List of Publications by Year in descending order

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| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | â€~Trapped rainbow' storage of light in metamaterials. Nature, 2007, 450, 397-401.  | 27.8 | 763       |
| 2  | Active nanoplasmonic metamaterials. Nature Materials, 2012, 11, 573-584.  | 27.5 | 502       |
| 3  | Overcoming Losses with Gain in a Negative Refractive Index Metamaterial. Physical Review Letters, 2010, 105, 127401.  | 7.8  | 251       |
| 4  | Breaking Lorentz reciprocity to overcome the time-bandwidth limit in physics and engineering.<br>Science, 2017, 356, 1260-1264.   | 12.6 | 174       |
| 5  | Nanophotonic Platforms for Enhanced Chiral Sensing. ACS Photonics, 2018, 5, 2669-2675.  | 6.6  | 138       |
| 6  | Ultraslow waves on the nanoscale. Science, 2017, 358, .   | 12.6 | 107       |
| 7  | Accessible Superchiral Near-Fields Driven by Tailored Electric and Magnetic Resonances in All-Dielectric Nanostructures. ACS Photonics, 2019, 6, 1939-1946.                       | 6.6  | 82        |
| 8  | Coherent Amplification and Noise in Gain-Enhanced Nanoplasmonic Metamaterials: A Maxwell-Bloch<br>Langevin Approach. ACS Nano, 2012, 6, 2420-2431.                                | 14.6 | 79        |
| 9  | Surface plasmon polaritons in generalized slab heterostructures with negative permittivity and permeability. Physical Review B, 2006, 73, .                                       | 3.2  | 78        |
| 10 | Large spontaneous-emission enhancements in metallic nanostructures: towards LEDs faster than<br>lasers [Invited]. Optics Express, 2016, 24, 17916.                                | 3.4  | 76        |
| 11 | Gain and plasmon dynamics in active negative-index metamaterials. Philosophical Transactions Series<br>A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3525-3550. | 3.4  | 67        |
| 12 | Single-mode operation in the slow-light regime using oscillatory waves in generalized left-handed heterostructures. Applied Physics Letters, 2006, 89, 201103.                    | 3.3  | 60        |
| 13 | Metamaterials with Quantum Gain. Science, 2013, 339, 654-655.   | 12.6 | 59        |
| 14 | Completely Stopped and Dispersionless Light in Plasmonic Waveguides. Physical Review Letters, 2014,<br>112, 167401.   | 7.8  | 58        |
| 15 | Theory of Light Amplification in Active Fishnet Metamaterials. Physical Review Letters, 2011, 107, 167405.  | 7.8  | 55        |
| 16 | Negative-permeability electromagnetically induced transparent and magnetically active metamaterials.<br>Physical Review B, 2010, 81, .  | 3.2  | 43        |
| 17 | Ultrabroadband 3D invisibility with fast-light cloaks. Nature Communications, 2019, 10, 4859.   | 12.8 | 30        |
| 18 | Dual Nanoresonators for Ultrasensitive Chiral Detection. ACS Photonics, 2021, 8, 1754-1762.   | 6.6  | 30        |

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|----|---|------|-----------|
| 19 | FDTD analysis of slow light propagation in negative-refractive-index metamaterial waveguides. Journal of Optics, 2009, 11, 114027.  | 1.5  | 29        |
| 20 | Tsakmakidis et al. reply. Nature, 2008, 455, E11-E12.   | 27.8 | 27        |
| 21 | Control and dynamic competition of bright and dark lasing states in active nanoplasmonic metamaterials. Physical Review B, 2012, 85, .  | 3.2  | 27        |
| 22 | Extreme control of light in metamaterials: Complete and loss-free stopping of light. Physica B:<br>Condensed Matter, 2012, 407, 4066-4069.  | 2.7  | 26        |
| 23 | Evanescent gain for slow and stopped light in negative refractive index heterostructures. Physical<br>Review B, 2011, 84, .   | 3.2  | 23        |
| 24 | Micrometer size polarization independent depletion-type photonic modulator in Silicon On Insulator.<br>Optics Express, 2007, 15, 5879.  | 3.4  | 22        |
| 25 | Spherical optomagnonic microresonators: Triple-resonant photon transitions between Zeeman-split<br>Mie modes. Physical Review B, 2020, 101, .                                     | 3.2  | 21        |
| 26 | Ultralow-loss optical diamagnetism in silver nanoforests. Journal of Optics, 2009, 11, 114026.  | 1.5  | 20        |
| 27 | Topological, nonreciprocal, and multiresonant slow light beyond the time-bandwidth limit. Applied Physics Letters, 2021, 119, .   | 3.3  | 13        |
| 28 | Nonreciprocal cavities and the time-bandwidth limit: comment. Optica, 2020, 7, 1097.  | 9.3  | 12        |
| 29 | Comment on "Spaser Action, Loss Compensation, and Stability in Plasmonic Systems with Gainâ€.<br>Physical Review Letters, 2011, 107, 259701; discussion 259702.                   | 7.8  | 11        |
| 30 | Three-Dimensional Giant Invisibility to Superscattering Enhancement Induced by Zeeman-Split Modes.<br>ACS Photonics, 2021, 8, 1407-1412.  | 6.6  | 11        |
| 31 | Magnetic switching of Kerker scattering in spherical microresonators. Nanophotonics, 2020, 9, 4033-4041.  | 6.0  | 10        |
| 32 | Complete bandgap switching in photonic opals. New Journal of Physics, 2009, 11, 073011.   | 2.9  | 9         |
| 33 | Hyperpolarizability of Plasmonic Meta-Atoms in Metasurfaces. Nano Letters, 2021, 21, 51-59.   | 9.1  | 9         |
| 34 | Engineering Subwavelength Nanoantennas in the Visible by Employing Resonant Anisotropic<br>Nanospheroids. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-12. | 2.9  | 8         |
| 35 | Stopped-light nanolasing in optical magic-angle graphene. Nature Nanotechnology, 2021, 16, 1048-1049.   | 31.5 | 8         |
| 36 | Systematic modal analysis of 3-D dielectric waveguides using conventional and high accuracy nonstandard FDTD algorithms. IEEE Photonics Technology Letters, 2005, 17, 2598-2600.  | 2.5  | 7         |

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|----|--|------|-----------|
| 37 | Multifunctional plasmonic metasurface demultiplexer and wavelength-polarization controllable beam splitter. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C50. | 2.1  | 7         |
| 38 | Quantum coherence–driven self-organized criticality and nonequilibrium light localization. Science<br>Advances, 2018, 4, eaaq0465.   | 10.3 | 6         |
| 39 | Arbitrarily high time bandwidth performance in a nonreciprocal optical resonator with broken time invariance. Scientific Reports, 2020, 10, 15752.                                       | 3.3  | 6         |
| 40 | Light-Alignment Controllable Beam Splitter and Vectorial Displacement Sensor in the Stopped-Light<br>Regime of Plasmonic Metasurfaces. ACS Photonics, 2021, 8, 296-306.                  | 6.6  | 6         |
| 41 | Watch your back. Nature, 2008, 451, 27-27.   | 27.8 | 5         |
| 42 | Slow light in metamaterial heterostructures. Proceedings of SPIE, 2008, , .  | 0.8  | 5         |
| 43 | Trapped Rainbow Storage of Light in Metamaterials. Advances in Science and Technology, 0, , .  | 0.2  | 5         |
| 44 | Complete and robust bandgap switching in double-inverse-opal photonic crystals. Applied Physics<br>Letters, 2008, 92, 011109.  | 3.3  | 4         |
| 45 | Recent developments in the study of slow light in complex photonic materials. , 2010, , .  |      | 4         |
| 46 | Plasmonic Nanolasers Without Cavity, Threshold and Diffraction Limit using Stopped Light. , 2012, , .  |      | 3         |
| 47 | Unconventional time-bandwidth performance of resonant cavities with nonreciprocal coupling.<br>Physical Review A, 2021, 103, .   | 2.5  | 3         |
| 48 | Reply to â€~Physical limitations on broadband invisibility based on fast-light media'. Nature<br>Communications, 2021, 12, 2800.   | 12.8 | 3         |
| 49 | Full-wave electromagnetic modelling of an InP/InGaAs travelling-wave heterojunction phototransistor. Journal Physics D: Applied Physics, 2006, 39, 1805-1814.                            | 2.8  | 2         |
| 50 | Slow and stopped light in metamaterials. , 2008, , .   |      | 2         |
| 51 | Slow and stopped light in metamaterials: the trapped rainbow. , 2008, , .  |      | 2         |
| 52 | Trapped rainbow storage of light in metamaterials. , 2010, , .   |      | 2         |
| 53 | Compensation of Losses in Slow-Light Negative-Index Waveguides By Evanescent Pumping. , 2010, , .  |      | 2         |
| 54 | Gain in negative-refractive-index slow-light waveguides. Proceedings of SPIE, 2011, , .  | 0.8  | 2         |

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|----|--|------|-----------|
| 55 | Slow and stopped-light lasing in active plasmonic metamaterials. , 2012, , .   |      | 2         |
| 56 | Tunable polarization-sensitive optical nanoswitches based on spheroidal core-shell nanoparticles.<br>Journal of Optics (United Kingdom), 2018, 20, 085004. | 2.2  | 2         |
| 57 | Gain enhancement of circular waveguide antennas using nearâ€zero index metamaterials. Microwave<br>and Optical Technology Letters, 2019, 61, 1617-1621.    | 1.4  | 2         |
| 58 | Active THz metasurfaces for compact isolation. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C191.                               | 2.1  | 2         |
| 59 | Analytical Methods for Causality Evaluation of Photonic Materials. Materials, 2022, 15, 1536.  | 2.9  | 2         |
| 60 | Exceeding the classical time-bandwidth product in nonlinear time-invariant systems. Nonlinear Dynamics, 0, , 1.  | 5.2  | 2         |
| 61 | Dynamics of amplification in a nanoplasmonic metamaterial. Applied Physics A: Materials Science and Processing, 2012, 107, 77-82.                          | 2.3  | 1         |
| 62 | True stopping of light: a new regime for nanophotonics. Proceedings of SPIE, 2014, , .   | 0.8  | 1         |
| 63 | Three-dimensional Weyl topology in one-dimensional photonic structures. Light: Science and Applications, 2022, 11, .                                       | 16.6 | 1         |
| 64 | FDTD modeling of an InP traveling-wave HPT. , 2004, , .  |      | 0         |
| 65 | Slow light in negative-index waveguide-heterostructures. Proceedings of SPIE, 2007, , .  | 0.8  | 0         |
| 66 | Optical magnetism in metal nanoforests. Proceedings of SPIE, 2009, , .   | 0.8  | 0         |
| 67 | Ultraslow and stored light in metamaterials: new developments and verifications. Proceedings of SPIE, 2009, , .  | 0.8  | Ο         |
| 68 | Gain in negative-index metamaterials and slow-light waveguides. Proceedings of SPIE, 2010, , .   | 0.8  | 0         |
| 69 | Dynamics of light amplification and gain in nano-plasmonic fishnet metamaterials. Proceedings of SPIE, 2011, , .   | 0.8  | 0         |
| 70 | From Loss-Compensation to Amplification and Lasing in Active Nanoplasmonic Metamaterials. , 2012, , .  |      | 0         |
| 71 | Nonlinear mode competition in a lasing nanoplasmonic metamaterial. , 2012, , .   |      | 0         |
| 72 | Quantum-Coherently Assisted Deep-UV Localization of Photonic States in Active Stopped-Light<br>Plasmonic Heterostructures. , 2015, , .                     |      | 0         |

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|----|---|-----|-----------|
| 73 | Predicting the optical response of plasmonic metamolecules using equivalent circuit models. , 2017, , .                     |     | 0         |
| 74 | Overcoming the time-bandwidth limit. , 2018, , .  |     | 0         |
| 75 | Optical Delay Beyond the Time-Bandwidth Limit: From Pipe Dream to Reality. , 2019, , .                                      |     | 0         |
| 76 | Finite-difference time-domain analyses of active cloaking for electrically-large objects. Optics Express, 2021, 29, 3055.   | 3.4 | 0         |
| 77 | Stopping fast waves with a left-handed metamaterial slab. , 2006, , .   |     | 0         |
| 78 | Slow Light in Tapered Negative-Refractive-Index Waveguides. , 2007, , .   |     | 0         |
| 79 | Stopped Light in Negative-Index Metamaterial Heterostructures. , 2008, , .  |     | 0         |
| 80 | â€~Trapped Rainbow' Schemes for Storing Light in Engineered Waveguides. , 2009, , .   |     | 0         |
| 81 | Recent Advances in â€~Trapped Rainbow' Techniques for Stopping Light. , 2009, , .   |     | 0         |
| 82 | Slow Light Amplification and Nano-Lasing in Active Plasmonic Metamaterials. , 2011, , .                                     |     | 0         |
| 83 | Quantum-Coherently Assisted Deep-UV Localization of Light in Active Plasmonic Heterostructures. , 2015, , .                 |     | 0         |
| 84 | Quantum-Coherence Emergent Self-Organized Criticality and Nonequilibrium Light Localization. , 2016, , .                    |     | 0         |
| 85 | Demonstration of ultra-high time-bandwidth product in a non-reciprocal fiber-optic system. , 2018, , .                      |     | 0         |
| 86 | Theoretical and numerical study of the time-bandwidth product in resonant cavities with nonreciprocal coupling. , 2020, , . |     | 0         |
| 87 | Duality Symmetry in Hybrid Nanoresonators for Chiral Sensing. , 2020, , .   |     | 0         |