

# Steven G Johnson

## List of Publications by Year in descending order

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267  
papers

21,546  
citations

11639

70  
h-index

10441

139  
g-index

272  
all docs

272  
docs citations

272  
times ranked

12953  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Meep: A flexible free-software package for electromagnetic simulations by the FDTD method. <i>Computer Physics Communications</i> , 2010, 181, 687-702.       | 3.0  | 2,195     |
| 2  | Observation of trapped light within the radiation continuum. <i>Nature</i> , 2013, 499, 188-191.  | 13.7 | 950       |
| 3  | Guided modes in photonic crystal slabs. <i>Physical Review B</i> , 1999, 60, 5751-5758.   | 1.1  | 911       |
| 4  | All-angle negative refraction without negative effective index. <i>Physical Review B</i> , 2002, 65, .  | 1.1  | 821       |
| 5  | Linear waveguides in photonic-crystal slabs. <i>Physical Review B</i> , 2000, 62, 8212-8222.  | 1.1  | 525       |
| 6  | A three-dimensional optical photonic crystal with designed point defects. <i>Nature</i> , 2004, 429, 538-542.   | 13.7 | 457       |
| 7  | Photonic-crystal slow-light enhancement of nonlinear phase sensitivity. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 2052. | 0.9  | 437       |
| 8  | Improving accuracy by subpixel smoothing in the finite-difference time domain. <i>Optics Letters</i> , 2006, 31, 2972.  | 1.7  | 418       |
| 9  | Subwavelength imaging in photonic crystals. <i>Physical Review B</i> , 2003, 68, .  | 1.1  | 395       |
| 10 | The Casimir effect in microstructured geometries. <i>Nature Photonics</i> , 2011, 5, 211-221.   | 15.6 | 387       |
| 11 | Evanescent-wave bonding between optical waveguides. <i>Optics Letters</i> , 2005, 30, 3042.   | 1.7  | 374       |
| 12 | Perturbation theory for Maxwell's equations with shifting material boundaries. <i>Physical Review E</i> , 2002, 65, 066611.                                   | 0.8  | 354       |
| 13 | Three-dimensional control of light in a two-dimensional photonic crystal slab. <i>Nature</i> , 2000, 407, 983-986.  | 13.7 | 350       |
| 14 | Optimal bistable switching in nonlinear photonic crystals. <i>Physical Review E</i> , 2002, 66, 055601.   | 0.8  | 316       |
| 15 | A Modified Split-Radix FFT With Fewer Arithmetic Operations. <i>IEEE Transactions on Signal Processing</i> , 2007, 55, 111-119.                               | 3.2  | 299       |
| 16 | Cerenkov Radiation in Photonic Crystals. <i>Science</i> , 2003, 299, 368-371.   | 6.0  | 267       |
| 17 | Waveguide branches in photonic crystals. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001, 18, 162.                                 | 0.9  | 246       |
| 18 | Symmetry-protected topological photonic crystal in three dimensions. <i>Nature Physics</i> , 2016, 12, 337-340.   | 6.5  | 245       |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | On-chip transformation optics for multimode waveguide bends. <i>Nature Communications</i> , 2012, 3, 1217.  | 5.8  | 232       |
| 20 | Design and global optimization of high-efficiency thermophotovoltaic systems. <i>Optics Express</i> , 2010, 18, A314.   | 1.7  | 226       |
| 21 | Optical Broadband Angular Selectivity. <i>Science</i> , 2014, 343, 1499-1501.   | 6.0  | 222       |
| 22 | Slow-light, band-edge waveguides for tunable time delays. <i>Optics Express</i> , 2005, 13, 7145.   | 1.7  | 220       |
| 23 | Adiabatic theorem and continuous coupled-mode theory for efficient taper transitions in photonic crystals. <i>Physical Review E</i> , 2002, 66, 066608.   | 0.8  | 196       |
| 24 | Quantitative analysis of bending efficiency in photonic-crystal waveguide bends at $\lambda = 155 \mu\text{m}$ wavelengths. <i>Optics Letters</i> , 2001, 26, 286.  | 1.7  | 185       |
| 25 | Elimination of cross talk in waveguide intersections. <i>Optics Letters</i> , 1998, 23, 1855.   | 1.7  | 182       |
| 26 | All-angle negative refraction in a three-dimensionally periodic photonic crystal. <i>Applied Physics Letters</i> , 2002, 81, 2352-2354.   | 1.5  | 180       |
| 27 | Three-dimensionally periodic dielectric layered structure with omnidirectional photonic band gap. <i>Applied Physics Letters</i> , 2000, 77, 3490-3492.   | 1.5  | 179       |
| 28 | Inverse design of large-area metasurfaces. <i>Optics Express</i> , 2018, 26, 33732.   | 1.7  | 177       |
| 29 | Structured spheres generated by an in-fibre fluid instability. <i>Nature</i> , 2012, 487, 463-467.  | 13.7 | 174       |
| 30 | Physics-Informed Neural Networks with Hard Constraints for Inverse Design. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, B1105-B1132.   | 1.3  | 167       |
| 31 | Bloch surface eigenstates within the radiation continuum. <i>Light: Science and Applications</i> , 2013, 2, e84-e84.  | 7.7  | 163       |
| 32 | High-Q enhancement of attractive and repulsive optical forces between coupled whispering-gallery-mode resonators. <i>Optics Express</i> , 2005, 13, 8286.   | 1.7  | 159       |
| 33 | Roughness losses and volume-current methods in photonic-crystal waveguides. <i>Applied Physics B: Lasers and Optics</i> , 2005, 81, 283-293.  | 1.1  | 158       |
| 34 | Enhanced nonlinear optics in photonic-crystal microcavities. <i>Optics Express</i> , 2007, 15, 16161.   | 1.7  | 155       |
| 35 | Demonstration of highly efficient waveguiding in a photonic crystal slab at the $15\text{-}\mu\text{m}$ wavelength. <i>Optics Letters</i> , 2000, 25, 1297.   | 1.7  | 154       |
| 36 | Frequency-Selective Near-Field Radiative Heat Transfer between Photonic Crystal Slabs: A Computational Approach for Arbitrary Geometries and Materials. <i>Physical Review Letters</i> , 2011, 107, 114302. | 2.9  | 148       |

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|----|---|-----|-----------|
| 37 | Multipole-cancellation mechanism for high-Q cavities in the absence of a complete photonic band gap. Applied Physics Letters, 2001, 78, 3388-3390.  | 1.5 | 144       |
| 38 | $\omega^{(2)}$ and $\omega^{(3)}$ harmonic generation at a critical power in inhomogeneous doubly resonant cavities. Optics Express, 2007, 15, 7303.  | 1.7 | 134       |
| 39 | Casimir Repulsion between Metallic Objects in Vacuum. Physical Review Letters, 2010, 105, 090403.   | 2.9 | 130       |
| 40 | Single-photon all-optical switching using waveguide-cavity quantum electrodynamics. Physical Review A, 2006, 74, .  | 1.0 | 126       |
| 41 | Fundamental limits to optical response in absorptive systems. Optics Express, 2016, 24, 3329.   | 1.7 | 124       |
| 42 | Cavity-enhanced second-harmonic generation via nonlinear-overlap optimization. Optica, 2016, 3, 233.  | 4.8 | 124       |
| 43 | General theory of spontaneous emission near exceptional points. Optics Express, 2017, 25, 12325.  | 1.7 | 118       |
| 44 | Topology optimization of freeform large-area metasurfaces. Optics Express, 2019, 27, 15765.   | 1.7 | 112       |
| 45 | Efficient Computation of Casimir Interactions between Arbitrary 3D Objects. Physical Review Letters, 2009, 103, 040401.   | 2.9 | 111       |
| 46 | Enabling enhanced emission and low-threshold lasing of organic molecules using special Fano resonances of macroscopic photonic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13711-13716. | 3.3 | 110       |
| 47 | Casimir forces on a silicon micromechanical chip. Nature Communications, 2013, 4, 1845.   | 5.8 | 109       |
| 48 | Are slot and sub-wavelength grating waveguides better than strip waveguides for sensing?. Optica, 2018, 5, 1046.  | 4.8 | 105       |
| 49 | Optimization-based design of surface textures for thin-film Si solar cells. Optics Express, 2011, 19, A841.   | 1.7 | 104       |
| 50 | Maximal spontaneous photon emission and energy loss from free electrons. Nature Physics, 2018, 14, 894-899.   | 6.5 | 100       |
| 51 | Fluctuating-surface-current formulation of radiative heat transfer for arbitrary geometries. Physical Review B, 2012, 86, .   | 1.1 | 98        |
| 52 | Coherent Plasmon-Exciton Coupling in Silver Platelet-J-aggregate Nanocomposites. Nano Letters, 2015, 15, 2588-2593.   | 4.5 | 98        |
| 53 | The failure of perfectly matched layers, and towards their redemption by adiabatic absorbers. Optics Express, 2008, 16, 11376.  | 1.7 | 96        |
| 54 | Low-loss, wide-angle Y splitter at $\lambda/16$ - $\lambda$ wavelengths built with a two-dimensional photonic crystal. Optics Letters, 2002, 27, 1400.  | 1.7 | 94        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Efficient Computation of Power, Force, and Torque in BEM Scattering Calculations. IEEE Transactions on Antennas and Propagation, 2015, 63, 3588-3598.   | 3.1 | 93        |
| 56 | Computation and Visualization of Casimir Forces in Arbitrary Geometries: Nonmonotonic Lateral-Wall Forces and the Failure of Proximity-Force Approximations. Physical Review Letters, 2007, 99, 080401. | 2.9 | 92        |
| 57 | Robust topology optimization of three-dimensional photonic-crystal band-gap structures. Optics Express, 2014, 22, 22632.  | 1.7 | 92        |
| 58 | Virtual photons in imaginary time: Computing exact Casimir forces via standard numerical electromagnetism techniques. Physical Review A, 2007, 76, .  | 1.0 | 91        |
| 59 | Silicon-in-silica spheres via axial thermal gradient in-fibre capillary instabilities. Nature Communications, 2013, 4, 2216.  | 5.8 | 90        |
| 60 | Fluctuating-surface-current formulation of radiative heat transfer: Theory and applications. Physical Review B, 2013, 88, .   | 1.1 | 90        |
| 61 | Formulation for scalable optimization of microcavities via the frequency-averaged local density of states. Optics Express, 2013, 21, 30812.   | 1.7 | 83        |
| 62 | Effectiveness of Thin Films in Lieu of Hyperbolic Metamaterials in the Near Field. Physical Review Letters, 2014, 112, 157402.  | 2.9 | 83        |
| 63 | Theoretical Criteria for Scattering Dark States in Nanostructured Particles. Nano Letters, 2014, 14, 2783-2788.   | 4.5 | 83        |
| 64 | Inverse design enables large-scale high-performance meta-optics reshaping virtual reality. Nature Communications, 2022, 13, 2409.   | 5.8 | 82        |
| 65 | Strain-tunable silicon photonic band gap microcavities in optical waveguides. Applied Physics Letters, 2004, 84, 1242-1244.   | 1.5 | 79        |
| 66 | Emulation of two-dimensional photonic crystal defect modes in a photonic crystal with a three-dimensional photonic band gap. Physical Review B, 2001, 64, .   | 1.1 | 78        |
| 67 | Shape-Independent Limits to Near-Field Radiative Heat Transfer. Physical Review Letters, 2015, 115, 204302.   | 2.9 | 76        |
| 68 | Analysis of mode structure in hollow dielectric waveguide fibers. Physical Review E, 2003, 67, 046608.  | 0.8 | 75        |
| 69 | Slow-light enhancement of radiation pressure in an omnidirectional-reflector waveguide. Applied Physics Letters, 2004, 85, 1466-1468.   | 1.5 | 74        |
| 70 | Fluctuating volume-current formulation of electromagnetic fluctuations in inhomogeneous media: Incandescence and luminescence in arbitrary geometries. Physical Review B, 2015, 92, .                   | 1.1 | 73        |
| 71 | Fundamental Limits to Extinction by Metallic Nanoparticles. Physical Review Letters, 2014, 112, 123903.   | 2.9 | 70        |
| 72 | Toward photonic-crystal metamaterials: Creating magnetic emitters in photonic crystals. Applied Physics Letters, 2003, 82, 1069-1071.   | 1.5 | 69        |

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|----|--|-----|-----------|
| 73 | Taper structures for coupling into photonic crystal slab waveguides. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 1817. | 0.9 | 69        |
| 74 | Perfect single-sided radiation and absorption without mirrors. Optica, 2016, 3, 1079.  | 4.8 | 69        |
| 75 | Widely tunable compact terahertz gas lasers. Science, 2019, 366, 856-860.  | 6.0 | 69        |
| 76 | Inverse Designed Metalenses with Extended Depth of Focus. ACS Photonics, 2020, 7, 873-878.   | 3.2 | 69        |
| 77 | Effect of a photonic band gap on scattering from waveguide disorder. Applied Physics Letters, 2004, 84, 3639-3641.                                 | 1.5 | 67        |
| 78 | Transformation inverse design. Optics Express, 2013, 21, 14223.  | 1.7 | 67        |
| 79 | Guiding 1.5 $\mu$ m light in photonic crystals based on dielectric rods. Applied Physics Letters, 2004, 85, 6110-6112.                             | 1.5 | 64        |
| 80 | Nontouching Nanoparticle Diclusters Bound by Repulsive and Attractive Casimir Forces. Physical Review Letters, 2010, 104, 160402.                  | 2.9 | 63        |
| 81 | Casimir forces in the time domain: Theory. Physical Review A, 2009, 80, .  | 1.0 | 60        |
| 82 | Delay-Bandwidth and Delay-Loss Limitations for Cloaking of Large Objects. Physical Review Letters, 2010, 104, 253903.                              | 2.9 | 60        |
| 83 | A framework for scintillation in nanophotonics. Science, 2022, 375, eabm9293.  | 6.0 | 59        |
| 84 | Anomalous Dispersion Relations by Symmetry Breaking in Axially Uniform Waveguides. Physical Review Letters, 2004, 92, 063903.                      | 2.9 | 57        |
| 85 | Modeling Nonlinear Optical Phenomena in Nanophotonics. Journal of Lightwave Technology, 2007, 25, 2539-2546.                                       | 2.7 | 55        |
| 86 | Spherical cloaking using nonlinear transformations for improved segmentation into concentric isotropic coatings. Optics Express, 2009, 17, 13467.  | 1.7 | 53        |
| 87 | Empowering Metasurfaces with Inverse Design: Principles and Applications. ACS Photonics, 2022, 9, 2178-2192.                                       | 3.2 | 53        |
| 88 | High-efficiency second-harmonic generation in doubly-resonant $\tilde{\Gamma}^2$ microring resonators. Optics Express, 2012, 20, 7526.             | 1.7 | 51        |
| 89 | Photonic topology optimization with semiconductor-foundry design-rule constraints. Optics Express, 2021, 29, 23916.                                | 1.7 | 50        |
| 90 | Repulsive and attractive Casimir forces in a glide-symmetric geometry. Physical Review A, 2008, 77, .  | 1.0 | 49        |

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|-----|--|-----|-----------|
| 91  | Modeling near-field radiative heat transfer from sharp objects using a general three-dimensional numerical scattering technique. <i>Physical Review B</i> , 2012, 85, .  | 1.1 | 49        |
| 92  | Floquet Chern insulators of light. <i>Nature Communications</i> , 2019, 10, 4194.  | 5.8 | 49        |
| 93  | Overlapping domains for topology optimization of large-area metasurfaces. <i>Optics Express</i> , 2019, 27, 32445.   | 1.7 | 49        |
| 94  | Accurate finite-difference time-domain simulation of anisotropic media by subpixel smoothing. <i>Optics Letters</i> , 2009, 34, 2778.  | 1.7 | 48        |
| 95  | Robust optimization of adiabatic tapers for coupling to slow-light photonic-crystal waveguides. <i>Optics Express</i> , 2012, 20, 21558.   | 1.7 | 48        |
| 96  | End-to-end nanophotonic inverse design for imaging and polarimetry. <i>Nanophotonics</i> , 2021, 10, 1177-1187.  | 2.9 | 48        |
| 97  | Type-II/III DCT/DST algorithms with reduced number of arithmetic operations. <i>Signal Processing</i> , 2008, 88, 1553-1564.   | 2.1 | 46        |
| 98  | Designing synthetic optical media: photonic crystals. <i>Acta Materialia</i> , 2003, 51, 5823-5835.  | 3.8 | 45        |
| 99  | Classical and fluctuation-induced electromagnetic interactions in micron-scale systems: designer bonding, antibonding, and Casimir forces. <i>Annalen Der Physik</i> , 2015, 527, 45-80.                       | 0.9 | 45        |
| 100 | Broadband super-collimation in a hybrid photonic crystal structure. <i>Optics Express</i> , 2009, 17, 8109.  | 1.7 | 44        |
| 101 | Integration of a photonic crystal polarization beam splitter and waveguide bend. <i>Optics Express</i> , 2009, 17, 8657.   | 1.7 | 44        |
| 102 | Microcavity confinement based on an anomalous zero group-velocity waveguide mode. <i>Optics Letters</i> , 2005, 30, 552.   | 1.7 | 43        |
| 103 | In-fiber production of polymeric particles for biosensing and encapsulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15549-15554.                  | 3.3 | 43        |
| 104 | Active learning of deep surrogates for PDEs: application to metasurface design. <i>Npj Computational Materials</i> , 2020, 6, .  | 3.5 | 43        |
| 105 | Perturbation theory for anisotropic dielectric interfaces, and application to subpixel smoothing of discretized numerical methods. <i>Physical Review E</i> , 2008, 77, 036611.                                | 0.8 | 42        |
| 106 | Casimir forces in the time domain: Applications. <i>Physical Review A</i> , 2010, 81, .  | 1.0 | 42        |
| 107 | Multifidelity deep neural operators for efficient learning of partial differential equations with application to fast inverse design of nanoscale heat transport. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 41        |
| 108 | Direct measurement of the quality factor in a two-dimensional photonic-crystal microcavity. <i>Optics Letters</i> , 2001, 26, 1903.  | 1.7 | 40        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Scalable numerical approach for the steady-state ab initio laser theory. <i>Physical Review A</i> , 2014, 90, .   | 1.0 | 40        |
| 110 | Limits to the Optical Response of Graphene and Two-Dimensional Materials. <i>Nano Letters</i> , 2017, 17, 5408-5415.  | 4.5 | 40        |
| 111 | Design of thin-film photonic metamaterial L <sup>1</sup> / <sub>4</sub> neburg lens using analytical approach. <i>Optics Express</i> , 2012, 20, 1617.                                      | 1.7 | 39        |
| 112 | Nonmonotonic effects of parallel sidewalls on Casimir forces between cylinders. <i>Physical Review A</i> , 2008, 77, .  | 1.0 | 38        |
| 113 | Integrated photonic structures for light trapping in thin-film Si solar cells. <i>Applied Physics Letters</i> , 2012, 100, 111110.  | 1.5 | 38        |
| 114 | Control of buckling in large micromembranes using engineered support structures. <i>Journal of Micromechanics and Microengineering</i> , 2012, 22, 065028.                                  | 1.5 | 38        |
| 115 | Computational inverse design for ultra-compact single-piece metalenses free of chromatic and angular aberration. <i>Applied Physics Letters</i> , 2021, 118, .                              | 1.5 | 37        |
| 116 | Disorder-immune confinement of light in photonic-crystal cavities. <i>Optics Letters</i> , 2005, 30, 3192.  | 1.7 | 36        |
| 117 | Fundamental relation between phase and group velocity, and application to the failure of perfectly matched layers in backward-wave structures. <i>Physical Review E</i> , 2009, 79, 065601. | 0.8 | 36        |
| 118 | Design of an efficient terahertz source using triply resonant nonlinear photonic crystal cavities. <i>Optics Express</i> , 2009, 17, 20099.   | 1.7 | 36        |
| 119 | Distinguishing correct from incorrect PML proposals and a corrected unsplit PML for anisotropic, dispersive media. <i>Journal of Computational Physics</i> , 2011, 230, 2369-2377.          | 1.9 | 36        |
| 120 | Fullwave Maxwell inverse design of axisymmetric, tunable, and multi-scale multi-wavelength metalenses. <i>Optics Express</i> , 2020, 28, 33854.   | 1.7 | 36        |
| 121 | Stable Suspension and Dispersion-Induced Transitions from Repulsive Casimir Forces Between Fluid-Separated Eccentric Cylinders. <i>Physical Review Letters</i> , 2008, 101, 190404.         | 2.9 | 35        |
| 122 | Exploration of in-fiber nanostructures from capillary instability. <i>Optics Express</i> , 2011, 19, 16273.   | 1.7 | 35        |
| 123 | Fundamental Limits to Near-Field Optical Response over Any Bandwidth. <i>Physical Review X</i> , 2019, 9, .   | 2.8 | 35        |
| 124 | High-performance hybrid time/frequency-domain topology optimization for large-scale photonics inverse design. <i>Optics Express</i> , 2022, 30, 4467.                                       | 1.7 | 35        |
| 125 | Polarization-Independent Linear Waveguides in 3D Photonic Crystals. <i>Physical Review Letters</i> , 2003, 91, 023902.  | 2.9 | 34        |
| 126 | Achieving a Strongly Temperature-Dependent Casimir Effect. <i>Physical Review Letters</i> , 2010, 105, 060401.  | 2.9 | 34        |



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|-----|---|-----|-----------|
| 127 | Diameter-bandwidth product limitation of isolated-object cloaking. <i>Physical Review A</i> , 2012, 86, .   | 1.0 | 34        |
| 128 | Type-IV DCT, DST, and MDCT algorithms with reduced numbers of arithmetic operations. <i>Signal Processing</i> , 2008, 88, 1313-1326.  | 2.1 | 33        |
| 129 | Zero- $\epsilon$ group-velocity modes in chalcogenide holey photonic-crystal fibers. <i>Optics Express</i> , 2009, 17, 10082.   | 1.7 | 33        |
| 130 | Nonlinear harmonic generation and devices in doubly resonant Kerr cavities. <i>Physical Review A</i> , 2009, 79, .  | 1.0 | 32        |
| 131 | Robust design of slow-light tapers in periodic waveguides. <i>Engineering Optimization</i> , 2009, 41, 365-384.   | 1.5 | 32        |
| 132 | Fluctuating surface currents: An algorithm for efficient prediction of Casimir interactions among arbitrary materials in arbitrary geometries. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 32        |
| 133 | Optomechanical and photothermal interactions in suspended photonic crystal membranes. <i>Optics Express</i> , 2013, 21, 7258.   | 1.7 | 32        |
| 134 | Optical bistability in axially modulated OmniGuide fibers. <i>Optics Letters</i> , 2003, 28, 516.   | 1.7 | 30        |
| 135 | Microstructure effects for Casimir forces in chiral metamaterials. <i>Physical Review B</i> , 2010, 82, .   | 1.1 | 29        |
| 136 | Global optimization of silicon photovoltaic cell front coatings. <i>Optics Express</i> , 2009, 17, 7505.  | 1.7 | 28        |
| 137 | Computation of Casimir interactions between arbitrary three-dimensional objects with arbitrary material properties. <i>Physical Review A</i> , 2011, 84, .                            | 1.0 | 28        |
| 138 | Anomalous Near-Field Heat Transfer between a Cylinder and a Perforated Surface. <i>Physical Review Letters</i> , 2013, 110, 014301.   | 2.9 | 28        |
| 139 | On the Computation of Power in Volume Integral Equation Formulations. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 611-620.                                       | 3.1 | 28        |
| 140 | Electromagnetic cavity with arbitrary $Q$ and small modal volume without a complete photonic bandgap. <i>Optics Letters</i> , 2002, 27, 1785.   | 1.7 | 27        |
| 141 | Linear stability analysis of capillary instabilities for concentric cylindrical shells. <i>Journal of Fluid Mechanics</i> , 2011, 683, 235-262.                                       | 1.4 | 27        |
| 142 | Degenerate four-wave mixing in triply resonant Kerr cavities. <i>Physical Review A</i> , 2011, 83, .  | 1.0 | 27        |
| 143 | Optimization of broadband optical response of multilayer nanospheres. <i>Optics Express</i> , 2012, 20, 18494.  | 1.7 | 27        |
| 144 | Radiative heat transfer in nonlinear Kerr media. <i>Physical Review B</i> , 2015, 91, .   | 1.1 | 27        |

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|-----|---|------|-----------|
| 145 | Inverse designed extended depth of focus meta-optics for broadband imaging in the visible. <i>Nanophotonics</i> , 2022, 11, 2531-2540.  | 2.9  | 27        |
| 146 | Computation and visualization of photonic quasicrystal spectra via Bloch's theorem. <i>Physical Review B</i> , 2008, 77, .  | 1.1  | 26        |
| 147 | Fluctuation-Induced Phenomena in Nanoscale Systems: Harnessing the Power of Noise. <i>Proceedings of the IEEE</i> , 2013, 101, 531-545.   | 16.4 | 26        |
| 148 | Speed-of-light limitations in passive linear media. <i>Physical Review A</i> , 2014, 90, .  | 1.0  | 26        |
| 149 | <i>Ab initio</i> multimode linewidth theory for arbitrary inhomogeneous laser cavities. <i>Physical Review A</i> , 2015, 91, .  | 1.0  | 26        |
| 150 | Inverse design of nanoparticles for enhanced Raman scattering. <i>Optics Express</i> , 2020, 28, 4444.  | 1.7  | 26        |
| 151 | Generalized Taylor-Duffy Method for Efficient Evaluation of Galerkin Integrals in Boundary-Element Method Computations. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 195-209.   | 3.1  | 25        |
| 152 | Bonding, antibonding and tunable optical forces in asymmetric membranes. <i>Optics Express</i> , 2011, 19, 2225.  | 1.7  | 24        |
| 153 | A high-efficiency regime for gas-phase terahertz lasers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6614-6619.   | 3.3  | 24        |
| 154 | Analysis of general geometric scaling perturbations in a transmitting waveguide: fundamental connection between polarization-mode dispersion and group-velocity dispersion. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 2867. | 0.9  | 23        |
| 155 | Doppler Radiation Emitted by an Oscillating Dipole Moving inside a Photonic Band-Gap Crystal. <i>Physical Review Letters</i> , 2006, 96, 043903.  | 2.9  | 23        |
| 156 | Toward 3D-Printed Inverse-Designed Metaoptics. <i>ACS Photonics</i> , 2022, 9, 43-51.   | 3.2  | 23        |
| 157 | Difference-frequency generation with quantum-limited efficiency in triply-resonant nonlinear cavities. <i>Optics Express</i> , 2009, 17, 9241.  | 1.7  | 22        |
| 158 | Designing evanescent optical interactions to control the expression of Casimir forces in optomechanical structures. <i>Applied Physics Letters</i> , 2011, 98, .  | 1.5  | 22        |
| 159 | Design strategies and rigorous conditions for single-polarization single-mode waveguides. <i>Optics Express</i> , 2008, 16, 15170.  | 1.7  | 21        |
| 160 | Layer-by-layer self-assembly of plexcitonic nanoparticles. <i>Optics Express</i> , 2013, 21, 19103.   | 1.7  | 20        |
| 161 | All-optical three-dimensional electron pulse compression. <i>New Journal of Physics</i> , 2015, 17, 013051.   | 1.2  | 20        |
| 162 | Efficient low-power terahertz generation via on-chip triply-resonant nonlinear frequency mixing. <i>Applied Physics Letters</i> , 2010, 96, 101110.   | 1.5  | 19        |

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|-----|---|-----|-----------|
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