# Rainer Hillenbrand

List of Publications by Year
in descending order

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| 187 | 19,576 | 9756 | 11030 |
|---|---|---|---|
| papers | citations | 73 h-index | 137 g-index |

| 191 | 191 | 191 | 12764 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Optical nano-imaging of gate-tunable graphene plasmons. Nature, 2012, 487, 77-81. | 13.7 | 1,820 |
| 2 | Highly confined low-loss plasmons in grapheneâ€“boron nitride heterostructures. Nature Materials, 2015, 14, 421-425. | 13.3 | 847 |
| 3 | Phonon-enhanced lightâ€“matter interaction at the nanometre scale. Nature, 2002, 418, 159-162. | 13.7 | 733 |
| 4 | Near-field microscopy by elastic light scattering from a tip. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 787-805. | 1.6 | 518 |
| 5 | Near-Field Microscopy Through a SiC Superlens. Science, 2006, 313, 1595-1595. | 6.0 | 513 |
| 6 | In-plane anisotropic and ultra-low-loss polaritons in a natural van der Waals crystal. Nature, 2018, 562, 557-562. | 13.7 | 506 |
| 7 | Terahertz Near-Field Nanoscopy of Mobile Carriers in Single Semiconductor Nanodevices. Nano Letters, 2008, 8, 3766-3770. | 4.5 | 483 |
| 8 | Nano-FTIR Absorption Spectroscopy of Molecular Fingerprints at 20Ânm Spatial Resolution. Nano Letters, 2012, 12, 3973-3978. | 4.5 | 477 |
| 9 | Pseudoheterodyne detection for background-free near-field spectroscopy. Applied Physics Letters, 2006, 89, 101124. | 1.5 | 426 |
| 10 | Controlling the near-field oscillations of loaded plasmonic nanoantennas. Nature Photonics, 2009, 3, 287-291. | 15.6 | 424 |
| 11 | Complex Optical Constants on a Subwavelength Scale. Physical Review Letters, 2000, 85, 3029-3032. | 2.9 | 396 |
| 12 | Infrared hyperbolic metasurface based on nanostructured van der Waals materials. Science, 2018, 359, 892-896. | 6.0 | 344 |
| 13 | Structural analysis and mapping of individual protein complexes by infrared nanospectroscopy. Nature Communications, 2013, 4, 2890. | 5.8 | 319 |
| 14 | Controlling graphene plasmons with resonant metal antennas and spatial conductivity patterns. Science, 2014, 344, 1369-1373. | 6.0 | 292 |
| 15 | Analytical model for quantitative prediction of material contrasts in scattering-type near-field optical microscopy. Optics Express, 2007, 15, 8550. | 1.7 | 276 |
| 16 | Direct observation of ultraslow hyperbolic polariton propagation with negative phase velocity. Nature Photonics, 2015, 9, 674-678. | 15.6 | 268 |
| 17 | Acoustic terahertz graphene plasmons revealed by photocurrent nanoscopy. Nature Nanotechnology, 2017, 12, 31-35. | 15.6 | 257 |
| 18 | Boron nitride nanoresonators for phonon-enhanced molecular vibrational spectroscopy at the strong coupling limit. Light: Science and Applications, 2018, 7, 17172-17172. | 7.7 | 257 |

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|---|---|---|---|
| 19 | Infrared-spectroscopic nanoimaging with a thermal source. Nature Materials, 2011, 10, 352-356. | 13.3 | 254 |
| 20 | Tuning quantum nonlocal effects in graphene plasmonics. Science, 2017, 357, 187-191. | 6.0 | 251 |
| 21 | Infrared Spectroscopic Mapping of Single Nanoparticles and Viruses at Nanoscale Resolution. Nano Letters, 2006, 6, 1307-1310. | 4.5 | 226 |
| 22 | Electronic and plasmonic phenomena at graphene grain boundaries. Nature Nanotechnology, 2013, 8, 821-825. | 15.6 | 226 |
| 23 | Resolving the electromagnetic mechanism of surface-enhanced light scattering at single hot spots. Nature Communications, 2012, 3, 684. | 5.8 | 207 |
| 24 | Nanofocusing of mid-infrared energy with tapered transmission lines. Nature Photonics, 2011, 5, 283-287. | 15.6 | 203 |
| 25 | Designer Magnetoplasmonics with Nickel Nanoferromagnets. Nano Letters, 2011, 11, 5333-5338. | 4.5 | 203 |
| 26 | Nanoscale polymer recognition by spectral signature in scattering infrared near-field microscopy. Applied Physics Letters, 2004, 85, 5064-5066. | 1.5 | 185 |
| 27 | Material-specific mapping of metal/semiconductor/dielectric nanosystems at 10 nm resolution by backscattering near-field optical microscopy. Applied Physics Letters, 2002, 80, 25-27. | 1.5 | 178 |
| 28 | Plasmonic Nickel Nanoantennas. Small, 2011, 7, 2341-2347. | 5.2 | 175 |
| 29 | Pure optical contrast in scattering-type scanning near-field microscopy. Journal of Microscopy, 2001, 202, 77-83. | 0.8 | 172 |
| 30 | Real-space mapping of tailored sheet and edge plasmons in graphene nanoresonators. Nature Photonics, 2016, 10, 239-243. | 15.6 | 167 |
| 31 | Coherent imaging of nanoscale plasmon patterns with a carbon nanotube optical probe. Applied Physics Letters, 2003, 83, 368-370. | 1.5 | 157 |
| 32 | Near-field imaging of mid-infrared surface phonon polariton propagation. Applied Physics Letters, 2005, 87, 081103. | 1.5 | 157 |
| 33 | Performance of visible and mid-infrared scattering-type near-field optical microscopes. Journal of Microscopy, 2003, 210, 311-314. | 0.8 | 155 |
| 34 | Experimental demonstration of the microscopic origin of circular dichroism in two-dimensional metamaterials. Nature Communications, 2016, 7, 12045. | 5.8 | 155 |
| 35 | Nanohole Plasmons in Optically Thin Gold Films. Journal of Physical Chemistry C, 2007, 111, 1207-1212. | 1.5 | 151 |
| 36 | Quantitative Measurement of Local Infrared Absorption and Dielectric Function with Tip-Enhanced Near-Field Microscopy. Journal of Physical Chemistry Letters, 2013, 4, 1526-1531. | 2.1 | 151 |

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| 37 | Phase-Resolved Mapping of the Near-Field Vector and Polarization State in Nanoscale Antenna Gaps. Nano Letters, 2010, 10, 3524-3528. | 4.5 | 150 |
| 38 | Nanoscale-resolved subsurface imaging by scattering-type near-field optical microscopy. Optics Express, 2005, 13, 8893. | 1.7 | 145 |
| 39 | Experimental Verification of the Spectral Shift between Near- and Far-Field Peak Intensities of Plasmonic Infrared Nanoantennas. Physical Review Letters, 2013, 110, 203902. | 2.9 | 144 |
| 40 | Fast and Sensitive Terahertz Detection Using an Antenna-Integrated Graphene pn Junction. Nano Letters, 2019, 19, 2765-2773. | 4.5 | 144 |
| 41 | Interface nano-optics with van der Waals polaritons. Nature, 2021, 597, 187-195. | 13.7 | 143 |
| 42 | Subwavelength-scale tailoring of surface phonon polaritons by focused ion-beam implantation. Nature Materials, 2004, 3, 606-609. | 13.3 | 141 |
| 43 | Thermoelectric detection and imaging of propagating grapheneÂplasmons. Nature Materials, 2017, 16, 204-207. | 13.3 | 141 |
| 44 | Hyperspectral infrared nanoimaging of organic samples based on Fourier transform infrared nanospectroscopy. Nature Communications, 2017, 8, 14402. | 5.8 | 133 |
| 45 | Real-Space Mapping of Fano Interference in Plasmonic Metamolecules. Nano Letters, 2011, 11, 3922-3926. | 4.5 | 129 |
| 46 | Broad spectral tuning of ultra-low-loss polaritons in a van der Waals crystal by intercalation. Nature Materials, 2020, 19, 964-968. | 13.3 | 129 |
| 47 | Nanoscale Free-Carrier Profiling of Individual Semiconductor Nanowires by Infrared Near-Field Nanoscopy. Nano Letters, 2010, 10, 1387-1392. | 4.5 | 122 |
| 48 | Strong Plasmon Reflection at Nanometer-Size Gaps in Monolayer Graphene on SiC. Nano Letters, 2013, 13, 6210-6215. | 4.5 | 121 |
| 49 | Nanoimaging of resonating hyperbolic polaritons in linear boron nitride antennas. Nature Communications, 2017, 8, 15624. | 5.8 | 121 |
| 50 | Higher-harmonics generation in tapping-mode atomic-force microscopy: Insights into the tipâ€“sample interaction. Applied Physics Letters, 2000, 76, 3478-3480. | 1.5 | 120 |
| 51 | Resonant Antenna Probes for Tip-Enhanced Infrared Near-Field Microscopy. Nano Letters, 2013, 13, 1065-1072. | 4.5 | 114 |
| 52 | Nanoscale terahertz scanning probe microscopy. Nature Photonics, 2021, 15, 558-569. | 15.6 | 112 |
| 53 | Probing low-energy hyperbolic polaritons in van der Waals crystals with an electron microscope. Nature Communications, 2017, 8, 95. | 5.8 | 111 |
| 54 | Optical Nanoimaging of Hyperbolic Surface Polaritons at the Edges of van der Waals Materials. Nano Letters, 2017, 17, 228-235. | 4.5 | 107 |

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| 55 | Influence of the tip in near-field imaging of nanoparticle plasmonic modes: Weak and strong coupling regimes. Physical Review B, 2009, 79, . | 1.1 | 104 |
| 56 | Substrate-enhanced infrared near-field spectroscopy. Optics Express, 2008, 16, 1529. | 1.7 | 103 |
| 57 | Infrared nanoscopy of strained semiconductors. Nature Nanotechnology, 2009, 4, 153-157. | 15.6 | 102 |
| 58 | Optical oscillation modes of plasmon particles observed in direct space by phase-contrast near-field microscopy. Applied Physics B: Lasers and Optics, 2001, 73, 239-243. | 1.1 | 97 |
| 59 | High performance mixed matrix membranes (MMMs) composed of ZIF-94 filler and 6FDA-DAM polymer. Journal of Membrane Science, 2018, 550, 198-207. | 4.1 | 95 |
| 60 | Longitudinal and transverse coupling in infrared gold nanoantenna arrays: long range versus short range interaction regimes. Optics Express, 2011, 19, 15047. | 1.7 | 94 |
| 61 | Nanoscale-resolved chemical identification of thin organic films using infrared near-field spectroscopy and standard Fourier transform infrared references. Applied Physics Letters, 2015, 106, . | 1.5 | 92 |
| 62 | Amplitude- and Phase-Resolved Near-Field Mapping of Infrared Antenna Modes by Transmission-Mode Scattering-Type Near-Field Microscopy. Journal of Physical Chemistry C, 2010, 114, 7341-7345. | 1.5 | 91 |
| 63 | Recovery of Permittivity and Depth from Near-Field Data as a Step toward Infrared Nanotomography. ACS Nano, 2014, 8, 6911-6921. | 7.3 | 91 |
| 64 | Real-space observation of vibrational strong coupling between propagating phonon polaritons and organic molecules. Nature Photonics, 2021, 15, 197-202. | 15.6 | 90 |
| 65 | Terahertz Nanofocusing with Cantilevered Terahertz-Resonant Antenna Tips. Nano Letters, 2017, 17, 6526-6533. | 4.5 | 84 |
| 66 | Subsurface chemical nanoidentification by nano-FTIR spectroscopy. Nature Communications, 2020, 11, 3359. | 5.8 | 84 |
| 67 | Synthetic optical holography for rapid nanoimaging. Nature Communications, 2014, 5, 3499. | 5.8 | 83 |
| 68 | Simultaneous IR Material Recognition and Conductivity Mapping by Nanoscale Nearâ€Field Microscopy. Advanced Materials, 2007, 19, 2209-2212. | 11.1 | 82 |
| 69 | Infrared Imaging of Single Nanoparticles via Strong Field Enhancement in a Scanning Nanogap. Physical Review Letters, 2006, 97, 060801. | 2.9 | 81 |
| 70 | Mapping the near fields of plasmonic nanoantennas by scatteringâ€type scanning nearâ€field optical microscopy. Laser and Photonics Reviews, 2015, 9, 637-649. | 4.4 | 81 |
| 71 | Focusing of surface phonon polaritons. Applied Physics Letters, 2008, 92, . | 1.5 | 80 |
| 72 | Efficient Coupling of Light to Graphene Plasmons by Compressing Surface Polaritons with Tapered Bulk Materials. Nano Letters, 2014, 14, 2896-2901. | 4.5 | 80 |

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| 74 | Nanomechanical Resonance Tuning and Phase Effects in Optical Near-Field Interaction. Nano Letters, 2004, 4, 1669-1672. | 4.5 | 79 |
| 75 | Importance of Plasmonic Scattering for an Optimal Enhancement of Vibrational Absorption in SEIRA with Linear Metallic Antennas. Journal of Physical Chemistry C, 2015, 119, 26652-26662. | 1.5 | 75 |
| 76 | Nano-imaging of intersubband transitions in van der Waals quantum wells. Nature Nanotechnology, 2018, 13, 1035-1041. | 15.6 | 75 |
| 77 | Probes for Ultrasensitive THz Nanoscopy. ACS Photonics, 2019, 6, 1279-1288. | 3.2 | 75 |
| 78 | Nanoscale Infrared Absorption Spectroscopy of Individual Nanoparticles Enabled by Scattering-Type Near-Field Microscopy. ACS Nano, 2011, 5, 6494-6499. | 7.3 | 73 |
| 79 | Phase-resolved terahertz self-detection near-field microscopy. Optics Express, 2018, 26, 18423. | 1.7 | 70 |
| 80 | All-electronic terahertz nanoscopy. Optica, 2018, 5, 159. | 4.8 | 70 |
| 81 | Collective near-field coupling and nonlocal phenomena in infrared-phononic metasurfaces for nano-light canalization. Nature Communications, 2020, 11, 3663. | 5.8 | 70 |
| 82 | Understanding the Image Contrast of Material Boundaries in IR Nanoscopy Reaching 5 nm Spatial Resolution. ACS Photonics, 2018, 5, 3372-3378. | 3.2 | 69 |
| 83 | Hyperspectral time-domain terahertz nano-imaging. Optics Express, 2019, 27, 24231. | 1.7 | 69 |
| 84 | Real-Space Mapping of the Chiral Near-Field Distributions in Spiral Antennas and Planar Metasurfaces. Nano Letters, 2016, 16, 663-670. | 4.5 | 64 |
| 85 | Enhanced resolution in subsurface near-field optical microscopy. Optics Express, 2012, 20, 593. | 1.7 | 63 |
| 86 | Electrical 2Ї€ phase control of infrared light in a 350-nm footprint using graphene plasmons. Nature Photonics, 2017, 11, 421-424. | 15.6 | 63 |
| 87 | Plasmons in Cylindrical 2D Materials as a Platform for Nanophotonic Circuits. ACS Photonics, 2015, 2, 280-286. | 3.2 | 58 |
| 88 | THz Near-Field Imaging of Extreme Subwavelength Metal Structures. ACS Photonics, 2020, 7, 687-694. | 3.2 | 58 |
| 89 | Nanoscale Resolved Infrared Probing of Crystal Structure and of Plasmonâ^'Phonon Coupling. Nano Letters, 2006, 6, 774-778. | 4.5 | 57 |
| 90 | Infrared spectroscopic near-field mapping of single nanotransistors. Nanotechnology, 2010, 21, 235702. | 1.3 | 56 |

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| 91 | Launching of hyperbolic phonon-polaritons in h-BN slabs by resonant metal plasmonic antennas. Nature Communications, 2019, 10, 3242. | 5.8 | 56 |
| 92 | Near-Field Imaging of Phased Array Metasurfaces. Nano Letters, 2015, 15, 3851-3858. | 4.5 | 55 |
| 93 | Near-field amplitude and phase recovery using phase-shifting interferometry. Optics Express, 2008, 16, 494. | 1.7 | 54 |
| 94 | Correlative infraredâ€“electron nanoscopy reveals the local structureâ€“conductivity relationship in zinc oxide nanowires. Nature Communications, 2012, 3, 1131. | 5.8 | 53 |
| 95 | Plasmonic antenna coupling to hyperbolic phonon-polaritons for sensitive and fast mid-infrared photodetection with graphene. Nature Communications, 2020, 11, 4872. | 5.8 | 53 |
| 96 | Visualizing the near-field coupling and interference of bonding and anti-bonding modes in infrared dimer nanoantennas. Optics Express, 2013, 21, 1270. | 1.7 | 52 |
| 97 | Deeply subwavelength phonon-polaritonic crystal made of a van der Waals material. Nature Communications, 2019, 10, 42. | 5.8 | 51 |
| 98 | Material-Specific Infrared Recognition of Single Sub-10 nm Particles by Substrate-Enhanced Scattering-Type Near-Field Microscopy. Nano Letters, 2007, 7, 3177-3181. | 4.5 | 50 |
| 99 | Local excitation and interference of surface phonon polaritons studied by nearâ€field infrared microscopy. Journal of Microscopy, 2008, 229, 389-395. | 0.8 | 50 |
| 100 | Dual-Scattering Near-Field Microscope for Correlative Nanoimaging of SERS and Electromagnetic Hotspots. Nano Letters, 2017, 17, 2667-2673. | 4.5 | 49 |
| 101 | Planar refraction and lensing of highly confined polaritons in anisotropic media. Nature Communications, 2021, 12, 4325. | 5.8 | 48 |
| 102 | Nanofocusing of Hyperbolic Phonon Polaritons in a Tapered Boron Nitride Slab. ACS Photonics, 2016, 3, 924-929. | 3.2 | 44 |
| 103 | High performance crystalline nanocellulose using an ancestral endoglucanase. Communications Materials, 2020, 1, . | 2.9 | 44 |
| 104 | Towards phonon photonics: scattering-type near-field optical microscopy reveals phonon-enhanced near-field interaction. Ultramicroscopy, 2004, 100, 421-427. | 0.8 | 43 |
| 105 | Acoustic Graphene Plasmon Nanoresonators for Field-Enhanced Infrared Molecular Spectroscopy. ACS Photonics, 2017, 4, 3089-3097. | 3.2 | 43 |
| 106 | Intrinsic Plasmonâ€“Phonon Interactions in Highly Doped Graphene: AÂNear-Field Imaging Study. Nano Letters, 2017, 17, 5908-5913. | 4.5 | 42 |
| 107 | Temperatureâ€depending Raman lineâ€shift of silicon carbide. Journal of Raman Spectroscopy, 2009, 40, 1867-1874. | 1.2 | 39 |
| 108 | Strong coupling between phonon-polaritons and plasmonic nanorods. Optics Express, 2016, 24, 25528. | 1.7 | 39 |

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| 109 | Nanoscale residual stress-field mappingâ€“around nanoindents in SiCâ€“by IR s-SNOM and confocal Raman microscopy. Optics Express, 2009, 17, 22351. | 1.7 | 36 |
| 110 | Focusing of in-plane hyperbolic polaritons in van der Waals crystals with tailored infrared nanoantennas. Science Advances, 2021, 7, eabj0127. | 4.7 | 36 |
| 111 | Surface-Enhanced Molecular Electron Energy Loss Spectroscopy. ACS Nano, 2018, 12, 4775-4786. | 7.3 | 35 |
| 112 | Resonant light scattering by near-field-induced phonon polaritons. Physical Review B, 2005, 71, . | 1.1 | 34 |
| 113 | Quantitative confocal phase imaging by synthetic optical holography. Optics Express, 2014, 22, 15267. | 1.7 | 34 |
| 114 | Extremely Confined Acoustic Phonon Polaritons in Monolayer-hBN/Metal Heterostructures for Strong Lightâ€“Matter Interactions. ACS Photonics, 2020, 7, 2610-2617. | 3.2 | 33 |
| 115 | Real-space nanoimaging of THz polaritons in the topological insulator Bi2Se3. Nature Communications, 2022, 13, 1374. | 5.8 | 33 |
| 116 | Whispering gallery mode resonators with J-aggregates. Optics Express, 2011, 19, 22280. | 1.7 | 32 |
| 117 | Phase in Nanooptics. ACS Nano, 2012, 6, 8-12. | 7.3 | 32 |
| 118 | Visualizing the Optical Interaction Tensor of a Gold Nanoparticle Pair. Nano Letters, 2010, 10, 652-656. | 4.5 | 31 |
| 119 | Graphene Plasmon Reflection by Corrugations. ACS Photonics, 2017, 4, 3081-3088. | 3.2 | 30 |
| 120 | Terahertz Nanoimaging and Nanospectroscopy of Chalcogenide Phase-Change Materials. ACS Photonics, 2020, 7, 3499-3506. | 3.2 | 29 |
| 121 | Nanoscale Guiding of Infrared Light with Hyperbolic Volume and Surface Polaritons in van der Waals Material Ribbons. Advanced Materials, 2020, 32, e1906530. | 11.1 | 29 |
| 122 | Electrospinning of peptide and protein fibres: approaching the molecular scale. Faraday Discussions, 2013, 166, 209. | 1.6 | 28 |
| 123 | Substrate Matters: Surface-Polariton Enhanced Infrared Nanospectroscopy of Molecular Vibrations. Nano Letters, 2019, 19, 8066-8073. | 4.5 | 28 |
| 124 | Microcavity phonon polaritons from the weak to the ultrastrong phononâ€“photon coupling regime. Nature Communications, 2021, 12, 6206. | 5.8 | 27 |
| 125 | Electrical detection of hyperbolic phonon-polaritons in heterostructures of graphene and boron nitride. Npj 2D Materials and Applications, 2017, 1, . | 3.9 | 25 |
| 126 | Nanoscale optical tomography using volume-scanning near-field microscopy. Applied Physics Letters, 2009, 95, 121108. | 1.5 | 24 |

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| 127 | High-power femtosecond mid-IR sources for s-SNOM applications. Journal of Optics (United Kingdom), 2014, 16, 094003. | 1.0 | 24 |
| 128 | Enhanced Lightâ€“Matter Interaction in <sup>10</sup>B Monoisotopic Boron Nitride Infrared Nanoresonators. Advanced Optical Materials, 2021, 9, 2001958. | 3.6 | 24 |
| 129 | An alternative approach for the incorporation of cellulose nanocrystals in flexible polyurethane foams based on renewably sourced polyols. Industrial Crops and Products, 2017, 95, 564-573. | 2.5 | 23 |
| 130 | Vibrational electron energy loss spectroscopy in truncated dielectric slabs. Physical Review B, 2018, 98, . | 1.1 | 23 |
| 131 | Tuning the polarization state of light via time retardation with a microstructured surface. Physical Review B, 2013, 88, . | 1.1 | 22 |
| 132 | Nanoscale Conductivity Contrast by Scattering-Type Near-Field Optical Microscopy in the Visible, Infrared and THz Domains. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 1255. | 1.2 | 20 |
| 133 | Contrast and scattering efficiency of scattering-type near-field optical probes. Applied Physics Letters, 2004, 85, 4466. | 1.5 | 18 |
| 134 | High-fidelity nano-FTIR spectroscopy by on-pixel normalization of signal harmonics. Nanophotonics, 2022, 11, 377-390. | 2.9 | 18 |
| 135 | Phonon-Enhanced Mid-Infrared CO<sub>2</sub> Gas Sensing Using Boron Nitride Nanoresonators. ACS Photonics, 2022, 9, 34-42. | 3.2 | 17 |
| 136 | Far-field disentanglement of modes in hybrid plasmonic-photonic crystals by fluorescence nano-reporters. Nanophotonics, 2013, 2, 173-185. | 2.9 | 14 |
| 137 | Synthetic optical holography with nonlinear-phase reference. Optics Express, 2014, 22, 26621. | 1.7 | 14 |
| 138 | Magnitude and phase-resolved infrared vibrational nanospectroscopy with a swept quantum cascade laser. Optics Express, 2015, 23, 13358. | 1.7 | 14 |
| 139 | Cross-Sectional Chemical Nanoimaging of Composite Polymer Nanoparticles by Infrared Nanospectroscopy. Macromolecules, 2021, 54, 995-1005. | 2.2 | 14 |
| 140 | Combined Tip-Enhanced Raman Spectroscopy and Scattering-Type Scanning Near-Field Optical Microscopy. Journal of Physical Chemistry C, 2018, 122, 16274-16280. | 1.5 | 13 |
| 141 | Rapid Infrared Spectroscopic Nanoimaging with nano-FTIR Holography. ACS Photonics, 2020, 7, 2878-2885. | 3.2 | 13 |
| 142 | Amplitude- and Phase-Resolved Infrared Nanoimaging and Nanospectroscopy of Polaritons in a Liquid Environment. Nano Letters, 2021, 21, 1360-1367. | 4.5 | 13 |
| 143 | Hyperspectral Nanoimaging of van der Waals Polaritonic Crystals. Nano Letters, 2021, 21, 7109-7115. | 4.5 | 13 |
| 144 | Active and Passive Tuning of Ultranarrow Resonances in Polaritonic Nanoantennas. Advanced Materials, 2022, 34, e2104954. | 11.1 | 13 |

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| 145 | Nanoscale Chemical Mapping by Local Infrared Spectroscopy (nano-FTIR). Microscopy Today, 2012, 20, 28-31. | 0.2 | 12 |
| 146 | Nanofocusing of acoustic graphene plasmon polaritons for enhancing mid-infrared molecular fingerprints. Nanophotonics, 2020, 9, 2089-2095. | 2.9 | 12 |
| 147 | Rapid simulations of hyperspectral near-field images of three-dimensional heterogeneous surfaces. Optics Express, 2021, 29, 39648. | 1.7 | 12 |
| 148 | Rapid simulations of hyperspectral near-field images of three-dimensional heterogeneous surfaces â€“ part II. Optics Express, 2022, 30, 11228. | 1.7 | 12 |
| 149 | Infrared phononic nanoantennas: Localized surface phonon polaritons in SiC disks. Science Bulletin, 2010, 55, 2625-2628. | 1.7 | 11 |
| 150 | Plasmons in graphene on uniaxial substrates. Applied Physics Letters, 2014, 104, 011111. | 1.5 | 11 |
| 151 | Polarization-Resolved Near-Field Characterization of Nanoscale Infrared Modes in Transmission Lines Fabricated by Gallium and Helium Ion Beam Milling. ACS Photonics, 2014, 1, 604-611. | 3.2 | 11 |
| 152 | Localized Surface Plasmons: Basics and Applications in Field-Enhanced Spectroscopy. Springer Series in Optical Sciences, 2012, , 151-176. | 0.5 | 9 |
| 153 | Probing and steering bulk and surface phonon polaritons in uniaxial materials using fast electrons: Hexagonal boron nitride. Physical Review B, 2020, 102, . | 1.1 | 9 |
| 154 | Transient vibration imaging with time-resolved synthetic holographic confocal microscopy. Optics Express, 2018, 26, 26688. | 1.7 | 8 |
| 155 | Tailoring Photoluminescence by Strain-Engineering in Layered Perovskite Flakes. Nano Letters, 2022, 22, 4153-4160. | 4.5 | 8 |
| 156 | Coupling mid-infrared light from a photonic crystal waveguide to metallic transmission lines. Applied Physics Letters, 2014, 104, . | 1.5 | 6 |
| 157 | Harnessing a Quantum Design Approach for Making Low-Loss Superlenses. Nano Letters, 2016, 16, 1609-1613. | 4.5 | 6 |
| 158 | Propagation and nanofocusing of infrared surface plasmons on tapered transmission lines: Influence of the substrate. Optics Communications, 2012, 285, 3378-3382. | 1.0 | 4 |
| 159 | What momentum mismatch?. Nature Nanotechnology, 2019, 14, 308-309. | 15.6 | 4 |
| 160 | Solvent-structured PEDOT:PSS surfaces: Fabrication strategies and nanoscale properties. Polymer, 2022, 246, 124723. | 1.8 | 4 |
| 161 | Plasmonic Metasurface Resonators to Enhance Terahertz Magnetic Fields for Highâ€Frequency Electron Paramagnetic Resonance. Small Methods, 2021, 5, e2100376. | 4.6 | 3 |
| 162 | Coloured heat. Nature Photonics, 2009, 3, 609-610. | 15.6 | 2 |

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| 163 | Local Field Enhancement of Mid-Infrared Light in an Integrated Photonic-Plasmonic Structure. Journal of Lightwave Technology, 2015, 33, 368-371. | 2.7 | 2 |
| 164 | Scattering-type Near-field Microscopy: From Nanoscale Infrared Material Recognition to Superlens Studies. , 2007, , . | | 1 |
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| 166 | Quantitative, nanoscale free-carrier concentration mapping using terahertz near-field nanoscopy. , 2011, , . | | 1 |
| 167 | Infrared spectroscopy on the nanometer-scale. Microscopy and Microanalysis, 2003, 9, 1066-1067. | 0.2 | 0 |
| 168 | Local Fields of Optical Antenna Structures. , 2007, , . | | 0 |
| 169 | Nanoscale infrared&THz mapping of conductivity. , 2008, , . | | 0 |
| 170 | THz scattering-type near-field microscopy of semiconductor conductivity and mobility. , 2009, , . | | 0 |
| 171 | Infrared and terahertz nanoscopy for dielectric imaging and near-field mapping of antennas and transmission-lines. , 2011, , . | | 0 |
| 172 | Nanoscale infrared spectroscopy with a thermal source: Nano-FTIR. , 2011, , . | | 0 |
| 173 | Mid-infrared nanophotonics based on antennas and transmission lines. , 2011, , . | | 0 |
| 174 | Enhancement effects in plasmonic nanocavities with quantum emitters. , 2012, , . | | 0 |
| 175 | Infrared nanoscopy and nanospectroscopy - From nanoscale chemical identification of polymers to real-space imaging of graphene plasmons. , 2013, , . | | 0 |
| 176 | Real-space mapping of chiral antennas and metasurfaces. , 2016, , . | | 0 |
| 177 | Synthetic holographic phase imaging in confocal microscopy and applications. , 2016, , . | | 0 |
| 178 | Plasmon Polariton Field Mapping by Elastic Light Scattering from a Tip. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 409-437. | 0.1 | 0 |
| 179 | Phonon based high quality factor split ring resonators made from boron nitride. , 2017, , . | | 0 |
| 180 | Addressing Vibrational Excitations in Van der Waals Materials and Molecular Layers Within Electron Energy Loss Spectroscopy. Microscopy and Microanalysis, 2018, 24, 408-409. | 0.2 | 0 |

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