , 28, 1706587	15.6	191
438	One-dimensional CdS nanostructures: a promising candidate for optoelectronics. <i>Advanced Materials</i> , 2013 , 25, 3017-37	24	190
437	Flexible and high energy density asymmetrical supercapacitors based on core/shell conducting polymer nanowires/manganese dioxide nanoflakes. <i>Nano Energy</i> , 2017 , 35, 242-250	17.1	189
436	Li ₃ VO ₄ : A Promising Insertion Anode Material for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2013 , 3, 428-432	21.8	188
435	Tunneling Diode Based on WSe ₂ /SnS Heterostructure Incorporating High Detectivity and Responsivity. <i>Advanced Materials</i> , 2018 , 30, 1703286	24	183
434	Morphology-dependent stimulated emission and field emission of ordered CdS nanostructure arrays. <i>ACS Nano</i> , 2009 , 3, 949-59	16.7	178
433	Emerging in-plane anisotropic two-dimensional materials. <i>Information Materials</i> , 2019 , 1, 54-73	23.1	175

432	Deep-ultraviolet solar-blind photoconductivity of individual gallium oxide nanobelts. <i>Nanoscale</i> , 2011 , 3, 1120-6	7.7	172
431	Recent progress of one-dimensional ZnO nanostructured solar cells. <i>Nano Energy</i> , 2012 , 1, 91-106	17.1	167
430	Chemical Vapor Deposition Synthesis of Ultrathin Hexagonal ReSe Flakes for Anisotropic Raman Property and Optoelectronic Application. <i>Advanced Materials</i> , 2016 , 28, 8296-8301	24	165
429	Large-scale synthesis of single-crystal hexagonal tungsten trioxide nanowires and electrochemical lithium intercalation into the nanocrystals. <i>Journal of Solid State Chemistry</i> , 2007 , 180, 98-105	3.3	165
428	Doping engineering and functionalization of two-dimensional metal chalcogenides. <i>Nanoscale Horizons</i> , 2019 , 4, 26-51	10.8	162
427	Large-Area Bilayer ReS ₂ Film/Multilayer ReS ₂ Flakes Synthesized by Chemical Vapor Deposition for High Performance Photodetectors. <i>Advanced Functional Materials</i> , 2016 , 26, 4551-4560	15.6	162
426	2D GeP: An Unexploited Low-Symmetry Semiconductor with Strong In-Plane Anisotropy. <i>Advanced Materials</i> , 2018 , 30, e1706771	24	156
425	An Intracellular H ₂ O ₂ -Responsive AIEgen for the Peroxidase-Mediated Selective Imaging and Inhibition of Inflammatory Cells. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 3123-3127	16.4	152
424	Ni(OH) ₂ nanosheet @ Fe ₂ O ₃ nanowire hybrid composite arrays for high-performance supercapacitor electrodes. <i>Nano Energy</i> , 2013 , 2, 754-763	17.1	148
423	A Fully Transparent and Flexible Ultraviolet/Visible Photodetector Based on Controlled Electrospun ZnO-CdO Heterojunction Nanofiber Arrays. <i>Advanced Functional Materials</i> , 2015 , 25, 5885-5894	15.6	146
422	Electrical transport and high-performance photoconductivity in individual ZrS ₂ nanobelts. <i>Advanced Materials</i> , 2010 , 22, 4151-6	24	145
421	Electronic and Optoelectronic Applications Based on 2D Novel Anisotropic Transition Metal Dichalcogenides. <i>Advanced Science</i> , 2017 , 4, 1700231	13.6	145
420	Vertical heterostructures based on SnSe ₂ /MoS ₂ for high performance photodetectors. <i>2D Materials</i> , 2017 , 4, 025048	5.9	143
419	Layered phosphorus-like GeP ₅ : a promising anode candidate with high initial coulombic efficiency and large capacity for lithium ion batteries. <i>Energy and Environmental Science</i> , 2015 , 8, 3629-3636	35.4	143
418	Local Charge Distribution Engineered by Schottky Heterojunctions toward Urea Electrolysis. <i>Advanced Energy Materials</i> , 2018 , 8, 1801775	21.8	142
417	Cobalt(II,III) oxide hollow structures: fabrication, properties and applications. <i>Journal of Materials Chemistry</i> , 2012 , 22, 23310		142
416	Polystyrene sphere-assisted one-dimensional nanostructure arrays: synthesis and applications. <i>Journal of Materials Chemistry</i> , 2011 , 21, 40-56		142
415	Photonic Potentiation and Electric Habituation in Ultrathin Memristive Synapses Based on Monolayer MoS ₂ . <i>Small</i> , 2018 , 14, e1800079	11	141

414	Revealing the conversion mechanism of CuO nanowires during lithiation-delithiation by in situ transmission electron microscopy. <i>Chemical Communications</i> , 2012 , 48, 4812-4	5.8	141
413	Booming Development of Group IV-VI Semiconductors: Fresh Blood of 2D Family. <i>Advanced Science</i> , 2016 , 3, 1600177	13.6	140
412	Controlled Synthesis of Ultrathin 2D In_2S_3 with Broadband Photoresponse by Chemical Vapor Deposition. <i>Advanced Functional Materials</i> , 2017 , 27, 1702448	15.6	139
411	High-Performance Solar-Blind Deep Ultraviolet Photodetector Based on Individual Single-Crystalline Zn_2GeO_4 Nanowire. <i>Advanced Functional Materials</i> , 2016 , 26, 704-712	15.6	136
410	Few-Layered PtS_2 Phototransistor on h-BN with High Gain. <i>Advanced Functional Materials</i> , 2017 , 27, 1701911	19.1	133
409	Crystal organometal halide perovskites with promising optoelectronic applications. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 11-27	7.1	133
408	2D layered group IIIA metal chalcogenides: synthesis, properties and applications in electronics and optoelectronics. <i>CrystEngComm</i> , 2016 , 18, 3968-3984	3.3	132
407	Hierarchical micro/nano porous silicon Li-ion battery anodes. <i>Chemical Communications</i> , 2012 , 48, 5079-818	5.8	132
406	Van der Waals Coupled Organic Molecules with Monolayer MoS for Fast Response Photodetectors with Gate-Tunable Responsivity. <i>ACS Nano</i> , 2018 , 12, 4062-4073	16.7	120
405	Large-surface-area BN nanosheets and their utilization in polymeric composites with improved thermal and dielectric properties. <i>Nanoscale Research Letters</i> , 2012 , 7, 662	5	120
404	CoO octahedral nanocages for high-performance lithium ion batteries. <i>Chemical Communications</i> , 2012 , 48, 4878-80	5.8	119
403	Single-crystalline Sb_2Se_3 nanowires for high-performance field emitters and photodetectors. <i>Advanced Materials</i> , 2010 , 22, 4530-3	24	118
402	Self-powered photovoltaic photodetector established on lateral monolayer MoS_2 - WS_2 heterostructures. <i>Nano Energy</i> , 2018 , 51, 45-53	17.1	115
401	An Enhanced UV-Vis-NIR and Flexible Photodetector Based on Electrospun ZnO Nanowire Array/ PbS Quantum Dots Film Heterostructure. <i>Advanced Science</i> , 2017 , 4, 1600316	13.6	113
400	Self-stacked Co_3O_4 nanosheets for high-performance lithium ion batteries. <i>Chemical Communications</i> , 2011 , 47, 12280-2	5.8	113
399	An Autotransferable g-C ₃ N ₄ Li-Modulating Layer toward Stable Lithium Anodes. <i>Advanced Materials</i> , 2019 , 31, e1900342	24	111
398	MXene/Silicon Van Der Waals Heterostructures for High-Speed Self-Driven Photodetectors. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700165	6.4	106
397	Characterization, Cathodoluminescence, and Field-Emission Properties of Morphology-Tunable CdS Micro/Nanostructures. <i>Advanced Functional Materials</i> , 2009 , 19, 2423-2430	15.6	106

396	Highly Anisotropic GeSe Nanosheets for Phototransistors with Ultrahigh Photoresponsivity. <i>Advanced Science</i> , 2018 , 5, 1800478	13.6	105
395	Decorating Perovskite Quantum Dots in TiO ₂ Nanotubes Array for Broadband Response Photodetector. <i>Advanced Functional Materials</i> , 2017 , 27, 1703115	15.6	104
394	Antimony-based materials as promising anodes for rechargeable lithium-ion and sodium-ion batteries. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 437-455	7.8	99
393	A High Rate 1.2V Aqueous Sodium-ion Battery Based on All NASICON Structured NaTi ₂ (PO ₄) ₃ and Na ₃ V ₂ (PO ₄) ₃ . <i>Electrochimica Acta</i> , 2016 , 196, 470-478	6.7	98
392	Submillimeter 2D Bi ₂ Se ₃ Flakes toward High-Performance Infrared Photodetection at Optical Communication Wavelength. <i>Advanced Functional Materials</i> , 2018 , 28, 1802707	15.6	98
391	Recent Progress on 2D Noble-Transition-Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2019 , 29, 1904932	15.6	98
390	WO ₃ nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. <i>Journal of Materials Chemistry</i> , 2011 , 21, 6525		97
389	Layer Structured Materials for Advanced Energy Storage and Conversion. <i>Small</i> , 2017 , 13, 1701649	11	95
388	Tube-in-tube TiO ₂ nanotubes with porous walls: fabrication, formation mechanism, and photocatalytic properties. <i>Small</i> , 2011 , 7, 445-9	11	95
387	Highly In-Plane Anisotropic 2D GeAs for Polarization-Sensitive Photodetection. <i>Advanced Materials</i> , 2018 , 30, e1804541	24	94
386	Construction of Longan-like hybrid structures by anchoring nickel hydroxide on yolk-shell polypyrrole for asymmetric supercapacitors. <i>Nano Energy</i> , 2019 , 56, 207-215	17.1	91
385	Space-Confined Chemical Vapor Deposition Synthesis of Ultrathin HfS ₂ Flakes for Optoelectronic Application. <i>Advanced Functional Materials</i> , 2017 , 27, 1702918	15.6	90
384	Hierarchical CuCo ₂ O ₄ @nickel-cobalt hydroxides core/shell nanoarchitectures for high-performance hybrid supercapacitors. <i>Science Bulletin</i> , 2017 , 62, 1122-1131	10.6	90
383	Single-crystal H ₂ V ₃ O ₈ nanowires: a competitive anode with large capacity for aqueous lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2011 , 21, 1780-1787		90
382	High performance near-infrared photodetectors based on ultrathin SnS nanobelts grown via physical vapor deposition. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 2111-2116	7.1	86
381	ZnSe nanostructures: Synthesis, properties and applications. <i>Progress in Materials Science</i> , 2016 , 83, 472-525	23.5	85
380	Flexible SnO(2) hollow nanosphere film based high-performance ultraviolet photodetector. <i>Chemical Communications</i> , 2013 , 49, 3739-41	5.8	85
379	Silver Nanoparticles Stabilized by Thermoresponsive Microgel Particles: Synthesis and Evidence of an Electron Donor-Acceptor Effect. <i>Macromolecular Rapid Communications</i> , 2007 , 28, 2339-2345	4.8	85

378	A Multifunctional Peptide-Conjugated AIEgen for Efficient and Sequential Targeted Gene Delivery into the Nucleus. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 5049-5053	16.4	84
377	Role of outer surface probes for regulating ion gating of nanochannels. <i>Nature Communications</i> , 2018 , 9, 40	17.4	83
376	Bulk synthesis, growth mechanism and properties of highly pure ultrafine boron nitride nanotubes with diameters of sub-10 nm. <i>Nanotechnology</i> , 2011 , 22, 145602	3.4	83
375	One-Pot Solution Synthesis of Cubic Cobalt Nanoskeletons. <i>Advanced Materials</i> , 2009 , 21, 1636-1640	24	83
374	Hierarchical Ni-Co-S@Ni-W-O core-shell nanosheet arrays on nickel foam for high-performance asymmetric supercapacitors. <i>Nano Research</i> , 2018 , 11, 1415-1425	10	82
373	Reconfigurable two-dimensional optoelectronic devices enabled by local ferroelectric polarization. <i>Nature Communications</i> , 2019 , 10, 3331	17.4	82
372	Ternary Ta ₂ NiSe ₅ Flakes for a High-Performance Infrared Photodetector. <i>Advanced Functional Materials</i> , 2016 , 26, 8281-8289	15.6	82
371	Distinct functional elements for outer-surface anti-interference and inner-wall ion gating of nanochannels. <i>Nature Communications</i> , 2018 , 9, 4557	17.4	82
370	Multi-heteroatom self-doped porous carbon derived from swim bladders for large capacitance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 15006-15014	13	81
369	PbSe Quantum Dots Sensitized High-Mobility BiOSe Nanosheets for High-Performance and Broadband Photodetection Beyond 2 μ m. <i>ACS Nano</i> , 2019 , 13, 9028-9037	16.7	81
368	Strong In-Plane Anisotropies of Optical and Electrical Response in Layered Dimetal Chalcogenide. <i>ACS Nano</i> , 2017 , 11, 10264-10272	16.7	81
367	In-doped Ga ₂ O ₃ nanobelt based photodetector with high sensitivity and wide-range photoresponse. <i>Journal of Materials Chemistry</i> , 2012 , 22, 17984		81
366	Synthesis of Large-Size 1T' ReS ₂ Se Alloy Monolayer with Tunable Bandgap and Carrier Type. <i>Advanced Materials</i> , 2017 , 29, 1705015	24	80
365	Photophysics in Cs ₃ Cu ₂ X ₅ (X = Cl, Br, or I): Highly Luminescent Self-Trapped Excitons from Local Structure Symmetrization. <i>Chemistry of Materials</i> , 2020 , 32, 3462-3468	9.6	80
364	2D Nanomaterial Arrays for Electronics and Optoelectronics. <i>Advanced Functional Materials</i> , 2018 , 28, 1706559	15.6	80
363	Performance-Enhancing Broadband and Flexible Photodetectors Based on Perovskite/ZnO-Nanowire Hybrid Structures. <i>Advanced Optical Materials</i> , 2017 , 5, 1700206	8.1	79
362	2D Ternary Chalcogenides. <i>Advanced Optical Materials</i> , 2018 , 6, 1800058	8.1	79
361	Highly reversible sodium storage in a GeP ₅ /C composite anode with large capacity and low voltage. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 4413-4420	13	77

360	Interlayer Coupling Induced Infrared Response in WS ₂ /MoS ₂ Heterostructures Enhanced by Surface Plasmon Resonance. <i>Advanced Functional Materials</i> , 2018 , 28, 1800339	15.6	75
359	Flexible Wire-Shaped Supercapacitors in Parallel Double Helix Configuration with Stable Electrochemical Properties under Static/Dynamic Bending. <i>Small</i> , 2016 , 12, 1024-33	11	75
358	Two-Dimensional van der Waals Materials with Aligned In-Plane Polarization and Large Piezoelectric Effect for Self-Powered Piezoelectric Sensors. <i>Nano Letters</i> , 2019 , 19, 5410-5416	11.5	74
357	A Ternary Solvent Method for Large-Sized Two-Dimensional Perovskites. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 2390-2394	16.4	72
356	Highly Porous Carbon with Graphene Nanoplatelet Microstructure Derived from Biomass Waste for High-Performance Supercapacitors in Universal Electrolyte. <i>Advanced Sustainable Systems</i> , 2017 , 1, 1600011	5.9	72
355	High quality graphene sheets from graphene oxide by hot-pressing. <i>Carbon</i> , 2013 , 54, 143-148	10.4	72
354	P-GaSe/N-MoS Vertical Heterostructures Synthesized by van der Waals Epitaxy for Photoresponse Modulation. <i>Small</i> , 2018 , 14, 1702731	11	71
353	Liquid-Alloy-Assisted Growth of 2D Ternary Ga In S toward High-Performance UV Photodetection. <i>Advanced Materials</i> , 2019 , 31, e1806306	24	71
352	Tunable Color Temperatures and Efficient White Emission from Cs Ag Na In Bi Cl Double Perovskite Nanocrystals. <i>Small</i> , 2019 , 15, e1903496	11	70
351	A simple hydrothermal method for the large-scale synthesis of single-crystal potassium tungsten bronze nanowires. <i>Chemistry - A European Journal</i> , 2006 , 12, 7717-23	4.8	70
350	Ultrathin 2D GeSe ₂ Rhombic Flakes with High Anisotropy Realized by Van der Waals Epitaxy. <i>Advanced Functional Materials</i> , 2017 , 27, 1703858	15.6	69
349	Recent Progress on Two-Dimensional Materials. <i>Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica</i> , 2021 , 2108017-0	3.8	69
348	Generalized Self-Doping Engineering towards Ultrathin and Large-Sized Two-Dimensional Homologous Perovskites. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14893-14897	16.4	68
347	Scalable production of self-supported WS ₂ /CNFs by electrospinning as the anode for high-performance lithium-ion batteries. <i>Science Bulletin</i> , 2016 , 61, 227-235	10.6	68
346	Ultrathin Non-van der Waals Magnetic Rhombohedral Cr ₂ S ₃ : Space-Confined Chemical Vapor Deposition Synthesis and Raman Scattering Investigation. <i>Advanced Functional Materials</i> , 2019 , 29, 1805880	15.6	68
345	Synergistic additive-mediated CVD growth and chemical modification of 2D materials. <i>Chemical Society Reviews</i> , 2019 , 48, 4639-4654	58.5	66
344	Robust Piezo-Phototronic Effect in Multilayer InSe for High-Performance Self-Powered Flexible Photodetectors. <i>ACS Nano</i> , 2019 , 13, 7291-7299	16.7	65
343	2D Metal Chalcogenides for IR Photodetection. <i>Small</i> , 2019 , 15, e1901347	11	65

342	Stacking-mode confined growth of 2H-MoTe ₂ /MoS ₂ bilayer heterostructures for UV-Vis IR photodetectors. <i>Nano Energy</i> , 2018 , 49, 200-208	17.1	65
341	Achieving highly uniform two-dimensional PbI ₂ flakes for photodetectors via space confined physical vapor deposition. <i>Science Bulletin</i> , 2017 , 62, 1654-1662	10.6	65
340	Heterostructures and superlattices in one-dimensional nanoscale semiconductors. <i>Journal of Materials Chemistry</i> , 2009 , 19, 5683		65
339	Halide-Induced Self-Limited Growth of Ultrathin Nonlayered Ge Flakes for High-Performance Phototransistors. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12909-12914	16.4	65
338	2D Group IVB Transition Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2018 , 28, 1803305	15.6	63
337	Multishelled Co ₃ O ₄ -Fe ₃ O ₄ hollow spheres with even magnetic phase distribution: Synthesis, magnetic properties and their application in water treatment. <i>Journal of Materials Chemistry</i> , 2011 , 21, 17680		63
336	Self-Limited Epitaxial Growth of Ultrathin Nonlayered CdS Flakes for High-Performance Photodetectors. <i>Advanced Functional Materials</i> , 2018 , 28, 1800181	15.6	62
335	Achieving Uniform Monolayer Transition Metal Dichalcogenides Film on Silicon Wafer via Silanization Treatment: A Typical Study on WS ₂ . <i>Advanced Materials</i> , 2017 , 29, 1603550	24	60
334	Ultrathin Single-Crystalline Boron Nanosheets for Enhanced Electro-Optical Performances. <i>Advanced Science</i> , 2015 , 2, 1500023	13.6	60
333	Nanostructured Materials and Architectures for Advanced Infrared Photodetection. <i>Advanced Materials Technologies</i> , 2017 , 2, 1700005	6.8	59
332	Design and Fabrication of Rocketlike Tetrapodal CdS Nanorods by Seed-Epitaxial Metal-Organic Chemical Vapor Deposition. <i>Crystal Growth and Design</i> , 2007 , 7, 488-491	3.5	59
331	High performance LiNi _{0.5} Mn _{1.5} O ₄ cathode by Al-coating and Al ³⁺ -doping through a physical vapor deposition method. <i>Electrochimica Acta</i> , 2016 , 191, 237-246	6.7	58
330	Fabrication of vertically aligned single-crystalline lanthanum hexaboride nanowire arrays and investigation of their field emission. <i>NPG Asia Materials</i> , 2013 , 5, e53-e53	10.3	58
329	Structural transformation, photocatalytic, and field-emission properties of ridged TiO ₂ nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 1352-8	9.5	58
328	Modulation of Molecular Spatial Distribution and Chemisorption with Perforated Nanosheets for Ethanol Electro-oxidation. <i>Advanced Materials</i> , 2019 , 31, e1900528	24	57
327	Ultrafast and Sensitive Self-Powered Photodetector Featuring Self-Limited Depletion Region and Fully Depleted Channel with van der Waals Contacts. <i>ACS Nano</i> , 2020 , 14, 9098-9106	16.7	57
326	Self-supported Zn ₃ P ₂ nanowire arrays grafted on carbon fabrics as an advanced integrated anode for flexible lithium ion batteries. <i>Nanoscale</i> , 2016 , 8, 8666-72	7.7	57
325	Sr Cd Sb O S : Strong SHG Response Activated by Highly Polarizable Sb/O/S Groups. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 8078-8081	16.4	56

324	Enhancing the performance of Li ₃ VO ₄ by combining nanotechnology and surface carbon coating for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11253-11260	13	56
323	Synthesis of ordered ZnS nanotubes by MOCVD-template method. <i>Materials Chemistry and Physics</i> , 2006 , 100, 281-284	4.4	56
322	Sodium-Mediated Epitaxial Growth of 2D Ultrathin Sb ₂ Se ₃ Flakes for Broadband Photodetection. <i>Advanced Functional Materials</i> , 2020 , 30, 1909849	15.6	55
321	Chemical Vapor Deposition Growth of High Crystallinity Sb Se Nanowire with Strong Anisotropy for Near-Infrared Photodetectors. <i>Small</i> , 2019 , 15, e1805307	11	54
320	Enhancing multiphoton upconversion through interfacial energy transfer in multilayered nanoparticles. <i>Nature Communications</i> , 2020 , 11, 1174	17.4	54
319	High-performance Schottky solar cells using ZrS ₂ nanobelt networks. <i>Energy and Environmental Science</i> , 2011 , 4, 2586	35.4	54
318	Simultaneous detection of telomerase and miRNA with graphene oxide-based fluorescent aptasensor in living cells and tissue samples. <i>Biosensors and Bioelectronics</i> , 2019 , 124-125, 199-204	11.8	54
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