

Ralf Vogelgesang

List of Publications by Year in descending order

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78
papers

4,348
citations

126708

33
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102304

66
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79
all docs

79
docs citations

79
times ranked

5398
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Vectorial near-field coupling. Nature Nanotechnology, 2019, 14, 698-704. | 15.6 | 29 |
| 2 | Field-level characterization of the optical response in J-aggregate/metal hybrid nanostructures by chirp-compensated spectral interferometry. Applied Physics Letters, 2017, 110, . | 1.5 | 9 |
| 3 | Large-Area Two-Dimensional Plasmonic Meta-Glasses and Meta-Crystals: a Comparative Study. Plasmonics, 2017, 12, 1381-1390. | 1.8 | 10 |
| 4 | Interaction between Relativistic Electrons and Mesoscopic Plasmonic Tapers. Microscopy and Microanalysis, 2017, 23, 1534-1535. | 0.2 | 0 |
| 5 | Plasmons in Mesoscopic Gold Tapers. Microscopy and Microanalysis, 2016, 22, 294-295. | 0.2 | 0 |
| 6 | Reflection and Phase Matching in Plasmonic Gold Tapers. Nano Letters, 2016, 16, 6137-6144. | 4.5 | 28 |
| 7 | A linear sensor array with self-bending sensitivity. , 2016, , . | | 1 |
| 8 | Quantitative and Direct Near-Field Analysis of Plasmonic-Induced Transparency and the Observation of a Plasmonic Breathing Mode. ACS Nano, 2016, 10, 2214-2224. | 7.3 | 16 |
| 9 | Gap-Plasmon-Enhanced Nanofocusing Near-Field Microscopy. ACS Photonics, 2016, 3, 223-232. | 3.2 | 63 |
| 10 | Suppression of Radiative Damping and Enhancement of Second Harmonic Generation in Bullâ€™s Eye Nanoresonators. ACS Nano, 2016, 10, 475-483. | 7.3 | 11 |
| 11 | Real-space Imaging of Plasmonic Modes of Gold Tapers by EFTEM and EELS. Microscopy and Microanalysis, 2015, 21, 2221-2222. | 0.2 | 3 |
| 12 | Interplay Between Strong Coupling and Radiative Damping in Hybrid Excitonic-Plasmonic Nanostructures. Nano-optics and Nanophotonics, 2015, , 119-136. | 0.2 | 0 |
| 13 | Excitation of Mesoscopic Plasmonic Tapers by Relativistic Electrons: Phase Matching versus Eigenmode Resonances. ACS Nano, 2015, 9, 7641-7648. | 7.3 | 61 |
| 14 | Gap Mode Formation in Metallic, Nanofocusing SNOM Tapers for High Spatial Resolution Broadband Spectroscopy. , 2015, , . | | 0 |
| 15 | Tetradymites as Natural Hyperbolic Materials for the Near-Infrared to Visible. ACS Photonics, 2014, 1, 1285-1289. | 3.2 | 119 |
| 16 | Observation of Lorentzian lineshapes in the room temperature optical spectra of strongly coupled J-aggregate/metal hybrid nanostructures by linear two-dimensional optical spectroscopy. Journal of Optics (United Kingdom), 2014, 16, 114021. | 1.0 | 13 |
| 17 | Interplay between Strong Coupling and Radiative Damping of Excitons and Surface Plasmon Polaritons in Hybrid Nanostructures. ACS Nano, 2014, 8, 1056-1064. | 7.3 | 97 |
| 18 | A hydrodynamically optimized nano-electrospray ionization source and vacuum interface. Analyst, The, 2014, 139, 1856. | 1.7 | 45 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Toward Plasmonics with Nanometer Precision: Nonlinear Optics of Helium-Ion Milled Gold Nanoantennas. <i>Nano Letters</i> , 2014, 14, 4778-4784. | 4.5 | 174 |
| 20 | On the symmetry and topology of plasmonic eigenmodes in heptamer and hexamer nanocavities. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 116, 947-954. | 1.1 | 20 |
| 21 | Plasmons of Hexamer and Pentamer Nanocavities Probed with Swift Electrons. <i>Microscopy and Microanalysis</i> , 2014, 20, 580-581. | 0.2 | 0 |
| 22 | Vibrational near-field mapping of planar and buried three-dimensional plasmonic nanostructures. <i>Nature Communications</i> , 2013, 4, 2237. | 5.8 | 103 |
| 23 | Phase Engineering of Subwavelength Unidirectional Plasmon Launchers. <i>Advanced Optical Materials</i> , 2013, 1, 434-437. | 3.6 | 5 |
| 24 | Numerical simulations of interference effects in photon-assisted electron energy-loss spectroscopy. <i>New Journal of Physics</i> , 2013, 15, 053013. | 1.2 | 34 |
| 25 | k-space imaging of the eigenmodes of sharp gold tapers for scanning near-field optical microscopy. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 603-610. | 1.5 | 30 |
| 26 | Recent Advances in Nearfield Optical Analysis and Description of Amorphous Metamaterials. <i>Nano-optics and Nanophotonics</i> , 2013, , 169-200. | 0.2 | 0 |
| 27 | Plasmonic grating as a nonlinear converter-coupler. <i>Optics Express</i> , 2012, 20, 1392. | 1.7 | 17 |
| 28 | Waveguides: Bottom-Up Tailoring of Plasmonic Nanopeapods Making Use of the Periodical Topography of Carbon Nanocoil Templates (<i>Adv. Funct. Mater.</i> 24/2012). <i>Advanced Functional Materials</i> , 2012, 22, 5284-5284. | 7.8 | 0 |
| 29 | Reciprocity Theory of Apertureless Scanning Near-Field Optical Microscopy with Point-Dipole Probes. <i>ACS Nano</i> , 2012, 6, 8173-8182. | 7.3 | 36 |
| 30 | Bottom-Up Tailoring of Plasmonic Nanopeapods Making Use of the Periodical Topography of Carbon Nanocoil Templates. <i>Advanced Functional Materials</i> , 2012, 22, 5157-5165. | 7.8 | 13 |
| 31 | Toroidal Plasmonic Eigenmodes in Oligomer Nanocavities for the Visible. <i>Nano Letters</i> , 2012, 12, 5239-5244. | 4.5 | 141 |
| 32 | Breaking the Mode Degeneracy of Surface Plasmon Resonances in a Triangular System. <i>Langmuir</i> , 2012, 28, 8867-8873. | 1.6 | 28 |
| 33 | Towards electrical detection of plasmons in all-silicon pin-diodes. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 773-777. | 0.7 | 1 |
| 34 | Plasmonic antennas, positioning, and coupling of individual quantum systems. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 666-677. | 0.7 | 15 |
| 35 | Long-Distance Indirect Excitation of Nanoplasmonic Resonances. <i>Nano Letters</i> , 2011, 11, 2765-2769. | 4.5 | 36 |
| 36 | Resonant wedge-plasmon modes in single-crystalline gold nanoplatelets. <i>Physical Review B</i> , 2011, 83, . | 1.1 | 81 |

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|----|---|-----|-----------|
| 37 | Hybridized Metal Slit Eigenmodes as an Illustration of Babinet's Principle. ACS Nano, 2011, 5, 6701-6706. | 7.3 | 54 |
| 38 | Near-Field Dynamics of Optical Yagi-Uda Nanoantennas. Nano Letters, 2011, 11, 2819-2824. | 4.5 | 105 |
| 39 | Plasmonic Oligomers: The Role of Individual Particles in Collective Behavior. ACS Nano, 2011, 5, 2042-2050. | 7.3 | 255 |
| 40 | 3D optical Yagi-Uda nanoantenna array. Nature Communications, 2011, 2, 267. | 5.8 | 292 |
| 41 | Global Surface Parameterization by Smooth Facet Selection. Journal of Computational and Theoretical Nanoscience, 2011, 8, 1631-1638. | 0.4 | 3 |
| 42 | Apertureless near-field optical microscopy: Differences between heterodyne interferometric and non-interferometric images. Ultramicroscopy, 2011, 111, 1469-1474. | 0.8 | 9 |
| 43 | Relating localized nanoparticle resonances to an associated antenna problem. Physical Review B, 2011, 84, . | 1.1 | 28 |
| 44 | Linear Plasmonic Nano-Antennas: Experiment, Simulation, and Theory. , 2010, , . | | 0 |
| 45 | Versatile optical access to the tunnel gap in a low-temperature scanning tunneling microscope. Review of Scientific Instruments, 2010, 81, 113102. | 0.6 | 33 |
| 46 | Surface plasmon coupling to nanoscale Schottky-type electrical detectors. Applied Physics Letters, 2010, 97, . | 1.5 | 23 |
| 47 | Real-space imaging of nanoplasmonic resonances. Analyst, The, 2010, 135, 1175. | 1.7 | 66 |
| 48 | Plasmonic Activity of Large-Area Gold Nanodot Arrays on Arbitrary Substrates. Nano Letters, 2010, 10, 47-51. | 4.5 | 20 |
| 49 | Transition from Isolated to Collective Modes in Plasmonic Oligomers. Nano Letters, 2010, 10, 2721-2726. | 4.5 | 544 |
| 50 | Plasmonic Nanowire Antennas: Experiment, Simulation, and Theory. Nano Letters, 2010, 10, 3596-3603. | 4.5 | 194 |
| 51 | Glimpsing the Weak Magnetic Field of Light. Science, 2009, 326, 529-530. | 6.0 | 34 |
| 52 | Electrospray Ion Beam Deposition: Soft-Landing and Fragmentation of Functional Molecules at Solid Surfaces. ACS Nano, 2009, 3, 2901-2910. | 7.3 | 92 |
| 53 | Full simulations of the apertureless scanning near field optical microscopy signal: achievable resolution and contrast. Optics Express, 2009, 17, 2518. | 1.7 | 35 |
| 54 | Fabry-Pérot Resonances in One-Dimensional Plasmonic Nanostructures. Nano Letters, 2009, 9, 2372-2377. | 4.5 | 276 |

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|----|--|-----|-----------|
| 55 | Plasmonic nanostructures in apertureless scanning near-field optical microscopy (aSNOM). <i>Physica Status Solidi (B): Basic Research</i> , 2008, 245, 2255-2260. | 0.7 | 20 |
| 56 | Beyond lock-in analysis for volumetric imaging in apertureless scanning near-field optical microscopy. <i>Journal of Microscopy</i> , 2008, 229, 365-370. | 0.8 | 6 |
| 57 | Amplitude- and phase-resolved optical near fields of split-ring-resonator-based metamaterials. <i>Optics Letters</i> , 2008, 33, 848. | 1.7 | 78 |
| 58 | Direct Near-Field Optical Imaging of Higher Order Plasmonic Resonances. <i>Nano Letters</i> , 2008, 8, 3155-3159. | 4.5 | 201 |
| 59 | Local detection of spin-orbit splitting by scanning tunneling spectroscopy. <i>Physical Review B</i> , 2007, 75, . | 1.1 | 81 |
| 60 | Electronic Band Structure Mapping of Nanotube Transistors by Scanning Photocurrent Microscopy. <i>Small</i> , 2007, 3, 2038-2042. | 5.2 | 40 |
| 61 | Local measurement of hot-electron phase-coherence at metal surfaces. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 88, 443-447. | 1.1 | 1 |
| 62 | Apertureless scanning near field optical microscope with sub-10nm resolution. <i>Review of Scientific Instruments</i> , 2006, 77, 043703. | 0.6 | 99 |
| 63 | Optical nonlinearity versus mechanical anharmonicity contrast in dynamic mode apertureless scanning near-field optical microscopy. <i>Applied Physics Letters</i> , 2005, 87, 163115. | 1.5 | 15 |
| 64 | The phonon density of states in amorphous materials. <i>Journal of Physics Condensed Matter</i> , 2003, 15, S2335-S2341. | 0.7 | 7 |
| 65 | Quantum Coherence of Image-Potential States. <i>Physical Review Letters</i> , 2003, 91, 106802. | 2.9 | 89 |
| 66 | Polarized ultraviolet Raman spectroscopy of $\hat{\Gamma}^2$ -Si ₃ N ₄ . <i>Journal of Applied Physics</i> , 2002, 92, 3103-3106. | 1.1 | 7 |
| 67 | The elastic constants of single crystal $\hat{\Gamma}^2$ -Si ₃ N ₄ . <i>Applied Physics Letters</i> , 2000, 76, 982-984. | 1.5 | 84 |
| 68 | Wavelength-dependent optical degradation of green InGaIn laser diodes. <i>Applied Physics Letters</i> , 1999, 75, 1351-1353. | 1.5 | 7 |
| 69 | Lattice parameters and optical characterization of Cd _{1-x} Mg _x Se alloys grown by vertical gradient freezing technique. <i>Journal of Crystal Growth</i> , 1999, 203, 51-60. | 0.7 | 12 |
| 70 | Zeeman Effect of Lyman Transitions: Electronic Raman Spectrum of Boron Acceptors in Diamond. <i>Physica Status Solidi (B): Basic Research</i> , 1999, 215, 109-114. | 0.7 | 1 |
| 71 | Electronic Raman and infrared spectra of acceptors in isotopically controlled diamonds. <i>Physical Review B</i> , 1998, 57, 15315-15327. | 1.1 | 37 |
| 72 | Infrared and Raman Spectroscopy of Acceptor-Bound Holes: Boron Acceptors in Isotopically Controlled Blue Diamonds. <i>Physica Status Solidi (B): Basic Research</i> , 1998, 210, 451-458. | 0.7 | 1 |

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|----|---|-----|-----------|
| 73 | Photoluminescence of short-period GaAs/AlAs superlattices: A hydrostatic pressure and temperature study. <i>Physical Review B</i> , 1998, 58, 7222-7229. | 1.1 | 28 |
| 74 | Multiphonon Raman and infrared spectra of isotopically controlled diamond. <i>Physical Review B</i> , 1998, 58, 5408-5416. | 1.1 | 44 |
| 75 | MnSe: Rocksalt versus zinc-blende structure. <i>Physical Review B</i> , 1998, 58, 6700-6703. | 1.1 | 12 |
| 76 | Electronic Raman and Infrared Spectra of Isotopically Controlled "Blue" Diamonds. <i>Physical Review Letters</i> , 1997, 79, 1706-1709. | 2.9 | 27 |
| 77 | Indirect transitions, free and impurity-bound excitons in gallium phosphide: A revisit with modulation and photoluminescence spectroscopy. <i>Journal of Applied Physics</i> , 1997, 82, 4331-4337. | 1.1 | 18 |
| 78 | Brillouin and Raman scattering in natural and isotopically controlled diamond. <i>Physical Review B</i> , 1996, 54, 3989-3999. | 1.1 | 131 |