## Anatoly V Zayats

List of Publications by Year in descending order

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| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Nonlocalityâ€Enabled Pulse Management in Epsilonâ€Nearâ€Zero Metamaterials. Advanced Materials, 2023,<br>35, e2107023.   | 11.1 | 9         |
| 2  | Atomically Smooth Single-Crystalline Platform for Low-Loss Plasmonic Nanocavities. Nano Letters, 2022, 22, 1786-1794.  | 4.5  | 13        |
| 3  | Plasmonic Nanocavity Induced Coupling and Boost of Dark Excitons in Monolayer WSe <sub>2</sub><br>at Room Temperature. Nano Letters, 2022, 22, 1915-1921.                  | 4.5  | 25        |
| 4  | Integrated Janus dipole source for selective coupling to silicon waveguide networks. Applied Physics<br>Reviews, 2022, 9, .  | 5.5  | 6         |
| 5  | Transverse spinning of unpolarized light. Nature Photonics, 2021, 15, 156-161.   | 15.6 | 82        |
| 6  | Directional imbalance of Bloch surface waves for ultrasensitive displacement metrology. Nanoscale, 2021, 13, 11041-11050.  | 2.8  | 10        |
| 7  | Rational design of bimetallic photocatalysts based on plasmonically-derived hot carriers. Nanoscale<br>Advances, 2021, 3, 767-780.   | 2.2  | 11        |
| 8  | Rapid detection of SARS-CoV-2 viral nucleic acids based on surface enhanced infrared absorption spectroscopy. Nanoscale, 2021, 13, 10133-10142.                            | 2.8  | 25        |
| 9  | Transverse spin dynamics in structured electromagnetic guided waves. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .         | 3.3  | 51        |
| 10 | Mark Stockman: Evangelist for Plasmonics. ACS Photonics, 2021, 8, 683-698.   | 3.2  | 2         |
| 11 | Selfâ€Assembled Plasmonic Coaxial Nanocavities for Highâ€Definition Broadâ€Angle Coloring in Reflection<br>and Transmission. Advanced Optical Materials, 2021, 9, 2001923. | 3.6  | 1         |
| 12 | Mode Engineering in Large Arrays of Coupled Plasmonic–Dielectric Nanoantennas. Advanced Optical<br>Materials, 2021, 9, 2001467.  | 3.6  | 9         |
| 13 | Angle-insensitive plasmonic nanorod metamaterial-based band-pass optical filters. Optics Express, 2021, 29, 11562.   | 1.7  | 4         |
| 14 | Machine Learning-Based Diffractive Image Analysis with Subwavelength Resolution. ACS Photonics, 2021, 8, 1448-1456.  | 3.2  | 17        |
| 15 | Light-induced symmetry breaking for enhancing second-harmonic generation from an ultrathin plasmonic nanocavity. Nature Communications, 2021, 12, 4326.                    | 5.8  | 54        |
| 16 | Optical spin–orbit coupling in the presence of magnetization: photonic skyrmion interaction with magnetic domains. Nanophotonics, 2021, 10, 3667-3675.                     | 2.9  | 20        |
| 17 | Dynamics of hot carriers in plasmonic heterostructures. Nanophotonics, 2021, 10, 2929-2938.  | 2.9  | 12        |
| 18 | Ultrafast Carrier and Lattice Dynamics in Plasmonic Nanocrystalline Copper Sulfide Films. Laser and Photonics Reviews, 2021, 15, 2000346.                                  | 4.4  | 9         |

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|----|---|-----|-----------|
| 19 | Long-Range Directional Routing and Spatial Selection of High-Spin-Purity Valley Trion Emission in<br>Monolayer WS <sub>2</sub> . ACS Nano, 2021, 15, 18163-18171.   | 7.3 | 14        |
| 20 | Photonic Spin Lattices: Symmetry Constraints for Skyrmion and Meron Topologies. Physical Review Letters, 2021, 127, 237403.   | 2.9 | 49        |
| 21 | Optoelectronic Synapses Based on Hot-Electron-Induced Chemical Processes. Nano Letters, 2020, 20, 1536-1541.  | 4.5 | 19        |
| 22 | Reconfigurable cavity-based plasmonic platform for resonantly enhanced sub-bandgap photodetection. Journal of Applied Physics, 2020, 128, 203101.                   | 1.1 | 4         |
| 23 | Electric Control of Spinâ€Orbit Coupling in Grapheneâ€Based Nanostructures with Broken Rotational<br>Symmetry. Laser and Photonics Reviews, 2020, 14, 2000214.      | 4.4 | 7         |
| 24 | Giant Enhancement of Second-Order Nonlinearity of Epsilon-near- Zero Medium by a Plasmonic<br>Metasurface. Nano Letters, 2020, 20, 5421-5427.                       | 4.5 | 69        |
| 25 | Tunneling-induced broadband and tunable optical emission from plasmonic nanorod metamaterials.<br>Nanophotonics, 2020, 9, 427-434.                                  | 2.9 | 13        |
| 26 | 3D Full-Color Image Projection Based on Reflective Metasurfaces under Incoherent Illumination. Nano<br>Letters, 2020, 20, 4481-4486.                                | 4.5 | 13        |
| 27 | Lasing at the nanoscale: coherent emission of surface plasmons by an electrically driven nanolaser.<br>Nanophotonics, 2020, 9, 3965-3975.                           | 2.9 | 12        |
| 28 | Refractive Index Sensing with Anisotropic Hyperbolic Metamaterials. Biological and Medical Physics Series, 2020, , 81-107.  | 0.3 | 0         |
| 29 | Photonic Spin-orbit Coupling and Topological Properties of Evanescent Fields. , 2020, , .   |     | 0         |
| 30 | Polarization dependence of second harmonic generation from plasmonic nanoprism arrays. Scientific<br>Reports, 2019, 9, 11514.                                       | 1.6 | 11        |
| 31 | Singlet–Triplet Transition Rate Enhancement inside Hyperbolic Metamaterials. Laser and Photonics<br>Reviews, 2019, 13, 1900101.                                     | 4.4 | 10        |
| 32 | Designer photonic dynamics by using non-uniform electron temperature distribution for on-demand all-optical switching times. Nature Communications, 2019, 10, 2967. | 5.8 | 34        |
| 33 | Plasmonic Metamaterials for Nanochemistry and Sensing. Accounts of Chemical Research, 2019, 52, 3018-3028.  | 7.6 | 85        |
| 34 | Single-nanowire spectrometers. Science, 2019, 365, 1017-1020.   | 6.0 | 291       |
| 35 | Optimizing hot carrier effects in Pt-decorated plasmonic heterostructures. Faraday Discussions, 2019, 214, 387-397.   | 1.6 | 15        |
| 36 | Anisotropic Plasmonic CuS Nanocrystals as a Natural Electronic Material with Hyperbolic Optical Dispersion. ACS Nano, 2019, 13, 6550-6560.                          | 7.3 | 30        |

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|----|---|-----|-----------|
| 37 | Experimental demonstration of linear and spinning Janus dipoles for polarisation- and wavelength-selective near-field coupling. Light: Science and Applications, 2019, 8, 52.           | 7.7 | 40        |
| 38 | Optical forces from near-field directionalities in planar structures. Physical Review B, 2019, 99, .  | 1.1 | 17        |
| 39 | Theory of hot electrons: general discussion. Faraday Discussions, 2019, 214, 245-281.   | 1.6 | 34        |
| 40 | Dynamics of hot electron generation in metallic nanostructures: general discussion. Faraday<br>Discussions, 2019, 214, 123-146.   | 1.6 | 21        |
| 41 | New materials for hot electron generation: general discussion. Faraday Discussions, 2019, 214, 365-386.   | 1.6 | 9         |
| 42 | Magnetoâ€Optical Metamaterials: Nonreciprocal Transmission and Faraday Effect Enhancement.<br>Advanced Optical Materials, 2019, 7, 1801420.   | 3.6 | 38        |
| 43 | Deep-subwavelength features of photonic skyrmions in a confined electromagnetic field with orbital angular momentum. Nature Physics, 2019, 15, 650-654.                                 | 6.5 | 176       |
| 44 | Nonlinear Nanoplasmonics. Springer Series in Optical Sciences, 2019, , 267-316.   | 0.5 | 2         |
| 45 | Amplitude and Phase Control of Guided Modes Excitation from a Single Dipole Source: Engineering Far―<br>and Nearâ€Field Directionality. Laser and Photonics Reviews, 2019, 13, 1900250. | 4.4 | 17        |
| 46 | Nanoparticle-based metasurfaces for angular independent spectral filtering applications. Journal of<br>Applied Physics, 2019, 126, .  | 1.1 | 6         |
| 47 | Nanocone-based plasmonic metamaterials. Nanotechnology, 2019, 30, 055301.   | 1.3 | 16        |
| 48 | Spontaneous photon-pair generation from a dielectric nanoantenna. Optica, 2019, 6, 1416.  | 4.8 | 98        |
| 49 | Geometric-Phase Metasurfaces Based on Anisotropic Reflection: Generalized Design Rules. ACS Photonics, 2018, 5, 1755-1761.  | 3.2 | 22        |
| 50 | Spin and Geometric Phase Control Fourâ€Wave Mixing from Metasurfaces. Laser and Photonics Reviews, 2018, 12, 1800034.   | 4.4 | 38        |
| 51 | Secondâ€Harmonic Generation from Hyperbolic Plasmonic Nanorod Metamaterial Slab. Laser and<br>Photonics Reviews, 2018, 12, 1700189.   | 4.4 | 43        |
| 52 | Repulsion of polarized particles from two-dimensional materials. Physical Review B, 2018, 97, .   | 1.1 | 16        |
| 53 | Evidence of High-Order Nonlinearities in Supercontinuum White-Light Generation from a Gold Nanofilm. ACS Photonics, 2018, 5, 1927-1932.   | 3.2 | 20        |
| 54 | Janus and Huygens Dipoles: Near-Field Directionality Beyond Spin-Momentum Locking. Physical Review Letters, 2018, 120, 117402.  | 2.9 | 130       |

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|----|---|------|-----------|
| 55 | Reactive tunnel junctions in electrically driven plasmonic nanorod metamaterials. Nature<br>Nanotechnology, 2018, 13, 159-164.                                  | 15.6 | 95        |
| 56 | Freeâ€electron Optical Nonlinearities in Plasmonic Nanostructures: A Review of the Hydrodynamic Description. Laser and Photonics Reviews, 2018, 12, 1700082.    | 4.4  | 79        |
| 57 | Not every dipole is the same: the hidden patterns of dipolar near fields. Europhysics News, 2018, 49, 14-18.  | 0.1  | 7         |
| 58 | Ultrafast Polarisation Control with Metamaterials. , 2018, , .  |      | 1         |
| 59 | Interferometric Evanescent Wave Excitation of a Nanoantenna for Ultrasensitive Displacement and<br>Phase Metrology. Physical Review Letters, 2018, 121, 193901. | 2.9  | 26        |
| 60 | Metaparticles: Dressing Nanoâ€Objects with a Hyperbolic Coating. Laser and Photonics Reviews, 2018, 12, 1800179.  | 4.4  | 28        |
| 61 | Förster Resonance Energy Transfer inside Hyperbolic Metamaterials. ACS Photonics, 2018, 5, 4594-4603.   | 3.2  | 24        |
| 62 | Nonlinear Goniometry by Second-Harmonic Generation in AlGaAs Nanoantennas. ACS Photonics, 2018, 5, 4386-4392.   | 3.2  | 37        |
| 63 | DNA-Assembled Plasmonic Waveguides for Nanoscale Light Propagation to a Fluorescent<br>Nanodiamond. Nano Letters, 2018, 18, 7323-7329.                          | 4.5  | 58        |
| 64 | Circular dichroism enhancement in plasmonic nanorod metamaterials. Optics Express, 2018, 26, 17841.   | 1.7  | 52        |
| 65 | Directional scattering from particles under evanescent wave illumination: the role of reactive power. Optics Letters, 2018, 43, 3393.                           | 1.7  | 16        |
| 66 | All-optical switching in silicon photonic waveguides with an epsilon-near-zero resonant cavity<br>[Invited]. Photonics Research, 2018, 6, B1.                   | 3.4  | 20        |
| 67 | Imaging Electric and Magnetic Modes and Their Hybridization in Single and Dimer AlGaAs<br>Nanoantennas. Advanced Optical Materials, 2018, 6, 1800664.           | 3.6  | 10        |
| 68 | Generalization of the optical theorem: experimental proof for radially polarized beams. Light: Science and Applications, 2018, 7, 36.                           | 7.7  | 23        |
| 69 | Special Issue on Recent Developments and Applications of Plasmonics. ACS Photonics, 2018, 5, 2538-2540.   | 3.2  | 2         |
| 70 | Nonlinearity-Induced Multiplexed Optical Trapping and Manipulation with Femtosecond Vector Beams.<br>Nano Letters, 2018, 18, 5538-5543.                         | 4.5  | 82        |
| 71 | Structural second-order nonlinearity in plasmonic metamaterials. Optica, 2018, 5, 1502.   | 4.8  | 21        |
|    |   |      |           |

72 Ultrafast Control of Light Polarisation in Nonlinear Metamaterials. , 2018, , .

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|----|---|------|-----------|
| 73 | Spontaneous emission in non-local materials. Light: Science and Applications, 2017, 6, e16273-e16273.   | 7.7  | 75        |
| 74 | Reflective Metasurfaces for Incoherent Light To Bring Computer Graphics Tricks to Optical Systems.<br>Nano Letters, 2017, 17, 4189-4193.  | 4.5  | 9         |
| 75 | Universal switching of plasmonic signals using optical resonator modes. Light: Science and Applications, 2017, 6, e16237-e16237.  | 7.7  | 20        |
| 76 | Amplification of surface-enhanced Raman scattering due to substrate-mediated localized surface plasmons in gold nanodimers. Journal of Materials Chemistry C, 2017, 5, 4075-4084. | 2.7  | 44        |
| 77 | Lateral Casimir Force on a Rotating Particle near a Planar Surface. Physical Review Letters, 2017, 118, 133605.   | 2.9  | 69        |
| 78 | Ultrafast synthesis and switching of light polarization in nonlinear anisotropic metamaterials.<br>Nature Photonics, 2017, 11, 628-633.   | 15.6 | 239       |
| 79 | Titanium Oxynitride Thin Films with Tunable Double Epsilon-Near-Zero Behavior for Nanophotonic Applications. ACS Applied Materials & Interfaces, 2017, 9, 29857-29862.            | 4.0  | 91        |
| 80 | Two-Dimensional Pulse Propagation without Anomalous Dispersion. Physical Review Letters, 2017, 119, 114301.   | 2.9  | 6         |
| 81 | Selfâ€Assembled Silver–Germanium Nanolayer Metamaterial with the Enhanced Nonlinear Response.<br>Advanced Optical Materials, 2017, 5, 1700753.                                    | 3.6  | 16        |
| 82 | Spontaneous Emission inside a Hyperbolic Metamaterial Waveguide. ACS Photonics, 2017, 4, 2513-2521.   | 3.2  | 43        |
| 83 | Geometry Defines Ultrafast Hotâ€Carrier Dynamics and Kerr Nonlinearity in Plasmonic Metamaterial<br>Waveguides and Cavities. Advanced Optical Materials, 2017, 5, 1700299.        | 3.6  | 25        |
| 84 | Hotâ€Electron Effects in Plasmonics and Plasmonic Materials. Advanced Optical Materials, 2017, 5, 1700508.  | 3.6  | 12        |
| 85 | Hydrodynamic Model for Coherent Nonlinear Plasmonics. Springer Series in Optical Sciences, 2017, , 235-259.   | 0.5  | 0         |
| 86 | Unidirectional evanescent-wave coupling from circularly polarized electric and magnetic dipoles: An<br>angular spectrum approach. Physical Review B, 2017, 95, .                  | 1.1  | 51        |
| 87 | Cathodoluminescence imaging spectroscopy of single and dimer AlGaAs nano-disks. , 2017, , .   |      | 1         |
| 88 | Hot-carrier generation in plasmonic SiO <inf>2</inf> -Au core-shell nanoparticles. , 2017, , .  |      | 0         |
| 89 | Sum-frequency generation and photon-pair creation in AlGaAs nano-disks. , 2017, , .   |      | 1         |

90 Nonlinear anisotropic metamaterials. , 2017, , .

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|-----|---|------|-----------|
| 91  | Controlling field enhancement with plasmonic nanocone metamaterials. , 2017, , .  |      | Ο         |
| 92  | Magneto-optical nanowire metamaterials. , 2017, , .   |      | 0         |
| 93  | Nonlinear Optics of Plasmonic Metamaterials. , 2017, , .  |      | 0         |
| 94  | Figures of merit for passive and active plasmonic circuits. , 2016, , .   |      | 0         |
| 95  | Nonlinear propagation of surface plasmon-polaritons in gold stripe waveguides. , 2016, , .  |      | 0         |
| 96  | Spectral variation of fluorescence lifetime near single metal nanoparticles. Scientific Reports, 2016, 6, 21349.  | 1.6  | 42        |
| 97  | Nonlocality-driven supercontinuum white light generation in plasmonic nanostructures. Nature Communications, 2016, 7, 11497.  | 5.8  | 73        |
| 98  | Tunable Ultra-high Aspect Ratio Nanorod Architectures grown on Porous Substrate via<br>Electromigration. Scientific Reports, 2016, 6, 22272.                                    | 1.6  | 15        |
| 99  | Benchmarking System-Level Performance of Passive and Active Plasmonic Components: Integrated Circuit Approach. Proceedings of the IEEE, 2016, 104, 2338-2348.                   | 16.4 | 15        |
| 100 | Nonlinear optics and optomechanics with plasmonic metamaterials. , 2016, , .  |      | 0         |
| 101 | Interscale mixing microscopy: far-field imaging beyond the diffraction limit. Optica, 2016, 3, 803.   | 4.8  | 9         |
| 102 | Stereoscopic Nanoscale-Precision Growth of Free-Standing Silver Nanorods by Electron Beam<br>Irradiation. Journal of Physical Chemistry C, 2016, 120, 20310-20314.              | 1.5  | 10        |
| 103 | Unifying physics and technology in light of Maxwell's equations. Philosophical Transactions Series A,<br>Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150264. | 1.6  | 2         |
| 104 | Superluminal and stopped light due to mode coupling in confined hyperbolic metamaterial waveguides. Scientific Reports, 2016, 5, 17678.   | 1.6  | 29        |
| 105 | Integrated plasmonic circuitry on a vertical-cavity surface-emitting semiconductor laser platform.<br>Nature Communications, 2016, 7, 12409.                                    | 5.8  | 24        |
| 106 | Nonlinear Dynamics of Ultrashort Long-Range Surface Plasmon Polariton Pulses in Gold Strip<br>Waveguides. ACS Photonics, 2016, 3, 2324-2329.                                    | 3.2  | 27        |
| 107 | Ultrafast Optical Modulation of Second- and Third-Harmonic Generation from Cut-Disk-Based Metasurfaces. ACS Photonics, 2016, 3, 1517-1522.                                      | 3.2  | 63        |
| 108 | Repulsion of polarised particles from anisotropic materials with a near-zero permittivity component.<br>Light: Science and Applications, 2016, 5, e16022-e16022.                | 7.7  | 25        |

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|-----|---|------|-----------|
| 109 | Internal Structure Refinement of Porous Sintered Silver via Electromigration. Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2016, 2016, 000190-000195. | 0.2  | Ο         |
| 110 | Plasmonic Metamaterials for Nonlinear Nanophotonics. , 2016, , .  |      | 0         |
| 111 | Nonlinear Metamaterial Nanophotonics. , 2016, , .   |      | 0         |
| 112 | Hyperbolic Polaritonic Crystals Based on Nanostructured Nanorod Metamaterials. Advanced<br>Materials, 2015, 27, 5974-5980.  | 11.1 | 30        |
| 113 | Purcell effect in hyperbolic metamaterial resonators. Physical Review B, 2015, 92, .  | 1.1  | 62        |
| 114 | Hyperbolic metamaterial antenna for second-harmonic generation tomography. Optics Express, 2015, 23, 30730.   | 1.7  | 56        |
| 115 | Active Nanophotonic Circuitry Based on Dielectricâ€loaded Plasmonic Waveguides. Advanced Optical<br>Materials, 2015, 3, 1662-1690.                                      | 3.6  | 49        |
| 116 | Optimizing Strontium Ruthenate Thin Films for Near-Infrared Plasmonic Applications. Scientific Reports, 2015, 5, 9118.  | 1.6  | 17        |
| 117 | Refractive index sensing with hyperbolic metamaterials: strategies for biosensing and nonlinearity enhancement. Optics Express, 2015, 23, 14329.                        | 1.7  | 82        |
| 118 | Bulk plasmonâ€polaritons in hyperbolic nanorod metamaterial waveguides. Laser and Photonics<br>Reviews, 2015, 9, 345-353.   | 4.4  | 104       |
| 119 | Eliminating material constraints for nonlinearity with plasmonic metamaterials. Nature Communications, 2015, 6, 7757.   | 5.8  | 123       |
| 120 | Applications of plasmonics: general discussion. Faraday Discussions, 2015, 178, 435-466.  | 1.6  | 17        |
| 121 | Scattering suppression from arbitrary objects in spatially dispersive layered metamaterials. Physical Review B, 2015, 91, .   | 1.1  | 45        |
| 122 | Tuning the effective plasma frequency of nanorod metamaterials from visible to telecom wavelengths. Applied Physics Letters, 2015, 107, .                               | 1.5  | 39        |
| 123 | Lateral forces on circularly polarizable particles near a surface. Nature Communications, 2015, 6, 8799.  | 5.8  | 159       |
| 124 | Spin–orbit interactions of light. Nature Photonics, 2015, 9, 796-808.   | 15.6 | 1,526     |
| 125 | Nonperturbative Hydrodynamic Model for Multiple Harmonics Generation in Metallic<br>Nanostructures. ACS Photonics, 2015, 2, 8-13.                                       | 3.2  | 79        |
| 126 | Light emission in nonlocal plasmonic metamaterials. Faraday Discussions, 2015, 178, 61-70.  | 1.6  | 22        |

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|-----|---|------|-----------|
| 127 | Plasmonic Metamaterials for Nanophotonics. , 2015, , .  |      | 0         |
| 128 | Electromigration Phenomena in Sintered Nanoparticle Ag Systems Under High Current Density.<br>Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2015, 2015, 000059-000063. | 0.2  | 0         |
| 129 | Ultrafast all-optical modulation with hyperbolic metamaterial integrated in Si photonic circuitry.<br>Optics Express, 2014, 22, 10987.  | 1.7  | 71        |
| 130 | Hydrogen Detected by the Naked Eye: Optical Hydrogen Gas Sensors Based on Core/Shell Plasmonic<br>Nanorod Metamaterials. Advanced Materials, 2014, 26, 3532-3537.                       | 11.1 | 104       |
| 131 | Impact of nonradiative line broadening on emission in photonic and plasmonic cavities. Physical<br>Review A, 2014, 90, .  | 1.0  | 8         |
| 132 | Photonic spin Hall effect in hyperbolic metamaterials for polarization-controlled routing of subwavelength modes. Nature Communications, 2014, 5, 3226.                                 | 5.8  | 229       |
| 133 | Nano-opto-mechanical effects in plasmonic waveguides. Laser and Photonics Reviews, 2014, 8, 131-136.  | 4.4  | 42        |
| 134 | Spin–orbit coupling in surface plasmon scattering by nanostructures. Nature Communications, 2014,<br>5, 5327.   | 5.8  | 250       |
| 135 | Nonlinear hyperbolic metamaterials. , 2014, , .   |      | 0         |
| 136 | Anisotropic plasmonic metamaterials for nanophotonic applications. , 2014, , .  |      | 0         |
| 137 | The room temperature phosphine-free synthesis of near-infrared emitting HgSe quantum dots. Journal of Materials Chemistry C, 2014, 2, 2107-2111.  | 2.7  | 14        |
| 138 | Nearâ€Field Hyperspectral Optical Imaging. ChemPhysChem, 2014, 15, 619-629.   | 1.0  | 8         |
| 139 | Compact Optical Antenna Coupler for Silicon Photonics Characterized by Third-Harmonic Generation.<br>ACS Photonics, 2014, 1, 912-916.   | 3.2  | 22        |
| 140 | Looking into Meta-Atoms of Plasmonic Nanowire Metamaterial. Nano Letters, 2014, 14, 4971-4976.  | 4.5  | 57        |
| 141 | Nonlocal optics of plasmonic nanowire metamaterials. Physical Review B, 2014, 89, .   | 1.1  | 74        |
| 142 | Shaping plasmon beams via the controlled illumination of finite-size plasmonic crystals. Scientific Reports, 2014, 4, 7234.   | 1.6  | 9         |
| 143 | Manipulating polarization of light with ultrathin epsilon-near-zero metamaterials. Optics Express, 2013, 21, 14907.   | 1.7  | 119       |
| 144 | Ultrasensitive Nonâ€Resonant Detection of Ultrasound with Plasmonic Metamaterials. Advanced<br>Materials, 2013, 25, 2351-2356.  | 11.1 | 54        |

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|-----|--|------|-----------|
| 145 | Fabrication and optical properties of large-scale arrays of gold nanocavities based on rod-in-a-tube<br>coaxials. Applied Physics Letters, 2013, 102, .      | 1.5  | 33        |
| 146 | Plasmonic enhancement of nonlinear magneto-optical response in nickel nanorod metamaterials.<br>Physical Review B, 2013, 87, .                               | 1.1  | 51        |
| 147 | Near-Field Interference for the Unidirectional Excitation of Electromagnetic Guided Modes. Science, 2013, 340, 328-330.                                      | 6.0  | 571       |
| 148 | Optomechanical "nonlinear" light modulation on nano-scales. , 2013, , .  |      | 0         |
| 149 | Optical hydrogen sensors based on Au/Pd core shell nanorod arrays. , 2013, , .   |      | 1         |
| 150 | Broadband and broadangle SPP antennas based on plasmonic crystals with linear chirp. Scientific<br>Reports, 2012, 2, 829.                                    | 1.6  | 49        |
| 151 | Nonlinear plasmonics. Nature Photonics, 2012, 6, 737-748.  | 15.6 | 2,200     |
| 152 | Tailoring and enhancing spontaneous two-photon emission using resonant plasmonic nanostructures. Physical Review A, 2012, 86, .                              | 1.0  | 34        |
| 153 | Microscopic model of Purcell enhancement in hyperbolic metamaterials. Physical Review B, 2012, 86, .   | 1.1  | 99        |
| 154 | Nonlinearly coupled localized plasmon resonances: Resonant second-harmonic generation. Physical<br>Review B, 2012, 86, .                                     | 1.1  | 70        |
| 155 | Surface Plasmon Polariton Amplification upon Electrical Injection in Highly Integrated Plasmonic<br>Circuits. Nano Letters, 2012, 12, 2459-2463.             | 4.5  | 86        |
| 156 | Low-Temperature Plasmonics of Metallic Nanostructures. Nano Letters, 2012, 12, 1561-1565.  | 4.5  | 113       |
| 157 | Active plasmonics. , 2011, , .   |      | 0         |
| 158 | All-Plasmonic Modulation via Stimulated Emission of Copropagating Surface Plasmon Polaritons on a<br>Substrate with Gain. Nano Letters, 2011, 11, 2231-2235. | 4.5  | 76        |
| 159 | Four-level polarization discriminator based on a surface plasmon polaritonic crystal. Applied Physics<br>Letters, 2011, 98, 111109.                          | 1.5  | 20        |
| 160 | Designed ultrafast optical nonlinearity in a plasmonic nanorod metamaterial enhanced by nonlocality. Nature Nanotechnology, 2011, 6, 107-111.                | 15.6 | 432       |
| 161 | The controlled fabrication and geometry tunable optics of gold nanotube arrays. Nanotechnology, 2011, 22, 045705.  | 1.3  | 29        |
| 162 | Low-Loss Multilayered Metamaterial Exhibiting a Negative Index of Refraction at Visible Wavelengths.<br>Physical Review Letters, 2011, 106, 067402.          | 2.9  | 158       |

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|-----|--|------|-----------|
| 163 | Experimental demonstration of dielectric-loaded plasmonic waveguide disk resonators at telecom wavelengths. Applied Physics Letters, 2011, 98, 161102.             | 1.5  | 30        |
| 164 | Light extraction beyond total internal reflection using one-dimensional plasmonic crystals. Applied<br>Physics Letters, 2011, 99, 081106.                          | 1.5  | 8         |
| 165 | The third plasmonic revolution. Nature Nanotechnology, 2010, 5, 482-483.   | 15.6 | 57        |
| 166 | High-Performance Biosensing Using Arrays of Plasmonic Nanotubes. ACS Nano, 2010, 4, 2210-2216.   | 7.3  | 140       |
| 167 | Hyperspectral imaging with scanning near-field optical microscopy: applications in plasmonics. Optics Express, 2010, 18, 16513.                                    | 1.7  | 45        |
| 168 | Plasmonic waveguide as an efficient transducer for high-density data storage. Applied Physics Letters, 2009, 95, .   | 1.5  | 29        |
| 169 | Plasmonic nanorod metamaterials for biosensing. Nature Materials, 2009, 8, 867-871.  | 13.3 | 1,529     |
| 170 | Optical Nonlocalities and Additional Waves in Epsilon-Near-Zero Metamaterials. Physical Review<br>Letters, 2009, 102, 127405.                                      | 2.9  | 249       |
| 171 | Guided plasmonic modes in nanorod assemblies: strong electromagnetic coupling regime. Optics Express, 2008, 16, 7460.  | 1.7  | 109       |
| 172 | Fabrication and optical properties of gold nanotube arrays. Journal of Physics Condensed Matter, 2008, 20, 362203.   | 0.7  | 51        |
| 173 | Three-dimensional numerical modeling of photonic integration with dielectric-loaded SPP waveguides. Physical Review B, 2008, 78, .                                 | 1.1  | 117       |
| 174 | Plasmonic Core/Shell Nanorod Arrays:  Subattoliter Controlled Geometry and Tunable Optical<br>Properties. Journal of Physical Chemistry C, 2007, 111, 12522-12527. | 1.5  | 51        |
| 175 | Anisotropic optical properties of arrays of gold nanorods embedded in alumina. Physical Review B, 2006, 73, .  | 1.1  | 137       |
| 176 | Growth and properties of gold and nickel nanorods in thin film alumina. Nanotechnology, 2006, 17, 5746-5753.   | 1.3  | 132       |
| 177 | Nano-optics of surface plasmon polaritons. Physics Reports, 2005, 408, 131-314.  | 10.3 | 2,082     |
| 178 | Near-field photonics: surface plasmon polaritons and localized surface plasmons. Journal of Optics, 2003, 5, S16-S50.  | 1.5  | 480       |
| 179 | Near-field second harmonic generation from a rough metal surface. Physical Review B, 1997, 56, 9290-9293.  | 1.1  | 106       |
| 180 | Near-field microscopy of surface-plasmon polaritons: Localization and internal interface imaging.<br>Physical Review B, 1995, 51, 17916-17924.                     | 1.1  | 97        |