# Dao-Hua Zhang

List of Publications by Year
in descending order



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|---|---|---|---|
| 78 papers | 1,118 citations | 394421 19 h-index | 454955 30 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 1556 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Plasmonic semiconductor nanogroove array enhanced broad spectral band millimetre and terahertz wave detection. Light: Science and Applications, 2021, 10, 58. | 16.6 | 32 |
| 2 | Great Enhancement Effect of 20â€“40 nm Ag NPs on Solar-Blind UV Response of the Mixed-Phase MgZnO Detector. ACS Omega, 2021, 6, 6699-6707. | 3.5 | 4 |
| 3 | Nearly total optical transmission of linearly polarized light through transparent electrode composed of GaSb monolithic high-contrast grating integrated with gold. Nanophotonics, 2021, 10, 3823-3830. | 6.0 | 4 |
| 4 | Hybridized surface lattice modes in intercalated 3-disk plasmonic crystals for high figure-of-merit plasmonic sensing. Nanoscale, 2021, 13, 4092-4102. | 5.6 | 9 |
| 5 | Controlling Spontaneous Emission from Perovskite Nanocrystals with Metalâ€“Emitterâ€“Metal Nanostructures. Crystals, 2021, 11, 1. | 2.2 | 17 |
| 6 | Si metasurface half-wave plates demonstrated on a 12-inch CMOS platform. Nanophotonics, 2020, 9, 149-157. | 6.0 | 28 |
| 7 | Strong Plasmonâ€“Exciton Interactions on Nanoantenna Arrayâ€“Monolayer WS<sub>2</sub> Hybrid System. Advanced Optical Materials, 2020, 8, 1901002. | 7.3 | 28 |
| 8 | Effect of Size on the Electronic Structure and Optical Properties of Cubic CsPbBr<sub>3</sub> Quantum Dots. IEEE Journal of Quantum Electronics, 2020, 56, 1-7. | 1.9 | 3 |
| 9 | GeSn/GaAs Hetero-Structure by Magnetron Sputtering. IEEE Journal of Quantum Electronics, 2020, 56, 1-5. | 1.9 | 1 |
| 10 | Growth of Direct Bandgap Ge1â^'xSnx Alloys by Modified Magnetron Sputtering. IEEE Journal of Quantum Electronics, 2020, 56, 1-4. | 1.9 | 0 |
| 11 | Dark Current Analysis of InAsSb-Based Hetero-$p{ext{-}}i{ext{-}}n$ Mid-Infrared Photodiode. IEEE Journal of Quantum Electronics, 2020, 56, 1-6. | 1.9 | 0 |
| 12 | Resonance Modes of Tall Plasmonic Nanostructures and Their Applications for Biosensing. IEEE Journal of Quantum Electronics, 2020, 56, 1-7. | 1.9 | 3 |
| 13 | Band Structure of Strained $mathrm{Ge}_{1-x}~mathrm{Sn}_{x}$ Alloy: A Full-Zone 30-Band ${k}cdot{p}$ Model. IEEE Journal of Quantum Electronics, 2020, 56, 1-8. | 1.9 | 4 |
| 14 | Polarization-Controlled Plasmonic Structured Illumination. Nano Letters, 2020, 20, 2602-2608. | 9.1 | 29 |
| 15 | Virtual Special Issue Dedicated to the 10th International Conference on Materials for Advanced Technologies (ICMAT), Symposium C: Semiconductor Photonics. IEEE Journal of Quantum Electronics, 2020, 56, 1-3. | 1.9 | 0 |
| 16 | High Order Magnetic and Electric Resonant Modes of Split Ring Resonator Metasurface Arrays for Strong Enhancement of Mid-Infrared Photodetection. ACS Applied Materials & Interfaces, 2020, 12, 8835-8844. | 8.0 | 13 |
| 17 | Hybrid Transverseâ€“Longitudinal Modes for High Figureâ€ofâ€Merit Localized Plasmonic Refractometric Sensing in the Visible Spectrum. Advanced Optical Materials, 2020, 8, 1901739. | 7.3 | 6 |
| 18 | Manipulating Coherent Lightâ€“Matter Interaction: Continuous Transition between Strong Coupling and Weak Coupling in MoS<sub>2</sub> Monolayer Coupled with Plasmonic Nanocavities. Advanced Optical Materials, 2019, 7, 1900857. | 7.3 | 48 |

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|---|---|---|---|
| 19 | Ultrathin Highly Luminescent Twoâ€Monolayer Colloidal CdSe Nanoplatelets. Advanced Functional Materials, 2019, 29, 1901028. | 14.9 | 56 |
| 20 | Broadband Absorption Tailoring of SiO2/Cu/ITO Arrays Based on Hybrid Coupled Resonance Mode. Nanomaterials, 2019, 9, 852. | 4.1 | 5 |
| 21 | Ultrathin Dual-Band Metasurface Polarization Converter. IEEE Transactions on Antennas and Propagation, 2019, 67, 4636-4641. | 5.1 | 120 |
| 22 | Concurrent Inhibition and Redistribution of Spontaneous Emission from All Inorganic Perovskite Photonic Crystals. ACS Photonics, 2019, 6, 1331-1337. | 6.6 | 39 |
| 23 | Plasmonâ€"exciton systems with high quantum yield using deterministic aluminium nanostructures with rotational symmetries. Nanoscale, 2019, 11, 20315-20323. | 5.6 | 4 |
| 24 | Asymmetric Split H-Shape Resonator Array for Enhancement of Midwave Infrared Photodetection. IEEE Journal of Quantum Electronics, 2019, 55, 1-6. | 1.9 | 1 |
| 25 | Reliable Fabrication of High Aspect Ratio Plasmonic Nanostructures Based on Seedless Pulsed Electrodeposition. Advanced Materials Technologies, 2019, 4, 1800364. | 5.8 | 10 |
| 26 | Antenna-assisted subwavelength metalâ€"InGaAsâ€"metal structure for sensitive and direct photodetection of millimeter and terahertz waves. Photonics Research, 2019, 7, 89. | 7.0 | 11 |
| 27 | Surface plasmon enhanced infrared photodetection. Opto-Electronic Advances, 2019, 2, 18002601-18002610. | 13.3 | 53 |
| 28 | Localized surface plasmon enhanced infrared photodetectors for uncooled imaging systems. , 2019, , . | | 0 |
| 29 | Polarization-Resolved Plasmon-Modulated Emissions of Quantum Dots Coupled to Aluminum Dimers with Sub-20 nm Gaps. ACS Photonics, 2018, 5, 1566-1574. | 6.6 | 17 |
| 30 | Combining sonicated cold development and pulsed electrodeposition for high aspect ratio sub-10 nm gap gold dimers for sensing applications in the visible spectrum. Nanoscale, 2018, 10, 5221-5228. | 5.6 | 13 |
| 31 | Single Plasmonic Structure Enhanced Dual-band Room Temperature Infrared Photodetection. Scientific Reports, 2018, 8, 1548. | 3.3 | 14 |
| 32 | High quality InAsSb-based heterostructure n-i-p mid-wavelength infrared photodiode. Applied Surface Science, 2018, 427, 605-608. | 6.1 | 19 |
| 33 | Defect-Induced Tunable Permittivity of Epsilon-Near-Zero in Indium Tin Oxide Thin Films. Nanomaterials, 2018, 8, 922. | 4.1 | 20 |
| 34 | InAs0.9Sb0.1-based hetero-p-i-n structure grown on GaSb with high mid-infrared photodetection performance at room temperature. Journal of Materials Science, 2018, 53, 13010-13017. | 3.7 | 7 |
| 35 | Electrically controlled enhancement in plasmonic mid-infrared photodiode. Optics Express, 2018, 26, 5452. | 3.4 | 11 |
| 36 | Room temperature plasmon-enhanced InAs0.91Sb0.09-based heterojunction n-i-p mid-wave infrared photodetector. Applied Physics Letters, 2018, 113, . | 3.3 | 21 |

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|---|---|---|---|
| 37 | Study of dark current in mid-infrared InAsSb-based heteron-i-pphotodiode. Journal Physics D: Applied Physics, 2018, 51, 275102. | 2.8 | 10 |
| 38 | A Simple Method for the Growth of Very Smooth and Ultra-Thin GaSb Films on GaAs (111) Substrate by MOCVD. Journal of Electronic Materials, 2017, 46, 3867-3872. | 2.2 | 3 |
| 39 | Multifunctional Hyperbolic Nanogroove Metasurface for Submolecular Detection. Small, 2017, 13, 1700600. | 10.0 | 46 |
| 40 | Polarization invariant plasmonic nanostructures for sensing applications. Scientific Reports, 2017, 7, 7539. | 3.3 | 21 |
| 41 | Ultra-small v-shaped gold split ring resonators for biosensing using fundamental magnetic resonance in the visible spectrum. Nanotechnology, 2017, 28, 405305. | 2.6 | 11 |
| 42 | Surface plasmon induced direct detection of long wavelength photons. Nature Communications, 2017, 8, 1660. | 12.8 | 51 |
| 43 | Room temperature strong coupling of monolayer WS<inf>2</inf> with gold nanoantennae. , 2017, , . | | 0 |
| 44 | Preferential Excitation of the Hybrid Magneticâ€"Electric Mode as a Limiting Mechanism for Achievable Fundamental Magnetic Resonance in Planar Aluminum Nanostructures. Advanced Materials, 2016, 28, 889-896. | 21.0 | 15 |
| 45 | Observation of the Kinetic Inductance Limitation for the Fundamental Magnetic Resonance in Ultrasmall Gold vâ€Shape Split Ring Resonators. Advanced Optical Materials, 2016, 4, 1047-1052. | 7.3 | 24 |
| 46 | Study of dual color infrared photodetection from n-GaSb/n-InAsSb heterostructures. AIP Advances, 2016, 6, 025120. | 1.3 | 10 |
| 47 | On-chip photonic Fourier transform with surface plasmon polaritons. Light: Science and Applications, 2016, 5, e16034-e16034. | 16.6 | 58 |
| 48 | Surface Plasmon Enhancement on Infrared Photodetection. Procedia Engineering, 2016, 140, 152-158. | 1.2 | 7 |
| 49 | InAs<sub>0.91</sub>Sb<sub>0.09</sub>photoconductor for near and middle infrared photodetection. Physica Scripta, 2016, 91, 115801. | 2.5 | 4 |
| 50 | Surface-enhanced Raman scattering of silver thin films on as-roughened substrate by reactive ion etching. Applied Physics A: Materials Science and Processing, 2016, 122, 1. | 2.3 | 7 |
| 51 | Two-dimensional metallic square-hole array for enhancement of mid-wavelength infrared photodetection. Optical and Quantum Electronics, 2016, 48, 1. | 3.3 | 6 |
| 52 | On-chip discrimination of orbital angular momentum of light with plasmonic nanoslits. Nanoscale, 2016, 8, 2227-2233. | 5.6 | 76 |
| 53 | A sensitive sensor with a double U-shaped ring-based metamaterial. Applied Physics A: Materials Science and Processing, 2014, 117, 537-540. | 2.3 | 2 |
| 54 | Subâ€100â€nm Sized Silver Split Ring Resonator Metamaterials with Fundamental Magnetic Resonance in the Middle Visible Spectrum. Advanced Optical Materials, 2014, 2, 280-285. | 7.3 | 25 |

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|---|---|---|---|
| 55 | Figure of Merit for Optimization of Metalâ€"Dielectric Multilayer Lenses. IEEE Nanotechnology Magazine, 2014, 13, 452-457. | 2.0 | 2 |
| 56 | Sub-10-nm Size and Sub-40-nm Pitch Metal Dot Patterning for Low-Cost Bit Patterned Media Application. IEEE Nanotechnology Magazine, 2014, 13, 496-501. | 2.0 | 7 |
| 57 | Real-Time Angular Sensitivity Compensation of Guided-Mode Resonance Filter. IEEE Photonics Technology Letters, 2014, 26, 231-234. | 2.5 | 12 |
| 58 | Sub-wavelength structures and their optical properties. , 2014, , . | | 0 |
| 59 | Design of sharp bends with transformation plasmonics. Applied Physics A: Materials Science and Processing, 2013, 112, 549-553. | 2.3 | 4 |
| 60 | The new way of controlling aluminum-doped zinc oxide films properties: ion beam post-treatment with cooling system. Applied Physics A: Materials Science and Processing, 2013, 112, 569-573. | 2.3 | 0 |
| 61 | Manipulating Surface Plasmon Polaritons on the meta-surface. , 2013, , . | | 0 |
| 62 | Beam focusing by an anisotropic metal-dielectric multilayer structure. , 2013, , . | | 0 |
| 63 | Large contrast enhancement by sonication assisted cold development process for low dose and ultrahigh resolution patterning on ZEP520A positive tone resist. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 051601. | 1.2 | 17 |
| 64 | The substrate cooling effect of ion beam post treatment on ZAO films properties. , 2012, , . | | 0 |
| 65 | Designing arbitrary nanoscale patterns by a nanocavity waveguide with omnidirectional illumination. Applied Physics B: Lasers and Optics, 2012, 109, 215-219. | 2.2 | 7 |
| 66 | Elimination of spurious solutions from kÂ·p theory with Fourier transform technique and Burt-Foreman operator ordering. Journal of Applied Physics, 2012, 111, 053702. | 2.5 | 6 |
| 67 | Efficient and wide spectrum half-cylindrical hyperlens with symmetrical metallodielectric structure. Applied Physics A: Materials Science and Processing, 2012, 107, 31-34. | 2.3 | 4 |
| 68 | Subwavelength lithography using metallic grating waveguide heterostructure. Applied Physics A: Materials Science and Processing, 2012, 107, 123-126. | 2.3 | 5 |
| 69 | Analysis of wetting layer effect on electronic structures of truncated-pyramid quantum dots. Optical and Quantum Electronics, 2011, 42, 705-711. | 3.3 | 3 |
| 70 | Subwavelength Focusing Using Plasmonic Wavelength-Launched Zone Plate Lenses. Plasmonics, 2011, 6, 269-272. | 3.4 | 7 |
| 71 | Beam splitting and a hollow light cone from a metamaterial based on a metallic nanorod array. , 2010, , . | | 0 |
| 72 | Superlens for lithography. , 2010, , . | | 1 |

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|---|---|---|---|
| 73 | Study of InAs/GaAs quantum dots grown by MOVPE under the safer growth conditions. Journal of Nanoparticle Research, 2007, 9, 877-884. | 1.9 | 2 |
| 74 | Mid-Infrared Emission From InAs Quantum Dots Grown by Metalâ€"Organic Vapor Phase Epitaxy. IEEE Nanotechnology Magazine, 2006, 5, 683-686. | 2.0 | 3 |
| 75 | Temperature dependence of BaTiO3 infrared dielectric properties. Applied Physics Letters, 2006, 88, 212902. | 3.3 | 7 |
| 76 | A Novel Technique to Re-construct 3D Void in Passivated Metal Interconnects. Materials Research Society Symposia Proceedings, 2003, 766, 481. | 0.1 | 1 |
| 77 | Six-band k/spl middot/p approach to the effects of doping on energy dispersion in p-type strained In/sub 0.15/Ga/sub 0.85/As-Al/sub 0.33/Ga/sub 0.67/As quantum-well structures. IEEE Journal of Quantum Electronics, 2000, 36, 835-841. | 1.9 | 1 |
| 78 | Interplays of Dipole and Chargeâ€Transferâ€Plasmon Modes in Capacitively and Conductively Coupled Dimer with High Aspect Ratio Nanogaps. Advanced Optical Materials, 0, , 2100748. | 7.3 | 3 |