# Xudong Wang

## List of Publications by Citations



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|---|---|---|---|
| 153 papers | 15,739 citations | 59 h-index | 125 g-index |
| 159 ext. papers | 17,855 ext. citations | 12.9 avg, IF | 7.02 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 153 | Direct-current nanogenerator driven by ultrasonic waves. *Science*, **2007**, 316, 102-5 | 33.3 | 1837 |
| 152 | Large-Scale Hexagonal-Patterned Growth of Aligned ZnO Nanorods for Nano-optoelectronics and Nanosensor Arrays. *Nano Letters*, **2004**, 4, 423-6 | 11.5 | 1371 |
| 151 | Microfibre-nanowire hybrid structure for energy scavenging. *Nature*, **2008**, 451, 809-13 | 50.4 | 1312 |
| 150 | Piezoelectric field effect transistor and nanoforce sensor based on a single ZnO nanowire. *Nano Letters*, **2006**, 6, 2768-72 | 11.5 | 856 |
| 149 | One-dimensional titanium dioxide nanomaterials: nanowires, nanorods, and nanobelts. *Chemical Reviews*, **2014**, 114, 9346-84 | 68.1 | 504 |
| 148 | Controlled replication of butterfly wings for achieving tunable photonic properties. *Nano Letters*, **2006**, 6, 2325-31 | 11.5 | 442 |
| 147 | Piezoelectric nanogenerators□Harvesting ambient mechanical energy at the nanometer scale. *Nano Energy*, **2012**, 1, 13-24 | 17.1 | 334 |
| 146 | H2V3O8 Nanowire/Graphene Electrodes for Aqueous Rechargeable Zinc Ion Batteries with High Rate Capability and Large Capacity. *Advanced Energy Materials*, **2018**, 8, 1800144 | 21.8 | 302 |
| 145 | Ultrathin Surface Coating Enables Stabilized Zinc Metal Anode. *Advanced Materials Interfaces*, **2018**, 5, 1800848 | 4.6 | 276 |
| 144 | Sponge-Like Piezoelectric Polymer Films for Scalable and Integratable Nanogenerators and Self-Powered Electronic Systems. *Advanced Energy Materials*, **2014**, 4, 1301624 | 21.8 | 270 |
| 143 | Large-Scale Synthesis of Six-Nanometer-Wide ZnO Nanobelts. *Journal of Physical Chemistry B*, **2004**, 108, 8773-8777 | 3.4 | 268 |
| 142 | PVDF microbelts for harvesting energy from respiration. *Energy and Environmental Science*, **2011**, 4, 4508 | 35.4 | 259 |
| 141 | High-Performance Integrated ZnO Nanowire UV Sensors on Rigid and Flexible Substrates. *Advanced Functional Materials*, **2011**, 21, 4464-4469 | 15.6 | 259 |
| 140 | Nanowire and nanobelt arrays of zinc oxide from synthesis to properties and to novel devices. *Journal of Materials Chemistry*, **2007**, 17, 711 | | 236 |
| 139 | Diethyl ether as self-healing electrolyte additive enabled long-life rechargeable aqueous zinc ion batteries. *Nano Energy*, **2019**, 62, 275-281 | 17.1 | 234 |
| 138 | Growth of uniformly aligned ZnO nanowire heterojunction arrays on GaN, AlN, and Al0.5Ga0.5N substrates. *Journal of the American Chemical Society*, **2005**, 127, 7920-3 | 16.4 | 228 |
| 137 | Ferroelectric Polarization-Enhanced Photoelectrochemical Water Splitting in TiO2-BaTiO3 Core-Shell Nanowire Photoanodes. *Nano Letters*, **2015**, 15, 7574-80 | 11.5 | 222 |

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|---|---|---|---|
| 136 | Three-dimensional high-density hierarchical nanowire architecture for high-performance photoelectrochemical electrodes. *Nano Letters*, **2011**, 11, 3413-9 | 11.5 | 210 |
| 135 | Enhanced photoelectrochemical efficiency and stability using a conformal TiO2 film on a black silicon photoanode. *Nature Energy*, **2017**, 2, | 62.3 | 186 |
| 134 | Piezopotential-driven redox reactions at the surface of piezoelectric materials. *Angewandte Chemie - International Edition*, **2012**, 51, 5962-6 | 16.4 | 178 |
| 133 | Enhanced photoresponse of ZnO nanorods-based self-powered photodetector by piezotronic interface engineering. *Nano Energy*, **2014**, 9, 237-244 | 17.1 | 172 |
| 132 | Nanowire structured hybrid cell for concurrently scavenging solar and mechanical energies. *Journal of the American Chemical Society*, **2009**, 131, 5866-72 | 16.4 | 151 |
| 131 | Air-Flow-Driven Triboelectric Nanogenerators for Self-Powered Real-Time Respiratory Monitoring. *ACS Nano*, **2018**, 12, 6156-6162 | 16.7 | 148 |
| 130 | Chemically Functionalized Natural Cellulose Materials for Effective Triboelectric Nanogenerator Development. *Advanced Functional Materials*, **2017**, 27, 1700794 | 15.6 | 147 |
| 129 | Effective weight control via an implanted self-powered vagus nerve stimulation device. *Nature Communications*, **2018**, 9, 5349 | 17.4 | 142 |
| 128 | Integrated nanogenerators in biofluid. *Nano Letters*, **2007**, 7, 2475-9 | 11.5 | 138 |
| 127 | Effective Wound Healing Enabled by Discrete Alternative Electric Fields from Wearable Nanogenerators. *ACS Nano*, **2018**, 12, 12533-12540 | 16.7 | 137 |
| 126 | Piezoelectric and Triboelectric Dual Effects in Mechanical-Energy Harvesting Using BaTiO/Polydimethylsiloxane Composite Film. *ACS Applied Materials & Interfaces*, **2016**, 8, 34335-34341 | 9.5 | 136 |
| 125 | Cellulose-Based Nanomaterials for Energy Applications. *Small*, **2017**, 13, 1702240 | 11 | 130 |
| 124 | High-performance pentacene field-effect transistors using Al2O3 gate dielectrics prepared by atomic layer deposition (ALD). *Organic Electronics*, **2007**, 8, 718-726 | 3.5 | 125 |
| 123 | Single-electrode triboelectric nanogenerator for scavenging friction energy from rolling tires. *Nano Energy*, **2015**, 15, 227-234 | 17.1 | 124 |
| 122 | Sequential Infiltration Synthesis of Doped Polymer Films with Tunable Electrical Properties for Efficient Triboelectric Nanogenerator Development. *Advanced Materials*, **2015**, 27, 4938-44 | 24 | 124 |
| 121 | Triboelectric nanogenerators and power-boards from cellulose nanofibrils and recycled materials. *Nano Energy*, **2016**, 30, 103-108 | 17.1 | 121 |
| 120 | Enhanced Photoelectrochemical Performance from Rationally Designed Anatase/Rutile TiO2 Heterostructures. *ACS Applied Materials & Interfaces*, **2016**, 8, 12239-45 | 9.5 | 116 |
| 119 | Simultaneous Enhancement of Charge Separation and Hole Transportation in a TiO -SrTiO Core-Shell Nanowire Photoelectrochemical System. *Advanced Materials*, **2017**, 29, 1701432 | 24 | 115 |

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|---|---|---|---|
| 118 | Development of lead iodide perovskite solar cells using three-dimensional titanium dioxide nanowire architectures. *ACS Nano*, **2015**, 9, 564-72 | 16.7 | 113 |
| 117 | Density-controlled growth of aligned ZnO nanowires sharing a common contact: a simple, low-cost, and mask-free technique for large-scale applications. *Journal of Physical Chemistry B*, **2006**, 110, 7720-4 | 3.4 | 111 |
| 116 | Air-Stable Porous FeN Encapsulated in Carbon Microboxes with High Volumetric Lithium Storage Capacity and a Long Cycle Life. *Nano Letters*, **2017**, 17, 5740-5746 | 11.5 | 110 |
| 115 | Interface engineering by piezoelectric potential in ZnO-based photoelectrochemical anode. *Nano Letters*, **2011**, 11, 5587-93 | 11.5 | 108 |
| 114 | Chemical modification of polymer surfaces for advanced triboelectric nanogenerator development. *Extreme Mechanics Letters*, **2016**, 9, 514-530 | 3.9 | 107 |
| 113 | Coupling of piezoelectric effect with electrochemical processes. *Nano Energy*, **2015**, 14, 296-311 | 17.1 | 107 |
| 112 | Biocompatibility and in vivo operation of implantable mesoporous PVDF-based nanogenerators. *Nano Energy*, **2016**, 27, 275-281 | 17.1 | 106 |
| 111 | Evolution of hollow TiO2 nanostructures via the Kirkendall effect driven by cation exchange with enhanced photoelectrochemical performance. *Nano Letters*, **2014**, 14, 2528-35 | 11.5 | 104 |
| 110 | Fundamental analysis of piezocatalysis process on the surfaces of strained piezoelectric materials. *Scientific Reports*, **2013**, 3, 2160 | 4.9 | 101 |
| 109 | Fundamental study of mechanical energy harvesting using piezoelectric nanostructures. *Journal of Applied Physics*, **2010**, 108, 034309 | 2.5 | 101 |
| 108 | Nanometre-thick single-crystalline nanosheets grown at the water-air interface. *Nature Communications*, **2016**, 7, 10444 | 17.4 | 100 |
| 107 | Highly efficient capillary photoelectrochemical water splitting using cellulose nanofiber-templated TiO□photoanodes. *Advanced Materials*, **2014**, 26, 2262-7, 2110 | 24 | 90 |
| 106 | Growth of Rutile Titanium Dioxide Nanowires by Pulsed Chemical Vapor Deposition. *Crystal Growth and Design*, **2011**, 11, 949-954 | 3.5 | 82 |
| 105 | Piezoelectric-polarization-enhanced photovoltaic performance in depleted-heterojunction quantum-dot solar cells. *Advanced Materials*, **2013**, 25, 916-21 | 24 | 81 |
| 104 | Band structure engineering at heterojunction interfaces via the piezotronic effect. *Advanced Materials*, **2012**, 24, 4683-91 | 24 | 80 |
| 103 | Growth of titanium dioxide nanorods in 3D-confined spaces. *Nano Letters*, **2011**, 11, 624-31 | 11.5 | 77 |
| 102 | Cl-doped ZnO nanowires with metallic conductivity and their application for high-performance photoelectrochemical electrodes. *ACS Applied Materials & Interfaces*, **2014**, 6, 1288-93 | 9.5 | 69 |
| 101 | Significant performance enhancement of ZnO photoanodes from Ni(OH)2 electrocatalyst nanosheets overcoating. *Nano Energy*, **2014**, 6, 10-18 | 17.1 | 66 |

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| 100 | Self-attraction among aligned Au/ZnO nanorods under electron beam. *Applied Physics Letters*, **2005**, 86, 013111 | 3.4 | 66 |
| 99 | Surface-Plasmon-Resonance-Enhanced Photoelectrochemical Water Splitting from Au-Nanoparticle-Decorated 3D TiO2 Nanorod Architectures. *Journal of Physical Chemistry C*, **2017**, 121, 12071-12079 | 3.8 | 63 |
| 98 | VS Nanoparticles Anchored on Graphene Sheets as a High-Rate and Stable Electrode Material for Sodium Ion Batteries. *ChemSusChem*, **2018**, 11, 735-742 | 8.3 | 63 |
| 97 | . *IEEE Pervasive Computing*, **2008**, 7, 49-55 | 1.3 | 62 |
| 96 | All-Textile Triboelectric Generator Compatible with Traditional Textile Process. *Advanced Materials Technologies*, **2016**, 1, 1600147 | 6.8 | 59 |
| 95 | Large-size liftable inverted-nanobowl sheets as reusable masks for nanolithiography. *Nano Letters*, **2005**, 5, 1784-8 | 11.5 | 59 |
| 94 | Hierarchical TiO2Si nanowire architecture with photoelectrochemical activity under visible light illumination. *Energy and Environmental Science*, **2012**, 5, 7918 | 35.4 | 57 |
| 93 | Hybrid graphene@MoS2@TiO2 microspheres for use as a high performance negative electrode material for lithium ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 3667-3674 | 13 | 56 |
| 92 | Mesoporous Piezoelectric Polymer Composite Films with Tunable Mechanical Modulus for Harvesting Energy from Liquid Pressure Fluctuation. *Advanced Functional Materials*, **2016**, 26, 6760-6765 | 15.6 | 55 |
| 91 | Piezotronic-Enhanced Photoelectrochemical Reactions in Ni(OH)2-Decorated ZnO Photoanodes. *Journal of Physical Chemistry Letters*, **2015**, 6, 3410-6 | 6.4 | 52 |
| 90 | High-Performance Poly(vinylidene difluoride)/Dopamine Core/Shell Piezoelectric Nanofiber and Its Application for Biomedical Sensors. *Advanced Materials*, **2021**, 33, e2006093 | 24 | 52 |
| 89 | Research Update: Materials design of implantable nanogenerators for biomechanical energy harvesting. *APL Materials*, **2017**, 5, | 5.7 | 51 |
| 88 | Self-Activated Electrical Stimulation for Effective Hair Regeneration a Wearable Omnidirectional Pulse Generator. *ACS Nano*, **2019**, 13, 12345-12356 | 16.7 | 51 |
| 87 | Non-contact cylindrical rotating triboelectric nanogenerator for harvesting kinetic energy from hydraulics. *Nano Research*, **2020**, 13, 1903-1907 | 10 | 51 |
| 86 | Single-crystalline germanium nanomembrane photodetectors on foreign nanocavities. *Science Advances*, **2017**, 3, e1602783 | 14.3 | 51 |
| 85 | Wafer-Level Patterned and Aligned Polymer Nanowire/Micro- and Nanotube Arrays on any Substrate. *Advanced Materials*, **2009**, 21, 2072-2076 | 24 | 50 |
| 84 | Ultrathin Piezotronic Transistors with 2 nm Channel Lengths. *ACS Nano*, **2018**, 12, 4903-4908 | 16.7 | 46 |
| 83 | Mechanisms in the solution growth of free-standing two-dimensional inorganic nanomaterials. *Nanoscale*, **2014**, 6, 6398-414 | 7.7 | 46 |

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| 82 | Study of Long-Term Biocompatibility and Bio-Safety of Implantable Nanogenerators. *Nano Energy*, **2018**, 51, 728-735 | 17.1 | 42 |
| 81 | Electron microscopy observation of TiO2 nanocrystal evolution in high-temperature atomic layer deposition. *Nano Letters*, **2013**, 13, 5727-34 | 11.5 | 41 |
| 80 | Wedding Cake Growth Mechanism in One-Dimensional and Two-Dimensional Nanostructure Evolution. *Nano Letters*, **2015**, 15, 7766-72 | 11.5 | 36 |
| 79 | Nitrogen Doped 3D Titanium Dioxide Nanorods Architecture with Significantly Enhanced Visible Light Photoactivity. *Journal of Physical Chemistry C*, **2015**, 119, 4397-4405 | 3.8 | 36 |
| 78 | Substrate-free self-assembly approach toward large-area nanomembranes. *ACS Nano*, **2012**, 6, 2602-9 | 16.7 | 35 |
| 77 | Piezotronic modulations in electro- and photochemical catalysis. *MRS Bulletin*, **2018**, 43, 946-951 | 3.2 | 35 |
| 76 | Degradable Piezoelectric Biomaterials for Wearable and Implantable Bioelectronics. *Current Opinion in Solid State and Materials Science*, **2020**, 24, | 12 | 34 |
| 75 | Wafer-scale heterostructured piezoelectric bio-organic thin films. *Science*, **2021**, 373, 337-342 | 33.3 | 33 |
| 74 | Enhanced Performance of Ge Photodiodes via Monolithic Antireflection Texturing and Ge Self-Passivation by Inverse Metal-Assisted Chemical Etching. *ACS Nano*, **2018**, 12, 6748-6755 | 16.7 | 32 |
| 73 | Two-dimensional nonlayered materials for electrocatalysis. *Energy and Environmental Science*, **2020**, 13, 3993-4016 | 35.4 | 31 |
| 72 | Effective anti-biofouling enabled by surface electric disturbance from water wave-driven nanogenerator. *Nano Energy*, **2019**, 57, 558-565 | 17.1 | 31 |
| 71 | Implanted Battery-Free Direct-Current Micro-Power Supply from in Vivo Breath Energy Harvesting. *ACS Applied Materials & Interfaces*, **2018**, 10, 42030-42038 | 9.5 | 31 |
| 70 | Piezotronics in Photo-Electrochemistry. *Advanced Materials*, **2018**, 30, e1800154 | 24 | 30 |
| 69 | Cellulose nanofiber-templated three-dimension TiO2 hierarchical nanowire network for photoelectrochemical photoanode. *Nanotechnology*, **2014**, 25, 504005 | 3.4 | 30 |
| 68 | Surface Gradient Ti-Doped MnO Nanowires for High-Rate and Long-Life Lithium Battery. *ACS Applied Materials & Interfaces*, **2018**, 10, 44376-44384 | 9.5 | 29 |
| 67 | Nature Degradable, Flexible, and Transparent Conductive Substrates from Green and Earth-Abundant Materials. *Scientific Reports*, **2017**, 7, 4936 | 4.9 | 28 |
| 66 | Implementation of ferroelectric materials in photocatalytic and photoelectrochemical water splitting. *Nanoscale Horizons*, **2020**, 5, 1174-1187 | 10.8 | 26 |
| 65 | A wafer-scale 1 nm Ni(OH) nanosheet with superior electrocatalytic activity for the oxygen evolution reaction. *Nanoscale*, **2018**, 10, 5054-5059 | 7.7 | 25 |

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| 64 | Metastable Intermediates in Amorphous Titanium Oxide: A Hidden Role Leading to Ultra-Stable Photoanode Protection. *Nano Letters*, **2018**, 18, 5335-5342 | 11.5 | 25 |
| 63 | Output of an ultrasonic wave-driven nanogenerator in a confined tube. *Nano Research*, **2009**, 2, 177-182 | 10 | 24 |
| 62 | Wearable and Implantable Electroceuticals for Therapeutic Electrostimulations. *Advanced Science*, **2021**, 8, 2004023 | 13.6 | 24 |
| 61 | Nanoparticle-Decorated Ultrathin LaO Nanosheets as an Efficient Electrocatalysis for Oxygen Evolution Reactions. *Nano-Micro Letters*, **2020**, 12, 49 | 19.5 | 23 |
| 60 | Three-Dimensional Kelvin Probe Microscopy for Characterizing In-Plane Piezoelectric Potential of Laterally Deflected ZnO Micro-/Nanowires. *Advanced Functional Materials*, **2012**, 22, 652-660 | 15.6 | 22 |
| 59 | Multifunctional Artificial Artery from Direct 3D Printing with Built-In Ferroelectricity and Tissue-Matching Modulus for Real-Time Sensing and Occlusion Monitoring. *Advanced Functional Materials*, **2020**, 30, 2002868 | 15.6 | 22 |
| 58 | Ionic Layer Epitaxy of Nanometer-Thick Palladium Nanosheets with Enhanced Electrocatalytic Properties. *Chemistry of Materials*, **2018**, 30, 3308-3314 | 9.6 | 21 |
| 57 | Respiration-driven triboelectric nanogenerators for biomedical applications. *EcoMat*, **2020**, 2, e12045 | 9.4 | 21 |
| 56 | Wafer-scale synthesis of ultrathin CoO nanosheets with enhanced electrochemical catalytic properties. *Journal of Materials Chemistry A*, **2017**, 5, 9060-9066 | 13 | 20 |
| 55 | Patterning at the 10 nanometer length scale using a strongly segregating block copolymer thin film and vapor phase infiltration of inorganic precursors. *Nanoscale*, **2016**, 8, 11595-601 | 7.7 | 20 |
| 54 | Massive Vacancy Concentration Yields Strong Room-Temperature Ferromagnetism in Two-Dimensional ZnO. *Nano Letters*, **2019**, 19, 7085-7092 | 11.5 | 18 |
| 53 | A self-powered implantable and bioresorbable electrostimulation device for biofeedback bone fracture healing. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118, | 11.5 | 18 |
| 52 | Tailored TiO2 Protection Layer Enabled Efficient and Stable Microdome Structured p-GaAs Photoelectrochemical Cathodes. *Advanced Energy Materials*, **2020**, 10, 1902985 | 21.8 | 17 |
| 51 | Hierarchical Branched Vanadium Oxide Nanorod@Si Nanowire Architecture for High Performance Supercapacitors. *Small*, **2017**, 13, 1603076 | 11 | 17 |
| 50 | Evolution of titanium dioxide one-dimensional nanostructures from surface-reaction-limited pulsed chemical vapor deposition. *Journal of Materials Research*, **2013**, 28, 270-279 | 2.5 | 17 |
| 49 | High-density platinum nanoparticle-decorated titanium dioxide nanofiber networks for efficient capillary photocatalytic hydrogen generation. *Journal of Materials Chemistry A*, **2016**, 4, 11672-11679 | 13 | 17 |
| 48 | Directed self-assembly of block copolymer films on atomically-thin graphene chemical patterns. *Scientific Reports*, **2016**, 6, 31407 | 4.9 | 16 |
| 47 | Piezopotential-Driven Redox Reactions at the Surface of Piezoelectric Materials. *Angewandte Chemie*, **2012**, 124, 6064-6068 | 3.6 | 16 |

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| 46 | Piezoelectric Nanocellulose Thin Film with Large-Scale Vertical Crystal Alignment. *ACS Applied Materials & Interfaces*, **2020**, 12, 26399-26404 | 9.5 | 15 |
| 45 | Unit Cell Level Thickness Control of Single-Crystalline Zinc Oxide Nanosheets Enabled by Electrical Double-Layer Confinement. *Langmuir*, **2017**, 33, 7708-7714 | 4 | 15 |
| 44 | Spontaneous phase transformation and exfoliation of rectangular single-crystal zinc hydroxy dodecylsulfate nanomembranes. *ACS Nano*, **2013**, 7, 6007-16 | 16.7 | 15 |
| 43 | Energy Harvesting Floor from Commercial Cellulosic Materials for a Self-Powered Wireless Transmission Sensor System. *ACS Applied Materials & Interfaces*, **2021**, 13, 5133-5141 | 9.5 | 14 |
| 42 | Memristive Behavior Enabled by Amorphous-Crystalline 2D Oxide Heterostructure. *Advanced Materials*, **2020**, 32, e2000801 | 24 | 12 |
| 41 | Kinetics-Driven Crystal Facets Evolution at the Tip of Nanowires: A New Implementation of the Ostwald-Lussac Law. *Nano Letters*, **2016**, 16, 7078-7084 | 11.5 | 12 |
| 40 | Phase transformation, charge transfer, and ionic diffusion of Na4MnV(PO4)3 in sodium-ion batteries: a combined first-principles and experimental study. *Journal of Materials Chemistry A*, **2020**, 8, 17477-17486 | 13 | 11 |
| 39 | Mechanisms of the Planar Growth of Lithium Metal Enabled by the 2D Lattice Confinement from a Ti3C2Tx MXene Intermediate Layer. *Advanced Functional Materials*, **2021**, 31, 2010987 | 15.6 | 11 |
| 38 | Nanogenerator for determination of acoustic power in ultrasonic reactors. *Ultrasonics Sonochemistry*, **2021**, 78, 105718 | 8.9 | 10 |
| 37 | Self-powered liquid chemical sensors based on solid-liquid contact electrification. *Analyst, The*, **2021**, 146, 1656-1662 | 5 | 10 |
| 36 | AlGaAs/Si dual-junction tandem solar cells by epitaxial lift-off and print-transfer-assisted direct bonding. *Energy Science and Engineering*, **2018**, 6, 47-55 | 3.4 | 9 |
| 35 | Inverted Wedding Cake Growth Operated by the Ehrlich-Schwoebel Barrier in Two-Dimensional Nanocrystal Evolution. *Angewandte Chemie - International Edition*, **2016**, 55, 2217-21 | 16.4 | 9 |
| 34 | Influences of screw dislocations on electroluminescence of AlGaN/AlN-based UVC LEDs. *AIP Advances*, **2019**, 9, 085128 | 1.5 | 8 |
| 33 | Decoupling the charge collecting and screening effects in piezotronics-regulated photoelectrochemical systems by using graphene as the charge collector. *Nano Energy*, **2018**, 48, 377-382 | 17.1 | 8 |
| 32 | Bioinspired Synthesis of Quasi-Two-Dimensional Monocrystalline Oxides. *Chemistry of Materials*, **2019**, 31, 9040-9048 | 9.6 | 8 |
| 31 | Prevention of Hepatic Ischemia-Reperfusion Injury by Carbohydrate-Derived Nanoantioxidants. *Nano Letters*, **2020**, 20, 6510-6519 | 11.5 | 8 |
| 30 | Polymer-based Nanogenerator for Biomedical Applications. *Chemical Research in Chinese Universities*, **2020**, 36, 41-54 | 2.2 | 7 |
| 29 | Computation of Electronic Energy Band Diagrams for Piezotronic Semiconductor and Electrochemical Systems. *Advanced Electronic Materials*, **2018**, 4, 1700395 | 6.4 | 7 |

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| 28 | Morphological control in the adaptive ionic layer epitaxy of ZnO nanosheets. *Extreme Mechanics Letters*, **2016**, 7, 64-70 | 3.9 | 7 |
| 27 | Spatial modeling for refining and predicting surface potential mapping with enhanced resolution. *Nanoscale*, **2013**, 5, 921-6 | 7.7 | 7 |
| 26 | Mapping of strain–piezopotential relationship along bent zinc oxide microwires. *Nano Energy*, **2013**, 2, 1225-1231 | 17.1 | 7 |
| 25 | Atomic layer deposition in the development of supercapacitor and lithium-ion battery devices. *Carbon*, **2021**, 179, 299-326 | 10.4 | 6 |
| 24 | Materials Perspectives for Self-Powered Cardiac Implantable Electronic Devices toward Clinical Translation.. *Accounts of Materials Research*, **2021**, 2, 739-750 | 7.5 | 6 |
| 23 | study of enhanced photodynamic cancer cell killing effect by nanometer-thick gold nanosheets. *Nano Research*, **2020**, 13, 3217-3223 | 10 | 5 |
| 22 | Calculation of the piezoelectric and flexoelectric effects in nanowires using a decoupled finite element analysis method. *Journal of Applied Physics*, **2016**, 119, 154104 | 2.5 | 5 |
| 21 | Quasi-Two-Dimensional Earth-Abundant Bimetallic Electrocatalysts for Oxygen Evolution Reactions. *ACS Energy Letters*, **2021**, 6, 3367-3375 | 20.1 | 5 |
| 20 | Accelerated complete human skin architecture restoration after wounding by nanogenerator-driven electrostimulation. *Journal of Nanobiotechnology*, **2021**, 19, 280 | 9.4 | 5 |
| 19 | Atomic Layer Deposition for Advanced Electrode Design in Photoelectrochemical and Triboelectric Systems. *Advanced Materials Interfaces*, **2017**, 4, 1600835 | 4.6 | 4 |
| 18 | Semiconductor Nanowires for Energy Harvesting. *Semiconductors and Semimetals*, **2016**, 94, 297-368 | 0.6 | 4 |
| 17 | Bioresorbable Primary Battery Anodes Built on Core-Double-Shell Zinc Microparticle Networks. *ACS Applied Materials & Interfaces*, **2021**, 13, 14275-14282 | 9.5 | 4 |
| 16 | A Rigid-Flexible Protecting Film with Surface Pits Structure for Dendrite-Free and High-Performance Lithium Metal Anode. *Nano Letters*, **2021**, 21, 7063-7069 | 11.5 | 4 |
| 15 | Inverted Wedding Cake Growth Operated by the Ehrlich–Schwoebel Barrier in Two-Dimensional Nanocrystal Evolution. *Angewandte Chemie*, **2016**, 128, 2257-2261 | 3.6 | 3 |
| 14 | Enhanced Ferromagnetism from Organic-Cerium Oxide Hybrid Ultrathin Nanosheets. *ACS Applied Materials & Interfaces*, **2019**, 11, 44601-44608 | 9.5 | 3 |
| 13 | Photoelectrodes: Highly Efficient Capillary Photoelectrochemical Water Splitting Using Cellulose Nanofiber-Templated TiO2 Photoanodes (Adv. Mater. 14/2014). *Advanced Materials*, **2014**, 26, 2110-2110 | 24 | 3 |
| 12 | Bulk Ferroelectric Metamaterial with Enhanced Piezoelectric and Biomimetic Mechanical Properties from Additive Manufacturing. *ACS Nano*, **2021**, 15, 14903-14914 | 16.7 | 3 |
| 11 | Long-term in vivo operation of implanted cardiac nanogenerators in swine. *Nano Energy*, **2021**, 90, 106507-106507 | 17.1 | 3 |

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| 10 | Microwave TFTs Made of MOCVD ZnO With ALD Al2O3 Gate Dielectric. *IEEE Journal of the Electron Devices Society*, **2016**, 4, 55-59 | 2.3 | 2 |
| 9 | Confined Shear Alignment of Ultrathin Films of Cellulose Nanocrystals.. *ACS Applied Bio Materials*, **2021**, 4, 7961-7966 | 4.1 | 2 |
| 8 | Stretchable Encapsulation Materials with High Dynamic Water Resistivity and Tissue-Matching Elasticity.. *ACS Applied Materials & Interfaces*, **2022**, | 9.5 | 2 |
| 7 | Piezoelectric and Piezotronic Effects in Energy Harvesting and Conversion **2013**, 89-132 | | 1 |
| 6 | Mesoporous Ultrathin InO Nanosheet Cocatalysts on a Silicon Nanowire Photoanode for Efficient Photoelectrochemical Water Splitting. *ACS Applied Materials & Interfaces*, **2021**, | 9.5 | 1 |
| 5 | Thickness-Dependent Piezoelectric Property from Quasi-Two-Dimensional Zinc Oxide Nanosheets with Unit Cell Resolution. *Research*, **2021**, 2021, 1519340 | 7.8 | 1 |
| 4 | Mesoporous carbon nanofiber network derived from agarose for supercapacitor electrode. *Journal of Nanoparticle Research*, **2018**, 20, 1 | 2.3 | 1 |
| 3 | The morphology of cast zinc-based alloy reinforced by spheroidal silicon phase and its wear resistance. *International Journal of Cast Metals Research*, **1998**, 11, 39-42 | 1 | |
| 2 | Piezoelectric Nanogenerators for Mechanical Energy Harvesting. *International Symposium on Microelectronics*, **2011**, 2011, 000367-000375 | 0.2 | |
| 1 | Level-expansion: A statistical sequential design methodology with application to nanomaterial synthesis. *Journal of Quality Technology*, **2020**, 52, 97-107 | 1.4 | |