

Zheng Liu

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1962268/zheng-liu-publications-by-year.pdf>

Version: 2024-04-26

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.

466
papers

53,464
citations

110
h-index

223
g-index

506
ext. papers

61,821
ext. citations

13.1
avg, IF

7.72
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 466 | Ultralow-Threshold and High-Quality Whispering-Gallery-Mode Lasing from Colloidal Core/Hybrid-Shell Quantum Wells.. <i>Advanced Materials</i> , 2022 , e2108884 | 24 | 5 |
| 465 | Recent progress in the synthesis of novel two-dimensional van der Waals materials.. <i>National Science Review</i> , 2022 , 9, nwab164 | 10.8 | 10 |
| 464 | Enhancing hydrovoltaic power generation through heat conduction effects.. <i>Nature Communications</i> , 2022 , 13, 1043 | 17.4 | 3 |
| 463 | Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. <i>Nature Catalysis</i> , 2022 , 5, 212-221 | 36.5 | 14 |
| 462 | Direct growth of single-metal-atom chains 2022 , 1, 245-253 | | 1 |
| 461 | Efficient and Selective CO Reduction to Formate on Pd-Doped Pb (CO) (OH) : Dynamic Catalyst Reconstruction and Accelerated CO Protonation.. <i>Small</i> , 2022 , e2107885 | 11 | 1 |
| 460 | Enhanced Versatility of Table-Top X-Rays from Van der Waals Structures.. <i>Advanced Science</i> , 2022 , e2105401 | 15.0 | 2 |
| 459 | Ultralow-Threshold and High-Quality Whispering-Gallery-Mode Lasing from Colloidal Core/Hybrid-Shell Quantum Wells (Adv. Mater. 13/2022). <i>Advanced Materials</i> , 2022 , 34, 2270104 | 24 | 1 |
| 458 | Nanowire-to-Nanoribbon Conversion in Transition-Metal Chalcogenides: Implications for One-Dimensional Electronics and Optoelectronics. <i>ACS Applied Nano Materials</i> , 2022 , 5, 1775-1782 | 5.6 | 2 |
| 457 | Phase engineering of Cr ₅ Te ₈ with colossal anomalous Hall effect. <i>Nature Electronics</i> , 2022 , 5, 224-232 | 28.4 | 10 |
| 456 | Chemical Vapor Deposition Synthesis of Two-dimensional Bi ₂ O ₂ Se on Silicon Substrate and its Photodetecting Application. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022 , | 0.6 | |
| 455 | Electronegativity Induced Charge Balancing to Boost Stability and Activity of Amorphous Electrocatalyst.. <i>Advanced Materials</i> , 2021 , e2100537 | 24 | 6 |
| 454 | Epitaxial Growth of Step-Like Cr S Lateral Homojunctions Towards Versatile Conduction Polarities and Enhanced Transistor Performances. <i>Small</i> , 2021 , e2105744 | 11 | 3 |
| 453 | Controllable growth of two-dimensional materials on noble metal substrates.. <i>IScience</i> , 2021 , 24, 1034326.1 | 26.1 | 2 |
| 452 | Versatile Post-Doping toward Two-Dimensional Semiconductors. <i>ACS Nano</i> , 2021 , | 16.7 | 4 |
| 451 | Anisotropic point defects in rhenium diselenide monolayers. <i>IScience</i> , 2021 , 24, 103456 | 6.1 | 0 |
| 450 | Thickness dependent properties of ultrathin perovskite nanosheets with Ruddlesden-Popper-like atomic stackings. <i>Nanoscale</i> , 2021 , 13, 18961-18966 | 7.7 | |

| | | | |
|-----|--|------|----|
| 449 | Machine Learning Driven Synthesis of Few-Layered WTe with Geometrical Control. <i>Journal of the American Chemical Society</i> , 2021 , 143, 18103-18113 | 16.4 | 6 |
| 448 | Atomically Dispersed Co -N and Fe-N Costructures Boost Oxygen Reduction Reaction in Both Alkaline and Acidic Media. <i>Advanced Materials</i> , 2021 , e2104718 | 24 | 41 |
| 447 | Mimicking Neuroplasticity via Ion Migration in van der Waals Layered Copper Indium Thiophosphate. <i>Advanced Materials</i> , 2021 , e2104676 | 24 | 7 |
| 446 | Electrically switchable van der Waals magnon valves. <i>Nature Communications</i> , 2021 , 12, 6279 | 17.4 | 4 |
| 445 | Discovery of Dome-Shaped Superconducting Phase and Anisotropic Transport in a van der Waals Layered Candidate NbIrTe under Pressure. <i>Advanced Science</i> , 2021 , e2103250 | 13.6 | 3 |
| 444 | 2D/2D atomic double-layer WS ₂ /Nb ₂ O ₅ shell/core nanosheets with ultrafast interfacial charge transfer for boosting photocatalytic H ₂ evolution. <i>Chinese Chemical Letters</i> , 2021 , 32, 3128-3128 | 8.1 | 5 |
| 443 | Many-Body Effect on Optical Properties of Monolayer Molybdenum Diselenide. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 2555-2561 | 6.4 | 6 |
| 442 | Direct Laser Patterning of a 2D WSe ₂ Logic Circuit. <i>Advanced Functional Materials</i> , 2021 , 31, 2009549 | 15.6 | 6 |
| 441 | Recent Advances in Synthesis and Study of 2D Twisted Transition Metal Dichalcogenide Bilayers. <i>Small Structures</i> , 2021 , 2, 2000153 | 8.7 | 9 |
| 440 | Hollow Spherical Superstructure of Carbon Nanosheets for Bifunctional Oxygen Reduction and Evolution Electrocatalysis. <i>Nano Letters</i> , 2021 , 21, 3640-3648 | 11.5 | 15 |
| 439 | Controlled Growth of Large-Sized and Phase-Selectivity 2D GaTe Crystals. <i>Small</i> , 2021 , 17, e2007909 | 11 | 2 |
| 438 | MoO ₃ /MoS ₂ vertical heterostructures synthesized via one-step CVD process for optoelectronics. <i>2D Materials</i> , 2021 , 8, 035036 | 5.9 | 8 |
| 437 | Fe/FeC Embedded in N-Doped Worm-like Porous Carbon for High-Rate Catalysis in Rechargeable Zinc-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 24710-24722 | 9.5 | 3 |
| 436 | Dynamical evolution of anisotropic response of type-II Weyl semimetal TaIrTe under ultrafast photoexcitation. <i>Light: Science and Applications</i> , 2021 , 10, 101 | 16.7 | 8 |
| 435 | Engineering High-Spin State Cobalt Cations in Spinel Zinc Cobalt Oxide for Spin Channel Propagation and Active Site Enhancement in Water Oxidation. <i>Angewandte Chemie</i> , 2021 , 133, 14657-14665 | 13.6 | 2 |
| 434 | Engineering High-Spin State Cobalt Cations in Spinel Zinc Cobalt Oxide for Spin Channel Propagation and Active Site Enhancement in Water Oxidation. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 14536-14544 | 16.4 | 27 |
| 433 | PdPSe: Component-Fusion-Based Topology Designer of Two-Dimensional Semiconductor. <i>Advanced Functional Materials</i> , 2021 , 31, 2102943 | 15.6 | 8 |
| 432 | Controlled Synthesis of MoWTe Atomic Layers with Emergent Quantum States. <i>ACS Nano</i> , 2021 , | 16.7 | 2 |

| | | | |
|-----|--|------|----|
| 431 | A Gas-Steamed MOF Route to P-Doped Open Carbon Cages with Enhanced Zn-Ion Energy Storage Capability and Ultraprobability. <i>Advanced Materials</i> , 2021 , 33, e2101698 | 24 | 28 |
| 430 | In vivo sensing of rabbit cornea by terahertz technology. <i>Journal of Biophotonics</i> , 2021 , 14, e202100130 | 3.1 | 5 |
| 429 | Boron Nanosheet-Supported Rh Catalysts for Hydrogen Evolution: A New Territory for the Strong Metal-Support Interaction Effect. <i>Nano-Micro Letters</i> , 2021 , 13, 138 | 19.5 | 10 |
| 428 | Chemical Vapor Deposition of Superconducting FeTeSe Nanosheets. <i>Nano Letters</i> , 2021 , 21, 5338-5344 | 11.5 | 8 |
| 427 | Penta-PdPSe: A New 2D Pentagonal Material with Highly In-Plane Optical, Electronic, and Optoelectronic Anisotropy. <i>Advanced Materials</i> , 2021 , 33, e2102541 | 24 | 27 |
| 426 | Ultrasensitive Photodetectors Promoted by Interfacial Charge Transfer from Layered Perovskites to Chemical Vapor Deposition-Grown MoS. <i>Small</i> , 2021 , 17, e2102461 | 11 | 4 |
| 425 | Cobalt nitride as a novel cocatalyst to boost photocatalytic CO ₂ reduction. <i>Nano Energy</i> , 2021 , 79, 105429 | 17.1 | 45 |
| 424 | 2D Material Based Synaptic Devices for Neuromorphic Computing. <i>Advanced Functional Materials</i> , 2021 , 31, 2005443 | 15.6 | 56 |
| 423 | Ternary Ta PdS Atomic Layers for an Ultrahigh Broadband Photoresponsive Phototransistor. <i>Advanced Materials</i> , 2021 , 33, e2005607 | 24 | 25 |
| 422 | 2D PtS nanorectangles/g-CN nanosheets with a metal sulfide-support interaction effect for high-efficiency photocatalytic H evolution. <i>Materials Horizons</i> , 2021 , 8, 612-618 | 14.4 | 10 |
| 421 | Wafer-Scale Growth of One-Dimensional Transition-Metal Telluride Nanowires. <i>Nano Letters</i> , 2021 , 21, 243-249 | 11.5 | 8 |
| 420 | Flexible Au micro-array electrode with atomic-scale Au thin film for enhanced ethanol oxidation reaction. <i>Nano Research</i> , 2021 , 14, 311-319 | 10 | 0 |
| 419 | Strong coupling and pressure engineering in WSe ₂ /MoSe ₂ heterobilayers. <i>Nature Physics</i> , 2021 , 17, 92-98 | 16.2 | 56 |
| 418 | Synaptic Devices: 2D Material Based Synaptic Devices for Neuromorphic Computing (Adv. Funct. Mater. 4/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170022 | 15.6 | |
| 417 | Raman scattering investigation of twisted WS ₂ /MoS ₂ heterostructures: interlayer mechanical coupling versus charge transfer. <i>Nano Research</i> , 2021 , 14, 2215 | 10 | 6 |
| 416 | Strain-Modulated Photoelectric Responses from a Flexible E _n Se/3R MoS Heterojunction. <i>Nano-Micro Letters</i> , 2021 , 13, 74 | 19.5 | 10 |
| 415 | Van der Waals engineering of ferroelectric heterostructures for long-retention memory. <i>Nature Communications</i> , 2021 , 12, 1109 | 17.4 | 29 |
| 414 | CVD Growth of Large-scale and Highly Crystalline 2D Chromium Telluride Nanoflakes. <i>ChemNanoMat</i> , 2021 , 7, 323-327 | 3.5 | 6 |

| | | | |
|-----|---|------|----|
| 413 | Interpenetrating interfaces for efficient perovskite solar cells with high operational stability and mechanical robustness. <i>Nature Communications</i> , 2021 , 12, 973 | 17.4 | 75 |
| 412 | Two-step CVD synthesis of NiTe-MoS ₂ vertical junctions with improved MoS ₂ transistors performance. <i>Nanotechnology</i> , 2021 , | 3.4 | 7 |
| 411 | Polymorphism of Segmented Grain Boundaries in Two-Dimensional Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2021 , 21, 6014-6021 | 11.5 | 2 |
| 410 | Engineering Cocatalysts onto Low-Dimensional Photocatalysts for CO ₂ Reduction. <i>Small Structures</i> , 2021 , 2, 2100046 | 8.7 | 15 |
| 409 | Understanding the Synergistic Effects of Cobalt Single Atoms and Small Nanoparticles: Enhancing Oxygen Reduction Reaction Catalytic Activity and Stability for Zinc-Air Batteries. <i>Advanced Functional Materials</i> , 2021 , 31, 2104735 | 15.6 | 32 |
| 408 | High thermoelectric performance enabled by convergence of nested conduction bands in PbBiSe with low thermal conductivity. <i>Nature Communications</i> , 2021 , 12, 4793 | 17.4 | 15 |
| 407 | MoTe ₂ : Semiconductor or Semimetal?. <i>ACS Nano</i> , 2021 , | 16.7 | 4 |
| 406 | Electronic and transport properties of TMDC planar superlattices: effective Hamiltonian approach. <i>Physica Scripta</i> , 2021 , 96, 125808 | 2.6 | 1 |
| 405 | One-step synthesis of BaTiO ₃ /CaTiO ₃ core-shell nanocubes by hydrothermal reaction. <i>Journal of Asian Ceramic Societies</i> , 2021 , 9, 359-365 | 2.4 | 3 |
| 404 | Emerging Phases of Layered Metal Chalcogenides.. <i>Small</i> , 2021 , e2105215 | 11 | 1 |
| 403 | A universal method for rapid and large-scale growth of layered crystals. <i>SmartMat</i> , 2020 , 1, e1011 | 22.8 | 23 |
| 402 | Bismuth Oxychalcogenide Nanosheet: Facile Synthesis, Characterization, and Photodetector Application. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000180 | 6.8 | 14 |
| 401 | Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. <i>Nature Communications</i> , 2020 , 11, 2253 | 17.4 | 58 |
| 400 | Engineering covalently bonded 2D layered materials by self-intercalation. <i>Nature</i> , 2020 , 581, 171-177 | 50.4 | 68 |
| 399 | Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS ₂ . <i>ACS Nano</i> , 2020 , 14, 6897-6905 | 16.7 | 8 |
| 398 | Efficient growth and characterization of one-dimensional transition metal tellurides inside carbon nanotubes. <i>Nanoscale</i> , 2020 , 12, 17185-17190 | 7.7 | 9 |
| 397 | Self-cross-linked arrays enabled flexible mechanical sensors for monitoring the body tremor. <i>Npj Flexible Electronics</i> , 2020 , 4, | 10.7 | 7 |
| 396 | Ferroelectric-field accelerated charge transfer in 2D CuInP ₂ S ₆ heterostructure for enhanced photocatalytic H ₂ evolution. <i>Nano Energy</i> , 2020 , 76, 104972 | 17.1 | 42 |

| | | | |
|-----|---|------|-----|
| 395 | Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 16013-16022 | 16.4 | 60 |
| 394 | Single-Atom Iron Catalysts on Overhang-Eave Carbon Cages for High-Performance Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2020 , 132, 7454-7459 | 3.6 | 45 |
| 393 | Single-Atom Iron Catalysts on Overhang-Eave Carbon Cages for High-Performance Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 7384-7389 | 16.4 | 134 |
| 392 | Versatile and scalable chemical vapor deposition of vertically aligned MoTe ₂ on reusable Mo foils. <i>Nano Research</i> , 2020 , 13, 2371-2377 | 10 | 2 |
| 391 | Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie</i> , 2020 , 132, 16147-16156 | 3.6 | 11 |
| 390 | Synthesis of Atomically Thin 1T-TaSe ₂ with a Strongly Enhanced Charge-Density-Wave Order. <i>Advanced Functional Materials</i> , 2020 , 30, 2001903 | 15.6 | 8 |
| 389 | Optogenetics inspired transition metal dichalcogenide neuristors for in-memory deep recurrent neural networks. <i>Nature Communications</i> , 2020 , 11, 3211 | 17.4 | 20 |
| 388 | Strain-driven growth of ultra-long two-dimensional nano-channels. <i>Nature Communications</i> , 2020 , 11, 772 | 17.4 | 16 |
| 387 | Controlled Growth of 3R Phase Tantalum Diselenide and Its Enhanced Superconductivity. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2948-2955 | 16.4 | 12 |
| 386 | Synthesis of Co-Doped MoS Monolayers with Enhanced Valley Splitting. <i>Advanced Materials</i> , 2020 , 32, e1906536 | 24 | 35 |
| 385 | A Novel Single-Atom Electrocatalyst Ti /rGO for Efficient Cathodic Reduction in Hybrid Photovoltaics. <i>Advanced Materials</i> , 2020 , 32, e2000478 | 24 | 20 |
| 384 | Oxygen doped MoS quantum dots for efficient electrocatalytic hydrogen generation. <i>Journal of Chemical Physics</i> , 2020 , 152, 134704 | 3.9 | 5 |
| 383 | Effects of precursors purity on graphene quality: Synthesis and thermoelectric effect. <i>AIP Advances</i> , 2020 , 10, 045016 | 1.5 | 1 |
| 382 | A Honeycomb-Like Bulk Superstructure of Carbon Nanosheets for Electrocatalysis and Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 19627-19632 | 16.4 | 50 |
| 381 | A Honeycomb-Like Bulk Superstructure of Carbon Nanosheets for Electrocatalysis and Energy Storage. <i>Angewandte Chemie</i> , 2020 , 132, 19795-19800 | 3.6 | 4 |
| 380 | Oxygen vacancy mediated bismuth stannate ultra-small nanoparticle towards photocatalytic CO ₂ -to-CO conversion. <i>Applied Catalysis B: Environmental</i> , 2020 , 276, 119156 | 21.8 | 30 |
| 379 | Second harmonic generation in 2D layered materials. <i>2D Materials</i> , 2020 , 7, 042002 | 5.9 | 16 |
| 378 | Bond Electronegativity as Hydrogen Evolution Reaction Catalyst Descriptor for Transition Metal (TM = Mo, W) Dichalcogenides. <i>Chemistry of Materials</i> , 2020 , 32, 1224-1234 | 9.6 | 28 |

| | | | |
|-----|--|------|----|
| 377 | Two-dimensional materials: From mechanical properties to flexible mechanical sensors. <i>Informa Mater</i> , 2020 , 2, 1077-1094 | 23.1 | 63 |
| 376 | Carbon Microtube Aerogel Derived from Kapok Fiber: An Efficient and Recyclable Sorbent for Oils and Organic Solvents. <i>ACS Nano</i> , 2020 , 14, 595-602 | 16.7 | 61 |
| 375 | Engineering grain boundaries at the 2D limit for the hydrogen evolution reaction. <i>Nature Communications</i> , 2020 , 11, 57 | 17.4 | 72 |
| 374 | Controlled Fragmentation of Single-Atom-Thick Polycrystalline Graphene. <i>Matter</i> , 2020 , 2, 666-679 | 12.7 | 30 |
| 373 | Dual-Metal Interbonding as the Chemical Facilitator for Single-Atom Dispersions. <i>Advanced Materials</i> , 2020 , 32, e2003484 | 24 | 40 |
| 372 | A Bottom-up In-situ Preparation of Graphene-like Porous Carbon for Ultrahigh Surface Area Specific Capacitance Supercapacitors. <i>ChemNanoMat</i> , 2020 , 6, 1789-1796 | 3.5 | |
| 371 | Air Stable Organic-Inorganic Perovskite Nanocrystals@Polymer Nanofibers and Waveguide Lasing. <i>Small</i> , 2020 , 16, e2004409 | 11 | 9 |
| 370 | Terahertz Surface Emission from MoSe at the Monolayer Limit. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 48161-48169 | 9.5 | 7 |
| 369 | Strain-Engineering of Bi ₂ O ₃ Br ₂ Nanotubes for Boosting Photocatalytic CO ₂ Reduction 2020 , 2, 1025-1032 | | 38 |
| 368 | Surfactant-assisted hydrothermal synthesis of MoS ₂ micro-pompon structure with enhanced photocatalytic performance under visible light. <i>Tungsten</i> , 2020 , 2, 203-213 | 4.6 | 15 |
| 367 | Embedding Ultrafine Metal Oxide Nanoparticles in Monolayered Metal-Organic Framework Nanosheets Enables Efficient Electrocatalytic Oxygen Evolution. <i>ACS Nano</i> , 2020 , 14, 1971-1981 | 16.7 | 57 |
| 366 | Two-dimensional ferromagnetism in CrTe flakes down to atomically thin layers. <i>Nanoscale</i> , 2020 , 12, 16427-16432 | 7.7 | 22 |
| 365 | Pristine edge structures of T'-phase transition metal dichalcogenides (ReSe, ReS) atomic layers. <i>Nanoscale</i> , 2020 , 12, 17005-17012 | 7.7 | 6 |
| 364 | Architecting a Stable High-Energy Aqueous Al-Ion Battery. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15295-15304 | 16.4 | 94 |
| 363 | Diffraction-limited imaging with monolayer 2D material-based ultrathin flat lenses. <i>Light: Science and Applications</i> , 2020 , 9, 137 | 16.7 | 30 |
| 362 | Phase-controllable growth of ultrathin 2D magnetic FeTe crystals. <i>Nature Communications</i> , 2020 , 11, 3729 | 17.4 | 57 |
| 361 | Recent Progress on 2D Transition Metal Compounds-based Electrocatalysts for Efficient Nitrogen Reduction. <i>Chemical Research in Chinese Universities</i> , 2020 , 36, 648-661 | 2.2 | 3 |
| 360 | Giant and Anisotropic Nonlinear Optical Responses of 1D van der Waals Material Tellurium. <i>Advanced Optical Materials</i> , 2020 , 8, 2001273 | 8.1 | 4 |

| | | | |
|-----|--|------|-----|
| 359 | Machine learning-guided synthesis of advanced inorganic materials. <i>Materials Today</i> , 2020 , 41, 72-80 | 21.8 | 22 |
| 358 | Robust nature of the chiral spin helix in CrNb ₃ S ₆ nanostructures studied by off-axis electron holography. <i>Physical Review B</i> , 2020 , 102, | 3.3 | 4 |
| 357 | Stabilization of metallic phases through formation of metallic/semiconducting lateral heterostructures. <i>Journal of Chemical Physics</i> , 2020 , 153, 084702 | 3.9 | 4 |
| 356 | A Tandem 0D/2D/2D NbS Quantum Dot/Nb O Nanosheet/g-C N Flake System with Spatial Charge-Transfer Cascades for Boosting Photocatalytic Hydrogen Evolution. <i>Small</i> , 2020 , 16, e2003302 | 11 | 16 |
| 355 | Machine-Learning-Driven Synthesis of Carbon Dots with Enhanced Quantum Yields. <i>ACS Nano</i> , 2020 , 14, 14761-14768 | 16.7 | 46 |
| 354 | Nanovoid-driven highly crystalline aluminum nitride and its application in solar-blind UV photodetectors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 14431-14438 | 7.1 | 5 |
| 353 | Bandgap engineering of two-dimensional semiconductor materials. <i>Npj 2D Materials and Applications</i> , 2020 , 4, | 8.8 | 152 |
| 352 | Atomic mechanism of metal crystal nucleus formation in a single-walled carbon nanotube. <i>Nature Chemistry</i> , 2020 , 12, 921-928 | 17.6 | 25 |
| 351 | Spontaneous Emission of Plasmon-Exciton Polaritons Revealed by Ultrafast Nonradiative Decays. <i>Laser and Photonics Reviews</i> , 2020 , 14, 2000233 | 8.3 | 5 |
| 350 | Space-confined microwave synthesis of ternary-layered BiOCl crystals with high-performance ultraviolet photodetection. <i>Information Materials</i> , 2020 , 2, 593-600 | 23.1 | 25 |
| 349 | Enhanced Potassium Ion Battery by Inducing Interlayer Anionic Ligands in MoS _{1.5} Se _{0.5} Nanosheets with Exploration of the Mechanism. <i>Advanced Energy Materials</i> , 2020 , 10, 1904162 | 21.8 | 26 |
| 348 | Scanning Moiré Fringe Method: A Superior Approach to Perceive Defects, Interfaces, and Distortion in 2D Materials. <i>ACS Nano</i> , 2020 , 14, 6034-6042 | 16.7 | 6 |
| 347 | Phase Transition and Superconductivity Enhancement in Se-Substituted MoTe Thin Films. <i>Advanced Materials</i> , 2019 , 31, e1904641 | 24 | 15 |
| 346 | Enhancing the cycling stability of Na-ion batteries by bonding MoS ₂ on assembled carbon-based materials. <i>Nano Materials Science</i> , 2019 , 1, 310-317 | 10.2 | 6 |
| 345 | Epitaxial Synthesis of Monolayer PtSe Single Crystal on MoSe with Strong Interlayer Coupling. <i>ACS Nano</i> , 2019 , 13, 10929-10938 | 16.7 | 45 |
| 344 | Controlled synthesis and room-temperature pyroelectricity of CuInP ₂ S ₆ ultrathin flakes. <i>Nano Energy</i> , 2019 , 58, 596-603 | 17.1 | 31 |
| 343 | Hydrochromic full-color MXene quantum dots through hydrogen bonding toward ultrahigh-efficiency white light-emitting diodes. <i>Applied Materials Today</i> , 2019 , 16, 90-101 | 6.6 | 50 |
| 342 | Atomic Plane-Vacancy Engineering of Transition-Metal Dichalcogenides with Enhanced Hydrogen Evolution Capability. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25264-25270 | 9.5 | 28 |

| | | | |
|-----|--|------|-----|
| 341 | Restoring the intrinsic optical properties of CVD-grown MoS monolayers and their heterostructures. <i>Nanoscale</i> , 2019 , 11, 12798-12803 | 7.7 | 20 |
| 340 | Highly anisotropic thermoelectric properties of black phosphorus crystals. <i>2D Materials</i> , 2019 , 6, 045009 | 5.9 | 17 |
| 339 | Agent-assisted VSSe ternary alloy single crystals as an efficient stable electrocatalyst for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15714-15721 | 13 | 14 |
| 338 | Elastic Properties of 2D Ultrathin Tungsten Nitride Crystals Grown by Chemical Vapor Deposition. <i>Advanced Functional Materials</i> , 2019 , 29, 1902663 | 15.6 | 21 |
| 337 | Improving Polysulfides Adsorption and Redox Kinetics by the Co N Nanoparticle/N-Doped Carbon Composites for Lithium-Sulfur Batteries. <i>Small</i> , 2019 , 15, e1901454 | 11 | 77 |
| 336 | Defect-Tailoring Mediated Electron-Hole Separation in Single-Unit-Cell Bi O Br Nanosheets for Boosting Photocatalytic Hydrogen Evolution and Nitrogen Fixation. <i>Advanced Materials</i> , 2019 , 31, e1807376 | 24 | 188 |
| 335 | Phase-Controlled Synthesis of Monolayer Ternary Telluride with a Random Local Displacement of Tellurium Atoms. <i>Advanced Materials</i> , 2019 , 31, e1900862 | 24 | 30 |
| 334 | Origin of giant negative piezoelectricity in a layered van der Waals ferroelectric. <i>Science Advances</i> , 2019 , 5, eaav3780 | 14.3 | 74 |
| 333 | Transport evidence of asymmetric spin-orbit coupling in few-layer superconducting 1T-MoTe. <i>Nature Communications</i> , 2019 , 10, 2044 | 17.4 | 39 |
| 332 | Fabrication of a Spherical Superstructure of Carbon Nanorods. <i>Advanced Materials</i> , 2019 , 31, e1900440 | 24 | 63 |
| 331 | A Single-Crystal Open-Capsule Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7906-7916 | 16.4 | 106 |
| 330 | Nonlinear photoresponse of type-II Weyl semimetals. <i>Nature Materials</i> , 2019 , 18, 476-481 | 27 | 104 |
| 329 | Facile synthesis of oil adsorbent carbon microtubes by pyrolysis of plant tissues. <i>Journal of Materials Science</i> , 2019 , 54, 9352-9361 | 4.3 | 8 |
| 328 | Anomalous Photothermoelectric Transport Due to Anisotropic Energy Dispersion in WTe. <i>Nano Letters</i> , 2019 , 19, 2647-2652 | 11.5 | 17 |
| 327 | Atomically-thin Bi ₂ MoO ₆ nanosheets with vacancy pairs for improved photocatalytic CO ₂ reduction. <i>Nano Energy</i> , 2019 , 61, 54-59 | 17.1 | 150 |
| 326 | Experimental progress on layered topological semimetals. <i>2D Materials</i> , 2019 , 6, 032001 | 5.9 | 16 |
| 325 | Electron transfer and cascade relaxation dynamics of graphene quantum dots/MoS ₂ monolayer mixed-dimensional van der Waals heterostructures. <i>Materials Today</i> , 2019 , 24, 10-16 | 21.8 | 40 |
| 324 | Isolation of Single-Wired Transition-Metal Monochalcogenides by Carbon Nanotubes. <i>Nano Letters</i> , 2019 , 19, 4845-4851 | 11.5 | 31 |

| | | | |
|-----|---|------|-----|
| 323 | Ultrathin Ruddlesden-Popper Perovskite Heterojunction for Sensitive Photodetection. <i>Small</i> , 2019 , 15, e1902890 | 11 | 27 |
| 322 | Ultrawideband Surface Enhanced Raman Scattering in Hybrid Graphene Fragmented-Gold Substrates via Cold-Etching. <i>Advanced Optical Materials</i> , 2019 , 7, 1900905 | 8.1 | 6 |
| 321 | New strategy towards the assembly of hierarchical heterostructures of SnO ₂ /ZnO for NO ₂ detection at a ppb level. <i>Inorganic Chemistry Frontiers</i> , 2019 , 6, 2801-2809 | 6.8 | 14 |
| 320 | Phosphate-Mediated Immobilization of High-Performance AuPd Nanoparticles for Dehydrogenation of Formic Acid at Room Temperature. <i>Advanced Functional Materials</i> , 2019 , 29, 1903347 | 15.6 | 40 |
| 319 | Van der Waals negative capacitance transistors. <i>Nature Communications</i> , 2019 , 10, 3037 | 17.4 | 71 |
| 318 | Spatially dispersive circular photogalvanic effect in a Weyl semimetal. <i>Nature Materials</i> , 2019 , 18, 955-962 | 27 | 58 |
| 317 | Self-gating in semiconductor electrocatalysis. <i>Nature Materials</i> , 2019 , 18, 1098-1104 | 27 | 84 |
| 316 | Bismuth Vacancy-Tuned Bismuth Oxybromide Ultrathin Nanosheets toward Photocatalytic CO Reduction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 30786-30792 | 9.5 | 79 |
| 315 | Isolated single atom cobalt in BiOBr atomic layers to trigger efficient CO photoreduction. <i>Nature Communications</i> , 2019 , 10, 2840 | 17.4 | 177 |
| 314 | Cobalt-Modulated Molybdenum-Dinitrogen Interaction in MoS for Catalyzing Ammonia Synthesis. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19269-19275 | 16.4 | 119 |
| 313 | Magneto-Transport and Shubnikov-de Haas Oscillations in the Type-II Weyl Semimetal Candidate NbIrTe ₄ Flake. <i>Chinese Physics Letters</i> , 2019 , 36, 077101 | 1.8 | 5 |
| 312 | Microscopy of Nanoporous Crystals. <i>Springer Handbooks</i> , 2019 , 1391-1450 | 1.3 | 4 |
| 311 | Stacking-dependent interlayer phonons in 3R and 2H MoS ₂ . <i>2D Materials</i> , 2019 , 6, 025022 | 5.9 | 19 |
| 310 | In-plane optical anisotropy in ReS flakes determined by angle-resolved polarized optical contrast spectroscopy. <i>Nanoscale</i> , 2019 , 11, 20199-20205 | 7.7 | 19 |
| 309 | Freestanding ultrathin bismuth-based materials for diversified photocatalytic applications. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25203-25226 | 13 | 56 |
| 308 | Ternary chalcogenide Ta ₂ NiS ₅ nanosheets for broadband pulse generation in ultrafast fiber lasers. <i>Nanophotonics</i> , 2019 , 9, 2341-2349 | 6.3 | 12 |
| 307 | Dual-Mode Sensor and Actuator to Learn Human-Hand Tracking and Grasping. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 5407-5410 | 2.9 | 13 |
| 306 | In-Plane Anisotropic Thermal Conductivity of Few-Layered Transition Metal Dichalcogenide Td-WTe. <i>Advanced Materials</i> , 2019 , 31, e1804979 | 24 | 29 |

| | | | |
|-----|--|------|-----|
| 305 | Ultrasensitive 2D Bi O Se Phototransistors on Silicon Substrates. <i>Advanced Materials</i> , 2019 , 31, e18049454 | 11.4 | 119 |
| 304 | Direct observation of ultrafast plasmonic hot electron transfer in the strong coupling regime. <i>Light: Science and Applications</i> , 2019 , 8, 9 | 16.7 | 109 |
| 303 | Ultrathin two-dimensional materials for photo- and electrocatalytic hydrogen evolution. <i>Materials Today</i> , 2018 , 21, 749-770 | 21.8 | 147 |
| 302 | InSe monolayer: synthesis, structure and ultra-high second-harmonic generation. <i>2D Materials</i> , 2018 , 5, 025019 | 5.9 | 59 |
| 301 | Compact-Nanobox Engineering of Transition Metal Oxides with Enhanced Initial Coulombic Efficiency for Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 8955-8964 | 9.5 | 29 |
| 300 | Structure engineering: extending the length of azaacene derivatives through quinone bridges. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 3628-3633 | 7.1 | 9 |
| 299 | Molecular Arrangements of Corannulene and Sumanene in Single-Walled Carbon Nanotubes. <i>ChemNanoMat</i> , 2018 , 4, 557-561 | 3.5 | 5 |
| 298 | Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. <i>Nature Communications</i> , 2018 , 9, 1545 | 17.4 | 267 |
| 297 | A library of atomically thin metal chalcogenides. <i>Nature</i> , 2018 , 556, 355-359 | 50.4 | 812 |
| 296 | Broadband Anisotropic Photoresponse of the "Hydrogen Atom" Version Type-II Weyl Semimetal Candidate TaIrTe. <i>ACS Nano</i> , 2018 , 12, 4055-4061 | 16.7 | 64 |
| 295 | Electron-Beam-Induced Synthesis of Hexagonal 1 H-MoSe from Square $\sqrt{3}\sqrt{3}$ FeSe Decorated with Mo Adatoms. <i>Nano Letters</i> , 2018 , 18, 2016-2020 | 11.5 | 1 |
| 294 | High-Performance Triboelectric Nanogenerator with Double-Surface Shape-Complementary Microstructures Prepared by Using Simple Sandpaper Templates. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 2283-2291 | 8.3 | 32 |
| 293 | Large-Area Atomic Layers of the Charge-Density-Wave Conductor TiSe. <i>Advanced Materials</i> , 2018 , 30, 1704382 | 24 | 43 |
| 292 | Anisotropic Ordering in 1T' Molybdenum and Tungsten Ditelluride Layers Alloyed with Sulfur and Selenium. <i>ACS Nano</i> , 2018 , 12, 894-901 | 16.7 | 35 |
| 291 | Novel Optoelectronic Devices: Transition-Metal-Dichalcogenide-Based 2D Heterostructures. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700335 | 6.4 | 61 |
| 290 | Synergistic Gating of Electro-Iono-Photoactive 2D Chalcogenide Neuristors: Coexistence of Hebbian and Homeostatic Synaptic Metaplasticity. <i>Advanced Materials</i> , 2018 , 30, e1800220 | 24 | 188 |
| 289 | Auto-optimizing Hydrogen Evolution Catalytic Activity of ReS through Intrinsic Charge Engineering. <i>ACS Nano</i> , 2018 , 12, 4486-4493 | 16.7 | 77 |
| 288 | One-Step Synthesis of Metal/Semiconductor Heterostructure NbS ₂ /MoS ₂ . <i>Chemistry of Materials</i> , 2018 , 30, 4001-4007 | 9.6 | 54 |

| | | | |
|-----|--|------|-----|
| 287 | High phase-purity 1T'-MoS- and 1T'-MoSe-layered crystals. <i>Nature Chemistry</i> , 2018 , 10, 638-643 | 17.6 | 510 |
| 286 | Fe(CN) ₆ ³⁻ /ion-modified MnO ₂ /graphene nanoribbons enabling high energy density asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 7649-7658 | 13 | 46 |
| 285 | Dislocation-driven growth of two-dimensional lateral quantum-well superlattices. <i>Science Advances</i> , 2018 , 4, eaap9096 | 14.3 | 30 |
| 284 | Engineering the Electrochemical Temperature Coefficient for Efficient Low-Grade Heat Harvesting. <i>Advanced Functional Materials</i> , 2018 , 28, 1803129 | 15.6 | 32 |
| 283 | Highly Efficient Mass Production of Boron Nitride Nanosheets via a Borate Nitridation Method. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 17370-17377 | 3.8 | 12 |
| 282 | Raman Signatures of Broken Inversion Symmetry and In-Plane Anisotropy in Type-II Weyl Semimetal Candidate TaIrTe. <i>Advanced Materials</i> , 2018 , 30, e1706402 | 24 | 37 |
| 281 | A topologically substituted boron nitride hybrid aerogel for highly selective CO ₂ uptake. <i>Nano Research</i> , 2018 , 11, 6325-6335 | 10 | 12 |
| 280 | Dislocation-Driven Growth of Two-Dimensional Lateral Quantum Well Superlattices. <i>Microscopy and Microanalysis</i> , 2018 , 24, 88-89 | 0.5 | |
| 279 | 3D Imaging and Manipulation of Subsurface Selenium Vacancies in PdSe ₂ . <i>Physical Review Letters</i> , 2018 , 121, 086101 | 7.4 | 43 |
| 278 | The Auger process in multilayer WSe crystals. <i>Nanoscale</i> , 2018 , 10, 17585-17592 | 7.7 | 16 |
| 277 | Morphology Engineering in Monolayer MoS ₂ -WS ₂ Lateral Heterostructures. <i>Advanced Functional Materials</i> , 2018 , 28, 1801568 | 15.6 | 52 |
| 276 | Anisotropic thermal transport in van der Waals layered alloys WSe ₂ (1-x)Te _{2x} . <i>Applied Physics Letters</i> , 2018 , 112, 241901 | 3.4 | 21 |
| 275 | Towards high-powered remote WLED based on flexible white-luminescent polymer composite films containing S, N co-doped graphene quantum dots. <i>Chemical Engineering Journal</i> , 2018 , 336, 406-415 | 14.7 | 37 |
| 274 | Stable 1T Tungsten Disulfide Monolayer and Its Junctions: Growth and Atomic Structures. <i>ACS Nano</i> , 2018 , 12, 12080-12088 | 16.7 | 51 |
| 273 | Light-Tunable 1T-TaS Charge-Density-Wave Oscillators. <i>ACS Nano</i> , 2018 , 12, 11203-11210 | 16.7 | 32 |
| 272 | Narrow bandgap oxide nanoparticles coupled with graphene for high performance mid-infrared photodetection. <i>Nature Communications</i> , 2018 , 9, 4299 | 17.4 | 98 |
| 271 | In-Plane Ferroelectricity in Thin Flakes of Van der Waals Hybrid Perovskite. <i>Advanced Materials</i> , 2018 , 30, e1803249 | 24 | 45 |
| 270 | Superlong Single-Crystal Metal-Organic Framework Nanotubes. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15393-15401 | 16.4 | 153 |

| | | | |
|-----|--|------|-----|
| 269 | Defect-Rich Bi ₂ O ₃ Nanotubes Self-Accelerating Charge Separation for Boosting Photocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2018 , 130, 15063-15067 | 3.6 | 34 |
| 268 | Defect-Rich Bi ₂ O ₃ Nanotubes Self-Accelerating Charge Separation for Boosting Photocatalytic CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14847-14851 | 16.4 | 219 |
| 267 | Observation of Weak Anti-Localization and Electron-Electron Interaction on Few-Layer 1T'-MoTe ₂ Thin Films. <i>Chinese Physics Letters</i> , 2018 , 35, 077303 | 1.8 | 4 |
| 266 | Lithiation-induced amorphization of Pd ₃ P ₂ S ₈ for highly efficient hydrogen evolution. <i>Nature Catalysis</i> , 2018 , 1, 460-468 | 36.5 | 153 |
| 265 | Multilayer-Folded Graphene Ribbon Film with Ultrahigh Areal Capacitance and High Rate Performance for Compressible Supercapacitors. <i>Advanced Functional Materials</i> , 2018 , 28, 1800597 | 15.6 | 112 |
| 264 | Electrically switchable Berry curvature dipole in the monolayer topological insulator WTe ₂ . <i>Nature Physics</i> , 2018 , 14, 900-906 | 16.2 | 143 |
| 263 | Bismuth vacancy mediated single unit cell Bi ₂ WO ₆ nanosheets for boosting photocatalytic oxygen evolution. <i>Applied Catalysis B: Environmental</i> , 2018 , 238, 119-125 | 21.8 | 116 |
| 262 | Ultrathin 2D Photocatalysts: Electronic-Structure Tailoring, Hybridization, and Applications. <i>Advanced Materials</i> , 2018 , 30, 1704548 | 24 | 298 |
| 261 | Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications. <i>Advanced Science</i> , 2017 , 4, 1600404 | 13.6 | 120 |
| 260 | Room-temperature electrically driven phase transition of two-dimensional 1T-TaS ₂ layers. <i>Nanoscale</i> , 2017 , 9, 2436-2441 | 7.7 | 16 |
| 259 | Tandem Nitrogen Functionalization of Porous Carbon: Toward Immobilizing Highly Active Palladium Nanoclusters for Dehydrogenation of Formic Acid. <i>ACS Catalysis</i> , 2017 , 7, 2720-2724 | 13.1 | 121 |
| 258 | Photofunctionality in Porphyrin-Hybridized Bis(dipyrrinato)zinc(II) Complex Micro- and Nanosheets. <i>Angewandte Chemie</i> , 2017 , 129, 3580-3584 | 3.6 | 24 |
| 257 | Enhancement of Exciton Emission from Multilayer MoS ₂ at High Temperatures: Intervalley Transfer versus Interlayer Decoupling. <i>Small</i> , 2017 , 13, 1700157 | 11 | 16 |
| 256 | Valley Pseudospin with a Widely Tunable Bandgap in Doped Honeycomb BN Monolayer. <i>Nano Letters</i> , 2017 , 17, 2079-2087 | 11.5 | 29 |
| 255 | Programmable high crystallinity carbon patterns. <i>2D Materials</i> , 2017 , 4, 025011 | 5.9 | 2 |
| 254 | Scalable Fabrication of Single Silicon Vacancy Defect Arrays in Silicon Carbide Using Focused Ion Beam. <i>ACS Photonics</i> , 2017 , 4, 1054-1059 | 6.3 | 35 |
| 253 | Ultrahigh Thermal Conductive yet Superflexible Graphene Films. <i>Advanced Materials</i> , 2017 , 29, 1700589 | 24 | 289 |
| 252 | Preparation of Ultrathin Two-Dimensional Ti ₃ C ₂ TCO Nanosheets as Highly Efficient Photothermal Agents. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 7842-7846 | 16.4 | 50 |

| | | | |
|-----|---|------|-----|
| 251 | Preparation of Ultrathin Two-Dimensional $Ti_xTa_{1-x}SyO_z$ Nanosheets as Highly Efficient Photothermal Agents. <i>Angewandte Chemie</i> , 2017 , 129, 7950-7954 | 3.6 | 10 |
| 250 | Phase evolution of lithium intercalation dynamics in 2H-MoS. <i>Nanoscale</i> , 2017 , 9, 7533-7540 | 7.7 | 58 |
| 249 | Tailoring MoS Exciton-Plasmon Interaction by Optical Spin-Orbit Coupling. <i>ACS Nano</i> , 2017 , 11, 1165-1171 | 16.7 | 88 |
| 248 | Single CdS Nanorod for High Responsivity UV-Visible Photodetector. <i>Advanced Optical Materials</i> , 2017 , 5, 1700159 | 8.1 | 31 |
| 247 | Humidity Sensors: Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications (Adv. Sci. 5/2017). <i>Advanced Science</i> , 2017 , 4, | 13.6 | 78 |
| 246 | 3R MoS with Broken Inversion Symmetry: A Promising Ultrathin Nonlinear Optical Device. <i>Advanced Materials</i> , 2017 , 29, 1701486 | 24 | 118 |
| 245 | Spatial Charge Storage within Honeycomb-Carbon Frameworks for Ultrafast Supercapacitors with High Energy and Power Densities. <i>Advanced Energy Materials</i> , 2017 , 7, 1700668 | 21.8 | 80 |
| 244 | Two-dimensional non-volatile programmable p-n junctions. <i>Nature Nanotechnology</i> , 2017 , 12, 901-906 | 28.7 | 196 |
| 243 | High Mobility 2D Palladium Diselenide Field-Effect Transistors with Tunable Ambipolar Characteristics. <i>Advanced Materials</i> , 2017 , 29, 1602969 | 24 | 180 |
| 242 | Temperature-dependent morphology of chemical vapor grown molybdenum disulfide. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 164002 | 3 | 6 |
| 241 | Versatile Electronic Skins for Motion Detection of Joints Enabled by Aligned Few-Walled Carbon Nanotubes in Flexible Polymer Composites. <i>Advanced Functional Materials</i> , 2017 , 27, 1606604 | 15.6 | 92 |
| 240 | Flexible Sensing Electronics for Wearable/Attachable Health Monitoring. <i>Small</i> , 2017 , 13, 1602790 | 11 | 491 |
| 239 | Freestanding atomically-thin two-dimensional materials beyond graphene meeting photocatalysis: Opportunities and challenges. <i>Nano Energy</i> , 2017 , 35, 79-91 | 17.1 | 142 |
| 238 | Highly Stretchable Graphene Fibers with Ultrafast Electrothermal Response for Low-Voltage Wearable Heaters. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600425 | 6.4 | 94 |
| 237 | Electric Field Effect in Two-Dimensional Transition Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2017 , 27, 1602404 | 15.6 | 36 |
| 236 | A Synthetic Route for Crystals of Woven Structures, Uniform Nanocrystals, and Thin Films of Imine Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2017 , 139, 13166-13172 | 16.4 | 131 |
| 235 | Recent advances in ternary two-dimensional materials: synthesis, properties and applications. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22855-22876 | 13 | 97 |
| 234 | Surface State Mediated Interlayer Excitons in a 2D Nonlayered/layered Semiconductor Heterojunction. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700373 | 6.4 | 13 |

| | | | |
|-----|---|------|-----|
| 233 | Fabrication and Properties of a Free-Standing Two-Dimensional Titania. <i>Journal of the American Chemical Society</i> , 2017 , 139, 15414-15419 | 16.4 | 50 |
| 232 | Zeeman splitting via spin-valley-layer coupling in bilayer MoTe. <i>Nature Communications</i> , 2017 , 8, 802 | 17.4 | 35 |
| 231 | Anti-Stokes Photoluminescence of van der Waals Layered Semiconductor PbI ₂ . <i>Advanced Optical Materials</i> , 2017 , 5, 1700609 | 8.1 | 14 |
| 230 | A novel Pd ₂ Se ₃ two-dimensional phase driven by interlayer fusion in layered PdSe ₂ . <i>Microscopy and Microanalysis</i> , 2017 , 23, 1700-1701 | 0.5 | 1 |
| 229 | Giant Enhancement of Cathodoluminescence of Monolayer Transitional Metal Dichalcogenides Semiconductors. <i>Nano Letters</i> , 2017 , 17, 6475-6480 | 11.5 | 30 |
| 228 | Single-Nanoparticle Plasmonic Electro-optic Modulator Based on MoS Monolayers. <i>ACS Nano</i> , 2017 , 11, 9720-9727 | 16.7 | 68 |
| 227 | High-quality monolayer superconductor NbSe grown by chemical vapour deposition. <i>Nature Communications</i> , 2017 , 8, 394 | 17.4 | 199 |
| 226 | PdSe: Pentagonal Two-Dimensional Layers with High Air Stability for Electronics. <i>Journal of the American Chemical Society</i> , 2017 , 139, 14090-14097 | 16.4 | 318 |
| 225 | Controllable Synthesis of Atomically Thin Type-II Weyl Semimetal WTe Nanosheets: An Advanced Electrode Material for All-Solid-State Flexible Supercapacitors. <i>Advanced Materials</i> , 2017 , 29, 1701909 | 24 | 81 |
| 224 | Influences of water molecules on the electronic properties of atomically thin molybdenum disulfide. <i>Applied Physics Letters</i> , 2017 , 111, 043106 | 3.4 | 5 |
| 223 | Wearable Electronics: Flexible Sensing Electronics for Wearable/Attachable Health Monitoring (Small 25/2017). <i>Small</i> , 2017 , 13, | 11 | 4 |
| 222 | Ordered and Atomically Perfect Fragmentation of Layered Transition Metal Dichalcogenides via Mechanical Instabilities. <i>ACS Nano</i> , 2017 , 11, 9191-9199 | 16.7 | 39 |
| 221 | Controlled Gas Molecules Doping of Monolayer MoS via Atomic-Layer-Deposited AlO Films. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 27402-27408 | 9.5 | 19 |
| 220 | Vacuum level dependent photoluminescence in chemical vapor deposition-grown monolayer MoS. <i>Scientific Reports</i> , 2017 , 7, 16714 | 4.9 | 20 |
| 219 | Toward a Mechanistic Understanding of Vertical Growth of van der Waals Stacked 2D Materials: A Multiscale Model and Experiments. <i>ACS Nano</i> , 2017 , 11, 12780-12788 | 16.7 | 58 |
| 218 | Signatures of a time-reversal symmetric Weyl semimetal with only four Weyl points. <i>Nature Communications</i> , 2017 , 8, 942 | 17.4 | 57 |
| 217 | Universal Substrate-Trapping Strategy To Grow Strictly Monolayer Transition Metal Dichalcogenides Crystals. <i>Chemistry of Materials</i> , 2017 , 29, 6095-6103 | 9.6 | 36 |
| 216 | Defect engineering in atomically-thin bismuth oxychloride towards photocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14144-14151 | 13 | 81 |

| | | | |
|-----|---|-------|-----|
| 215 | Efficient Generation of an Array of Single Silicon-Vacancy Defects in Silicon Carbide. <i>Physical Review Applied</i> , 2017 , 7, | 4-3 | 51 |
| 214 | Novel Pd ₂ Se ₃ Two-Dimensional Phase Driven by Interlayer Fusion in Layered PdSe ₂ . <i>Physical Review Letters</i> , 2017 , 119, 016101 | 7-4 | 86 |
| 213 | Current rectification and asymmetric photoresponse in MoS ₂ stacking-induced homojunctions. <i>2D Materials</i> , 2017 , 4, 035011 | 5-9 | 11 |
| 212 | Hexagonal Boron Nitride Nanosheets as High-Performance Binder-Free Fire-Resistant Wood Coatings. <i>Small</i> , 2017 , 13, 1602456 | 11 | 39 |
| 211 | Valley polarization in stacked MoS ₂ induced by circularly polarized light. <i>Nano Research</i> , 2017 , 10, 1618-1626 | 16-26 | 14 |
| 210 | Temperature Dependence of Anisotropic Thermal-Conductivity Tensor of Bulk Black Phosphorus. <i>Advanced Materials</i> , 2017 , 29, 1603297 | 24 | 65 |
| 209 | Large-Area and High-Quality 2D Transition Metal Telluride. <i>Advanced Materials</i> , 2017 , 29, 1603471 | 24 | 140 |
| 208 | Single-Layer Ternary Chalcogenide Nanosheet as a Fluorescence-Based "Capture-Release" Biomolecular Nanosensor. <i>Small</i> , 2017 , 13, 1601925 | 11 | 24 |
| 207 | Metal-Semiconductor Phase-Transition in WSe ₂ Te Monolayer. <i>Advanced Materials</i> , 2017 , 29, 1603991 | 24 | 88 |
| 206 | MoS ₂ /Rubrene van der Waals Heterostructure: Toward Ambipolar Field-Effect Transistors and Inverter Circuits. <i>Small</i> , 2017 , 13, 1602558 | 11 | 29 |
| 205 | High-Electron-Mobility and Air-Stable 2D Layered PtSe FETs. <i>Advanced Materials</i> , 2017 , 29, 1604230 | 24 | 368 |
| 204 | Pressure-Induced Phase Transition in Weyl Semimetallic WTe ₂ . <i>Small</i> , 2017 , 13, 1701887 | 11 | 20 |
| 203 | Extreme Nanowires: The Smallest Crystals in the Smallest Nanotubes 2016 , 397-398 | | |
| 202 | Ultrafast Self-Limited Growth of Strictly Monolayer WSe ₂ Crystals. <i>Small</i> , 2016 , 12, 5741-5749 | 11 | 42 |
| 201 | Fermi arc electronic structure and Chern numbers in the type-II Weyl semimetal candidate Mo _x W _{1-x} Te ₂ . <i>Physical Review B</i> , 2016 , 94, | 3-3 | 106 |
| 200 | Facile synthesis of 3D plum candy-like ZnCo ₂ O ₄ microspheres as a high-performance anode for lithium ion batteries. <i>RSC Advances</i> , 2016 , 6, 79971-79977 | 3-7 | 28 |
| 199 | Photopolymerization of Diacetylene on Aligned Multiwall Carbon Nanotube Microfibers for High-Performance Energy Devices. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 32643-32648 | 9-5 | 21 |
| 198 | Subatomic deformation driven by vertical piezoelectricity from CdS ultrathin films. <i>Science Advances</i> , 2016 , 2, e1600209 | 14-3 | 49 |

| | | | |
|-----|--|------|-----|
| 197 | Individualized p-Doped Carbon Nanohorns. <i>Angewandte Chemie</i> , 2016 , 128, 10624-10628 | 3.6 | 2 |
| 196 | Room-temperature ferroelectricity in CuInP2S6 ultrathin flakes. <i>Nature Communications</i> , 2016 , 7, 12357 | 17.4 | 355 |
| 195 | Control of Radiative Exciton Recombination by Charge Transfer Induced Surface Dipoles in MoS2 and WS2 Monolayers. <i>Scientific Reports</i> , 2016 , 6, 24105 | 4.9 | 27 |
| 194 | One-dimensional nanowires of pseudoboehmite (aluminum oxyhydroxide AlOOH). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 11759-11764 | 11.5 | 18 |
| 193 | Monolayer Crystals: Ultrafast Self-Limited Growth of Strictly Monolayer WSe2 Crystals (Small 41/2016). <i>Small</i> , 2016 , 12, 5780-5780 | 11 | |
| 192 | Controlled Synthesis of Atomically Thin 1T-TaS2 for Tunable Charge Density Wave Phase Transitions. <i>Chemistry of Materials</i> , 2016 , 28, 7613-7618 | 9.6 | 54 |
| 191 | Black Phosphorus Nanosheets: Synthesis, Characterization and Applications. <i>Small</i> , 2016 , 12, 3480-502 | 11 | 267 |
| 190 | Extraordinarily Strong Interlayer Interaction in 2D Layered PtS2. <i>Advanced Materials</i> , 2016 , 28, 2399-407 | 24 | 322 |
| 189 | Carbon Nanotubes as Electrically Active Nanoreactors for Multi-Step Inorganic Synthesis: Sequential Transformations of Molecules to Nanoclusters and Nanoclusters to Nanoribbons. <i>Journal of the American Chemical Society</i> , 2016 , 138, 8175-83 | 16.4 | 53 |
| 188 | Weaving of organic threads into a crystalline covalent organic framework. <i>Science</i> , 2016 , 351, 365-9 | 33.3 | 307 |
| 187 | Quantum dot decorated aligned carbon nanotube bundles for a performance enhanced photoswitch. <i>Nanoscale</i> , 2016 , 8, 8547-52 | 7.7 | 9 |
| 186 | Photoresponse: Highly Sensitive Detection of Polarized Light Using Anisotropic 2D ReS2 (Adv. Funct. Mater. 8/2016). <i>Advanced Functional Materials</i> , 2016 , 26, 1146-1146 | 15.6 | 12 |
| 185 | Construction of a 2D Graphene-Like MoS2/C3N4 Heterojunction with Enhanced Visible-Light Photocatalytic Activity and Photoelectrochemical Activity. <i>Chemistry - A European Journal</i> , 2016 , 22, 4645-4645 ² | 4.8 | |
| 184 | Optoelectronic properties of atomically thin ReSSe with weak interlayer coupling. <i>Nanoscale</i> , 2016 , 8, 5826-34 | 7.7 | 27 |
| 183 | Room-temperature Y-type emission of perylenes by encapsulation within single-walled carbon nanotubes. <i>Nanoscale</i> , 2016 , 8, 7834-9 | 7.7 | 8 |
| 182 | A novel wet-spinning method of manufacturing continuous bio-inspired composites based on graphene oxide and sodium alginate. <i>Nano Research</i> , 2016 , 9, 735-744 | 10 | 35 |
| 181 | In-grown structure of NiFe mixed metal oxides and CNT hybrid catalysts for oxygen evolution reaction. <i>Chemical Communications</i> , 2016 , 52, 1439-42 | 5.8 | 64 |
| 180 | Controlled Synthesis of Atomically Layered Hexagonal Boron Nitride via Chemical Vapor Deposition. <i>Molecules</i> , 2016 , 21, | 4.8 | 10 |

| | | | |
|-----|--|------|-----|
| 179 | Highly Sensitive Detection of Polarized Light Using Anisotropic 2D ReS ₂ . <i>Advanced Functional Materials</i> , 2016 , 26, 1169-1177 | 15.6 | 286 |
| 178 | Controlled Growth and Reliable Thickness-Dependent Properties of Organic/Inorganic Perovskite Platelet Crystal. <i>Advanced Functional Materials</i> , 2016 , 26, 5263-5270 | 15.6 | 52 |
| 177 | MoS ₂ /TiO ₂ Edge-On Heterostructure for Efficient Photocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2016 , 6, 1600464 | 21.8 | 226 |
| 176 | Flexible Capacitive Tactile Sensor Based on Micropatterned Dielectric Layer. <i>Small</i> , 2016 , 12, 5042-5048 | 11 | 256 |
| 175 | Construction of a 2D Graphene-Like MoS ₂ /C ₃ N ₄ Heterojunction with Enhanced Visible-Light Photocatalytic Activity and Photoelectrochemical Activity. <i>Chemistry - A European Journal</i> , 2016 , 22, 4764-4773 | 4.8 | 135 |
| 174 | Growth and optical properties of Nb-doped WS ₂ monolayers. <i>Applied Physics Express</i> , 2016 , 9, 071201 | 2.4 | 44 |
| 173 | Protein Structures: Identification of a Novel Parallel β -Strand Conformation within Molecular Monolayer of Amyloid Peptide (Adv. Sci. 6/2016). <i>Advanced Science</i> , 2016 , 3, | 13.6 | 1 |
| 172 | Single Atom Imaging and Spectroscopy of Impurities in 2D Materials. <i>Microscopy and Microanalysis</i> , 2016 , 22, 862-863 | 0.5 | |
| 171 | Discovery of a new type of topological Weyl fermion semimetal state in MoWTe. <i>Nature Communications</i> , 2016 , 7, 13643 | 17.4 | 134 |
| 170 | Fast Photoresponse from 1T Tin Diselenide Atomic Layers. <i>Advanced Functional Materials</i> , 2016 , 26, 137-145 | 13.5 | 125 |
| 169 | Hierarchical Sandwich-Like Structure of Ultrafine N-Rich Porous Carbon Nanospheres Grown on Graphene Sheets as Superior Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10324-33 | 9.5 | 87 |
| 168 | Postsynthesis of h-BN/Graphene Heterostructures Inside a STEM. <i>Small</i> , 2016 , 12, 252-9 | 11 | 20 |
| 167 | Capacity-increasing robust porous SiO ₂ /Si/graphene/C microspheres as an anode for Li-ion batteries. <i>RSC Advances</i> , 2016 , 6, 45077-45084 | 3.7 | 13 |
| 166 | Brick-and-mortar sandwiched porous carbon building constructed by metal-organic framework and graphene: Ultrafast charge/discharge rate up to 2 V s ⁻¹ for supercapacitors. <i>Nano Energy</i> , 2016 , 30, 84-92 | 17.1 | 69 |
| 165 | Periodic Organic-Inorganic Halide Perovskite Microplatelet Arrays on Silicon Substrates for Room-Temperature Lasing. <i>Advanced Science</i> , 2016 , 3, 1600137 | 13.6 | 89 |
| 164 | 2D Black Phosphorus/SrTiO ₃ -Based Programmable Photoconductive Switch. <i>Advanced Materials</i> , 2016 , 28, 7768-73 | 24 | 44 |
| 163 | Graphene Heterostructures 2016 , 3-20 | | |
| 162 | Identification of a Novel Parallel β -Strand Conformation within Molecular Monolayer of Amyloid Peptide. <i>Advanced Science</i> , 2016 , 3, 1500369 | 13.6 | 22 |

| | | | |
|-----|---|-------|-----|
| 161 | An iron-based green approach to 1-h production of single-layer graphene oxide. <i>Nature Communications</i> , 2015 , 6, 5716 | 17.4 | 302 |
| 160 | Two-Step Growth of Two-Dimensional WSe ₂ /MoSe ₂ Heterostructures. <i>Nano Letters</i> , 2015 , 15, 6135-41 | 11.5 | 401 |
| 159 | High-Yield Exfoliation of Ultrathin Two-Dimensional Ternary Chalcogenide Nanosheets for Highly Sensitive and Selective Fluorescence DNA Sensors. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10430-6 | 16.4 | 187 |
| 158 | Superstructured Assembly of Nanocarbons: Fullerenes, Nanotubes, and Graphene. <i>Chemical Reviews</i> , 2015 , 115, 7046-117 | 68.1 | 381 |
| 157 | Growth and Optical Properties of High-Quality Monolayer WS ₂ on Graphite. <i>ACS Nano</i> , 2015 , 9, 4056-63 | 16.7 | 129 |
| 156 | Characterization of Graphene and Transition Metal Dichalcogenide at the Atomic Scale. <i>Journal of the Physical Society of Japan</i> , 2015 , 84, 121005 | 1.5 | 5 |
| 155 | Tellurium-Assisted Low-Temperature Synthesis of MoS ₂ and WS ₂ Monolayers. <i>ACS Nano</i> , 2015 , 9, 11658-667 | 16.7 | 107 |
| 154 | Monolayers of W _x Mo _{1-x} S ₂ alloy heterostructure with in-plane composition variations. <i>Applied Physics Letters</i> , 2015 , 106, 063113 | 3.4 | 86 |
| 153 | Controllable graphene coated mesoporous carbon/sulfur composite for lithium-sulfur batteries. <i>RSC Advances</i> , 2015 , 5, 74138-74143 | 3.7 | 10 |
| 152 | Controlled Synthesis of High-Quality Monolayered Sn ₂ Se ₃ via Physical Vapor Deposition. <i>Nano Letters</i> , 2015 , 15, 6400-5 | 11.5 | 169 |
| 151 | Stacking-Dependent Interlayer Coupling in Trilayer MoS ₂ with Broken Inversion Symmetry. <i>Nano Letters</i> , 2015 , 15, 8155-61 | 11.5 | 106 |
| 150 | High rate capability supercapacitors assembled from wet-spun graphene films with a CaCO ₃ template. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 1890-1895 | 13 | 26 |
| 149 | Band engineering for novel two-dimensional atomic layers. <i>Small</i> , 2015 , 11, 1868-84 | 11 | 79 |
| 148 | Solution processible hyperbranched inverse-vulcanized polymers as new cathode materials in LiB batteries. <i>Polymer Chemistry</i> , 2015 , 6, 973-982 | 4.9 | 45 |
| 147 | Interfaces in Two-Dimensional Heterostructures of Transition Metal Dichalcogenides. <i>Microscopy and Microanalysis</i> , 2015 , 21, 105-106 | 0.5 | |
| 146 | Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Light-Matter Interactions. <i>Advanced Materials</i> , 2015 , 27, 7800-8 | 24 | 94 |
| 145 | Coupling and Interlayer Exciton in Twist-Stacked WS ₂ Bilayers. <i>Advanced Optical Materials</i> , 2015 , 3, 160081605 | 16.05 | 35 |
| 144 | Van der Waals p-n Junction Based on an Organic-Inorganic Heterostructure. <i>Advanced Functional Materials</i> , 2015 , 25, 5865-5871 | 15.6 | 76 |

| | | | |
|-----|---|------|-------------------|
| 143 | Chemical Vapor Deposition of High-Quality and Atomically Layered ReS ₂ . <i>Small</i> , 2015 , 11, 5423-9 | 11 | 99 |
| 142 | Graphene: Exfoliation at the Liquid/Air Interface to Assemble Reduced Graphene Oxide Ultrathin Films for a Flexible Noncontact Sensing Device (Adv. Mater. 8/2015). <i>Advanced Materials</i> , 2015 , 27, 1467-1467 | 24 | 1467 ² |
| 141 | Structure and local chemical properties of boron-terminated tetravacancies in hexagonal boron nitride. <i>Physical Review Letters</i> , 2015 , 114, 075502 | 7.4 | 27 |
| 140 | Exfoliation at the liquid/air interface to assemble reduced graphene oxide ultrathin films for a flexible noncontact sensing device. <i>Advanced Materials</i> , 2015 , 27, 1370-5 | 24 | 119 |
| 139 | Boron- and Nitrogen-Substituted Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2015 , 27, 1181-1186 | 9.6 | 202 |
| 138 | Mesoscopic constructs of ordered and oriented metal-organic frameworks on plasmonic silver nanocrystals. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2199-202 | 16.4 | 120 |
| 137 | Recent progress in scanning electron microscopy for the characterization of fine structural details of nano materials. <i>Progress in Solid State Chemistry</i> , 2014 , 42, 1-21 | 8 | 42 |
| 136 | Structures of Silica-Based Nanoporous Materials Revealed by Microscopy. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2014 , 640, 521-536 | 1.3 | 12 |
| 135 | Fracture toughness of graphene. <i>Nature Communications</i> , 2014 , 5, 3782 | 17.4 | 433 |
| 134 | Boron nitride-graphene nanocapacitor and the origins of anomalous size-dependent increase of capacitance. <i>Nano Letters</i> , 2014 , 14, 1739-44 | 11.5 | 100 |
| 133 | Chemical vapor deposition growth of crystalline monolayer MoSe ₂ . <i>ACS Nano</i> , 2014 , 8, 5125-31 | 16.7 | 566 |
| 132 | Large-area synthesis of monolayer and few-layer MoSe ₂ films on SiO ₂ substrates. <i>Nano Letters</i> , 2014 , 14, 2419-25 | 11.5 | 312 |
| 131 | Sulfur-Impregnated, Sandwich-Type, Hybrid Carbon Nanosheets with Hierarchical Porous Structure for High-Performance Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2014 , 4, 1301988 | 21.8 | 117 |
| 130 | Active tunable absorption enhancement with graphene nanodisk arrays. <i>Nano Letters</i> , 2014 , 14, 299-304 | 11.5 | 477 |
| 129 | Band gap engineering and layer-by-layer mapping of selenium-doped molybdenum disulfide. <i>Nano Letters</i> , 2014 , 14, 442-9 | 11.5 | 378 |
| 128 | Direct chemical conversion of graphene to boron- and nitrogen- and carbon-containing atomic layers. <i>Nature Communications</i> , 2014 , 5, 3193 | 17.4 | 169 |
| 127 | Single molecular spectroscopy: identification of individual fullerene molecules. <i>Physical Review Letters</i> , 2014 , 113, 185502 | 7.4 | 7 |
| 126 | Strain and structure heterogeneity in MoS ₂ atomic layers grown by chemical vapour deposition. <i>Nature Communications</i> , 2014 , 5, 5246 | 17.4 | 352 |

| | | | |
|-----|---|------|-----|
| 125 | Two-dimensional heterostructures: fabrication, characterization, and application. <i>Nanoscale</i> , 2014 , 6, 12250-72 | 7.7 | 266 |
| 124 | One-pot synthesis of protein-embedded metal-organic frameworks with enhanced biological activities. <i>Nano Letters</i> , 2014 , 14, 5761-5 | 11.5 | 585 |
| 123 | Atomic structure and dynamic behaviour of truly one-dimensional ionic chains inside carbon nanotubes. <i>Nature Materials</i> , 2014 , 13, 1050-4 | 27 | 66 |
| 122 | Probing interlayer coupling in twisted single-crystal bilayer graphene by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2014 , 45, 912-917 | 2.3 | 7 |
| 121 | Plasmonic hot electron induced structural phase transition in a MoS2 monolayer. <i>Advanced Materials</i> , 2014 , 26, 6467-71 | 24 | 429 |
| 120 | Vertical and in-plane heterostructures from WS2/MoS2 monolayers. <i>Nature Materials</i> , 2014 , 13, 1135-4227 | 1580 | |
| 119 | High thermal conductivity of suspended few-layer hexagonal boron nitride sheets. <i>Nano Research</i> , 2014 , 7, 1232-1240 | 10 | 157 |
| 118 | Electrical transport properties of polycrystalline monolayer molybdenum disulfide. <i>ACS Nano</i> , 2014 , 8, 7930-7 | 16.7 | 96 |
| 117 | Quantification of Dopant Distribution and the Local Band Gap in Selenium-Doped Molybdenum Disulfide. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1754-1755 | 0.5 | |
| 116 | In situ observation of step-edge in-plane growth of graphene in a STEM. <i>Nature Communications</i> , 2014 , 5, 4055 | 17.4 | 45 |
| 115 | Tunable electronics in large-area atomic layers of boron-nitrogen-carbon. <i>Nano Letters</i> , 2013 , 13, 3476-811.5 | 63 | |
| 114 | Low-Temperature, Directly Depositing Individual Single-Walled Carbon Nanotubes for Fabrication of Suspended Nanotube Devices. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 16256-16262 | 3.8 | 2 |
| 113 | Sensitivity of graphene edge states to surface adatom interactions. <i>Nano Letters</i> , 2013 , 13, 4820-6 | 11.5 | 25 |
| 112 | A review of fine structures of nanoporous materials as evidenced by microscopic methods. <i>Microscopy (Oxford, England)</i> , 2013 , 62, 109-46 | 1.3 | 39 |
| 111 | Ultrathin high-temperature oxidation-resistant coatings of hexagonal boron nitride. <i>Nature Communications</i> , 2013 , 4, 2541 | 17.4 | 418 |
| 110 | Building 3D structures of vanadium pentoxide nanosheets and application as electrodes in supercapacitors. <i>Nano Letters</i> , 2013 , 13, 5408-13 | 11.5 | 311 |
| 109 | Using the plasmon linewidth to calculate the time and efficiency of electron transfer between gold nanorods and graphene. <i>ACS Nano</i> , 2013 , 7, 11209-17 | 16.7 | 158 |
| 108 | Visualization and quantification of transition metal atomic mixing in Mo _{1-x} W _x S ₂ single layers. <i>Nature Communications</i> , 2013 , 4, 1351 | 17.4 | 165 |

| | | | |
|-----|--|------|------|
| 107 | Lyotropic Liquid Crystal of Polyacrylonitrile-Grafted Graphene Oxide and Its Assembled Continuous Strong Nacre-Mimetic Fibers. <i>Macromolecules</i> , 2013 , 46, 6931-6941 | 5.5 | 101 |
| 106 | Synthesis of chiral metal oxide complexes with tunable electron transition-based optical activity. <i>Chemical Communications</i> , 2013 , 49, 11686-8 | 5.8 | 12 |
| 105 | Three-dimensional metal-graphene-nanotube multifunctional hybrid materials. <i>ACS Nano</i> , 2013 , 7, 58-64 | 16.7 | 185 |
| 104 | Blueshift of the A-exciton peak in folded monolayer 1H-MoS ₂ . <i>Physical Review B</i> , 2013 , 88, | 3.3 | 28 |
| 103 | Gated tunability and hybridization of localized plasmons in nanostructured graphene. <i>ACS Nano</i> , 2013 , 7, 2388-95 | 16.7 | 534 |
| 102 | Twisting bilayer graphene superlattices. <i>ACS Nano</i> , 2013 , 7, 2587-94 | 16.7 | 139 |
| 101 | In-plane heterostructures of graphene and hexagonal boron nitride with controlled domain sizes. <i>Nature Nanotechnology</i> , 2013 , 8, 119-24 | 28.7 | 687 |
| 100 | Direct laser-patterned micro-supercapacitors from paintable MoS ₂ films. <i>Small</i> , 2013 , 9, 2905-10 | 11 | 401 |
| 99 | Bottom-up approach toward single-crystalline VO ₂ -graphene ribbons as cathodes for ultrafast lithium storage. <i>Nano Letters</i> , 2013 , 13, 1596-601 | 11.5 | 235 |
| 98 | Tunable band gap photoluminescence from atomically thin transition-metal dichalcogenide alloys. <i>ACS Nano</i> , 2013 , 7, 4610-6 | 16.7 | 442 |
| 97 | Graphene-network-backboned architectures for high-performance lithium storage. <i>Advanced Materials</i> , 2013 , 25, 3979-84 | 24 | 232 |
| 96 | A solid with a hierarchical tetramodal micro-meso-macro pore size distribution. <i>Nature Communications</i> , 2013 , 4, 2015 | 17.4 | 73 |
| 95 | Electrical performance of monolayer MoS ₂ field-effect transistors prepared by chemical vapor deposition. <i>Applied Physics Letters</i> , 2013 , 102, 193107 | 3.4 | 182 |
| 94 | Synthesis and photoresponse of large GaSe atomic layers. <i>Nano Letters</i> , 2013 , 13, 2777-81 | 11.5 | 319 |
| 93 | Intrinsic structural defects in monolayer molybdenum disulfide. <i>Nano Letters</i> , 2013 , 13, 2615-22 | 11.5 | 1418 |
| 92 | Vapour phase growth and grain boundary structure of molybdenum disulphide atomic layers. <i>Nature Materials</i> , 2013 , 12, 754-9 | 27 | 1384 |
| 91 | Temperature-dependent phonon shifts in monolayer MoS ₂ . <i>Applied Physics Letters</i> , 2013 , 103, 093102 | 3.4 | 167 |
| 90 | Plasmon-induced doping of graphene. <i>ACS Nano</i> , 2012 , 6, 10222-8 | 16.7 | 317 |

| | | | |
|----|--|------|------|
| 89 | Graphene quantum dots derived from carbon fibers. <i>Nano Letters</i> , 2012 , 12, 844-9 | 11.5 | 1779 |
| 88 | Atomic imaging and spectroscopy of low-dimensional materials with interrupted periodicities. <i>Journal of Electron Microscopy</i> , 2012 , 61, 285-91 | | 9 |
| 87 | New Porous Crystals of Extended Metal-Catecholates. <i>Chemistry of Materials</i> , 2012 , 24, 3511-3513 | 9.6 | 423 |
| 86 | Large-area vapor-phase growth and characterization of MoS(2) atomic layers on a SiO(2) substrate. <i>Small</i> , 2012 , 8, 966-71 | 11 | 1394 |
| 85 | Sulfur-doped graphene as an efficient metal-free cathode catalyst for oxygen reduction. <i>ACS Nano</i> , 2012 , 6, 205-11 | 16.7 | 1580 |
| 84 | Large-pore apertures in a series of metal-organic frameworks. <i>Science</i> , 2012 , 336, 1018-23 | 33.3 | 1425 |
| 83 | Anomalous high capacitance in a coaxial single nanowire capacitor. <i>Nature Communications</i> , 2012 , 3, 879 | 17.4 | 42 |
| 82 | High-precision imaging of an encapsulated Lindqvist ion and correlation of its structure and symmetry with quantum chemical calculations. <i>Nanoscale</i> , 2012 , 4, 1190-9 | 7.7 | 10 |
| 81 | Binary and ternary atomic layers built from carbon, boron, and nitrogen. <i>Advanced Materials</i> , 2012 , 24, 4878-95 | 24 | 197 |
| 80 | Graphene-antenna sandwich photodetector. <i>Nano Letters</i> , 2012 , 12, 3808-13 | 11.5 | 540 |
| 79 | Synthesis of reduced graphene oxide/Fe ₃ O ₄ multifunctional freestanding membranes and their temperature dependent electronic transport properties. <i>Carbon</i> , 2012 , 50, 1338-1345 | 10.4 | 76 |
| 78 | Direct growth of graphene/hexagonal boron nitride stacked layers. <i>Nano Letters</i> , 2011 , 11, 2032-7 | 11.5 | 413 |
| 77 | Aggregation of ferromagnetic and paramagnetic atoms at edges of graphenes and graphite. <i>Chinese Physics B</i> , 2011 , 20, 026803 | 1.2 | 7 |
| 76 | Correlation between droplet-induced strain actuation and voltage generation in single-wall carbon nanotube films. <i>Nano Letters</i> , 2011 , 11, 5117-22 | 11.5 | 6 |
| 75 | Identification of active atomic defects in a monolayered tungsten disulphide nanoribbon. <i>Nature Communications</i> , 2011 , 2, 213 | 17.4 | 77 |
| 74 | Growth of bilayer graphene on insulating substrates. <i>ACS Nano</i> , 2011 , 5, 8187-92 | 16.7 | 243 |
| 73 | Ultra-narrow WS ₂ nanoribbons encapsulated in carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2011 , 21, 171-180 | | 69 |
| 72 | Direct laser writing of micro-supercapacitors on hydrated graphite oxide films. <i>Nature Nanotechnology</i> , 2011 , 6, 496-500 | 28.7 | 1161 |

| | | | |
|----|---|------|-----|
| 71 | Coaxially Stacked Coronene Columns inside Single-Walled Carbon Nanotubes. <i>Angewandte Chemie</i> , 2011 , 123, 4955-4959 | 3.6 | 17 |
| 70 | Coaxially stacked coronene columns inside single-walled carbon nanotubes. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 4853-7 | 16.4 | 87 |
| 69 | Experimental Evidence of Local Magnetic Moments at Edges of n-Layer Graphenes and Graphite. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 15785-15792 | 3.8 | 6 |
| 68 | Visible light detection using single-walled carbon nanotube film and gold nanoparticles or nanorods. <i>Journal of Applied Physics</i> , 2010 , 107, 094311 | 2.5 | 5 |
| 67 | Influence of Aromatic Environments on the Physical Properties of β -Carotene. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2524-2530 | 3.8 | 11 |
| 66 | Thickness-dependent morphologies of gold on n-layer graphenes. <i>Journal of the American Chemical Society</i> , 2010 , 132, 944-6 | 16.4 | 159 |
| 65 | Mixed low-dimensional nanomaterial: 2D ultranarrow MoS ₂ inorganic nanoribbons encapsulated in quasi-1D carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2010 , 132, 13840-7 | 16.4 | 188 |
| 64 | Imaging the structure, symmetry, and surface-inhibited rotation of polyoxometalate ions on graphene oxide. <i>Nano Letters</i> , 2010 , 10, 4600-6 | 11.5 | 51 |
| 63 | Surface-energy generator of single-walled carbon nanotubes and usage in a self-powered system. <i>Advanced Materials</i> , 2010 , 22, 999-1003 | 24 | 59 |
| 62 | Catalyst and chirality dependent growth of carbon nanotubes determined through nano-test tube chemistry. <i>Advanced Materials</i> , 2010 , 22, 3685-9 | 24 | 42 |
| 61 | Low-temperature growth of single-wall carbon nanotubes inside nano test tubes. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 2730-2733 | 1.3 | 6 |
| 60 | Visualizing and identifying single atoms using electron energy-loss spectroscopy with low accelerating voltage. <i>Nature Chemistry</i> , 2009 , 1, 415-8 | 17.6 | 138 |
| 59 | Graphene oxide: structural analysis and application as a highly transparent support for electron microscopy. <i>ACS Nano</i> , 2009 , 3, 2547-56 | 16.7 | 559 |
| 58 | Self-assembled double ladder structure formed inside carbon nanotubes by encapsulation of H ₈ Si ₈ O ₁₂ . <i>ACS Nano</i> , 2009 , 3, 1160-6 | 16.7 | 34 |
| 57 | Coulomb explosion: a novel approach to separate single-walled carbon nanotubes from their bundle. <i>Nano Letters</i> , 2009 , 9, 239-44 | 11.5 | 21 |
| 56 | Open and closed edges of graphene layers. <i>Physical Review Letters</i> , 2009 , 102, 015501 | 7.4 | 476 |
| 55 | Direct imaging of the structure, relaxation, and sterically constrained motion of encapsulated tungsten polyoxometalate lindqvist ions within carbon nanotubes. <i>ACS Nano</i> , 2008 , 2, 966-76 | 16.7 | 43 |
| 54 | Imaging the atomic structure of activated carbon. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 362201 | 11.8 | 117 |

| | | | |
|----|--|------|-----|
| 53 | Highly dense and perfectly aligned single-walled carbon nanotubes fabricated by diamond wire drawing dies. <i>Nano Letters</i> , 2008 , 8, 1071-5 | 11.5 | 62 |
| 52 | ZnO tetrapods designed as multiterminal sensors to distinguish false responses and increase sensitivity. <i>Nano Letters</i> , 2008 , 8, 652-5 | 11.5 | 63 |
| 51 | A Catalytic Reaction Inside a Single-Walled Carbon Nanotube. <i>Advanced Materials</i> , 2008 , 20, 1443-1449 | 24 | 159 |
| 50 | Individual Water-Filled Single-Walled Carbon Nanotubes as Hydroelectric Power Converters. <i>Advanced Materials</i> , 2008 , 20, 1772-1776 | 24 | 148 |
| 49 | Insights into the crystal growth mechanisms of zeolites from combined experimental imaging and theoretical studies. <i>Faraday Discussions</i> , 2007 , 136, 125-41; discussion 213-29 | 3.6 | 23 |
| 48 | Dynamics of carbon nanotube growth from fullerenes. <i>Nano Letters</i> , 2007 , 7, 2428-34 | 11.5 | 67 |
| 47 | Mesoporous silicalite-1 zeolite crystals with unique pore shapes analogous to the morphology. <i>Microporous and Mesoporous Materials</i> , 2007 , 106, 174-179 | 5.3 | 52 |
| 46 | Imaging the dynamic behaviour of individual retinal chromophores confined inside carbon nanotubes. <i>Nature Nanotechnology</i> , 2007 , 2, 422-5 | 28.7 | 74 |
| 45 | Imaging the structure of an individual C60 fullerene molecule and its deformation process using HRTEM with atomic sensitivity. <i>Journal of the American Chemical Society</i> , 2007 , 129, 6666-7 | 16.4 | 30 |
| 44 | Large photocurrent generated by a camera flash in single-walled carbon nanotubes. <i>Journal Physics D: Applied Physics</i> , 2007 , 40, 6898-6901 | 3 | 11 |
| 43 | ?????????????????????????????????????. <i>Materia Japan</i> , 2007 , 46, 335-341 | 0.1 | |
| 42 | Structural Study of Porous Materials by Electron Microscopy. <i>Studies in Surface Science and Catalysis</i> , 2007 , 168, 477-XIII | 1.8 | 1 |
| 41 | Atomic Level Characterization of Nanocarbon Materials by HR-TEM. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2007 , 127, 336-339 | 0 | 1 |
| 40 | Transmission electron microscopy imaging of individual functional groups of fullerene derivatives. <i>Physical Review Letters</i> , 2006 , 96, 088304 | 7.4 | 37 |
| 39 | Transmission Electron Microscopy Observation on Fine Structure of Zeolite NaA Membrane. <i>Chemistry of Materials</i> , 2006 , 18, 922-927 | 9.6 | 37 |
| 38 | Complex zeolite structure solved by combining powder diffraction and electron microscopy. <i>Nature</i> , 2006 , 444, 79-81 | 50.4 | 182 |
| 37 | Racemic Helical Mesoporous Silica Formation by Achiral Anionic Surfactant. <i>Chemistry of Materials</i> , 2006 , 18, 241-243 | 9.6 | 73 |
| 36 | Studies of anionic surfactant templated mesoporous structures by electron microscopy. <i>Studies in Surface Science and Catalysis</i> , 2005 , 11-18 | 1.8 | 6 |

| | | | |
|----|--|------|------|
| 35 | Three-dimensional low symmetry mesoporous silica structures templated from tetra-headgroup rigid bolaform quaternary ammonium surfactant. <i>Journal of the American Chemical Society</i> , 2005 , 127, 6780-7 | 16.4 | 77 |
| 34 | Characterization of chiral mesoporous materials by transmission electron microscopy. <i>Small</i> , 2005 , 1, 233-7 | 11 | 117 |
| 33 | Determination of optical isomers for left-handed or right-handed chiral double-wall carbon nanotubes. <i>Physical Review Letters</i> , 2005 , 95, 187406 | 7.4 | 25 |
| 32 | Synthesis and characterization of chiral mesoporous silica. <i>Nature</i> , 2004 , 429, 281-4 | 50.4 | 682 |
| 31 | Facile synthesis and characterization of novel mesoporous and mesorelief oxides with gyroidal structures. <i>Journal of the American Chemical Society</i> , 2004 , 126, 865-75 | 16.4 | 283 |
| 30 | Structural study of meso-porous materials by electron microscopy. <i>Studies in Surface Science and Catalysis</i> , 2004 , 148, 261-288 | 1.8 | 22 |
| 29 | Ordered Nanowire Arrays of Metal Sulfides Templated by Mesoporous Silica SBA-15 via a Simple Impregnation Reaction. <i>Chemistry Letters</i> , 2003 , 32, 824-825 | 1.7 | 37 |
| 28 | A layered tungstic acid $H_2W_2O_7 \times nH_2O$ with a double-octahedral sheet structure: conversion process from an aurivillius phase $Bi_2W_2O_9$ and structural characterization. <i>Inorganic Chemistry</i> , 2003 , 42, 4479-84 | 5.1 | 49 |
| 27 | Novel approaches to synthesize self-supported ultrathin carbon nanowire arrays templated by MCM-41. <i>Chemical Communications</i> , 2003 , 2726-7 | 5.8 | 72 |
| 26 | Surface Structure and Crystal Growth of Zeolite Beta C. <i>Angewandte Chemie</i> , 2002 , 114, 1283-1285 | 3.6 | 7 |
| 25 | Incommensurate modulation in the microporous silica SSZ-24. <i>Chemistry - A European Journal</i> , 2002 , 8, 4549-56 | 4.8 | 20 |
| 24 | Surface structure and crystal growth of zeolite Beta C. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 1235-7 | 16.4 | 41 |
| 23 | Framework Determination of a Polytype of Zeolite Beta by Using Electron Crystallography. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 5673-5678 | 3.4 | 30 |
| 22 | An HREM study of channel structures in mesoporous silica SBA-15 and platinum wires produced in the channels. <i>ChemPhysChem</i> , 2001 , 2, 229-31 | 3.2 | 125 |
| 21 | Very High Surface Area Microporous Carbon with a Three-Dimensional Nano-Array Structure: Synthesis and Its Molecular Structure. <i>Chemistry of Materials</i> , 2001 , 13, 4413-4415 | 9.6 | 274 |
| 20 | Ordered nanoporous arrays of carbon supporting high dispersions of platinum nanoparticles. <i>Nature</i> , 2001 , 412, 169-72 | 50.4 | 2251 |
| 19 | Template synthesis of asymmetrically mesostructured platinum networks. <i>Journal of the American Chemical Society</i> , 2001 , 123, 1246-7 | 16.4 | 257 |
| 18 | Template-assisted self-assembly of macro/micro bifunctional porous materials. <i>Journal of Materials Chemistry</i> , 2001 , 11, 1687-1693 | | 57 |

| | | | |
|----|---|------|-----------|
| 17 | The first zeolite with three-dimensional intersecting straight-channel system of 12-membered rings. <i>Journal of the American Chemical Society</i> , 2001 , 123, 5370-1 | 16.4 | 92 |
| 16 | Preparation and HREM characterization of a protonated form of a layered perovskite tantalate from an Aurivillius phase Bi(2)SrTa(2)O(9) via acid treatment. <i>Inorganic Chemistry</i> , 2001 , 40, 5768-71 | 5.1 | 56 |
| 15 | A Regular Arrangement of Fibrous SmH ₂ in an α -Fe Matrix, Found After the Hydrogenation-disproportionation Process of Sm ₂ Fe ₁₇ . <i>Materia Japan</i> , 2001 , 40, 1022-1022 | 0.1 | |
| 14 | TEM Studies of Platinum Nanowires Fabricated in Mesoporous Silica MCM-41. <i>Angewandte Chemie - International Edition</i> , 2000 , 39, 3107-3110 | 16.4 | 190 |
| 13 | Synthesis of New, Nanoporous Carbon with Hexagonally Ordered Mesostructure. <i>Journal of the American Chemical Society</i> , 2000 , 122, 10712-10713 | 16.4 | 2131 |
| 12 | Atomically Dispersed Intrinsic Hollow Sites of M - M ₁ - M ₂ (M ₁ = Pt, Ir; M ₂ = Fe, Co, Ni, Cu, Pt, Ir) on FeCoNiCuPtIr Nanocrystals Enabling Rapid Water Redox. <i>Advanced Functional Materials</i> , 2110645 | 15.6 | 2 |
| 11 | Room-Temperature Nonvolatile Molecular Memory Based on Partially Unzipped Nanotube. <i>Advanced Functional Materials</i> , 2107224 | 15.6 | |
| 10 | Phase-pure two-dimensional Fe _x GeTe ₂ magnets with near-room-temperature TC. <i>Nano Research</i> , 1 | 10 | 4 |
| 9 | Two-dimensional Nb ₃ Cl ₈ memristor based on desorption and adsorption of O ₂ molecules. <i>Rare Metals</i> , 1 | 5.5 | 0 |
| 8 | Surface Local Polarization Induced by Bismuth-Oxygen Vacancy Pairs Tuning Non-Covalent Interaction for CO ₂ Photoreduction. <i>Advanced Energy Materials</i> , 2102389 | 21.8 | 11 |
| 7 | Recent progress of flexible electronics by 2D transition metal dichalcogenides. <i>Nano Research</i> , 1 | 10 | 10 |
| 6 | Diverse Spin-Polarized In-Gap States at Grain Boundaries of Rhenium Dichalcogenides Induced by Unsaturated Re-Re Bonding | | 1513-1520 |
| 5 | Strong Piezoelectricity in 3R-MoS ₂ Flakes. <i>Advanced Electronic Materials</i> , 2101131 | 6.4 | 1 |
| 4 | 2D Cairo Pentagonal PdPS: Air-Stable Anisotropic Ternary Semiconductor with High Optoelectronic Performance. <i>Advanced Functional Materials</i> , 2113255 | 15.6 | 5 |
| 3 | Organic Ion Template-Guided Solution Growth of Ultrathin Bismuth Oxyselenide with Tunable Electronic Properties for Optoelectronic Applications. <i>Advanced Functional Materials</i> , 2201020 | 15.6 | 0 |
| 2 | Direct Light Orbital Angular Momentum Detection in Mid-Infrared Based on Type-II Weyl Semimetal TaIrTe ₄ . <i>Advanced Materials</i> , 2201229 | 24 | 1 |
| 1 | Composition and phase engineering of metal chalcogenides and phosphorous chalcogenides. <i>Nature Materials</i> , | 27 | 11 |