

Jun Zhang

List of Publications by Year in descending order

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123
papers

10,044
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41258

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times ranked

15925
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Donor–Acceptor Pair Quantum Emitters in Hexagonal Boron Nitride. <i>Nano Letters</i> , 2022, 22, 1331-1337. | 4.5 | 17 |
| 2 | UV-activated single-layer WSe ₂ for highly sensitive NO ₂ detection. <i>Rare Metals</i> , 2022, 41, 1520-1528. | 3.6 | 16 |
| 3 | Magnetic Phase Transitions and Magnetoelastic Coupling in a Two-Dimensional Stripy Antiferromagnet. <i>Nano Letters</i> , 2022, 22, 1233-1241. | 4.5 | 21 |
| 4 | Magneto-Raman Study of Magnon–Phonon Coupling in Two-Dimensional Ising Antiferromagnetic FePS ₃ . <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 1533-1539. | 2.1 | 15 |
| 5 | Azimuth-Resolved Circular Dichroism of Metamaterials. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 1697-1704. | 2.1 | 5 |
| 6 | Optical Control of Bulk Phonon Modes in Crystalline Solids. <i>Advanced Quantum Technologies</i> , 2022, 5, . | 1.8 | 5 |
| 7 | Room-temperature Near-infrared Excitonic Lasing from Mechanically Exfoliated InSe Microflake. <i>ACS Nano</i> , 2022, 16, 1477-1485. | 7.3 | 11 |
| 8 | Brillouin Light Scattering of Halide Double Perovskite. <i>Advanced Photonics Research</i> , 2022, 3, . | 1.7 | 2 |
| 9 | Layer Number-Dependent Raman Spectra of ¹³ InSe. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 3691-3697. | 2.1 | 10 |
| 10 | Charge State Manipulation of NV Centers in Diamond under Phonon-Assisted Anti-Stokes Excitation of NV ⁰ . <i>ACS Photonics</i> , 2022, 9, 1605-1613. | 3.2 | 6 |
| 11 | Engineering Near-Infrared Light Emission in Mechanically Exfoliated InSe Platelets through Hydrostatic Pressure for Multicolor Microlasing. <i>Nano Letters</i> , 2022, 22, 3840-3847. | 4.5 | 11 |
| 12 | All Optical Switching through Anisotropic Gain of CsPbBr ₃ Single Crystal Microplatelet. <i>Nano Letters</i> , 2022, 22, 4049-4057. | 4.5 | 29 |
| 13 | Multiphonon Process in Mn-Doped ZnO Nanowires. <i>Nano Letters</i> , 2022, 22, 5385-5391. | 4.5 | 8 |
| 14 | Detection of electron-phonon coupling in two-dimensional materials by light scattering. <i>Nano Research</i> , 2021, 14, 1711-1733. | 5.8 | 25 |
| 15 | Breakdown of Raman selection rules by Fröhlich interaction in few-layer WS ₂ . <i>Nano Research</i> , 2021, 14, 239-244. | 5.8 | 15 |
| 16 | Zone-Folded Longitudinal Acoustic Phonons Driving Self-Trapped State Emission in Colloidal CdSe Nanoplatelet Superlattices. <i>Nano Letters</i> , 2021, 21, 4137-4144. | 4.5 | 22 |
| 17 | Dynamic fingerprint of fractionalized excitations in single-crystalline Cu ₃ Zn(OH) ₆ FBr. <i>Nature Communications</i> , 2021, 12, 3048. | 5.8 | 17 |
| 18 | Measuring bulk and surface acoustic modes in diamond by angle-resolved Brillouin spectroscopy. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1. | 2.0 | 5 |

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|----|--|------|-----------|
| 19 | Review of Raman spectroscopy of two-dimensional magnetic van der Waals materials*. Chinese Physics B, 2021, 30, 117104. | 0.7 | 10 |
| 20 | Ionic Liquid Passivation Eliminates Low-n Quantum Well Domains in Blue Quasi-2D Perovskite Films. ACS Applied Materials & Interfaces, 2021, 13, 57540-57547. | 4.0 | 2 |
| 21 | Diammonium-Cesium Lead Halide Perovskite with Phase-Segregated Interpenetrating Morphology for Photovoltaics. Journal of Physical Chemistry Letters, 2020, 11, 747-754. | 2.1 | 20 |
| 22 | Photoluminescent Quantum Interference in a van der Waals Magnet Preserved by Symmetry Breaking. ACS Nano, 2020, 14, 1003-1010. | 7.3 | 23 |
| 23 | Spin-polarized exciton formation in Co-doped GaN nanowires. Materials Chemistry and Physics, 2020, 245, 122756. | 2.0 | 10 |
| 24 | Polarization-tunable nonlinear absorption patterns from saturated absorption to reverse saturated absorption in anisotropic GeS flake and an application of all-optical switching. Science China Materials, 2020, 63, 1489-1502. | 3.5 | 15 |
| 25 | Growth mechanism for vertically oriented layered In ₂ Se ₃ nanoplates. Physical Review Materials, 2020, 4, . | 0.9 | 3 |
| 26 | High-Quality Hexagonal Nonlayered CdS Nanoplatelets for Low-Threshold Whispering-Gallery-Mode Lasing. Small, 2019, 15, e1901364. | 5.2 | 24 |
| 27 | Review on the quantum emitters in two-dimensional materials. Journal of Semiconductors, 2019, 40, 071903. | 2.0 | 47 |
| 28 | Single photon-chiral phonon entanglement in monolayer WSe ₂ . Journal of Semiconductors, 2019, 40, 070404. | 2.0 | 1 |
| 29 | Reply to: Can lasers really refrigerate CdS nanobelts?. Nature, 2019, 570, E62-E64. | 13.7 | 4 |
| 30 | Twisted-Angle-Dependent Optical Behaviors of Intralayer Excitons and Trions in WS ₂ /WSe ₂ Heterostructure. ACS Photonics, 2019, 6, 3082-3091. | 3.2 | 41 |
| 31 | Unraveling the Defect Emission and Exciton-Lattice Interaction in Bilayer WS ₂ . Journal of Physical Chemistry C, 2019, 123, 4433-4440. | 1.5 | 14 |
| 32 | Anomalous Temperature-Dependent Exciton-Phonon Coupling in Cesium Lead Bromide Perovskite Nanosheets. Journal of Physical Chemistry C, 2019, 123, 5128-5135. | 1.5 | 50 |
| 33 | Phonon-Assisted Electro-Optical Switches and Logic Gates Based on Semiconductor Nanostructures. Advanced Materials, 2019, 31, e1901263. | 11.1 | 21 |
| 34 | Cross-dimensional electron-phonon coupling in van der Waals heterostructures. Nature Communications, 2019, 10, 2419. | 5.8 | 60 |
| 35 | Probing the Magnetic Ordering of Antiferromagnetic MnPS ₃ by Raman Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 3087-3093. | 2.1 | 74 |
| 36 | Raman Spectroscopy of Isotropic Two-Dimensional Materials Beyond Graphene. Springer Series in Materials Science, 2019, , 29-52. | 0.4 | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Phonon assisted photoluminescence up-conversion of in diamond color centers. , 2019, , . | | 0 |
| 38 | Valley Zeeman splitting of monolayer MoS ₂ probed by low-field magnetic circular dichroism spectroscopy at room temperature. Applied Physics Letters, 2018, 112, . | 1.5 | 34 |
| 39 | Phonon-Assisted Photoluminescence Up-Conversion of Silicon-Vacancy Centers in Diamond. Journal of Physical Chemistry Letters, 2018, 9, 6656-6661. | 2.1 | 21 |
| 40 | Brightening and controlling dark excitons in monolayer TMDCs. Science China Materials, 2018, 61, 1245-1247. | 3.5 | 1 |
| 41 | Anomalous Pressure Characteristics of Defects in Hexagonal Boron Nitride Flakes. ACS Nano, 2018, 12, 7127-7133. | 7.3 | 51 |
| 42 | Low Threshold Fabry-Pérot Mode Lasing from Lead Iodide Trapezoidal Nanoplatelets. Small, 2018, 14, e1801938. | 5.2 | 17 |
| 43 | Moiré Phonons in Twisted Bilayer MoS ₂ . ACS Nano, 2018, 12, 8770-8780. | 7.3 | 149 |
| 44 | Observation of Internal Photoinduced Electron and Hole Separation in Hybrid Two-Dimensional Perovskite Films. Journal of the American Chemical Society, 2017, 139, 1432-1435. | 6.6 | 477 |
| 45 | Layer-number dependent high-frequency vibration modes in few-layer transition metal dichalcogenides induced by interlayer couplings. Journal of Semiconductors, 2017, 38, 031006. | 2.0 | 18 |
| 46 | Layer-Number Dependent Optical Properties of 2D Materials and Their Application for Thickness Determination. Advanced Functional Materials, 2017, 27, 1604468. | 7.8 | 189 |
| 47 | Interfacial Interactions in van der Waals Heterostructures of MoS ₂ and Graphene. ACS Nano, 2017, 11, 11714-11723. | 7.3 | 92 |
| 48 | Controllable Synthesis of Two-Dimensional Ruddlesden-Popper-Type Perovskite Heterostructures. Journal of Physical Chemistry Letters, 2017, 8, 6211-6219. | 2.1 | 54 |
| 49 | A two-dimensional Fe-doped SnS ₂ magnetic semiconductor. Nature Communications, 2017, 8, 1958. | 5.8 | 315 |
| 50 | Low-Frequency Shear and Layer-Breathing Modes in Raman Scattering of Two-Dimensional Materials. ACS Nano, 2017, 11, 11777-11802. | 7.3 | 179 |
| 51 | Gapped Spin-1/2 Spinon Excitations in a New Kagome Quantum Spin Liquid Compound Cu ₃ Zn(OH) ₆ FBr. Chinese Physics Letters, 2017, 34, 077502. | 1.3 | 98 |
| 52 | Superlubricity of a graphene/MoS ₂ heterostructure: a combined experimental and DFT study. Nanoscale, 2017, 9, 10846-10853. | 2.8 | 133 |
| 53 | Observation of forbidden phonons, Fano resonance and dark excitons by resonance Raman scattering in few-layer WS ₂ . 2D Materials, 2017, 4, 031007. | 2.0 | 41 |
| 54 | Resolved-sideband Raman cooling of an optical phonon in semiconductor materials. Nature Photonics, 2016, 10, 600-605. | 15.6 | 42 |

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|----|---|------|-----------|
| 55 | Phonon Confinement Effect in Two-dimensional Nanocrystallites of Monolayer MoS ₂ to Probe Phonon Dispersion Trends Away from Brillouin-Zone Center. Chinese Physics Letters, 2016, 33, 057801. | 1.3 | 22 |
| 56 | Raman and photoluminescence spectra of two-dimensional nanocrystallites of monolayer WS ₂ and WSe ₂ . 2D Materials, 2016, 3, 025016. | 2.0 | 144 |
| 57 | Raman spectroscopy of atomically thin two-dimensional magnetic iron phosphorus trisulfide (FePS ₃). Nature Photonics, 2016, 10, 115-121. | 15.6 | 282 |
| 58 | Lattice vibrations and Raman scattering in two-dimensional layered materials beyond graphene. Nano Research, 2016, 9, 3559-3597. | 5.8 | 93 |
| 59 | CdS bulk crystal growth by optical floating zone method: strong photoluminescence upconversion and minimum trapped state emission. Optical Engineering, 2016, 56, 011109. | 0.5 | 7 |
| 60 | Raman characterization of AB- and ABC-stacked few-layer graphene by interlayer shear modes. Carbon, 2016, 99, 118-122. | 5.4 | 43 |
| 61 | Polytypism and unexpected strong interlayer coupling in two-dimensional layered ReS ₂ . Nanoscale, 2016, 8, 8324-8332. | 2.8 | 120 |
| 62 | Aqueous oxidation reaction enabled layer-by-layer corrosion of semiconductor nanoplates into single-crystalline 2D nanocrystals with single layer accuracy and ionic surface capping. Chemical Communications, 2016, 52, 3426-3429. | 2.2 | 5 |
| 63 | Laser cooling of organic-inorganic lead halide perovskites. Nature Photonics, 2016, 10, 115-121. | 15.6 | 282 |
| 64 | Rapid and Nondestructive Identification of Polytypism and Stacking Sequences in Few-Layer Molybdenum Diselenide by Raman Spectroscopy. Advanced Materials, 2015, 27, 4502-4508. | 11.1 | 96 |
| 65 | Phonon-assisted Upconversion Photoluminescence in Monolayer MoSe ₂ and WSe ₂ . Acta Chimica Sinica, 2015, 73, 959. | 0.5 | 3 |
| 66 | Interlayer vibrational modes in few-quintuple-layer Bi ₂ Te ₃ nanocrystals: Raman spectroscopy and. Physical Review B, 2014, 90, . | 5.1 | 87 |
| 67 | Exceptionally Stiff Two-Dimensional Molecular Crystal by Substrate-Confinement. ACS Nano, 2014, 8, 11425-11431. | 7.3 | 6 |
| 68 | Transition metal oxides on organic semiconductors. Organic Electronics, 2014, 15, 871-877. | 1.4 | 30 |
| 69 | Large-Area Synthesis of Monolayer and Few-Layer MoSe ₂ Films on SiO ₂ Substrates. Nano Letters, 2014, 14, 2419-2425. | 4.5 | 376 |
| 70 | Transparent free-standing metamaterials and their applications in surface-enhanced Raman scattering. Nanoscale, 2014, 6, 132-139. | 2.8 | 48 |
| 71 | Te-seeded growth of few-quintuple layer Bi ₂ Te ₃ nanoplates. Nano Research, 2014, 7, 1243-1253. | 5.8 | 22 |
| 72 | Ultrafast Carrier Thermalization and Cooling Dynamics in Few-Layer MoS ₂ . ACS Nano, 2014, 8, 10931-10940. | 7.3 | 236 |

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|----|---|------|-----------|
| 73 | Tailoring Alphabetical Metamaterials in Optical Frequency: Plasmonic Coupling, Dispersion, and Sensing. ACS Nano, 2014, 8, 3796-3806. | 7.3 | 42 |
| 74 | Solid-State Semiconductor Optical Cryocooler Based on CdS Nanobelts. Nano Letters, 2014, 14, 4724-4728. | 4.5 | 22 |
| 75 | Taming excitons in II-VI semiconductor nanowires and nanobelts. Journal Physics D: Applied Physics, 2014, 47, 394009. | 1.3 | 6 |
| 76 | Iron Pyrite Thin Film Counter Electrodes for Dye-Sensitized Solar Cells: High Efficiency for Iodine and Cobalt Redox Electrolyte Cells. ACS Nano, 2014, 8, 10597-10605. | 7.3 | 138 |
| 77 | Laminated Carbon Nanotube Networks for Metal Electrode-Free Efficient Perovskite Solar Cells. ACS Nano, 2014, 8, 6797-6804. | 7.3 | 427 |
| 78 | Intelligent and Ultrasensitive Analysis of Mercury Trace Contaminants via Plasmonic Metamaterial-Based Surface-Enhanced Raman Spectroscopy. Small, 2014, 10, 3252-3256. | 5.2 | 20 |
| 79 | Observation of low-wavenumber out-of-plane optical phonon in few-layer graphene. Journal of Raman Spectroscopy, 2013, 44, 70-74. | 1.2 | 9 |
| 80 | Layer-by-layer thinning of MoS ₂ by thermal annealing. Nanoscale, 2013, 5, 8904-8908. | 2.8 | 110 |
| 81 | Metamaterials-Based Label-Free Nanosensor for Conformation and Affinity Biosensing. ACS Nano, 2013, 7, 7583-7591. | 7.3 | 104 |
| 82 | Orientation of molecular interface dipole on metal surface investigated by noncontact atomic force microscopy. Science Bulletin, 2013, 58, 3630-3635. | 1.7 | 10 |
| 83 | Anomalous frequency trends in MoS ₂ thin films attributed to surface effects. Physical Review B, 2013, 88, . | 1.1 | 104 |
| 84 | Real-Space Identification of Intermolecular Bonding with Atomic Force Microscopy. Science, 2013, 342, 611-614. | 6.0 | 365 |
| 85 | Interlayer Breathing and Shear Modes in Few-Trilayer MoS ₂ and WSe ₂ . Nano Letters, 2013, 13, 1007-1015. | 4.5 | 576 |
| 86 | Laser cooling of a semiconductor by 40 kelvin. Nature, 2013, 493, 504-508. | 13.7 | 264 |
| 87 | Recent developments and future directions in the growth of nanostructures by van der Waals epitaxy. Nanoscale, 2013, 5, 3570. | 2.8 | 144 |
| 88 | Topology-Driven Magnetic Quantum Phase Transition in Topological Insulators. Science, 2013, 339, 1582-1586. | 6.0 | 206 |
| 89 | Vertically Aligned Gold Nanorod Monolayer on Arbitrary Substrates: Self-Assembly and Femtomolar Detection of Food Contaminants. ACS Nano, 2013, 7, 5993-6000. | 7.3 | 218 |
| 90 | Effects of lower symmetry and dimensionality on Raman spectra in two-dimensional WSe ₂ . Physical Review B, 2013, 88, . | 1.1 | 204 |

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|-----|---|-----|-----------|
| 91 | The Electrical Detection of Lead Ions Using Gold Nanoparticle and DNAzyme Functionalized Graphene Device. <i>Advanced Healthcare Materials</i> , 2013, 2, 271-274. | 3.9 | 73 |
| 92 | Demonstration of Net Laser Cooling in a Semiconductor. <i>Asia-Pacific Physics Newsletter</i> , 2013, 02, 27-28. | 0.0 | 2 |
| 93 | Laser cooling of a semiconductor by 40 kelvin: an optical refrigerator based on cadmium sulfide nanoribbons. , 2013, , . | | 0 |
| 94 | Laser cooling of CdS nanobelts: Thickness matters. <i>Optics Express</i> , 2013, 21, 19302. | 1.7 | 31 |
| 95 | Tunable Dirac Fermion Dynamics in Topological Insulators. <i>Scientific Reports</i> , 2013, 3, 2411. | 1.6 | 94 |
| 96 | Assembly of reconfigurable one-dimensional colloidal superlattices due to a synergy of fundamental nanoscale forces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 2240-2245. | 3.3 | 144 |
| 97 | Highly Enhanced Exciton Recombination Rate by Strong Electron-Phonon Coupling in Single ZnTe Nanobelt. <i>Nano Letters</i> , 2012, 12, 6420-6427. | 4.5 | 43 |
| 98 | Controlled synthesis of CdE (E = S, Se and Te) nanowires. <i>RSC Advances</i> , 2012, 2, 5243. | 1.7 | 36 |
| 99 | Monolayered adatom aggregation induced by metallofullerene molecules on Cu(100). <i>Surface Science</i> , 2012, 606, 78-82. | 0.8 | 6 |
| 100 | Exciton-phonon coupling in individual ZnTe nanorods studied by resonant Raman spectroscopy. <i>Physical Review B</i> , 2012, 85, . | 1.1 | 109 |
| 101 | Surface Depletion Induced Quantum Confinement in CdS Nanobelts. <i>ACS Nano</i> , 2012, 6, 5283-5290. | 7.3 | 60 |
| 102 | Synthesis and optical properties of II-VI 1D nanostructures. <i>Nanoscale</i> , 2012, 4, 1422. | 2.8 | 74 |
| 103 | Electric-Field-Dependent Photoconductivity in CdS Nanowires and Nanobelts: Exciton Ionization, Franz-Keldysh, and Stark Effects. <i>Nano Letters</i> , 2012, 12, 2993-2999. | 4.5 | 62 |
| 104 | Direct observation of inner and outer G ² band double-resonance Raman scattering in free standing graphene. <i>Applied Physics Letters</i> , 2012, 100, . | 1.5 | 17 |
| 105 | The origin of sub-bands in the Raman D-band of graphene. <i>Carbon</i> , 2012, 50, 4252-4258. | 5.4 | 54 |
| 106 | Scanning Tunneling Microscopy Investigation of Substrate-Dependent Adsorption and Assembly of Metallofullerene Gd@C ₈₂ on Cu(111) and Cu(100). <i>Journal of Physical Chemistry C</i> , 2011, 115, 6265-6268. | 1.5 | 12 |
| 107 | Direct Observation and Measurement of Mobile Charge Carriers in a Monolayer Organic Semiconductor on a Dielectric Substrate. <i>ACS Nano</i> , 2011, 5, 6195-6201. | 7.3 | 23 |
| 108 | Raman Spectroscopy of Few-Quintuple Layer Topological Insulator Bi ₂ Se ₃ Nanoplatelets. <i>Nano Letters</i> , 2011, 11, 2407-2414. | 4.5 | 409 |

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|-----|--|-----|-----------|
| 109 | Switchable Wettability in SnO ₂ Nanowires and SnO ₂ @SnO ₂ Heterostructures. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22225-22231. | 1.5 | 49 |
| 110 | Structural change of metallofullerene: an easier thermal decomposition. <i>Nanoscale</i> , 2011, 3, 4130. | 2.8 | 2 |
| 111 | Phonons in BiS ₂ nanostructures: Raman scattering and first-principles studies. <i>Physical Review B</i> , 2011, 84, . | 1.1 | 126 |
| 112 | Flexible Visible-Infrared Metamaterials and Their Applications in Highly Sensitive Chemical and Biological Sensing. <i>Nano Letters</i> , 2011, 11, 3232-3238. | 4.5 | 215 |
| 113 | Raman study of ultrathin Fe ₃ O ₄ films on GaAs(001) substrate: stoichiometry, epitaxial orientation and strain. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 1388-1391. | 1.2 | 17 |
| 114 | Charge transfer and optical phonon mixing in few-layer graphene chemically doped with sulfuric acid. <i>Physical Review B</i> , 2010, 82, . | 1.1 | 87 |
| 115 | p- μ type Field-Effect Transistors of Single-Crystal Zinc Telluride Nanobelts. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 9469-9471. | 7.2 | 41 |
| 116 | Resonance Fluorescence from a Coherently Driven Semiconductor Quantum Dot in a Cavity. <i>Physical Review Letters</i> , 2007, 99, 187402. | 2.9 | 293 |
| 117 | Raman scattering from an individual tubular graphite cone. <i>Carbon</i> , 2007, 45, 1116-1119. | 5.4 | 10 |
| 118 | Synthesis and in vivo study of metallofullerene based MRI contrast agent. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2007, 272, 605-609. | 0.7 | 23 |
| 119 | Study of rare earth encapsulated carbon nanomolecules for biomedical uses. <i>Journal of Alloys and Compounds</i> , 2006, 408-412, 400-404. | 2.8 | 28 |
| 120 | Analogies between nuclear clusters and fullerene cages. <i>Nuclear Physics A</i> , 2004, 738, 459-462. | 0.6 | 1 |
| 121 | Influences of Structural Properties on Stability of Fullerenols. <i>Journal of Physical Chemistry B</i> , 2004, 108, 11473-11479. | 1.2 | 139 |
| 122 | Catalytic Growth of Large-Scale Single-Crystal CdS Nanowires by Physical Evaporation and Their Photoluminescence. <i>Chemistry of Materials</i> , 2002, 14, 1773-1777. | 3.2 | 221 |
| 123 | Electrochemical fabrication of ordered Bi ₂ S ₃ nanowire arrays. <i>Journal Physics D: Applied Physics</i> , 2001, 34, 3224-3228. | 1.3 | 76 |