

Aanlian Pan

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8777213/aanlian-pan-publications-by-citations.pdf>

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

330 papers	14,251 citations	63 h-index	105 g-index
352 ext. papers	17,075 ext. citations	9.5 avg, IF	6.67 L-index

#	Paper	IF	Citations
330	Lateral epitaxial growth of two-dimensional layered semiconductor heterojunctions. <i>Nature Nanotechnology</i> , 2014 , 9, 1024-30	28.7	858
329	Two-dimensional transition metal dichalcogenides as atomically thin semiconductors: opportunities and challenges. <i>Chemical Society Reviews</i> , 2015 , 44, 8859-76	58.5	719
328	Growth of alloy MoS(2x)Se2(1-x) nanosheets with fully tunable chemical compositions and optical properties. <i>Journal of the American Chemical Society</i> , 2014 , 136, 3756-9	16.4	362
327	Surface Plasmon-Enhanced Photodetection in Few Layer MoS2 Phototransistors with Au Nanostructure Arrays. <i>Small</i> , 2015 , 11, 2392-8	11	292
326	Van der Waals epitaxial growth and optoelectronics of large-scale WSe/SnS vertical bilayer p-n junctions. <i>Nature Communications</i> , 2017 , 8, 1906	17.4	258
325	Two-Dimensional CHNHPbI Perovskite Nanosheets for Ultrafast Pulsed Fiber Lasers. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 12759-12765	9.5	231
324	Novel Ag3PO4/CeO2 composite with high efficiency and stability for photocatalytic applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 1750-1756	13	226
323	Insights into Enhanced Visible-Light Photocatalytic Hydrogen Evolution of g-C3N4 and Highly Reduced Graphene Oxide Composite: The Role of Oxygen. <i>Chemistry of Materials</i> , 2015 , 27, 1612-1621	9.6	219
322	Synthesis of WS2xSe2-2x Alloy Nanosheets with Composition-Tunable Electronic Properties. <i>Nano Letters</i> , 2016 , 16, 264-9	11.5	218
321	Color-tunable photoluminescence of alloyed CdS(x)Se(1-x) nanobelts. <i>Journal of the American Chemical Society</i> , 2005 , 127, 15692-3	16.4	206
320	Vapor Growth and Tunable Lasing of Band Gap Engineered Cesium Lead Halide Perovskite Micro/Nanorods with Triangular Cross Section. <i>ACS Nano</i> , 2017 , 11, 1189-1195	16.7	199
319	Directional Growth of Ultralong CsPbBr Perovskite Nanowires for High-Performance Photodetectors. <i>Journal of the American Chemical Society</i> , 2017 , 139, 15592-15595	16.4	195
318	Optical waveguide through CdS nanoribbons. <i>Small</i> , 2005 , 1, 980-3	11	184
317	Continuous alloy-composition spatial grading and superbroad wavelength-tunable nanowire lasers on a single chip. <i>Nano Letters</i> , 2009 , 9, 784-8	11.5	180
316	Single-Mode Lasers Based on Cesium Lead Halide Perovskite Submicron Spheres. <i>ACS Nano</i> , 2017 , 11, 10681-10688	16.7	168
315	Nitrogen treatment generates tunable nanohybridization of Ni5P4 nanosheets with nickel hydr(oxy)oxides for efficient hydrogen production in alkaline, seawater and acidic media. <i>Applied Catalysis B: Environmental</i> , 2019 , 251, 181-194	21.8	155
314	Lateral Growth of Composition Graded Atomic Layer MoS(2(1-x))Se(2x) Nanosheets. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5284-7	16.4	155

3 ¹³	High-Quality In-Plane Aligned CsPbX Perovskite Nanowire Lasers with Composition-Dependent Strong Exciton-Photon Coupling. <i>ACS Nano</i> , 2018 , 12, 6170-6178	16.7	147
3 ¹²	Single-Crystal Thin Films of Cesium Lead Bromide Perovskite Epitaxially Grown on Metal Oxide Perovskite (SrTiO). <i>Journal of the American Chemical Society</i> , 2017 , 139, 13525-13532	16.4	147
3 ¹¹	Stimulated emissions in aligned CdS nanowires at room temperature. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 24268-72	3.4	143
3 ¹⁰	Strong photoluminescence of nanostructured crystalline tungsten oxide thin films. <i>Applied Physics Letters</i> , 2005 , 86, 141901	3.4	136
3 ⁰⁹	High efficiency and fast van der Waals hetero-photodiodes with a unilateral depletion region. <i>Nature Communications</i> , 2019 , 10, 4663	17.4	127
3 ⁰⁸	ZnO flowers made up of thin nanosheets and their optical properties. <i>Journal of Crystal Growth</i> , 2005 , 282, 165-172	1.6	119
3 ⁰⁷	Room-temperature near-infrared photodetectors based on single heterojunction nanowires. <i>Nano Letters</i> , 2014 , 14, 694-8	11.5	118
3 ⁰⁶	How lasing happens in CsPbBr perovskite nanowires. <i>Nature Communications</i> , 2019 , 10, 265	17.4	118
3 ⁰⁵	Spatial composition grading of quaternary ZnCdSSe alloy nanowires with tunable light emission between 350 and 710 nm on a single substrate. <i>ACS Nano</i> , 2010 , 4, 671-80	16.7	116
3 ⁰⁴	Lasing mechanism of ZnO nanowires/nanobelts at room temperature. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 12865-73	3.4	112
3 ⁰³	Flexible Photodetector Arrays Based on Patterned CH ₃ NH ₃ PbI ₃ Perovskite Film for Real-Time Photosensing and Imaging. <i>Advanced Materials</i> , 2019 , 31, e1805913	24	110
3 ⁰²	Unconventional p-d Hybridization Interaction in PtGa Ultrathin Nanowires Boosts Oxygen Reduction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019 , 141, 18083-18090	16.4	107
3 ⁰¹	Rayleigh-instability-induced metal nanoparticle chains encapsulated in nanotubes produced by atomic layer deposition. <i>Nano Letters</i> , 2008 , 8, 114-8	11.5	106
3 ⁰⁰	Germanium/perovskite heterostructure for high-performance and broadband photodetector from visible to infrared telecommunication band. <i>Light: Science and Applications</i> , 2019 , 8, 106	16.7	100
299	Two-Dimensional MoS ₂ -Graphene-Based Multilayer van der Waals Heterostructures: Enhanced Charge Transfer and Optical Absorption, and Electric-Field Tunable Dirac Point and Band Gap. <i>Chemistry of Materials</i> , 2017 , 29, 5504-5512	9.6	99
298	Perovskite-Erbium Silicate Nanosheet Hybrid Waveguide Photodetectors at the Near-Infrared Telecommunication Band. <i>Advanced Materials</i> , 2017 , 29, 1604431	24	99
297	Composition and bandgap-graded semiconductor alloy nanowires. <i>Advanced Materials</i> , 2012 , 24, 13-33	24	99
296	High-Performance Flexible Photodetectors based on High-Quality Perovskite Thin Films by a Vapor-Solution Method. <i>Advanced Materials</i> , 2017 , 29, 1703256	24	96

- 295 Direct Vapor Growth of Perovskite CsPbBr Nanoplate Electroluminescence Devices. *ACS Nano*, **2017**, 11, 9869-9876 16.7 96
- 294 Room-temperature dual-wavelength lasing from single-nanoribbon lateral heterostructures. *Journal of the American Chemical Society*, **2012**, 134, 12394-7 16.4 96
- 293 Spatial bandgap engineering along single alloy nanowires. *Journal of the American Chemical Society*, **2011**, 133, 2037-9 16.4 91
- 292 Visible Light-Assisted High-Performance Mid-Infrared Photodetectors Based on Single InAs Nanowire. *Nano Letters*, **2016**, 16, 6416-6424 11.5 90
- 291 Cesium lead halide perovskite triangular nanorods as high-gain medium and effective cavities for multiphoton-pumped lasing. *Nano Research*, **2017**, 10, 3385-3395 10 89
- 290 Self-Powered Broad-band Photodetectors Based on Vertically Stacked WSe/BiTe Heterojunctions. *ACS Nano*, **2019**, 13, 13573-13580 16.7 89
- 289 Composition-Modulated Two-Dimensional Semiconductor Lateral Heterostructures via Layer-Selected Atomic Substitution. *ACS Nano*, **2017**, 11, 961-967 16.7 86
- 288 Properties of Excitons and Photogenerated Charge Carriers in Metal Halide Perovskites. *Advanced Materials*, **2019**, 31, e1806671 24 85
- 287 Twist-angle-dependent interlayer exciton diffusion in WS-WSe heterobilayers. *Nature Materials*, **2020**, 19, 617-623 27 85
- 286 Band Alignment Engineering in Two-Dimensional Lateral Heterostructures. *Journal of the American Chemical Society*, **2018**, 140, 11193-11197 16.4 85
- 285 Growth of dendritic cobalt nanocrystals at room temperature. *Journal of Crystal Growth*, **2004**, 260, 427-434 16.4 83
- 284 Incorporating Large A Cations into Lead Iodide Perovskite Cages: Relaxed Goldschmidt Tolerance Factor and Impact on Exciton-Phonon Interaction. *ACS Central Science*, **2019**, 5, 1377-1386 16.8 80
- 283 Facile in situ construction of mediator-free direct Z-scheme g-C₃N₄/CeO₂ heterojunctions with highly efficient photocatalytic activity. *Journal Physics D: Applied Physics*, **2018**, 51, 275302 3 80
- 282 Broken Symmetry Induced Strong Nonlinear Optical Effects in Spiral WS Nanosheets. *ACS Nano*, **2017**, 11, 4892-4898 16.7 79
- 281 Dimensional transformation and morphological control of graphitic carbon nitride from water-based supramolecular assembly for photocatalytic hydrogen evolution: from 3D to 2D and 1D nanostructures. *Applied Catalysis B: Environmental*, **2019**, 254, 321-328 21.8 76
- 280 Wavelength-converted/selective waveguiding based on composition-graded semiconductor nanowires. *Nano Letters*, **2012**, 12, 5003-7 11.5 76
- 279 Van der Waals epitaxial growth of vertically stacked Sb₂Te₃/MoS₂ p-n heterojunctions for high performance optoelectronics. *Nano Energy*, **2019**, 59, 66-74 17.1 75
- 278 On-Nanowire Axial Heterojunction Design for High-Performance Photodetectors. *ACS Nano*, **2016**, 10, 8474-81 16.7 73

277	On-nanowire spatial band gap design for white light emission. <i>Nano Letters</i> , 2011 , 11, 5085-9	11.5	72
276	Composition modulation in one-dimensional and two-dimensional chalcogenide semiconductor nanostructures. <i>Chemical Society Reviews</i> , 2018 , 47, 7504-7521	58.5	72
275	Single-Crystalline InGaAs Nanowires for Room-Temperature High-Performance Near-Infrared Photodetectors. <i>Nano-Micro Letters</i> , 2016 , 8, 29-35	19.5	71
274	Quaternary alloy semiconductor nanobelts with bandgap spanning the entire visible spectrum. <i>Journal of the American Chemical Society</i> , 2009 , 131, 9502-3	16.4	70
273	Semiconductor alloy nanoribbon lateral heterostructures for high-performance photodetectors. <i>Advanced Materials</i> , 2014 , 26, 2844-9	24	65
272	Enhancing Light Emission of ZnO-Nanofilm/Si-Micropillar Heterostructure Arrays by Piezo-Phototronic Effect. <i>Advanced Materials</i> , 2015 , 27, 4447-4453	24	65
271	Multicolor Heterostructures of Two-Dimensional Layered Halide Perovskites that Show Interlayer Energy Transfer. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15675-15683	16.4	65
270	Strain-Tuning Atomic Substitution in Two-Dimensional Atomic Crystals. <i>ACS Nano</i> , 2018 , 12, 4853-4860	16.7	64
269	Band-selective infrared photodetectors with complete-composition-range InAs(x)P(1-x) alloy nanowires. <i>Advanced Materials</i> , 2014 , 26, 7444-9	24	64
268	Color-changeable optical transport through Se-doped CdS 1D nanostructures. <i>Nano Letters</i> , 2007 , 7, 2970-5	11.5	63
267	Low-threshold nanowire laser based on composition-symmetric semiconductor nanowires. <i>Nano Letters</i> , 2013 , 13, 1251-6	11.5	62
266	Fabrication and photoluminescence of high-quality ternary CdSSe nanowires and nanoribbons. <i>Nanotechnology</i> , 2006 , 17, 1083-6	3.4	62
265	Controllable Growth and Formation Mechanisms of Dislocated WS Spirals. <i>Nano Letters</i> , 2018 , 18, 3885-3892	11.5	62
264	Highly stable lead-free Cs3Bi2I9 perovskite nanoplates for photodetection applications. <i>Nano Research</i> , 2019 , 12, 1894-1899	10	61
263	Controlled Vapor Growth and Nonlinear Optical Applications of Large-Area 3R Phase WS2 and WSe2 Atomic Layers. <i>Advanced Functional Materials</i> , 2019 , 29, 1806874	15.6	59
262	Synthesis of Tower-like ZnO Structures and Visible Photoluminescence Origins of Varied-Shaped ZnO Nanostructures. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 7655-7660	3.8	59
261	Changeable position of SPR peak of Ag nanoparticles embedded in mesoporous SiO2 glass by annealing treatment. <i>Applied Surface Science</i> , 2003 , 205, 323-328	6.7	59
260	Photocurrent detection of the orbital angular momentum of light. <i>Science</i> , 2020 , 368, 763-767	33.3	58

259	Near Full-Composition-Range High-Quality GaAsSb Nanowires Grown by Molecular-Beam Epitaxy. <i>Nano Letters</i> , 2017 , 17, 622-630	11.5	57
258	Direct Vapor Growth of 2D Vertical Heterostructures with Tunable Band Alignments and Interfacial Charge Transfer Behaviors. <i>Advanced Science</i> , 2019 , 6, 1802204	13.6	57
257	Epitaxial nucleation and lateral growth of high-crystalline black phosphorus films on silicon. <i>Nature Communications</i> , 2020 , 11, 1330	17.4	56
256	Si-CdSSe core/shell nanowires with continuously tunable light emission. <i>Nano Letters</i> , 2008 , 8, 3413-7	11.5	55
255	Asymmetric light propagation in composition-graded semiconductor nanowires. <i>Scientific Reports</i> , 2012 , 2, 820	4.9	54
254	Vapor growth and interfacial carrier dynamics of high-quality CdS-CdSSe-CdS axial nanowire heterostructures. <i>Nano Energy</i> , 2017 , 32, 28-35	17.1	53
253	Rational Kinetics Control toward Universal Growth of 2D Vertically Stacked Heterostructures. <i>Advanced Materials</i> , 2019 , 31, e1901351	24	53
252	Light Emission Properties of 2D Transition Metal Dichalcogenides: Fundamentals and Applications. <i>Advanced Optical Materials</i> , 2018 , 6, 1800420	8.1	53
251	Preparation of nanosized particles of FeNi and FeCo alloy in solution. <i>Journal of Materials Science</i> , 2003 , 38, 4581-4585	4.3	53
250	Single-Crystalline Cu ₄ Bi ₄ S ₉ Nanoribbons: Facile Synthesis, Growth Mechanism, and Surface Photovoltaic Properties. <i>Chemistry of Materials</i> , 2011 , 23, 1299-1305	9.6	52
249	Tin(IV)-Tolerant Vapor-Phase Growth and Photophysical Properties of Aligned Cesium Tin Halide Perovskite (CsSnX ₃ ; X = Br, I) Nanowires. <i>ACS Energy Letters</i> , 2019 , 4, 1045-1052	20.1	51
248	Preparation and elastic properties of helical nanotubes obtained by atomic layer deposition with carbon nanocoils as templates. <i>Small</i> , 2010 , 6, 910-4	11	51
247	Plasmonic amplification with ultra-high optical gain at room temperature. <i>Scientific Reports</i> , 2013 , 3, 1967	4.9	50
246	The optical properties of ZnO sheets electrodeposited on ITO glass. <i>Materials Letters</i> , 2007 , 61, 2000-2003	9.3	49
245	High-quality alloyed CdS _x Se _{1-x} whiskers as waveguides with tunable stimulated emission. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 22313-7	3.4	47
244	Rubidium Doping to Enhance Carrier Transport in CsPbBr ₃ Single Crystals for High-Performance X-Ray Detection. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 989-996	9.5	47
243	Doping-Induced Hydrogen-Bond Engineering in Polymeric Carbon Nitride To Significantly Boost the Photocatalytic H ₂ Evolution Performance. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 17341-17349	9.5	46
242	Space-Confined Synthesis of 2D All-Inorganic CsPbI ₃ Perovskite Nanosheets for Multiphoton-Pumped Lasing. <i>Advanced Optical Materials</i> , 2018 , 6, 1800879	8.1	46

241	Crystal structure and electron transition underlying photoluminescence of methylammonium lead bromide perovskites. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 7739-7745	7.1	45
240	Ultrahigh-Performance Optoelectronics Demonstrated in Ultrathin Perovskite-Based Vertical Semiconductor Heterostructures. <i>ACS Nano</i> , 2019 , 13, 7996-8003	16.7	45
239	Controllable Fabrication of High-Quality 6-Fold Symmetry-Branched CdS Nanostructures with ZnS Nanowires as Templates. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 9253-9260	3.8	45
238	A Noble Metal Dichalcogenide for High-Performance Field-Effect Transistors and Broadband Photodetectors. <i>Advanced Functional Materials</i> , 2020 , 30, 1907945	15.6	45
237	Generalized Synthetic Strategy for Amorphous Transition Metal Oxides-Based 2D Heterojunctions with Superb Photocatalytic Hydrogen and Oxygen Evolution. <i>Advanced Functional Materials</i> , 2021 , 31, 2009230	15.6	45
236	Thermal stability and lasing of CdS nanowires coated by amorphous silica. <i>Small</i> , 2005 , 1, 1058-62	11	44
235	Novel 3D flower-like Ag ₃ PO ₄ microspheres with highly enhanced visible light photocatalytic activity. <i>Materials Letters</i> , 2014 , 116, 209-211	3.3	43
234	Nanolaser arrays based on individual waved CdS nanoribbons. <i>Laser and Photonics Reviews</i> , 2016 , 10, 458-464	8.3	42
233	Ultrahigh Hole Mobility of Sn-Catalyzed GaSb Nanowires for High Speed Infrared Photodetectors. <i>Nano Letters</i> , 2019 , 19, 5920-5929	11.5	41
232	Bandgap-engineered GaAsSb alloy nanowires for near-infrared photodetection at 1.31 μ m. <i>Semiconductor Science and Technology</i> , 2015 , 30, 105033	1.8	40
231	High-Throughput One-Photon Excitation Pathway in 0D/3D Heterojunctions for Visible-Light Driven Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2021 , 31, 2100816	15.6	40
230	CVD growth of perovskite/graphene films for high-performance flexible image sensor. <i>Science Bulletin</i> , 2020 , 65, 343-349	10.6	39
229	Generation of helical topological exciton-polaritons. <i>Science</i> , 2020 , 370, 600-604	33.3	39
228	High Gain Submicrometer Optical Amplifier at Near-Infrared Communication Band. <i>Physical Review Letters</i> , 2015 , 115, 027403	7.4	38
227	Ultra-thin tubular graphitic carbon Nitride-Carbon Dot lateral heterostructures: One-Step synthesis and highly efficient catalytic hydrogen generation. <i>Chemical Engineering Journal</i> , 2020 , 397, 125470	14.7	38
226	Phonon-assisted stimulated emission from single CdS nanoribbons at room temperature. <i>Applied Physics Letters</i> , 2006 , 88, 173102	3.4	38
225	Recent Progress on Electrical and Optical Manipulations of Perovskite Photodetectors. <i>Advanced Science</i> , 2021 , 8, e2100569	13.6	37
224	Heteroepitaxial growth of GaSb nanotrees with an ultra-low reflectivity in a broad spectral range. <i>Nano Letters</i> , 2012 , 12, 1799-805	11.5	36

223	Interlayer exciton formation, relaxation, and transport in TMD van der Waals heterostructures. <i>Light: Science and Applications</i> , 2021 , 10, 72	16.7	36
222	Transferred van der Waals metal electrodes for sub-1-nm MoS ₂ vertical transistors. <i>Nature Electronics</i> , 2021 , 4, 342-347	28.4	36
221	Few-layer WO ₃ nanosheets for high-performance UV-photodetectors. <i>Materials Letters</i> , 2015 , 148, 184-187	39	35
220	Up-conversion luminescence and optical temperature-sensing properties of Er ³⁺ -doped perovskite Na _{0.5} Bi _{0.5} TiO ₃ nanocrystals. <i>Journal of Physics and Chemistry of Solids</i> , 2016 , 98, 28-31	3.9	35
219	Wavelength-Tunable Mid-Infrared Lasing from Black Phosphorus Nanosheets. <i>Advanced Materials</i> , 2020 , 32, e1808319	24	34
218	Low threshold, single-mode laser based on individual CdS nanoribbons in dielectric DBR microcavity. <i>Nano Energy</i> , 2016 , 30, 481-487	17.1	34
217	Strategy to boost catalytic activity of polymeric carbon nitride: synergistic effect of controllable in situ surface engineering and morphology. <i>Nanoscale</i> , 2019 , 11, 16393-16405	7.7	33
216	High-performance optoelectronic devices based on van der Waals vertical MoS ₂ /MoSe ₂ heterostructures. <i>Nano Research</i> , 2020 , 13, 1053-1059	10	33
215	Spatially composition-modulated two-dimensional WSe ₂ nanosheets. <i>Nanoscale</i> , 2017 , 9, 4707-4712	7.7	32
214	Origin of enhanced photocatalytic activity of F-doped CeO ₂ nanocubes. <i>Applied Surface Science</i> , 2016 , 370, 427-432	6.7	32
213	Formation and optical properties of ZnO:ZnFe ₂ O ₄ superlattice microwires. <i>Nano Research</i> , 2010 , 3, 326-338	38	32
212	Fabrication and Red-Color Lasing of Individual Highly Uniform Single-Crystal CdSe Nanobelts. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 14253-14256	3.8	32
211	Synthesis of PbS microcrystals via a hydrothermal process. <i>Materials Letters</i> , 2006 , 60, 1242-1246	3.3	32
210	Ultrahigh Quality Upconverted Single-Mode Lasing in Cesium Lead Bromide Spherical Microcavity. <i>Advanced Optical Materials</i> , 2018 , 6, 1800391	8.1	31
209	Hierarchical SnO ₂ Nanostructures: Linear Assembly of Nanorods on the Nanowire Backbones. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1844-1848	3.8	31
208	Nonlinear photoluminescence in monolayer WS ₂ : parabolic emission and excitation fluence-dependent recombination dynamics. <i>Nanoscale</i> , 2017 , 9, 7235-7241	7.7	30
207	High-responsivity two-dimensional p-PbI ₂ /n-WS ₂ vertical heterostructure photodetectors enhanced by photogating effect. <i>Materials Horizons</i> , 2019 , 6, 1474-1480	14.4	30
206	Cooperative excitonic quantum ensemble in perovskite-assembly superlattice microcavities. <i>Nature Communications</i> , 2020 , 11, 329	17.4	30

205	Atomic layer deposition assisted template approach for electrochemical synthesis of Au crescent-shaped half-nanotubes. <i>ACS Nano</i> , 2011 , 5, 788-94	16.7	30
204	Controlled Synthesis and Photonics Applications of Metal Halide Perovskite Nanowires. <i>Small Methods</i> , 2019 , 3, 1800294	12.8	30
203	Ultrathin and Conformable Lead Halide Perovskite Photodetector Arrays for Potential Application in Retina-Like Vision Sensing. <i>Advanced Materials</i> , 2021 , 33, e2006006	24	30
202	Single-mode lasing and 3D confinement from perovskite micro-cubic cavity. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 11740-11748	7.1	30
201	Room-temperature high-performance CsPbBr perovskite tetrahedral microlasers. <i>Nanoscale</i> , 2019 , 11, 2393-2400	7.7	29
200	Nonvolatile MoTe p-n Diodes for Optoelectronic Logics. <i>ACS Nano</i> , 2019 , 13, 7216-7222	16.7	29
199	Strain-activated light-induced halide segregation in mixed-halide perovskite solids. <i>Nature Communications</i> , 2020 , 11, 6328	17.4	29
198	Visualizing Carrier Transport in Metal Halide Perovskite Nanoplates via Electric Field Modulated Photoluminescence Imaging. <i>Nano Letters</i> , 2018 , 18, 3024-3031	11.5	29
197	WO-WS Vertical Bilayer Heterostructures with High Photoluminescence Quantum Yield. <i>Journal of the American Chemical Society</i> , 2019 , 141, 11754-11758	16.4	29
196	Enhanced visible-light photoactivity of La-doped ZnS thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 108, 895-900	2.6	29
195	Structure and Photoluminescence of Pure and Indium-Doped ZnTe Microstructures. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 1415-1421	3.8	29
194	Growth of Oriented Zinc Oxide Nanowire Array into Novel Hierarchical Structures in Aqueous Solutions. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 17546-17553	3.8	29
193	Facile in situ synthesis of wurtzite ZnS/ZnO core/shell heterostructure with highly efficient visible-light photocatalytic activity and photostability. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 075503		28
192	Theory of ferromagnetic resonance in magnetic trilayers with a tilted spin polarizer. <i>Physical Review B</i> , 2008 , 78,	3.3	28
191	Stimulated emission from trapped excitons in SnO ₂ nanowires. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007 , 39, 223-229	3	28
190	Current-driven magnetization dynamics in magnetic trilayers with a tilted spin polarizer. <i>European Physical Journal B</i> , 2010 , 73, 417-421	1.2	26
189	Structure and stimulated emission of ZnSe nanoribbons grown by thermal evaporation. <i>Nanotechnology</i> , 2007 , 18, 305705	3.4	26
188	High-Temperature Upconverted Single-Mode Lasing in 3D Fully Inorganic Perovskite Microcubic Cavity. <i>ACS Photonics</i> , 2019 , 6, 793-801	6.3	26

- 187 Giant nonlinear optical activity in two-dimensional palladium diselenide. *Nature Communications*, **2021**, 12, 1083 17.4 26
- 186 Structural stability and Raman scattering of ZnSe nanoribbons under high pressure. *Journal of Alloys and Compounds*, **2009**, 480, 798-801 5.7 25
- 185 Hierarchical Self-assembly of Well-Defined Louver-Like P-Doped Carbon Nitride Nanowire Arrays with Highly Efficient Hydrogen Evolution. *Nano-Micro Letters*, **2020**, 12, 52 19.5 24
- 184 Lateral composition-graded semiconductor nanoribbons for multi-color nanolasers. *Nano Research*, **2016**, 9, 933-941 10 24
- 183 Ag₃PO₄Semiconductor Photocatalyst: Possibilities and Challenges. *Journal of Nanomaterials*, **2013**, 2013, 1-8 3.2 24
- 182 Single-crystal erbium chloride silicate nanowires as a Si-compatible light emission material in communication wavelength. *Optical Materials Express*, **2011**, 1, 1202 2.6 24
- 181 Phonon-assisted stimulated emission in Mn-doped ZnO nanowires. *Journal of Physics Condensed Matter*, **2007**, 19, 136206 1.8 24
- 180 Interfacial charge modulation: carbon quantum dot implanted carbon nitride double-deck nanoframes for robust visible-light photocatalytic tetracycline degradation. *Nanoscale*, **2020**, 12, 3135-3145 17.5 24
- 179 Probing and Manipulating Carrier Interlayer Diffusion in van der Waals Multilayer by Constructing Type-I Heterostructure. *Nano Letters*, **2019**, 19, 7217-7225 11.5 23
- 178 Steering charge kinetics boost the photocatalytic activity of graphitic carbon nitride: heteroatom-mediated spatial charge separation and transfer. *Journal Physics D: Applied Physics*, **2019**, 53, 015502 3 23
- 177 Solvent-induced crystallization for hybrid perovskite thin-film photodetector with high-performance and low working voltage. *Journal Physics D: Applied Physics*, **2017**, 50, 375101 3 23
- 176 Ferromagnetic and metallic properties of the semihydrogenated GaN sheet. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 1442-1445 1.3 23
- 175 Liquid-Metal-Assisted Growth of Vertical GaSe/MoS p-n Heterojunctions for Sensitive Self-Driven Photodetectors. *ACS Nano*, **2021**, 15, 10039-10047 16.7 23
- 174 High on/off ratio photosensitive field effect transistors based on few layer SnS₂. *Nanotechnology*, **2016**, 27, 34LT01 3.4 22
- 173 Strong interlayer hybridization in the aligned SnS₂/WSe₂ hetero-bilayer structure. *Npj 2D Materials and Applications*, **2019**, 3, 8.8 22
- 172 Trap-state whispering-gallery mode lasing from high-quality tin-doped CdS whiskers. *Applied Physics Letters*, **2011**, 99, 263101 3.4 22
- 171 Epitaxial synthesis of ultrathin InSe/MoS heterostructures with high visible/near-infrared photoresponse. *Nanoscale*, **2020**, 12, 6480-6488 7.7 21
- 170 Luminescence and local photonic confinement of single ZnSe:Mn nanostructure and the shape dependent lasing behavior. *Nanotechnology*, **2013**, 24, 055201 3.4 21

169	TiO ₂ nanowires sensitized with CdS quantum dots and the surface photovoltage properties. <i>Materials Letters</i> , 2010 , 64, 1688-1690	3.3	21
168	Temperature Difference Triggering Controlled Growth of All-Inorganic Perovskite Nanowire Arrays in Air. <i>Small</i> , 2018 , 14, e1803010	11	21
167	Controlled fabrication, lasing behavior and excitonic recombination dynamics in single crystal CH ₃ NH ₃ PbBr ₃ perovskite cuboids. <i>Science Bulletin</i> , 2019 , 64, 698-704	10.6	20
166	Understanding the Different Exciton-Plasmon Coupling Regimes in Two-Dimensional Semiconductors Coupled with Plasmonic Lattices: A Combined Experimental and Unified Equation of Motion Approach. <i>ACS Photonics</i> , 2018 , 5, 192-204	6.3	20
165	Surface plasmon resonance enhanced band-edge emission of CdS@SiO ₂ core-shell nanowires with gold nanoparticles attached. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 566-571	7.1	20
164	Synthesis and Diameter-dependent Thermal Conductivity of InAs Nanowires. <i>Nano-Micro Letters</i> , 2014 , 6, 301-306	19.5	20
163	The study on crystal defects-involved energy transfer process of Eu ³⁺ doped ZnO lattice. <i>Materials Letters</i> , 2014 , 129, 65-67	3.3	20
162	Controllable growth and optical properties of large scale ZnO arrays. <i>Journal of Crystal Growth</i> , 2005 , 282, 125-130	1.6	20
161	Light-triggered two-dimensional lateral homogeneous p-n diodes for opto-electrical interconnection circuits. <i>Science Bulletin</i> , 2020 , 65, 293-299	10.6	20
160	Room temperature near unity spin polarization in 2D Van der Waals heterostructures. <i>Nature Communications</i> , 2020 , 11, 4442	17.4	20
159	Growth of CdSe/MoS ₂ vertical heterostructures for fast visible-wavelength photodetectors. <i>Journal of Alloys and Compounds</i> , 2020 , 815, 152309	5.7	20
158	Vapor growth of WSe ₂ /WS ₂ heterostructures with stacking dependent optical properties. <i>Nano Research</i> , 2019 , 12, 3123-3128	10	19
157	Surface crystallization effects on the optical and electric properties of CdS nanorods. <i>Nanotechnology</i> , 2005 , 16, 2402-6	3.4	19
156	Multicolor Semiconductor Lasers. <i>Advanced Optical Materials</i> , 2019 , 7, 1900071	8.1	18
155	One-step synthesis of low-dimensional CdSe nanostructures and optical waveguide of CdSe nanowires. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 135301	3	18
154	Near-Unity Polarization of Valley-Dependent Second-Harmonic Generation in Stacked TMDC Layers and Heterostructures at Room Temperature. <i>Advanced Materials</i> , 2020 , 32, e1908061	24	17
153	An Electrically Controlled Wavelength-Tunable Nanoribbon Laser. <i>ACS Nano</i> , 2020 , 14, 3397-3404	16.7	17
152	Wavelength-Tunable Interlayer Exciton Emission at the Near-Infrared Region in van der Waals Semiconductor Heterostructures. <i>Nano Letters</i> , 2020 , 20, 3361-3368	11.5	17

151	Study of Eu(DBM)3phen-doped optical polymer waveguides. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2005 , 22, 820	1.7	17
150	Dual-channel type tunable field-effect transistors based on vertical bilayer WS ₂ (1-x)Se _{2x} /SnS ₂ heterostructures. <i>Information Materials</i> , 2020 , 2, 752-760	23.1	17
149	Theory-Driven Heterojunction Photocatalyst Design with Continuously Adjustable Band Gap Materials. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 28065-28074	3.8	17
148	Low-temperature synthesis of all-inorganic perovskite nanocrystals for UV-photodetectors. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5488-5496	7.1	16
147	Visible whispering-gallery modes in ZnO microwires with varied cross sections. <i>Journal of Applied Physics</i> , 2011 , 110, 033101	2.5	16
146	Color-changeable properties of plasmonic waveguides based on Se-doped CdS nanoribbons. <i>Physical Review B</i> , 2010 , 82,	3.3	16
145	Phase diagram of magnetic multilayers with tilted dual spin torques. <i>Journal of Applied Physics</i> , 2011 , 109, 033905	2.5	16
144	Gamma-irradiation-induced Ag/SiO ₂ composite films and their optical absorption properties. <i>Materials Research Bulletin</i> , 2003 , 38, 789-796	5.1	16
143	Large-Scale Growth of Ultrathin Low-Dimensional Perovskite Nanosheets for High-Detectivity Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 2884-2891	9.5	16
142	Controllable Vapor Growth of Large-Area Aligned CdS Se Nanowires for Visible Range Integratable Photodetectors. <i>Nano-Micro Letters</i> , 2018 , 10, 58	19.5	16
141	Wavelength Selective Photodetectors Integrated on a Single Composition-Graded Semiconductor Nanowire. <i>Advanced Optical Materials</i> , 2018 , 6, 1800293	8.1	15
140	Surface functionalized 3D carbon fiber boosts the lithium storage behaviour of transition metal oxide nanowires via strong electronic interaction and tunable adsorption energy. <i>Nanoscale Horizons</i> , 2019 , 4, 1402-1410	10.8	15
139	Microphotoluminescence of individual ZnSe nanoribbons. <i>Materials Letters</i> , 2014 , 129, 118-121	3.3	15
138	Optical transmission through metal/dielectric multilayer films perforated with periodic subwavelength slits. <i>Optics Communications</i> , 2011 , 284, 471-475	2	15
137	Negative differential resistance in polymer molecular devices modulated with molecular length. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010 , 374, 3857-3862	2.3	15
136	Observation of delayed fluorescence in CdS _x Se _{1-x} nanobelts by femtosecond time-resolved fluorescence spectroscopy. <i>Applied Physics Letters</i> , 2008 , 92, 032102	3.4	15
135	Enhanced Trion Emission and Carrier Dynamics in Monolayer WS ₂ Coupled with Plasmonic Nanocavity. <i>Advanced Optical Materials</i> , 2020 , 8, 2001147	8.1	15
134	Strain-Stabilized Metastable Face-Centered Tetragonal Gold Overlayer for Efficient CO Electroreduction. <i>Nano Letters</i> , 2021 , 21, 1003-1010	11.5	15

133	Strong Second- and Third-Harmonic Generation in 1D Chiral Hybrid Bismuth Halides. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16095-16104	16.4	15
132	Mechanism of Extreme Optical Nonlinearities in Spiral WS above the Bandgap. <i>Nano Letters</i> , 2020 , 20, 2667-2673	11.5	14
131	A simple and cheap way to produce porous ZnO ribbons and their photovoltaic response. <i>Materials Letters</i> , 2007 , 61, 4459-4462	3.3	14
130	Seamlessly Splicing Metallic Sn Mo S at MoS Edge for Enhanced Photoelectrocatalytic Performance in Microreactor. <i>Advanced Science</i> , 2020 , 7, 2002172	13.6	14
129	Power- and polarization dependence of two photon luminescence of single CdSe nanowires with tightly focused cylindrical vector beams of ultrashort laser pulses. <i>Laser and Photonics Reviews</i> , 2016 , 10, 835-842	8.3	14
128	Phonon-Assisted Electro-Optical Switches and Logic Gates Based on Semiconductor Nanostructures. <i>Advanced Materials</i> , 2019 , 31, e1901263	24	13
127	Revealing Excitonic and Electron-Hole Plasma States in Stimulated Emission of Single CsPbBr ₃ Nanowires at Room Temperature. <i>Physical Review Applied</i> , 2020 , 13,	4.3	13
126	Mesoporous g-C ₃ N ₄ Nanosheets: Synthesis, Superior Adsorption Capacity and Photocatalytic Activity. <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 5502-5510	1.3	13
125	Template-free synthesis and photocatalytic activity of CdS nanorings. <i>Materials Letters</i> , 2013 , 100, 141-144	3.3	13
124	Photoluminescence and surface photovoltage properties of ZnSe nanoribbons. <i>Science Bulletin</i> , 2015 , 60, 1674-1679	10.6	13
123	Modulated exciton-plasmon interactions in Au-SiO ₂ -CdTe composite nanoparticles. <i>Optics Express</i> , 2013 , 21, 11095-100	3.3	13
122	Mechanically and electronically controlled molecular switch behavior in a compound molecular device. <i>Applied Physics Letters</i> , 2010 , 97, 103506	3.4	13
121	Ab initio studies of half-metallic ferromagnetism in carbon-doped. <i>Solid State Communications</i> , 2010 , 150, 923-927	1.6	13
120	Photoluminescence and electroluminescence properties of ZnO films on p-type silicon wafers. <i>Chinese Physics B</i> , 2007 , 16, 1790-1795		13
119	An air-stable microwire radial heterojunction with high photoconductivity based on a new building block. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 5933-5939	7.1	12
118	Facile route to fabricate carbon-doped TiO ₂ nanoparticles and its mechanism of enhanced visible light photocatalytic activity. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	12
117	Carrier-Funneling-Induced Efficient Energy Transfer in CdS _x Se _{1-x} Heterostructure Microplates. <i>ACS Energy Letters</i> , 2019 , 4, 2796-2804	20.1	12
116	Ordered CdS micro/nanostructures on CdSe nanostructures. <i>Nanotechnology</i> , 2009 , 20, 125601	3.4	12

115	Observation and Active Control of a Collective Polariton Mode and Polaritonic Band Gap in Few-Layer WS Strongly Coupled with Plasmonic Lattices. <i>Nano Letters</i> , 2020 , 20, 790-798	11.5	12
114	Recent Advances in Two-Dimensional Heterostructures: From Band Alignment Engineering to Advanced Optoelectronic Applications. <i>Advanced Electronic Materials</i> , 2021 , 7, 2001174	6.4	12
113	Tin Nanoparticles-Enhanced Optical Transportation in Branched CdS Nanowire Waveguides. <i>Advanced Optical Materials</i> , 2018 , 6, 1800305	8.1	12
112	Indirect to direct band gap crossover in two-dimensional WS ₂ (1-x)Se _{2x} alloys. <i>Npj 2D Materials and Applications</i> , 2021 , 5,	8.8	12
111	Trion-Induced Distinct Transient Behavior and Stokes Shift in WS Monolayers. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3763-3772	6.4	11
110	Magneto-spectroscopy of exciton Rydberg states in a CVD grown WSe ₂ monolayer. <i>Applied Physics Letters</i> , 2019 , 114, 232104	3.4	11
109	Bandgap broadly tunable GaZnSeAs alloy nanowires. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 2912-2966	3.6	11
108	Tilted spin torque-driven ferromagnetic resonance in a perpendicular-analyzer magnetic trilayer. <i>Journal of Magnetism and Magnetic Materials</i> , 2010 , 322, 2264-2267	2.8	11
107	Optical processes in the formation of stimulated emission from ZnO nanowires. <i>Chinese Physics B</i> , 2007 , 16, 1129-1134		11
106	Facile one-step in-situ synthesis of type-II CeO ₂ /CeF ₃ composite with tunable morphology and photocatalytic activity. <i>Ceramics International</i> , 2016 , 42, 16374-16381	5.1	11
105	Nanocavity-Enhanced Giant Stimulated Raman Scattering in Si Nanowires in the Visible Light Region. <i>Nano Letters</i> , 2019 , 19, 1204-1209	11.5	10
104	Ultra-long distance carrier transportation in bandgap-graded CdSSe nanowire waveguides. <i>Nanoscale</i> , 2019 , 11, 8494-8501	7.7	10
103	Optical sensor based on a single CdS nanobelt. <i>Sensors</i> , 2014 , 14, 7332-41	3.8	10
102	Electronic structure and magnetic properties in Nitrogen-doped from density functional calculations. <i>Solid State Communications</i> , 2010 , 150, 852-856	1.6	10
101	Double-Gate MoS Field-Effect Transistors with Full-Range Tunable Threshold Voltage for Multifunctional Logic Circuits. <i>Advanced Materials</i> , 2021 , 33, e2101036	24	10
100	Protonated supramolecular complex-induced porous graphitic carbon nitride nanosheets as bifunctional catalyst for water oxidation and organic pollutant degradation. <i>Journal of Materials Science</i> , 2019 , 54, 7637-7650	4.3	9
99	Er ³⁺ -doped Na _{0.5} Bi _{0.5} TiO ₃ ferroelectric thin films with enhanced electrical properties and strong green up-conversion luminescence. <i>Applied Physics A: Materials Science and Processing</i> , 2015 , 119, 937-940	2.6	9
98	Down-conversion luminescence and its temperature-sensing properties from Er ³⁺ -doped sodium bismuth titanate ferroelectric thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2015 , 121, 773-777	2.6	9

97	Self-assembled hierarchical carbon/g-C ₃ N ₄ composite with high photocatalytic activity. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 135501	3	9
96	Polarization-Dependent Optical Properties and Optoelectronic Devices of 2D Materials. <i>Research</i> , 2020 , 2020, 5464258	7.8	9
95	Ultrastable low-cost colloidal quantum dot microlasers of operative temperature up to 450 K. <i>Light: Science and Applications</i> , 2021 , 10, 60	16.7	9
94	Moiré Superlattices and related moiré excitons in twisted van der Waals heterostructures. <i>Chemical Society Reviews</i> , 2021 , 50, 6401-6422	58.5	9
93	Vapor growth of CdS nanowires/WS nanosheet heterostructures with sensitive photodetections. <i>Nanotechnology</i> , 2019 , 30, 345603	3.4	8
92	Second-harmonic generation in single CdSe nanowires by focused cylindrical vector beams. <i>Optics Letters</i> , 2017 , 42, 2623-2626	3	8
91	Large photoluminescence redshift of ZnTe nanostructures: The effect of twin structures. <i>Chemical Physics Letters</i> , 2013 , 576, 26-30	2.5	8
90	Orientation-controlled synthesis and magnetism of single crystalline Co nanowires. <i>Journal of Magnetism and Magnetic Materials</i> , 2012 , 324, 4043-4047	2.8	8
89	Synthesis and optical properties of InP quantum dot/nanowire heterostructures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 1898-1902	1.6	8
88	Spatially composition-graded alloy semiconductor nanowires and wavelength specific lateral-multijunction full-spectrum solar cells 2009 ,		8
87	Twist Angle-Dependent Optical Responses in Controllably Grown WS ₂ Vertical Homojunctions. <i>Chemistry of Materials</i> , 2020 , 32, 9721-9729	9.6	8
86	Active optical antennas driven by inelastic electron tunneling. <i>Nanophotonics</i> , 2018 , 7, 1503-1516	6.3	8
85	Carrier Transport Across a CdS _x Se _{1-x} Lateral Heterojunction Visualized by Ultrafast Microscopy. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 11325-11332	3.8	7
84	Magnetic-brightening and control of dark exciton in CsPbBr ₃ perovskite. <i>Science China Materials</i> , 2020 , 63, 1503-1509	7.1	7
83	Non-fullerene acceptors for large-open-circuit-voltage and high-efficiency organic solar cells. <i>Materials Today Nano</i> , 2018 , 1, 47-59	9.7	7
82	Gradient index plasmonic ring resonator with high extinction ratio. <i>Optics Communications</i> , 2014 , 312, 280-283	2	7
81	Modulational instability and gap solitons in periodic ferromagnetic films. <i>European Physical Journal B</i> , 2012 , 85, 1	1.2	7
80	Complete composition tunability of Cd _{1-x} Zn _x Te alloy nanostructures along a single substrate. <i>Materials Letters</i> , 2013 , 105, 90-94	3.3	7

79	Trapping of surface plasmon polaritons in a multiple-teeth-shaped waveguide at visible wavelengths. <i>Applied Physics B: Lasers and Optics</i> , 2011 , 103, 883-887	1.9	7
78	Magnetic properties in nitrogen-doped CeO ₂ from first-principles calculations. <i>Physica B: Condensed Matter</i> , 2010 , 405, 4858-4862	2.8	7
77	Self-Absorption Effect in the Spatial Resolved Spectra of CdS Nano-Ribbon Optical Waveguide Observed by Near-Field Spectroscopy. <i>Optical Review</i> , 2006 , 13, 235-238	0.9	7
76	A host-guest self-assembly strategy to enhance electron densities in ultrathin porous carbon nitride nanocages toward highly efficient hydrogen evolution. <i>Chemical Engineering Journal</i> , 2022 , 430, 132880	14.7	7
75	General Synthesis of Nanoporous 2D Metal Compounds with 3D Bicontinuous Structure. <i>Advanced Materials</i> , 2020 , 32, e2004055	24	7
74	Planar Heterojunction Organic Photodetectors Based on Fullerene and Non-fullerene Acceptor Bilayers for a Tunable Spectral Response. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 55064-55071	9.5	7
73	Robust and High Photoluminescence in WS ₂ Monolayer through In Situ Defect Engineering. <i>Advanced Functional Materials</i> , 2021 , 31, 2105339	15.6	7
72	Metasurface-enabled on-chip multiplexed diffractive neural networks in the visible. <i>Light: Science and Applications</i> , 2022 , 11,	16.7	7
71	Contact and injection engineering for low SS reconfigurable FETs and high gain complementary inverters. <i>Science Bulletin</i> , 2020 , 65, 2007-2013	10.6	6
70	Dilute tin-doped CdS nanowires for low-loss optical waveguiding. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 4391	7.1	6
69	Semiconductor Alloy Nanowires and Nanobelts With Tunable Optical Properties. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011 , 17, 808-818	3.8	6
68	Broadband emission in all-inorganic metal halide perovskites with intrinsic vacancies. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 13976-13981	7.1	6
67	Efficient control of emission and carrier polarity in WS ₂ monolayer by indium doping. <i>Science China Materials</i> , 2021 , 64, 1449-1456	7.1	6
66	Synthesis and optoelectronic properties of quaternary GaInAsSb alloy nanosheets. <i>Nanotechnology</i> , 2016 , 27, 505602	3.4	6
65	Acid-induced topological morphology modulation of graphitic carbon nitride homojunctions as advanced metal-free catalysts for OER and pollutant degradation. <i>Journal of Materials Science and Technology</i> , 2021 , 86, 210-218	9.1	6
64	Polar-Induced Selective Epitaxial Growth of Multijunction Nanoribbons for High-Performance Optoelectronics. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 15813-15820	9.5	5
63	Color-tunable periodic spatial emission of alloyed CdS _{1-x} Se _x / Sn: CdS _{1-x} Se _x superlattice microwires. <i>Optical Materials Express</i> , 2011 , 1, 1185	2.6	5
62	Trapping of surface-plasmon polaritons in a subwavelength cut. <i>Optics Communications</i> , 2011 , 284, 153-155	1.5	5

61	Facile preparation of TiO ₂ nanostructures by direct annealing of the Ti foil. <i>Materials Letters</i> , 2010 , 64, 2392-2394	3.3	5
60	Plasmonically engineered light-matter interactions in Au-nanoparticle/MoS ₂ heterostructures for artificial optoelectronic synapse. <i>Nano Research</i> , 1	10	5
59	Record high photoresponse observed in CdS-black phosphorous van der Waals heterojunction photodiode. <i>Science China Materials</i> , 2020 , 63, 1570-1578	7.1	5
58	Supersaturation-triggered synthesis of 2D/1D phosphide heterostructures as multi-functional catalysts for water splitting. <i>Applied Physics Letters</i> , 2021 , 118, 093901	3.4	5
57	Spin-Orbit Torque in Van der Waals-Layered Materials and Heterostructures. <i>Advanced Science</i> , 2021 , 8, e2100847	13.6	5
56	Second harmonic generation and waveguide properties in perovskite Na _{0.5} Bi _{0.5} TiO ₃ nanowires. <i>Optics Letters</i> , 2016 , 41, 3803-5	3	5
55	Light-triggered interfacial charge transfer and enhanced photodetection in CdSe/ZnS quantum dots/MoS ₂ mixed-dimensional phototransistors. <i>Opto-Electronic Advances</i> , 2021 , 4, 210017-210017	6.5	5
54	Magnetic Doping Induced Strong Circularly Polarized Light Emission and Detection in 2D Layered Halide Perovskite. <i>Advanced Optical Materials</i> , 2200183	8.1	5
53	Silicon-erbium ytterbium silicate nanowire waveguides with optimized optical gain. <i>Frontiers of Physics</i> , 2017 , 12, 1	3.7	4
52	Optically manipulated nanomechanics of semiconductor nanowires. <i>Chinese Physics B</i> , 2019 , 28, 054204	1.2	4
51	Continuous-wave lasing in halide perovskites. <i>Science China Materials</i> , 2018 , 61, 1243-1244	7.1	4
50	Cavity Engineering of Photon-Phonon Interactions in Si Nanocavities. <i>Nano Letters</i> , 2019 , 19, 7950-7956	11.5	4
49	Synthesis and optical characterizations of chain-like Si@SiSe ₂ nanowire heterostructures. <i>Nanoscale</i> , 2012 , 4, 1481-5	7.7	4
48	Simple Synthesis and Growth Mechanism of Core/Shell CdSe/SiO _x Nanowires. <i>Journal of Nanomaterials</i> , 2010 , 2010, 1-6	3.2	4
47	Simulated emission behaviors from Excitons in CdS nanoribbons. <i>Journal of Physics: Conference Series</i> , 2006 , 28, 12-17	0.3	4
46	Efficient modulation of MoS ₂ /WSe ₂ interlayer excitons via uniaxial strain. <i>Applied Physics Letters</i> , 2022 , 120, 053107	3.4	4
45	Effects of the substrate-surface reconstruction and orientation on the spin valley polarization in MoTe ₂ /EuO. <i>Physical Review B</i> , 2020 , 102,	3.3	4
44	Controlled growth of SnSe/MoS ₂ vertical p/n heterojunction for optoelectronic applications. <i>Nano Futures</i> , 2021 , 5, 015002	3.6	4

43	Near-infrared photodetection based on erbium chloride borate nanobelts. <i>Applied Physics Express</i> , 2019 , 12, 035001	2.4	3
42	Au Nanoarrays: Surface Plasmon-Enhanced Photodetection in Few Layer MoS2 Phototransistors with Au Nanostructure Arrays (Small 20/2015). <i>Small</i> , 2015 , 11, 2346-2346	11	3
41	Visible light stimulating dual-wavelength emission and O vacancy involved energy transfer behavior in luminescence for coaxial nanocable arrays. <i>Journal of Applied Physics</i> , 2014 , 115, 224308	2.5	3
40	Fabrication and optical waveguide of Sn-catalyzed CdSe microstructures. <i>Solid State Communications</i> , 2013 , 167, 31-35	1.6	3
39	Broadband coherent emission observed in polycrystalline CdSSe nanowires under high excitation. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 375302	1.8	3
38	Ballistic phonon transmission in quasiperiodic acoustic nanocavities. <i>Journal of Applied Physics</i> , 2011 , 109, 084310	2.5	3
37	BALLISTIC PHONON TRANSPORT THROUGH GAUSSIAN ACOUSTIC NANOCAVITIES. <i>Modern Physics Letters B</i> , 2011 , 25, 1631-1642	1.6	3
36	Electrically switchable valley polarization, spin/valley filter, and valve effects in transition-metal dichalcogenide monolayers interfaced with two-dimensional ferromagnetic semiconductors. <i>Physical Review B</i> , 2021 , 104,	3.3	3
35	Study on Charge Carriers Behavior at CdS/TiO2Interface of One Dimensional TiO2@CdS Core-shell Structure by Raman Scattering and Surface Photovoltage Spectroscopy. <i>Acta Chimica Sinica</i> , 2013 , 71, 634	3.3	3
34	Amorphous B-doped graphitic carbon nitride quantum dots with high photoluminescence quantum yield of near 90% and their sensitive detection of Fe ²⁺ /Cd ²⁺ . <i>Science China Materials</i> , 1	7.1	3
33	A novel visible light sensing and recording system enabled by integration of photodetector and electrochromic devices. <i>Nanoscale</i> , 2021 , 13, 9177-9184	7.7	3
32	Orbital-Angular-Momentum-Controlled Hybrid Nanowire Circuit. <i>Nano Letters</i> , 2021 , 21, 6220-6227	11.5	3
31	Photoluminescence Lightening: Extraordinary Oxygen Modulated Dynamics in WS Monolayers.. <i>Nano Letters</i> , 2022 ,	11.5	3
30	Comparison of the optical waveguide behaviors of Se-doped and undoped CdS nanoribbons by using near-field optical microscopy. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 978-81	1.3	2
29	Room temperature exciton-polaritons in high-quality 2D Ruddlesden-Popper perovskites (BA) ₂ (MA) _{n-1} Pb _n I _{3n+1} (n = 3, 4). <i>Applied Physics Letters</i> , 2020 , 117, 221107	3.4	2
28	Two ultra-stable novel allotropes of tellurium few-layers. <i>Chinese Physics B</i> , 2020 , 29, 097103	1.2	2
27	An Efficient Deep-Subwavelength Second Harmonic Nanoantenna Based on Surface Plasmon-Coupled Dilute Nitride GaNP Nanowires. <i>Nano Letters</i> , 2021 , 21, 3426-3434	11.5	2
26	Focus on 2D material nanophotonics. <i>Nanotechnology</i> , 2019 , 30, 030201	3.4	2

25	Trap-Mediated Energy Transfer in Er-Doped Cesium Lead Halide Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3320-3326	6.4	2
24	Revealing the many-body interactions and valley-polarization behavior in Re-doped MoS ₂ monolayers. <i>Applied Physics Letters</i> , 2021 , 118, 113101	3.4	2
23	Optical waveguide beam splitters based on hybrid metal-dielectric-semiconductor nanostructures. <i>Optics Communications</i> , 2015 , 354, 168-173	2	1
22	Two-step excitation structure changes of luminescence centers and strong tunable blue emission on surface of silica nanospheres. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	1
21	Wang et al. Reply. <i>Physical Review Letters</i> , 2016 , 117, 219702	7.4	1
20	Effect of Gaussian acoustic nanocavities in a narrow constriction on ballistic phonon transmission. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 104, 635-642	2.6	1
19	Ballistic phonon transport through a Fibonacci array of acoustic nanocavities in a narrow constriction. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011 , 375, 2000-2006	2.3	1
18	Non-Traditional Positively-Biased Narrow-Band Perovskite Single-Crystal Photodetectors Enabled by Interfacial Engineering. <i>Advanced Optical Materials</i> , 2022 , 10, 2102225	8.1	1
17	Measuring the local mobility of graphene on semiconductors. <i>Physical Review Materials</i> , 2018 , 2,	3.2	1
16	Enhancing circular polarization of photoluminescence of two-dimensional Ruddlesden-Popper perovskites by constructing van der Waals heterostructures. <i>Applied Physics Letters</i> , 2021 , 119, 151101	3.4	1
15	Triphenylamine-Polystyrene Blends for Perovskite Solar Cells with Simultaneous Energy Loss Suppression and Stability Improvement. <i>Solar Rrl</i> , 2020 , 4, 2000490	7.1	1
14	Bottom-up fabrication of semiconducting 2D coordination nanosheets for versatile bioimaging and photodetecting applications. <i>Materials Advances</i> , 2021 , 2, 5189-5194	3.3	1
13	Controlled vapor growth of 2D magnetic Cr ₂ Se ₃ and its magnetic proximity effect in heterostructures*. <i>Chinese Physics B</i> , 2021 , 30, 097601	1.2	1
12	Low Thresholds and Tunable Modes in Plasmon-Assisted Perovskite Microlasers. <i>Advanced Optical Materials</i> , 2022 , 10, 2102777	8.1	1
11	Polarized photoluminescence spectroscopy in WS ₂ , WSe ₂ atomic layers and heterostructures by cylindrical vector beams*. <i>Chinese Physics B</i> , 2021 , 30, 087802	1.2	0
10	Strain-controlled synthesis of ultrathin hexagonal GaTe/MoS heterostructure for sensitive photodetection. <i>IScience</i> , 2021 , 24, 103031	6.1	0
9	Strong interfacial coupling in vertical WSe ₂ /WS ₂ heterostructure for high performance photodetection. <i>Applied Physics Letters</i> , 2022 , 120, 181108	3.4	0
8	Gallium doping-assisted giant photoluminescence enhancement of monolayer MoS ₂ grown by chemical vapor deposition. <i>Applied Physics Letters</i> , 2022 , 120, 221902	3.4	0

- 7 Enhanced luminescent intensity in a free-standing erbium silicate microplate. *Journal of Modern Optics*, **2019**, 66, 1951-1955 1.1
- 6 Effects of contact shape on ballistic phonon transport in semiconductor nanowires. *Current Applied Physics*, **2012**, 12, 437-442 2.6
- 5 Optical waveguide behavior of Se-doped and undoped CdS one-dimensional nanostructures using near-field optical microscopy **2009**, 52, 26-30
- 4 Study of rhodamine B-doped polymer optical waveguides by using scanning near-field optical microscopy **2005**, 6019, 702
- 3 One-Photon Excitation Pathway: High-Throughput One-Photon Excitation Pathway in 0D/3D Heterojunctions for Visible-Light Driven Hydrogen Evolution (Adv. Funct. Mater. 18/2021). *Advanced Functional Materials*, **2021**, 31, 2170125 15.6
- 2 Infrared photodetector based on 2D monoclinic gold phosphide nanosheets yielded from one-step chemical vapor transport deposition. *Applied Physics Letters*, **2022**, 120, 131104 3.4
- 1 Manipulating Picosecond Photoresponse in van der Waals Heterostructure Photodetectors. *Advanced Functional Materials*, 2200973 15.6