

Mark L. Brongersma

List of Publications by Year in descending order

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Version: 2024-02-01

191
papers

33,939
citations

5558

82
h-index

3476

182
g-index

193
all docs

193
docs citations

193
times ranked

30019
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Plasmonics for extreme light concentration and manipulation. <i>Nature Materials</i> , 2010, 9, 193-204. | 13.3 | 3,773 |
| 2 | Plasmon-induced hot carrier science and technology. <i>Nature Nanotechnology</i> , 2015, 10, 25-34. | 15.6 | 2,564 |
| 3 | Dielectric gradient metasurface optical elements. <i>Science</i> , 2014, 345, 298-302. | 6.0 | 1,866 |
| 4 | Plasmonics-A Route to Nanoscale Optical Devices. <i>Advanced Materials</i> , 2001, 13, 1501-1505. | 11.1 | 1,463 |
| 5 | Polarization-sensitive broadband photodetector using a black phosphorus vertical p-n junction. <i>Nature Nanotechnology</i> , 2015, 10, 707-713. | 15.6 | 1,007 |
| 6 | Self-limited plasmonic welding of silver nanowire junctions. <i>Nature Materials</i> , 2012, 11, 241-249. | 13.3 | 1,002 |
| 7 | Engineering light absorption in semiconductor nanowire devices. <i>Nature Materials</i> , 2009, 8, 643-647. | 13.3 | 802 |
| 8 | Light management for photovoltaics using high-index nanostructures. <i>Nature Materials</i> , 2014, 13, 451-460. | 13.3 | 796 |
| 9 | Design of Plasmonic Thin-Film Solar Cells with Broadband Absorption Enhancements. <i>Advanced Materials</i> , 2009, 21, 3504-3509. | 11.1 | 761 |
| 10 | Electromagnetic energy transfer and switching in nanoparticle chain arrays below the diffraction limit. <i>Physical Review B</i> , 2000, 62, R16356-R16359. | 1.1 | 722 |
| 11 | Spatiotemporal light control with active metasurfaces. <i>Science</i> , 2019, 364, . | 6.0 | 581 |
| 12 | The Case for Plasmonics. <i>Science</i> , 2010, 328, 440-441. | 6.0 | 524 |
| 13 | Semiconductor Nanowire Optical Antenna Solar Absorbers. <i>Nano Letters</i> , 2010, 10, 439-445. | 4.5 | 486 |
| 14 | Planar Lenses Based on Nanoscale Slit Arrays in a Metallic Film. <i>Nano Letters</i> , 2009, 9, 235-238. | 4.5 | 463 |
| 15 | Plasmon Enhanced Solar-to-Fuel Energy Conversion. <i>Nano Letters</i> , 2011, 11, 3440-3446. | 4.5 | 456 |
| 16 | Photonic spin-controlled multifunctional shared-aperture antenna array. <i>Science</i> , 2016, 352, 1202-1206. | 6.0 | 408 |
| 17 | Hybrid Silicon Nanowire-Polymer Solar Cells. <i>Nano Letters</i> , 2012, 12, 2971-2976. | 4.5 | 402 |
| 18 | Phase-Coupled Plasmon-Induced Transparency. <i>Physical Review Letters</i> , 2010, 104, 243902. | 2.9 | 390 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Defect-related versus excitonic visible light emission from ion beam synthesized Si nanocrystals in SiO ₂ . Applied Physics Letters, 1996, 69, 2033-2035. | 1.5 | 377 |
| 20 | Hot-Electron Photodetection with a Plasmonic Nanostripe Antenna. Nano Letters, 2014, 14, 1374-1380. | 4.5 | 343 |
| 21 | Compact, High-Speed and Power-Efficient Electrooptic Plasmonic Modulators. Nano Letters, 2009, 9, 4403-4411. | 4.5 | 323 |
| 22 | Optical antenna thermal emitters. Nature Photonics, 2009, 3, 658-661. | 15.6 | 319 |
| 23 | Li Intercalation in MoS ₂ : In Situ Observation of Its Dynamics and Tuning Optical and Electrical Properties. Nano Letters, 2015, 15, 6777-6784. | 4.5 | 312 |
| 24 | Dielectric Metamaterials Based on Electric and Magnetic Resonances of Silicon Carbide Particles. Physical Review Letters, 2007, 99, 107401. | 2.9 | 298 |
| 25 | Dynamic Reflection Phase and Polarization Control in Metasurfaces. Nano Letters, 2017, 17, 407-413. | 4.5 | 293 |
| 26 | Tuning the Color of Silicon Nanostructures. Nano Letters, 2010, 10, 2649-2654. | 4.5 | 291 |
| 27 | Resonant Germanium Nanoantenna Photodetectors. Nano Letters, 2010, 10, 1229-1233. | 4.5 | 277 |
| 28 | Strong exciton-erbium coupling in Si nanocrystal-doped SiO ₂ . Applied Physics Letters, 2000, 76, 2325-2327. | 1.5 | 272 |
| 29 | Spatially controlled doping of two-dimensional SnS ₂ through intercalation for electronics. Nature Nanotechnology, 2018, 13, 294-299. | 15.6 | 269 |
| 30 | Plasmon-Assisted Local Temperature Control to Pattern Individual Semiconductor Nanowires and Carbon Nanotubes. Nano Letters, 2007, 7, 3523-3527. | 4.5 | 248 |
| 31 | Electrically Controlled Nonlinear Generation of Light with Plasmonics. Science, 2011, 333, 1720-1723. | 6.0 | 240 |
| 32 | All-solid-state spatial light modulator with independent phase and amplitude control for three-dimensional LiDAR applications. Nature Nanotechnology, 2021, 16, 69-76. | 15.6 | 232 |
| 33 | An invisible metal-semiconductor photodetector. Nature Photonics, 2012, 6, 380-385. | 15.6 | 223 |
| 34 | Tuning the emission wavelength of Si nanocrystals in SiO ₂ by oxidation. Applied Physics Letters, 1998, 72, 2577-2579. | 1.5 | 220 |
| 35 | A Nonvolatile Plasmonic Switch Employing Photochromic Molecules. Nano Letters, 2008, 8, 1506-1510. | 4.5 | 220 |
| 36 | Electrically driven subwavelength optical nanocircuits. Nature Photonics, 2014, 8, 244-249. | 15.6 | 219 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Plasmonic Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 52-57. | 10.2 | 217 |
| 38 | Metasurface-driven OLED displays beyond 10,000 pixels per inch. <i>Science</i> , 2020, 370, 459-463. | 6.0 | 212 |
| 39 | Extraordinary optical absorption through subwavelength slits. <i>Optics Letters</i> , 2009, 34, 686. | 1.7 | 211 |
| 40 | The role of quantum-confined excitons vs defects in the visible luminescence of SiO ₂ films containing Ge nanocrystals. <i>Applied Physics Letters</i> , 1996, 68, 2511-2513. | 1.5 | 205 |
| 41 | Optical Fano resonance of an individual semiconductor nanostructure. <i>Nature Materials</i> , 2014, 13, 471-475. | 13.3 | 205 |
| 42 | Size-dependent electron-hole exchange interaction in Si nanocrystals. <i>Applied Physics Letters</i> , 2000, 76, 351-353. | 1.5 | 199 |
| 43 | Electrical tuning of phase-change antennas and metasurfaces. <i>Nature Nanotechnology</i> , 2021, 16, 667-672. | 15.6 | 196 |
| 44 | A micromachining-based technology for enhancing germanium light emission via tensile strain. <i>Nature Photonics</i> , 2012, 6, 398-405. | 15.6 | 190 |
| 45 | Multifunctional interleaved geometric-phase dielectric metasurfaces. <i>Light: Science and Applications</i> , 2017, 6, e17027-e17027. | 7.7 | 174 |
| 46 | Synthesis and characterization of aerosol silicon nanocrystal nonvolatile floating-gate memory devices. <i>Applied Physics Letters</i> , 2001, 79, 433-435. | 1.5 | 161 |
| 47 | Silicon Mie resonators for highly directional light emission from monolayer MoS ₂ . <i>Nature Photonics</i> , 2018, 12, 284-290. | 15.6 | 160 |
| 48 | Metamaterial mirrors in optoelectronic devices. <i>Nature Nanotechnology</i> , 2014, 9, 542-547. | 15.6 | 158 |
| 49 | Plasmon-Assisted Chemical Vapor Deposition. <i>Nano Letters</i> , 2006, 6, 2592-2597. | 4.5 | 153 |
| 50 | Electro-optical modulation of a silicon waveguide with an ϵ -near-zero material. <i>Optics Express</i> , 2013, 21, 26387. | 1.7 | 151 |
| 51 | Temporal color mixing and dynamic beam shaping with silicon metasurfaces. <i>Science</i> , 2019, 365, 257-260. | 6.0 | 149 |
| 52 | Surface plasmon polariton analogue to Young's double-slit experiment. <i>Nature Nanotechnology</i> , 2007, 2, 426-429. | 15.6 | 145 |
| 53 | Design of midinfrared photodetectors enhanced by surface plasmons on grating structures. <i>Applied Physics Letters</i> , 2006, 89, 151116. | 1.5 | 144 |
| 54 | Direct bandgap germanium-on-silicon inferred from 57% ϵ -100% uniaxial tensile strain [Invited]. <i>Photonics Research</i> , 2014, 2, A8. | 3.4 | 139 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Multiple-Wavelength Focusing of Surface Plasmons with a Nonperiodic Nanoslit Coupler. Nano Letters, 2011, 11, 2693-2698. | 4.5 | 133 |
| 56 | Significant Enhancement of Infrared Photodetector Sensitivity Using a Semiconducting Single-Walled Carbon Nanotube/C ₆₀ Phototransistor. Advanced Materials, 2015, 27, 759-765. | 11.1 | 133 |
| 57 | Spectral properties of plasmonic resonator antennas. Optics Express, 2008, 16, 16529. | 1.7 | 132 |
| 58 | Colloidal Ellipsoids with Continuously Variable Shape. Advanced Materials, 2000, 12, 1511-1514. | 11.1 | 129 |
| 59 | Measurement of the polarization state of light using an integrated plasmonic polarimeter. Nanophotonics, 2012, 1, 125-129. | 2.9 | 126 |
| 60 | Self-Assembly Based Plasmonic Arrays Tuned by Atomic Layer Deposition for Extreme Visible Light Absorption. Nano Letters, 2013, 13, 3352-3357. | 4.5 | 118 |
| 61 | Omnidirectional resonance in a metal-dielectric-metal geometry. Applied Physics Letters, 2004, 84, 4421-4423. | 1.5 | 117 |
| 62 | Spatiotemporal light control with frequency-gradient metasurfaces. Science, 2019, 365, 374-377. | 6.0 | 117 |
| 63 | Strained germanium thin film membrane on silicon substrate for optoelectronics. Optics Express, 2011, 19, 25866. | 1.7 | 114 |
| 64 | Photonic Multitasking Interleaved Si Nanoantenna Phased Array. Nano Letters, 2016, 16, 7671-7676. | 4.5 | 113 |
| 65 | Elements for Plasmonic Nanocircuits with Three-Dimensional Slot Waveguides. Advanced Materials, 2010, 22, 5120-5124. | 11.1 | 109 |
| 66 | Strain-Induced Pseudoheterostructure Nanowires Confining Carriers at Room Temperature with Nanoscale-Tunable Band Profiles. Nano Letters, 2013, 13, 3118-3123. | 4.5 | 107 |
| 67 | High quality factor phase gradient metasurfaces. Nature Nanotechnology, 2020, 15, 956-961. | 15.6 | 107 |
| 68 | Tunable Light Emission from Quantum-Confined Excitons in TiSi ₂ -Catalyzed Silicon Nanowires. Nano Letters, 2006, 6, 2140-2144. | 4.5 | 106 |
| 69 | Electromagnetic energy transport along arrays of closely spaced metal rods as an analogue to plasmonic devices. Applied Physics Letters, 2001, 78, 16-18. | 1.5 | 103 |
| 70 | Solving dielectric and plasmonic waveguide dispersion relations on a pocket calculator. Optics Express, 2009, 17, 24112. | 1.7 | 103 |
| 71 | Metal-Dielectric Slot-Waveguide Structures for the Propagation of Surface Plasmon Polaritons at 1.55 μm . IEEE Journal of Quantum Electronics, 2007, 43, 479-485. | 1.0 | 102 |
| 72 | High Excitation Transfer Efficiency from Energy Relay Dyes in Dye-Sensitized Solar Cells. Nano Letters, 2010, 10, 3077-3083. | 4.5 | 97 |

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|----|--|------|-----------|
| 73 | Purcell effect for active tuning of light scattering from semiconductor optical antennas. <i>Science</i> , 2017, 358, 1407-1410. | 6.0 | 97 |
| 74 | General properties of dielectric optical antennas. <i>Optics Express</i> , 2009, 17, 24084. | 1.7 | 94 |
| 75 | Monolithic Full-Stokes Near-Infrared Polarimetry with Chiral Plasmonic Metasurface Integrated Graphene-Silicon Photodetector. <i>ACS Nano</i> , 2020, 14, 16634-16642. | 7.3 | 94 |
| 76 | Engineering optical nanoantennas. <i>Nature Photonics</i> , 2008, 2, 270-272. | 15.6 | 93 |
| 77 | Dielectric waveguide model for guided surface polaritons. <i>Optics Letters</i> , 2005, 30, 1473. | 1.7 | 90 |
| 78 | Omnidirectional Near-Unity Absorption in an Ultrathin Planar Semiconductor Layer on a Metal Substrate. <i>ACS Photonics</i> , 2014, 1, 812-821. | 3.2 | 88 |
| 79 | Probing the Band Structure of Topological Silicon Photonic Lattices in the Visible Spectrum. <i>Physical Review Letters</i> , 2019, 122, 117401. | 2.9 | 87 |
| 80 | Electrically Tunable Coherent Optical Absorption in Graphene with Ion Gel. <i>Nano Letters</i> , 2015, 15, 1570-1576. | 4.5 | 85 |
| 81 | Applying plasmonics to a sustainable future. <i>Science</i> , 2017, 356, 908-909. | 6.0 | 85 |
| 82 | Atomic Layer Deposition of Lead Sulfide Quantum Dots on Nanowire Surfaces. <i>Nano Letters</i> , 2011, 11, 934-940. | 4.5 | 84 |
| 83 | High-specific-power flexible transition metal dichalcogenide solar cells. <i>Nature Communications</i> , 2021, 12, 7034. | 5.8 | 84 |
| 84 | Broadband enhancement of light emission in silicon slot waveguides. <i>Optics Express</i> , 2009, 17, 7479. | 1.7 | 83 |
| 85 | Exciton resonance tuning of an atomically thin lens. <i>Nature Photonics</i> , 2020, 14, 426-430. | 15.6 | 80 |
| 86 | Metal-dielectric-metal plasmonic waveguide devices for manipulating light at the nanoscale. <i>Chinese Optics Letters</i> , 2009, 7, 302-308. | 1.3 | 79 |
| 87 | Electroluminescence from strained germanium membranes and implications for an efficient Si-compatible laser. <i>Applied Physics Letters</i> , 2012, 100, . | 1.5 | 79 |
| 88 | Shape-Dependent Light Scattering Properties of Subwavelength Silicon Nanoblocks. <i>Nano Letters</i> , 2015, 15, 1759-1765. | 4.5 | 78 |
| 89 | Nearly Total Solar Absorption in Ultrathin Nanostructured Iron Oxide for Efficient Photoelectrochemical Water Splitting. <i>ACS Photonics</i> , 2014, 1, 235-240. | 3.2 | 76 |
| 90 | Origin of MeV ion irradiation-induced stress changes in SiO ₂ . <i>Journal of Applied Physics</i> , 2000, 88, 59-64. | 1.1 | 75 |

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|-----|--|------|-----------|
| 91 | Light Trapping for Solar Fuel Generation with Mie Resonances. Nano Letters, 2014, 14, 1446-1452. | 4.5 | 75 |
| 92 | Dynamic thermal emission control with InAs-based plasmonic metasurfaces. Science Advances, 2018, 4, eaat3163. | 4.7 | 74 |
| 93 | Electrifying plasmonics on silicon. Nature Materials, 2010, 9, 3-4. | 13.3 | 73 |
| 94 | Backward phase-matching for nonlinear optical generation in negative-index materials. Nature Materials, 2015, 14, 807-811. | 13.3 | 73 |
| 95 | Quantification of Free-Carrier Absorption in Silicon Nanocrystals with an Optical Microcavity. Nano Letters, 2008, 8, 3787-3793. | 4.5 | 72 |
| 96 | Photocurrent mapping of near-field optical antenna resonances. Nature Nanotechnology, 2011, 6, 588-593. | 15.6 | 72 |
| 97 | Electrical tuning of a quantum plasmonic resonance. Nature Nanotechnology, 2017, 12, 866-870. | 15.6 | 72 |
| 98 | Optical Coupling of Deep-Subwavelength Semiconductor Nanowires. Nano Letters, 2011, 11, 1463-1468. | 4.5 | 70 |
| 99 | Compact Aperiodic Metallic Groove Arrays for Unidirectional Launching of Surface Plasmons. Nano Letters, 2013, 13, 5420-5424. | 4.5 | 69 |
| 100 | Quantification and impact of nonparabolicity of the conduction band of indium tin oxide on its plasmonic properties. Applied Physics Letters, 2014, 105, 181117. | 1.5 | 69 |
| 101 | Temperature dependence of MeV heavy ion irradiation-induced viscous flow in SiO ₂ . Applied Physics Letters, 1997, 71, 1628-1630. | 1.5 | 68 |
| 102 | Harvest season for hot electrons. Nature Nanotechnology, 2013, 8, 229-230. | 15.6 | 68 |
| 103 | Transparent Metallic Fractal Electrodes for Semiconductor Devices. Nano Letters, 2014, 14, 5068-5074. | 4.5 | 66 |
| 104 | Subwavelength angle-sensing photodetectors inspired by directional hearing in small animals. Nature Nanotechnology, 2018, 13, 1143-1147. | 15.6 | 66 |
| 105 | Direct laser writing of volumetric gradient index lenses and waveguides. Light: Science and Applications, 2020, 9, 196. | 7.7 | 66 |
| 106 | Dynamic Tuning of Gap Plasmon Resonances Using a Solid-State Electrochromic Device. Nano Letters, 2019, 19, 7988-7995. | 4.5 | 65 |
| 107 | Two-Dimensional Chalcogenide Nanoplates as Tunable Metamaterials via Chemical Intercalation. Nano Letters, 2013, 13, 5913-5918. | 4.5 | 64 |
| 108 | Localized charge injection in SiO ₂ films containing silicon nanocrystals. Applied Physics Letters, 2001, 79, 791-793. | 1.5 | 61 |

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|-----|---|------|-----------|
| 109 | Epsilon-Near-Zero Si Slot-Waveguide Modulator. ACS Photonics, 2018, 5, 4484-4490. | 3.2 | 59 |
| 110 | DNA-Assembled Plasmonic Waveguides for Nanoscale Light Propagation to a Fluorescent Nanodiamond. Nano Letters, 2018, 18, 7323-7329. | 4.5 | 58 |
| 111 | An Electrically-Driven GaAs Nanowire Surface Plasmon Source. Nano Letters, 2012, 12, 4943-4947. | 4.5 | 57 |
| 112 | Introductory lecture: nanoplasmonics. Faraday Discussions, 2015, 178, 9-36. | 1.6 | 56 |
| 113 | Depth distribution of luminescent Si nanocrystals in Si implanted SiO ₂ films on Si. Journal of Applied Physics, 1999, 86, 759-763. | 1.1 | 54 |
| 114 | Active flat optics using a guided mode resonance. Optics Letters, 2017, 42, 5. | 1.7 | 54 |
| 115 | Plasmonics – the missing link between nanoelectronics and microphotonics. Applied Physics A: Materials Science and Processing, 2007, 89, 221-223. | 1.1 | 53 |
| 116 | Nanophotonic light trapping with patterned transparent conductive oxides. Optics Express, 2012, 20, A385. | 1.7 | 53 |
| 117 | Ultrafast developments. Nature Photonics, 2009, 3, 12-13. | 15.6 | 52 |
| 118 | Redesigning Photodetector Electrodes as an Optical Antenna. Nano Letters, 2013, 13, 392-396. | 4.5 | 52 |
| 119 | Non-local metasurfaces for spectrally decoupled wavefront manipulation and eye tracking. Nature Nanotechnology, 2021, 16, 1224-1230. | 15.6 | 52 |
| 120 | Charging of single Si nanocrystals by atomic force microscopy. Applied Physics Letters, 2001, 78, 3133-3135. | 1.5 | 51 |
| 121 | Antireflection High-Index Metasurfaces Combining Mie and Fabry-Pérot Resonances. ACS Photonics, 2019, 6, 453-459. | 3.2 | 51 |
| 122 | Strong Modification of Quantum Dot Spontaneous Emission via Gap Plasmon Coupling in Metal Nanoslits. Journal of Physical Chemistry C, 2010, 114, 7269-7273. | 1.5 | 49 |
| 123 | Imaging the Hidden Modes of Ultrathin Plasmonic Strip Antennas by Cathodoluminescence. Nano Letters, 2011, 11, 4265-4269. | 4.5 | 49 |
| 124 | Broadband Sharp 90-degree Bends and T-Splitters in Plasmonic Coaxial Waveguides. Nano Letters, 2013, 13, 4753-4758. | 4.5 | 42 |
| 125 | A Light-Field Metasurface for High-Resolution Single-Particle Tracking. Nano Letters, 2019, 19, 2267-2271. | 4.5 | 41 |
| 126 | Routing and photodetection in subwavelength plasmonic slot waveguides. Nanophotonics, 2012, 1, 9-16. | 2.9 | 40 |

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|-----|--|-----|-----------|
| 127 | Observing Plasmon Damping Due to Adhesion Layers in Gold Nanostructures Using Electron Energy Loss Spectroscopy. ACS Photonics, 2017, 4, 268-274. | 3.2 | 40 |
| 128 | Broadband Antireflection Coatings Employing Multiresonant Dielectric Metasurfaces. ACS Photonics, 2018, 5, 4456-4462. | 3.2 | 39 |
| 129 | Spin-Switched Three-Dimensional Full-Color Scenes Based on a Dielectric Meta-hologram. ACS Photonics, 2019, 6, 2910-2916. | 3.2 | 39 |
| 130 | Tensile-strained germanium-on-insulator substrate fabrication for silicon-compatible optoelectronics. Optical Materials Express, 2011, 1, 1121. | 1.6 | 37 |
| 131 | Nanoscale Spatial Coherent Control over the Modal Excitation of a Coupled Plasmonic Resonator System. Nano Letters, 2015, 15, 7666-7670. | 4.5 | 37 |
| 132 | Tuning of Plasmons in Transparent Conductive Oxides by Carrier Accumulation. ACS Photonics, 2018, 5, 1493-1498. | 3.2 | 37 |
| 133 | Second-Harmonic Generation in GaAs Photonic Crystal Cavities in (111)B and (001) Crystal Orientations. ACS Photonics, 2014, 1, 516-523. | 3.2 | 36 |
| 134 | Condition for unity absorption in an ultrathin and highly lossy film in a Gires-Tournois interferometer configuration. Optics Letters, 2015, 40, 1960. | 1.7 | 36 |
| 135 | Fabry-Perot description for Mie resonances of rectangular dielectric nanowire optical resonators. Optics Express, 2016, 24, 29760. | 1.7 | 35 |
| 136 | Superabsorbing, Artificial Metal Films Constructed from Semiconductor Nanoantennas. Nano Letters, 2016, 16, 3801-3808. | 4.5 | 35 |
| 137 | Observation of improved minority carrier lifetimes in high-quality Ge-on-insulator using time-resolved photoluminescence. Optics Letters, 2014, 39, 6205. | 1.7 | 34 |
| 138 | The Planar Parabolic Optical Antenna. Nano Letters, 2013, 13, 188-193. | 4.5 | 33 |
| 139 | Sombrero-Shaped Plasmonic Nanoparticles with Molecular-Level Sensitivity and Multifunctionality. ACS Nano, 2011, 5, 6449-6457. | 7.3 | 32 |
| 140 | Gap Plasmon Resonance in a Suspended Plasmonic Nanowire Coupled to a Metallic Substrate. Nano Letters, 2015, 15, 5609-5616. | 4.5 | 31 |
| 141 | Polarization-independent metasurface lens employing the Pancharatnam-Berry phase. Optics Express, 2018, 26, 24835. | 1.7 | 31 |
| 142 | Monolithic integration of germanium-on-insulator p-i-n photodetector on silicon. Optics Express, 2015, 23, 15816. | 1.7 | 30 |
| 143 | Probing Complex Reflection Coefficients in One-Dimensional Surface Plasmon Polariton Waveguides and Cavities Using STEM EELS. Nano Letters, 2015, 15, 120-126. | 4.5 | 30 |
| 144 | Porous Silicon Gradient Refractive Index Micro-Optics. Nano Letters, 2016, 16, 7402-7407. | 4.5 | 30 |

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|-----|--|-----|-----------|
| 145 | The road to atomically thin metasurface optics. <i>Nanophotonics</i> , 2020, 10, 643-654. | 2.9 | 30 |
| 146 | Plasmon-enhanced emission from optically-doped MOS light sources. <i>Optics Express</i> , 2009, 17, 185. | 1.7 | 29 |
| 147 | Thermal Stability and Surface Passivation of Ge Nanowires Coated by Epitaxial SiGe Shells. <i>Nano Letters</i> , 2012, 12, 1385-1391. | 4.5 | 29 |
| 148 | Electrically Tunable, CMOS-Compatible Metamaterial Based on Semiconductor Nanopillars. <i>ACS Photonics</i> , 2018, 5, 4702-4709. | 3.2 | 29 |
| 149 | Bandgap-customizable germanium using lithographically determined biaxial tensile strain for silicon-compatible optoelectronics. <i>Optics Express</i> , 2015, 23, 16740. | 1.7 | 28 |
| 150 | Thermoplasmonic Ignition of Metal Nanoparticles. <i>Nano Letters</i> , 2018, 18, 1699-1706. | 4.5 | 28 |
| 151 | Energy transfer in nanowire solar cells with photon-harvesting shells. <i>Journal of Applied Physics</i> , 2009, 105, 124509. | 1.1 | 27 |
| 152 | Power flow from a dipole emitter near an optical antenna. <i>Optics Express</i> , 2011, 19, 19084. | 1.7 | 27 |
| 153 | Synthesis parameter space of bismuth catalyzed germanium nanowires. <i>Applied Physics Letters</i> , 2009, 94, . | 1.5 | 25 |
| 154 | Single crystalline and core-shell indium-catalyzed germanium nanowires—a systematic thermal CVD growth study. <i>Nanotechnology</i> , 2009, 20, 245608. | 1.3 | 25 |
| 155 | Side-coupled cavity model for surface plasmon-polariton transmission across a groove. <i>Optics Express</i> , 2009, 17, 17837. | 1.7 | 25 |
| 156 | Engineering light absorption in single-nanowire solar cells with metal nanoparticles. <i>New Journal of Physics</i> , 2011, 13, 123026. | 1.2 | 24 |
| 157 | Probing Molecular Junctions Using Surface Plasmon Resonance Spectroscopy. <i>Nano Letters</i> , 2006, 6, 2797-2803. | 4.5 | 22 |
| 158 | Near-infrared free-carrier absorption in silicon nanocrystals. <i>Optics Letters</i> , 2009, 34, 3397. | 1.7 | 22 |
| 159 | Microring and microdisk optical resonators using silicon nanocrystals and erbium prepared using silicon technology. <i>Optical Materials</i> , 2005, 27, 804-811. | 1.7 | 21 |
| 160 | Free-Space Optical Beam Tapping with an All-Silica Metasurface. <i>ACS Photonics</i> , 2017, 4, 2544-2549. | 3.2 | 20 |
| 161 | Effects of surface oxide formation on germanium nanowire band-edge photoluminescence. <i>Applied Physics Letters</i> , 2013, 102, . | 1.5 | 19 |
| 162 | Nanoelectromechanical modulation of a strongly-coupled plasmonic dimer. <i>Nature Communications</i> , 2021, 12, 48. | 5.8 | 19 |

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|-----|---|------|-----------|
| 163 | Models for quantitative charge imaging by atomic force microscopy. <i>Journal of Applied Physics</i> , 2001, 90, 2764-2772. | 1.1 | 18 |
| 164 | Silicon-Nanocrystal-Coated Silica Microsphere Thermo-optical Switch. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006, 12, 1476-1479. | 1.9 | 18 |
| 165 | Lateral overgrowth of germanium for monolithic integration of germanium-on-insulator on silicon. <i>Journal of Crystal Growth</i> , 2015, 416, 21-27. | 0.7 | 18 |
| 166 | Deep-Subwavelength Semiconductor Nanowire Surface Plasmon Polariton Couplers. <i>Nano Letters</i> , 2014, 14, 429-434. | 4.5 | 17 |
| 167 | Ultrafast Electron and Phonon Response of Oriented and Diameter-Controlled Germanium Nanowire Arrays. <i>Nano Letters</i> , 2014, 14, 3427-3431. | 4.5 | 17 |
| 168 | Electromagnetic energy transport along Yagi arrays. <i>Materials Science and Engineering C</i> , 2002, 19, 291-294. | 3.8 | 16 |
| 169 | Plasmonic and new plasmonic materials: general discussion. <i>Faraday Discussions</i> , 2015, 178, 123-149. | 1.6 | 16 |
| 170 | An Over-Coupled Phase-Change Metasurface for Efficient Reflection Phase Modulation. <i>Advanced Optical Materials</i> , 2020, 8, 2000745. | 3.6 | 16 |
| 171 | Anisotropic Metasurfaces as Tunable SERS Substrates for 2D Materials. <i>ACS Photonics</i> , 2019, 6, 1996-2004. | 3.2 | 15 |
| 172 | Plasmon Launching and Scattering by Silicon Nanoparticles. <i>ACS Photonics</i> , 2021, 8, 1582-1591. | 3.2 | 15 |
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