

Bethanie J H Stadler

List of Publications by Year in descending order

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87
docs citations

87
times ranked

1626
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Decoding of 23 Unique Magnetic Nanobarcodes. IEEE Transactions on Magnetics, 2022, 58, 1-6. | 2.1 | 1 |
| 2 | Exploring Effects of Magnetic Nanowire Arrangements and Imperfections on First-Order Reversal Curve Diagrams. IEEE Transactions on Magnetics, 2022, 58, 1-6. | 2.1 | 3 |
| 3 | Review of integrated magneto-optical isolators with rare-earth iron garnets for polarization diverse and magnet-free isolation in silicon photonics [Invited]. Optical Materials Express, 2022, 12, 697. | 3.0 | 16 |
| 4 | Magnetic Nanowires toward Authentication. Particle and Particle Systems Characterization, 2021, 38, 2000227. | 2.3 | 12 |
| 5 | Unlocking the decoding of unknown magnetic nanobarcode signatures. Nanoscale Advances, 2021, 3, 584-592. | 4.6 | 11 |
| 6 | Magnetic Nanowire Biolabels Using Ferromagnetic Resonance Identification. ACS Applied Nano Materials, 2021, 4, 3557-3564. | 5.0 | 16 |
| 7 | Selective Detection of Cancer Cells Using Magnetic Nanowires. ACS Applied Materials & Interfaces, 2021, 13, 21060-21066. | 8.0 | 14 |
| 8 | Methods for tuning plasmonic and photonic optical resonances in high surface area porous electrodes. Scientific Reports, 2021, 11, 7656. | 3.3 | 2 |
| 9 | Study of Nanowire-Based Integrated via Technology for CMOS Application in Millimeter-Wave Frequencies. IEEE Microwave and Wireless Components Letters, 2021, 31, 693-696. | 3.2 | 4 |
| 10 | Magnetic Nanowires for Nanobarcoding and Beyond. Sensors, 2021, 21, 4573. | 3.8 | 11 |
| 11 | Realizing the Principles for Remote and Selective Detection of Cancer Cells Using Magnetic Nanowires. Journal of Physical Chemistry B, 2021, 125, 7742-7749. | 2.6 | 5 |
| 12 | Facile decoding of quantitative signatures from magnetic nanowire arrays. Scientific Reports, 2020, 10, 15482. | 3.3 | 22 |
| 13 | Isolation of Cancer-Derived Exosomes Using a Variety of Magnetic Nanostructures: From Fe ₃ O ₄ Nanoparticles to Ni Nanowires. Nanomaterials, 2020, 10, 1662. | 4.1 | 29 |
| 14 | Nonlinear Magnon Scattering Mechanism for Microwave Pumping in Magnetic Films. IEEE Access, 2020, 8, 216960-216968. | 4.2 | 8 |
| 15 | A Phase Analysis Method for Ferromagnetic Resonance Characterization of Magnetic Nanowires. , 2020, , . | | 0 |
| 16 | Permeability and Ferromagnetic Resonance Study for Magnetic Nanowires Substrate With Copper Layer. IEEE Microwave and Wireless Components Letters, 2020, 30, 1065-1068. | 3.2 | 6 |
| 17 | Projection method as a probe for multiplexing/demultiplexing of magnetically enriched biological tissues. RSC Advances, 2020, 10, 13286-13292. | 3.6 | 17 |
| 18 | A Guideline for Effectively Synthesizing and Characterizing Magnetic Nanoparticles for Advancing Nanobiotechnology: A Review. Sensors, 2020, 20, 2554. | 3.8 | 65 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Beyond the qualitative description of complex magnetic nanoparticle arrays using FORC measurement. Nano Express, 2020, 1, 010017. | 2.4 | 18 |
| 20 | Interfacial and Bulk Magnetic Properties of Stoichiometric Cerium Doped Terbium Iron Garnet Polycrystalline Thin Films. Advanced Functional Materials, 2020, 30, 2000409. | 14.9 | 12 |
| 21 | Fabrication of Long-Range Ordered Aluminum Oxide and Fe/Au Multilayered Nanowires for 3-D Magnetic Memory. IEEE Transactions on Magnetics, 2020, 56, 1-6. | 2.1 | 19 |
| 22 | Demultiplexing of Magnetic Nanowires with Overlapping Signatures for Tagged Biological Species. ACS Applied Nano Materials, 2020, 3, 3080-3087. | 5.0 | 22 |
| 23 | Template-assisted electrodeposited magnetic nanowires and their properties for applications. , 2020, , 675-695. | | 6 |
| 24 | Magnetic nanowires for quantitative detection of biopolymers. AIP Advances, 2020, 10, . | 1.3 | 10 |
| 25 | Polyacrylamide Ferrogels with Ni Nanowires. Materials, 2019, 12, 2582. | 2.9 | 28 |
| 26 | Nanowarming using Au-tipped Co ₃₅ /Fe ₆₅ ferromagnetic nanowires. Nanoscale, 2019, 11, 14607-14615. | 5.6 | 30 |
| 27 | Electrodeposited Fe ⁶⁶ Ga Alloy Films for Directly Coupled Noncontact Torque Sensing. IEEE Sensors Journal, 2019, 19, 6655-6661. | 4.7 | 6 |
| 28 | Magnetic Nanowires for RF applications: Ferromagnetic Resonance and Permeability Characterization. , 2019, , . | | 6 |
| 29 | High-Gyrotropy Seedlayer-Free Ce:TbIG for Monolithic Laser-Matched SOI Optical Isolators. ACS Photonics, 2019, 6, 2455-2461. | 6.6 | 18 |
| 30 | Effect of growth temperature on the key properties of aluminum-doped zinc oxide thin films prepared by atomic layer deposition. MRS Communications, 2019, 9, 1105-1110. | 1.8 | 6 |
| 31 | Signal Enhancement for Ferromagnetic Resonance Measurement of Magnetic Nanowire array. , 2019, , . | | 3 |
| 32 | A Ferromagnetic Resonance Measurement System for Small Volume Magnetic Nanowires. , 2019, , . | | 0 |
| 33 | Development of a Biolabeling System Using Ferromagnetic Nanowires. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2019, 3, 134-142. | 3.4 | 18 |
| 34 | Enrichment and Quantification of Epitope-specific CD4+ T Lymphocytes using Ferromagnetic Iron-gold and Nickel Nanowires. Scientific Reports, 2018, 8, 15696. | 3.3 | 11 |
| 35 | Design of self-biased coplanar circulator with ferromagnetic nanowires. , 2018, , . | | 4 |
| 36 | Galfenol Thin Films and Nanowires. Sensors, 2018, 18, 2643. | 3.8 | 12 |

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|----|---|------|-----------|
| 37 | Ferromagnetic Resonance Characterization of Magnetic Nanowires for Biolabel Applications. , 2018, , . | | 2 |
| 38 | Magneto-optical materials and designs for integrated TE- and TM-mode planar waveguide isolators: a review [Invited]. Optical Materials Express, 2018, 8, 3307. | 3.0 | 59 |
| 39 | Magnetostrictive Fe ³⁺ Ga/Cu Nanowires Array With GMR Sensor for Sensing Applied Pressure. IEEE Sensors Journal, 2017, 17, 2015-2020. | 4.7 | 13 |
| 40 | Controlled Electrodeposition and Magnetic Properties of Co ₃₅ Fe ₆₅ Nanowires with High Saturation Magnetization. Journal of the Electrochemical Society, 2017, 164, D13-D22. | 2.9 | 28 |
| 41 | Si-integrated ultrathin films of phase-pure Y ₃ Fe ₅ O ₁₂ (YIG) via novel two-step rapid thermal anneal. Materials Research Letters, 2017, 5, 379-385. | 8.7 | 10 |
| 42 | Magnetic ordering in 45 nm-diameter multisegmented FeGa/Cu nanowires: single nanowires and arrays. Journal of Materials Chemistry C, 2017, 5, 7546-7552. | 5.5 | 18 |
| 43 | Monolithically-Integrated TE-mode 1D Silicon-on-Insulator Isolators using Seedlayer-Free Garnet. Scientific Reports, 2017, 7, 5820. | 3.3 | 45 |
| 44 | Complex Three-Dimensional Magnetic Ordering in Segmented Nanowire Arrays. ACS Nano, 2017, 11, 8311-8319. | 14.6 | 34 |
| 45 | Study of Galfenol direct cytotoxicity and remote microactuation in cells. Biomaterials, 2017, 139, 67-74. | 11.4 | 11 |
| 46 | Sputter-deposited seedlayer-free cerium-doped terbium iron garnets for SOI waveguide isolators. , 2016, , . | | 3 |
| 47 | Electrodeposited Fe and Fe ³⁺ Au nanowires as MRI contrast agents. Chemical Communications, 2016, 52, 12634-12637. | 4.1 | 47 |
| 48 | Mapping the magnetic and crystal structure in cobalt nanowires. Journal of Applied Physics, 2015, 118, 024302. | 2.5 | 34 |
| 49 | Inducing cells to disperse nickel nanowires via integrin-mediated responses. Nanotechnology, 2015, 26, 135102. | 2.6 | 30 |
| 50 | Composition and crystallinity in electrochemically deposited magnetostrictive galfenol (FeGa). Journal of Applied Physics, 2014, 115, . | 2.5 | 13 |
| 51 | Metallic 10 nm Diameter Magnetic Sensors and Large-Scale Ordered Arrays. IEEE Transactions on Magnetics, 2014, 50, 1-5. | 2.1 | 8 |
| 52 | Technique for measurement of magnetostriction in an individual nanowire using atomic force microscopy. Journal of Applied Physics, 2014, 115, 17A919. | 2.5 | 6 |
| 53 | Growth Parameters of Fully Crystallized YIG, Bi:YIG, and Ce:YIG Films With High Faraday Rotations. IEEE Photonics Journal, 2014, 6, 1-8. | 2.0 | 59 |
| 54 | Integrated Magneto-Optical Materials and Isolators: A Review. IEEE Photonics Journal, 2014, 6, 1-15. | 2.0 | 236 |

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|----|--|------|-----------|
| 55 | Magnetic Barcode Nanowires for Osteosarcoma Cell Control, Detection and Separation. IEEE Transactions on Magnetism, 2013, 49, 453-456. | 2.1 | 28 |
| 56 | Fabrication of BioInspired Inorganic Nanocilia Sensors. IEEE Transactions on Magnetism, 2013, 49, 191-196. | 2.1 | 29 |
| 57 | Hysteresis measurement of individual multilayered Fe-Ga/Cu nanowires using magnetic force microscopy. Journal of Applied Physics, 2013, 113, 17A331. | 2.5 | 17 |
| 58 | Electrodeposition and characterization of magnetostrictive galferol (FeGa) thin films for use in microelectromechanical systems. Journal of Applied Physics, 2013, 113, . | 2.5 | 28 |
| 59 | Quasi-Phase-Matched Faraday Rotation in Semiconductor Waveguides With a Magneto-optic Cladding for Monolithically Integrated Optical Isolators. IEEE Photonics Journal, 2013, 5, 6602512-6602512. | 2.0 | 25 |
| 60 | Magnetization reversal mechanisms in 35-nm diameter Fe _{1-x} Ga _x /Cu multilayered nanowires. Journal of Applied Physics, 2012, 111, . | 2.5 | 14 |
| 61 | Epitaxial Fe(1-x)Ga _x /GaAs structures via electrochemistry for spintronics applications. Journal of Applied Physics, 2012, 111, 07E502. | 2.5 | 11 |
| 62 | Low-Resistivity 10 nm Diameter Magnetic Sensors. Nano Letters, 2012, 12, 4102-4109. | 9.1 | 72 |
| 63 | CPP GMR Through Nanowires. IEEE Transactions on Magnetism, 2012, 48, 1744-1750. | 2.1 | 11 |
| 64 | Micromagnetic calculation of spin transfer torque in Co/Cu multilayer nanowires. Journal of Applied Physics, 2011, 109, . | 2.5 | 6 |
| 65 | Electrochemical Synthesis of Magnetostrictive Fe _{1-x} Ga _x /Cu Multilayered Nanowire Arrays with Tailored Magnetic Response. Advanced Functional Materials, 2011, 21, 4677-4683. | 14.9 | 80 |
| 66 | Characterization of the magnetic properties of multilayer magnetostrictive iron-gallium nanowires. Journal of Applied Physics, 2010, 107, . | 2.5 | 28 |
| 67 | Magneto-resistance and spin transfer torque in electrodeposited Co/Cu multilayered nanowire arrays with small diameters. Journal of Applied Physics, 2009, 105, . | 2.5 | 33 |
| 68 | Novel Magneto-resistive Structures Using Self-Assembly and Nanowires on Si. Materials Research Society Symposia Proceedings, 2009, 1160, 1. | 0.1 | 0 |
| 69 | Opening of Hybrid Bandgaps in Two-Dimensional Photonic Crystals of Pb(Mg _{1/3} Nb _{1/3})O ₃ Having Very Low Refractive Index Contrast. IEEE Photonics Technology Letters, 2008, 20, 673-675. | 2.5 | 0 |
| 70 | Controlling the angular response of magneto-resistance in Co _{1-x} Cu multilayered nanowires using Co crystallographic orientation. Journal of Applied Physics, 2008, 103, 07B504. | 2.5 | 12 |
| 71 | Effect of magnetic field on the mechanical properties of magnetostrictive iron-gallium nanowires. Journal of Applied Physics, 2008, 103, 07D305. | 2.5 | 16 |
| 72 | Integration of magneto-optic garnet waveguides and polarizers for optical isolators. , 2008, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Fabrication of Garnet Waveguides and Polarizers for Integrated Optical Isolators. , 2007, , . | | 3 |
| 74 | Garnet Waveguides and Polarizers for Integrated Optical Isolators on Si Substrates. , 2007, , . | | 1 |
| 75 | Magnetic nanowires for acoustic sensors (invited). Journal of Applied Physics, 2006, 99, 08B310. | 2.5 | 152 |
| 76 | Large-scale ordering of porous Si using anodic aluminum oxide grown by directed self-assembly. Applied Physics Letters, 2006, 89, 093106. | 3.3 | 19 |
| 77 | Fabrication and magnetic behavior of Co/Cu multilayered nanowires. Journal of Materials Research, 2006, 21, 2870-2875. | 2.6 | 25 |
| 78 | The effects of oxygen on intergranular exchange and anisotropy dispersion in Co ²⁺ /Pd multilayers for perpendicular magnetic recording media. Journal of Applied Physics, 2006, 99, 08E708. | 2.5 | 0 |
| 79 | Integrating yttrium iron garnet onto nongarnet substrates with faster deposition rates and high reliability. Applied Physics Letters, 2005, 87, 121111. | 3.3 | 56 |
| 80 | Fabrication of Integrated Magneto-Optic Isolator. Materials Research Society Symposia Proceedings, 2004, 834, 145. | 0.1 | 2 |
| 81 | Nanowire Arrays with Specialized Geometries for Magnetoelectronics (Invited). Materials Research Society Symposia Proceedings, 2004, 853, 7. | 0.1 | 0 |
| 82 | Structure analysis of terbium aluminosilicate glass. Materials Research Society Symposia Proceedings, 2004, 817, 152. | 0.1 | 0 |
| 83 | Magnetic nanowires and Y-Junctions. Materials Research Society Symposia Proceedings, 2004, 818, 211. | 0.1 | 0 |
| 84 | Undergraduate Materials Research Initiative: Providing Active Research Experience. Materials Research Society Symposia Proceedings, 2000, 632, 1. | 0.1 | 0 |
| 85 | Integration of Yttrium Iron Garnet Films via Reactive RF Sputtering Bethanie. Materials Research Society Symposia Proceedings, 1998, 517, 481. | 0.1 | 1 |
| 86 | CoPt Nanowires with Low Pt Content for the Catalytic Methanol Oxidation Reaction (MOR). ACS Applied Nano Materials, 0, , . | 5.0 | 8 |