# Erdmann Spiecker

List of Publications by Year
in descending order

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| 125 | 5,435 | 117571 | 85498 |
|---|---|---|---|
| papers | citations | 34 h-index | 71 g-index |

| 128 | 128 | 128 | 9482 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Scavenging of bacteria or bacterial products by magnetic particles functionalized with a broad-spectrum pathogen recognition receptor motif offers diagnostic and therapeutic applications. Acta Biomaterialia, 2022, 141, 418-428. | 4.1 | 11 |
| 2 | Overcoming Temperatureâ€Induced Degradation of Silver Nanowire Electrodes by an Ag@SnO<sub>x</sub> Coreâ€Shell Approach. Advanced Electronic Materials, 2022, 8, . | 2.6 | 7 |
| 3 | Quantification of the temperature-dependent evolution of defect structures in a CoNi-base superalloy. Acta Materialia, 2022, 227, 117702. | 3.8 | 14 |
| 4 | Noncovalent Liquid Phase Functionalization of 2H-WS<sub>2</sub> with PDI: An Energy Conversion Platform with Long-Lived Charge Separation. Journal of the American Chemical Society, 2022, 144, 5834-5840. | 6.6 | 8 |
| 5 | Exploring the Preparation Dependence of Crystalline 2D-Extended Ultrathin C8-BTBT-C8 Films. ACS Applied Materials & Interfaces, 2022, 14, 16830-16838. | 4.0 | 6 |
| 6 | Sub-Kelvin thermometry for evaluating the local temperature stability within in situ TEM gas cells. Ultramicroscopy, 2022, 235, 113494. | 0.8 | 6 |
| 7 | Creep properties and deformation mechanisms of single-crystalline Î³â€²-strengthened superalloys in dependence of the Co/Ni ratio. Philosophical Magazine, 2022, 102, 718-744. | 0.7 | 3 |
| 8 | Atomically resolved TEM imaging of covalently functionalised graphene. Npj 2D Materials and Applications, 2022, 6, . | 3.9 | 3 |
| 9 | Seeing structural evolution of organic molecular nano-crystallites using 4D scanning confocal electron diffractionÂ(4D-SCED). Nature Communications, 2022, 13, . | 5.8 | 6 |
| 10 | Understanding and Controlling the Evolution of Nanomorphology and Crystallinity of Organic Bulkâ€Heterojunction Blends with Solvent Vapor Annealing. Solar Rrl, 2022, 6, . | 3.1 | 8 |
| 11 | The effect of Î³ matrix channel width on the compositional evolution in a multi-component nickel-based superalloy. Scripta Materialia, 2022, 219, 114853. | 2.6 | 2 |
| 12 | Radiolysisâ€Driven Evolution of Gold Nanostructures â€“ Model Verification by Scale Bridging In Situ Liquidâ€Phase Transmission Electron Microscopy and Xâ€Ray Diffraction. Advanced Science, 2022, 9, . | 5.6 | 15 |
| 13 | Intrinsic nano-diffusion-couple for studying high temperature diffusion in multi-component superalloys. Scripta Materialia, 2021, 192, 120-124. | 2.6 | 8 |
| 14 | Microscopic Deformation Modes and Impact of Network Anisotropy on the Mechanical and Electrical Performance of Five-fold Twinned Silver Nanowire Electrodes. ACS Nano, 2021, 15, 362-376. | 7.3 | 23 |
| 15 | Reduced grey brookite for noble metal free photocatalytic H<sub>2</sub>evolution. Journal of Materials Chemistry A, 2021, 9, 1168-1179. | 5.2 | 26 |
| 16 | Correlative Laboratory Nanoâ€CT and 360Â° Electron Tomography of Macropore Structures in Hierarchical Zeolites. Advanced Materials Interfaces, 2021, 8, 2001154. | 1.9 | 11 |
| 17 | Phase evolution of Cu<sub>2</sub>ZnSnS<sub>4</sub> (CZTS) nanoparticles from in situ formed binary sulphides under solvothermal conditions. CrystEngComm, 2021, 23, 7944-7954. | 1.3 | 5 |
| 18 | LPE growth of Tb<sub>3</sub>Al<sub>5</sub>O<sub>12</sub>:Ce single crystalline film converters for WLED application. CrystEngComm, 2021, 23, 3212-3219. | 1.3 | 12 |

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|---|---|---|---|
| 19 | Accessing local electron-beam induced temperature changes during in situ liquid-phase transmission electron microscopy. Nanoscale Advances, 2021, 3, 2466-2474. | 2.2 | 30 |
| 20 | Efficient charge-transfer from diketopyrrolopyrroles to single-walled carbon nanotubes. Nanoscale, 2021, 13, 11544-11551. | 2.8 | 4 |
| 21 | ZnS Ultrathin Interfacial Layers for Optimizing Carrier Management in Sb<sub>2</sub>S<sub>3</sub>-based Photovoltaics. ACS Applied Materials & Interfaces, 2021, 13, 11861-11868. | 4.0 | 20 |
| 22 | Comprehensive, multidimensional and correlative particle characterization of a saxolite and talcum compound to support the understanding of complex separation processes. Microscopy and Microanalysis, 2021, 27, 934-937. | 0.2 | 2 |
| 23 | Early stages of phase decomposition in NiAu alloy thin films studied by in situ TEM using ultrafast quenching methods. Microscopy and Microanalysis, 2021, 27, 2692-2694. | 0.2 | 0 |
| 24 | Diffraction contrast analysis of dislocations in 2D materials using true dark-field and 4D-STEM in SEM. Microscopy and Microanalysis, 2021, 27, 1816-1819. | 0.2 | 0 |
| 25 | Combining in situ heating with transmission diffraction and imaging in SEM for investigation of early stages of solid-state dewetting. Microscopy and Microanalysis, 2021, 27, 1052-1054. | 0.2 | 0 |
| 26 | Multi-modal characterization of collagen fibril orientation in human cortical bone by a combination of quantitative polarized Raman spectroscopy, nanoscale X-ray computed tomography and 360Â° electron tomography. Microscopy and Microanalysis, 2021, 27, 96-101. | 0.2 | 0 |
| 27 | Correlative Zernike phase contrast X-ray nanotomography to determine the distribution and orientation of graphite particles in a carbon fiber reinforced epoxy resin for improved thermal conductivity. Microscopy and Microanalysis, 2021, 27, 944-946. | 0.2 | 0 |
| 28 | Correlative relationship between nanomorphology, crystallinity, texture and device efficiency of organic BHJ solar cells studied by energy-filtered TEM. Microscopy and Microanalysis, 2021, 27, 390-392. | 0.2 | 0 |
| 29 | In situ chip-based heating studies of metal-induced layer exchange and Si crystallization using STEM, LEND and SE imaging in SEM. Microscopy and Microanalysis, 2021, 27, 2696-2698. | 0.2 | 1 |
| 30 | Scanning confocal electron diffraction (SCED): high angular resolution diffraction imaging with order-of-magnitude improved dose efficiency. Microscopy and Microanalysis, 2021, 27, 194-197. | 0.2 | 0 |
| 31 | Extending lab-based X-ray nanotomography of low Z and porous materials to larger sample volumes without compromising resolution. Microscopy and Microanalysis, 2021, 27, 1218-1221. | 0.2 | 1 |
| 32 | Beam-induced heating at low electron fluxes during liquid phase transmission electron microscopy. Microscopy and Microanalysis, 2021, 27, 1040-1042. | 0.2 | 0 |
| 33 | A scale-bridging study of the influence of TCP phases on the mechanical properties of an additive manufactured Ni-base superalloy combining microcompression testing, X-ray nanotomography and TEM. Microscopy and Microanalysis, 2021, 27, 938-942. | 0.2 | 0 |
| 34 | Unraveling Structural Details in Ga-Pd SCALMS Systems Using Correlative Nano-CT, 360Â° Electron Tomography and Analytical TEM. Catalysts, 2021, 11, 810. | 1.6 | 7 |
| 35 | Yielding behavior of a single-crystalline Î³'-strengthened Co-Ti-Cr superalloy. Scripta Materialia, 2021, 200, 113928. | 2.6 | 16 |
| 36 | Grain boundary mediated plasticity: A blessing for the ductility of metallic thin films?. Acta Materialia, 2021, 215, 117079. | 3.8 | 18 |

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|---|---|---|---|
| 37 | Effect of size and shape on the elastic modulus of metal nanowires. MRS Advances, 2021, 6, 665-673. | 0.5 | 11 |
| 38 | Rapid fabrication and interface structure of highly faceted epitaxial Ni-Au solid solution nanoparticles on sapphire. Acta Materialia, 2021, 220, 117318. | 3.8 | 10 |
| 39 | Distinct endocytosis and immune activation of poly(lactic-co-glycolic) acidÂnanoparticles prepared by single- and double-emulsion evaporation. Nanomedicine, 2021, 16, 2075-2094. | 1.7 | 4 |
| 40 | Early stages of high-temperature oxidation of Ni- and Co-base model superalloys: A comparative study using rapid thermal annealing and advanced electron microscopy. Corrosion Science, 2021, 191, 109744. | 3.0 | 22 |
| 41 | Well-separated water-soluble carbon dots via gradient chromatography. Nanoscale, 2021, 13, 13116-13128. | 2.8 | 19 |
| 42 | Structural characterization of Î±,Ï‰-DH6T monolayer films grown at the liquidâ€“liquid interface. Soft Matter, 2021, 17, 9765-9771. | 1.2 | 3 |
| 43 | Ptâ€“Fe<sub>3</sub>O<sub>4</sub>, Pdâ€“Fe<sub>3</sub>O<sub>4</sub>, and Auâ€“Fe<sub>3</sub>O<sub>4</sub> Nanoheterodimers and Their Efficacy as Radiosensitizers in Cancer Therapy. ACS Applied Bio Materials, 2021, 4, 7879-7892. | 2.3 | 4 |
| 44 | Hydrogenated anatase TiO<sub>2</sub> single crystals: defects formation and structural changes as microscopic origin of co-catalyst free photocatalytic H<sub>2</sub> evolution activity. Journal of Materials Chemistry A, 2021, 9, 24932-24942. | 5.2 | 7 |
| 45 | Modelling the Radiolysis of Silver Nitrate Solutions in presence of Bromide Ions in Liquid-Phase Transmission Electron Microscopy. Microscopy and Microanalysis, 2021, 27, 103-104. | 0.2 | 1 |
| 46 | Correlative Nanoâ€Computed Tomography and Focused Ionâ€Beam Sectioning: A Case Study on a Coâ€Base Superalloy Oxide Scale. Advanced Engineering Materials, 2020, 22, 1900823. | 1.6 | 4 |
| 47 | Facile one-pot synthesis of water-soluble fcc FePt3 alloy nanostructures. SN Applied Sciences, 2020, 2, 1. | 1.5 | 2 |
| 48 | Areaâ€Selective Growth of HfS<sub>2</sub> Thin Films via Atomic Layer Deposition at Low Temperature. Advanced Materials Interfaces, 2020, 7, 2001493. | 1.9 | 10 |
| 49 | Unraveling Complexity: A Strategy for the Characterization of Anisotropic Core Multishell Nanoparticles. Particle and Particle Systems Characterization, 2020, 37, 2000145. | 1.2 | 3 |
| 50 | Epitaxial Metal Halide Perovskites by Inkjetâ€Printing on Various Substrates. Advanced Functional Materials, 2020, 30, 2004612. | 7.8 | 21 |
| 51 | Strain-activated light-induced halide segregation in mixed-halide perovskite solids. Nature Communications, 2020, 11, 6328. | 5.8 | 86 |
| 52 | Collecting up to 115% of Singlet-Fission Products by Single-Walled Carbon Nanotubes. ACS Nano, 2020, 14, 8875-8886. | 7.3 | 7 |
| 53 | Buried Microphase Separation by Dynamic Interplay of Crystallization and Microphase Separation in Semicrystalline PEO-Rich PS-b-PEO Block Copolymer Thin Films. Macromolecules, 2020, 53, 5604-5613. | 2.2 | 6 |
| 54 | Bipolar-shell resurfacing for blue LEDs based on strongly confined perovskite quantum dots. Nature Nanotechnology, 2020, 15, 668-674. | 15.6 | 541 |

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| 55 | Effect of the Counteranion on the Formation Pathway of Cu<sub>2</sub>ZnSnS<sub>4</sub> (CZTS) Nanoparticles under Solvothermal Conditions. Inorganic Chemistry, 2020, 59, 1973-1984. | 1.9 | 14 |
| 56 | Crystal-structure of active layers of small molecule organic photovoltaics before and after solvent vapor annealing. Zeitschrift Fur Kristallographie - Crystalline Materials, 2020, 235, 15-28. | 0.4 | 6 |
| 57 | Unraveling the Complex Nanomorphology of Ternary Organic Solar Cells with Multimodal Analytical Transmission Electron Microscopy. Solar Rrl, 2020, 4, 2000114. | 3.1 | 7 |
| 58 | Segregation-assisted climb of Frank partial dislocations: An alternative route to superintrinsic stacking faults in L12-hardened superalloys. Acta Materialia, 2020, 191, 270-279. | 3.8 | 26 |
| 59 | Mechanical cleaning of graphene using in situ electron microscopy. Nature Communications, 2020, 11, 1743. | 5.8 | 36 |
| 60 | Atomic Structure and Chemical Composition of Planar Fault Structures in Co-Base Superalloys. Minerals, Metals and Materials Series, 2020, , 920-928. | 0.3 | 2 |
| 61 | Interface Molecular Engineering for Laminated Monolithic Perovskite/Silicon Tandem Solar Cells with 80.4% Fill Factor. Advanced Functional Materials, 2019, 29, 1901476. | 7.8 | 43 |
| 62 | Preparation of Graphene-Supported Microwell Liquid Cells for <em>In Situ</em> Transmission Electron Microscopy. Journal of Visualized Experiments, 2019, , . | 0.2 | 6 |
| 63 | Nanoparticles: In Situ Liquid Cell TEM Studies on Etching and Growth Mechanisms of Gold Nanoparticles at a Solidâ€“Liquidâ€“Gas Interface (Adv. Mater. Interfaces 20/2019). Advanced Materials Interfaces, 2019, 6, 1970126. | 1.9 | 1 |
| 64 | In Situ Liquid Cell TEM Studies on Etching and Growth Mechanisms of Gold Nanoparticles at a Solidâ€“Liquidâ€“Gas Interface. Advanced Materials Interfaces, 2019, 6, 1901027. | 1.9 | 23 |
| 65 | In Vitro Endothelialization of Surface-Integrated Nanofiber Networks for Stretchable Blood Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 5740-5751. | 4.0 | 11 |
| 66 | Fabrication and structural characterization of diamond-coated tungsten tips. Diamond and Related Materials, 2019, 97, 107446. | 1.8 | 7 |
| 67 | Lowâ€temperature oxidationâ€induced crack healing in Ti 2 Al 0.5 Sn 0.5 Câ€“Al 2 O 3 composites. International Journal of Applied Ceramic Technology, 2019, 16, 1744-1751. | 1.1 | 2 |
| 68 | Transforming layered MoS<sub>2</sub> into functional MoO<sub>2</sub> nanowires. Nanoscale, 2019, 11, 11687-11695. | 2.8 | 12 |
| 69 | Insights into fundamental deformation processes from advanced in situ transmission electron microscopy. MRS Bulletin, 2019, 44, 443-449. | 1.7 | 16 |
| 70 | Pushing PbS/Metalâ€Halideâ€Perovskite Core/Epitaxialâ€Ligandâ€Shell Nanocrystal Photodetectors beyond 3 Âµm Wavelength. Advanced Functional Materials, 2019, 29, 1807964. | 7.8 | 35 |
| 71 | Scanning Transmission Electron Microscopy and Diffraction in SEM: Novel Approaches for In Situ Studies. Microscopy and Microanalysis, 2019, 25, 25-26. | 0.2 | 0 |
| 72 | Determination of 3D electrostatic field at an electron nano-emitter. Applied Physics Letters, 2019, 114, 013101. | 1.5 | 14 |

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| 73 | Tension/Compression asymmetry of a creep deformed single crystal Co-base superalloy. Acta Materialia, 2019, 166, 597-610. | 3.8 | 48 |
| 74 | Assembling Mesoscaleâ€Structured Organic Interfaces in Perovskite Photovoltaics. Advanced Materials, 2019, 31, e1806516. | 11.1 | 16 |
| 75 | Pressure induced local phase transformation in nanocrystalline tetragonal zirconia microparticles. Scripta Materialia, 2019, 163, 86-90. | 2.6 | 4 |
| 76 | Germanium Template Assisted Integration of Gallium Arsenide Nanocrystals on Silicon: A Versatile Platform for Modern Optoelectronic Materials. Advanced Optical Materials, 2018, 6, 1701329. | 3.6 | 0 |
| 77 | On the grain boundary strengthening effect of boron in Î³/Î³â€² Cobalt-base superalloys. Acta Materialia, 2018, 145, 247-254. | 3.8 | 73 |
| 78 | Early stages of scale formation during oxidation of Î³ / Î³ â€² strengthened single crystal ternary Co-base superalloy at 900â€Â°C. Corrosion Science, 2018, 135, 78-86. | 3.0 | 56 |
| 79 | Impact of N Incorporation on VLS Growth of GaP(N) Nanowires Utilizing UDMH. Nanoscale Research Letters, 2018, 13, 417. | 3.1 | 11 |
| 80 | Understanding the Role of Surface Charge in Cellular Uptake and X-ray-Induced ROS Enhancing of Auâ€“Fe<sub>3</sub>O<sub>4</sub> Nanoheterodimers. ACS Applied Bio Materials, 2018, 1, 2002-2011. | 2.3 | 14 |
| 81 | Inducing a Nanotwinned Grain Structure within the TiO<sub>2</sub> Nanotubes Provides Enhanced Electron Transport and DSSC Efficiencies >10%. Advanced Energy Materials, 2018, 8, 1800981. | 10.2 | 42 |
| 82 | Unravelling the Mechanisms of Goldâ€“Silver Coreâ€“Shell Nanostructure Formation by in Situ TEM Using an Advanced Liquid Cell Design. Nano Letters, 2018, 18, 7222-7229. | 4.5 | 57 |
| 83 | Thermophysical and Mechanical Properties of Advanced Single Crystalline Co-base Superalloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4099-4109. | 1.1 | 58 |
| 84 | In situ manipulation and switching of dislocations in bilayer graphene. Science Advances, 2018, 4, eaat4712. | 4.7 | 33 |
| 85 | Elemental segregation to antiphase boundaries in a crept CoNi-based single crystal superalloy. Scripta Materialia, 2018, 157, 62-66. | 2.6 | 48 |
| 86 | On the diffusive phase transformation mechanism assisted by extended dislocations during creep of a single crystal CoNi-based superalloy. Acta Materialia, 2018, 155, 362-371. | 3.8 | 89 |
| 87 | Butterfly gyroid nanostructures as a time-frozen glimpse of intracellular membrane development. Science Advances, 2017, 3, e1603119. | 4.7 | 109 |
| 88 | Direct observation of dislocation formation and plastic anisotropy in Nb2AlC MAX phase using in situ nanomechanics in transmission electron microscopy. Scripta Materialia, 2017, 137, 104-108. | 2.6 | 14 |
| 89 | Publisherâ€™s note. Ultramicroscopy, 2017, 177, 1-13. | 0.8 | 1 |
| 90 | Correlative micro-diffraction and differential phase contrast study of mean inner potential and subtle beam-specimen interaction. Ultramicroscopy, 2017, 176, 233-245. | 0.8 | 11 |

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| 91 | Suppression of Hysteresis Effects in Organohalide Perovskite Solar Cells. Advanced Materials Interfaces, 2017, 4, 1700007. | 1.9 | 57 |
| 92 | Local temperature measurement in TEM by parallel beam electron diffraction. Ultramicroscopy, 2017, 176, 161-169. | 0.8 | 67 |
| 93 | Nanoscale distribution of Bi atoms in InP1â^'xBix. Scientific Reports, 2017, 7, 12278. | 1.6 | 7 |
| 94 | Deformation behavior of nanocrystalline titania particles accessed by complementary inÂsitu electron microscopy techniques. Journal of the American Ceramic Society, 2017, 100, 5709-5722. | 1.9 | 15 |
| 95 | Memory Effect of Selfâ€Assembled PSâ€bâ€PEO Block Copolymer Films with Selectively Embedded Functionalized TiO<sub>2</sub> Nanoparticles. Advanced Materials Interfaces, 2017, 4, 1700230. | 1.9 | 13 |
| 96 | A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. Science, 2017, 358, 1192-1197. | 6.0 | 554 |
| 97 | Low temperature solid-state wetting and formation of nanowelds in silver nanowires. Nanotechnology, 2017, 28, 385701. | 1.3 | 7 |
| 98 | Overcoming the Interface Losses in Planar Heterojunction Perovskiteâ€Based Solar Cells. Advanced Materials, 2016, 28, 5112-5120. | 11.1 | 188 |
| 99 | Planar defect formation in the Î³â€² phase during high temperature creep in single crystal CoNi-base superalloys. Acta Materialia, 2016, 113, 335-349. | 3.8 | 108 |
| 100 | High efficiency and stability small molecule solar cells developed by bulk microstructure fine-tuning. Nano Energy, 2016, 28, 241-249. | 8.2 | 57 |
| 101 | A flexible method for the preparation of thin film samples for in situ TEM characterization combining shadow-FIB milling and electron-beam-assisted etching. Ultramicroscopy, 2016, 171, 82-88. | 0.8 | 13 |
| 102 | Organic and perovskite solar modules innovated by adhesive top electrode and depth-resolved laser patterning. Energy and Environmental Science, 2016, 9, 2302-2313. | 15.6 | 64 |
| 103 | Texture evolution and microstructural changes during solid-state dewetting: A correlative study by complementary in situ TEM techniques. Acta Materialia, 2016, 115, 230-241. | 3.8 | 23 |
| 104 | Crack healing induced electrical and mechanical properties recovery in a Ti 2 SnC ceramic. Journal of the European Ceramic Society, 2016, 36, 25-32. | 2.8 | 42 |
| 105 | Photophysics of Molecularâ€Weightâ€Induced Losses in Indacenodithienothiopheneâ€Based Solar Cells. Advanced Functional Materials, 2015, 25, 4898-4907. | 7.8 | 61 |
| 106 | A New Crystal Phase Molybdate Yb<sub>2</sub>Mo<sub>4</sub>O<sub>15</sub>: The Synthesis and Upconversion Properties. Particle and Particle Systems Characterization, 2015, 32, 340-346. | 1.2 | 11 |
| 107 | Uniform Surface Modification of 3D BioglassÂ®-Based Scaffolds with Mesoporous Silica Particles (MCM-41) for Enhancing Drug Delivery Capability. Frontiers in Bioengineering and Biotechnology, 2015, 3, 177. | 2.0 | 29 |
| 108 | A comprehensive study on the mechanism behind formation and depletion of Cu<sub>2</sub>ZnSnS<sub>4</sub> (CZTS) phases. CrystEngComm, 2015, 17, 6972-6984. | 1.3 | 37 |

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| 109 | The process of solid-state dewetting of Au thin films studied by in situ scanning transmission electron microscopy. Acta Materialia, 2015, 90, 118-132. | 3.8 | 71 |
| 110 | On the identification of superdislocations in the Î³â€²-phase of single-crystal Ni-base superalloys â€“ An application of the LACBED method to complex microstructures. Acta Materialia, 2015, 87, 34-44. | 3.8 | 17 |
| 111 | Advanced Scale Bridging Microstructure Analysis of Single Crystal Niâ€Base Superalloys. Advanced Engineering Materials, 2015, 17, 216-230. | 1.6 | 117 |
| 112 | The effects of post-processing on the surface and the optical properties of copper indium sulfide quantum dots. Journal of Colloid and Interface Science, 2015, 445, 337-347. | 5.0 | 22 |
| 113 | Encapsulation of silver nanowire networks by atomic layer deposition for indium-free transparent electrodes. Nano Energy, 2015, 16, 196-206. | 8.2 | 68 |
| 114 | Coexistence of both gyroid chiralities in individual butterfly wing scales of Callophrys rubi. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12911-12916. | 3.3 | 58 |
| 115 | Influence of anisotropic elasticity on the mechanical properties of fivefold twinned nanowires. Journal of the Mechanics and Physics of Solids, 2015, 84, 358-379. | 2.3 | 37 |
| 116 | â€œBlackâ€•TiO<sub>2</sub> Nanotubes Formed by High-Energy Proton Implantation Show Noble-Metal-co-Catalyst Free Photocatalytic H<sub>2</sub>-Evolution. Nano Letters, 2015, 15, 6815-6820. | 4.5 | 174 |
| 117 | Combining Atomistic Simulation and X-ray Diffraction for the Characterization of Nanostructures: A Case Study on Fivefold Twinned Nanowires. ACS Nano, 2014, 8, 1629-1638. | 7.3 | 34 |
| 118 | Epitaxial Growth of PbSe Quantum Dots on MoS<sub>2</sub> Nanosheets and their Nearâ€Infrared Photoresponse. Advanced Functional Materials, 2014, 24, 5798-5806. | 7.8 | 134 |
| 119 | A significant cathodic shift in the onset potential of photoelectrochemical water splitting for hematite nanostructures grown from Feâ€“Si alloys. Materials Horizons, 2014, 1, 344-347. | 6.4 | 15 |
| 120 | Black TiO<sub>2</sub> Nanotubes: Cocatalyst-Free Open-Circuit Hydrogen Generation. Nano Letters, 2014, 14, 3309-3313. | 4.5 | 417 |
| 121 | Broadband NIR photoluminescence from Ni<sup>2+</sup>-doped nanocrystalline Baâ€“Al titanate glass ceramics. Journal of Materials Chemistry, 2012, 22, 2582-2588. | 6.7 | 47 |
| 122 | Bioactive glass (type 45S5) nanoparticles: in vitro reactivity on nanoscale and biocompatibility. Journal of Nanoparticle Research, 2012, 14, 1. | 0.8 | 114 |
| 123 | Covalent bulk functionalization of graphene. Nature Chemistry, 2011, 3, 279-286. | 6.6 | 596 |
| 124 | Epitaxial upward transport of Al at the beginning of the Alâ€induced layer exchange process. Physica Status Solidi - Rapid Research Letters, 2011, 5, 172-174. | 1.2 | 2 |
| 125 | Nonâ€Covalent Chemistry of Graphene: Electronic Communication with Dendronized Perylene Bisimides. Advanced Materials, 2010, 22, 5483-5487. | 11.1 | 120 |