

Jorge Bravo-Abad

List of Publications by Year in descending order

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Version: 2024-02-01

74
papers

3,005
citations

186265

28
h-index

161849

54
g-index

74
all docs

74
docs citations

74
times ranked

3346
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Light-matter interactions near photonic Weyl points. Physical Review A, 2021, 103, . | 2.5 | 13 |
| 2 | Spatial coherence from Nd ³⁺ quantum emitters mediated by a plasmonic chain. Optics Express, 2021, 29, 26244. | 3.4 | 3 |
| 3 | Deep Learning for the Modeling and Inverse Design of Radiative Heat Transfer. Physical Review Applied, 2021, 16, . | 3.8 | 20 |
| 4 | Tunable and Robust Long-Range Coherent Interactions between Quantum Emitters Mediated by Weyl Bound States. Physical Review Letters, 2020, 125, 163602. | 7.8 | 30 |
| 5 | Generating Weyl nodes in non-centrosymmetric cubic crystal structures. Journal of Physics Communications, 2020, 4, 065006. | 1.2 | 3 |
| 6 | Deep learning enabled inverse design in nanophotonics. Nanophotonics, 2020, 9, 1041-1057. | 6.0 | 295 |
| 7 | Tunable and Robust Long-range Coherent Dipole Interactions Mediated by Weyl Bound States. , 2020, , . | | 0 |
| 8 | Multiline Operation from a Single Plasmon-Assisted Laser. ACS Photonics, 2018, 5, 406-412. | 6.6 | 12 |
| 9 | Enabling Lasing Action in Hybrid Atomic-Nanophotonic Integrated Structures. Annalen Der Physik, 2018, 530, 1800203. | 2.4 | 1 |
| 10 | A high-efficiency regime for gas-phase terahertz lasers. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6614-6619. | 7.1 | 24 |
| 11 | Plasmonic Waveguide-Integrated Nanowire Laser. Nano Letters, 2017, 17, 747-754. | 9.1 | 80 |
| 12 | Nonequilibrium plasmon emission and amplification in photo-excited graphene. , 2016, , . | | 0 |
| 13 | Intermittent chaos for ergodic light trapping in a photonic fiber plate. Light: Science and Applications, 2016, 5, e16216-e16216. | 16.6 | 17 |
| 14 | Spatio-temporal Modeling of Lasing Action in Core-Shell Metallic Nanoparticles. ACS Photonics, 2016, 3, 1952-1960. | 6.6 | 17 |
| 15 | Nonequilibrium plasmon emission drives ultrafast carrier relaxation dynamics in photoexcited graphene. Physical Review B, 2016, 93, . | 3.2 | 29 |
| 16 | Plasmon-Assisted Nd ³⁺ -Based Solid-State Nanolaser. Nano Letters, 2016, 16, 895-899. | 9.1 | 44 |
| 17 | Lasing action in active plasmonic structures. , 2015, , . | | 0 |
| 18 | Theory of lasing action in plasmonic crystals. Physical Review B, 2015, 91, . | 3.2 | 26 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Disorder sets light straight. <i>Nature Physics</i> , 2015, 11, 213-214. | 16.7 | 2 |
| 20 | Weyl points in photonic-crystal superlattices. <i>2D Materials</i> , 2015, 2, 034013. | 4.4 | 32 |
| 21 | Second-harmonic generation using π -quasi-phasematching in a GaAs whispering-gallery-mode microcavity. <i>Nature Communications</i> , 2014, 5, 3109. | 12.8 | 161 |
| 22 | Larger-area single-mode photonic crystal surface-emitting lasers enabled by an accidental Dirac point. <i>Optics Letters</i> , 2014, 39, 2072. | 3.3 | 63 |
| 23 | Theory of strong coupling between quantum emitters and localized surface plasmons. <i>Journal of Optics (United Kingdom)</i> , 2014, 16, 114018. | 2.2 | 62 |
| 24 | Modeling of threshold and dynamics behavior of organic nanostructured lasers. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1463. | 5.5 | 23 |
| 25 | Deep-subwavelength negative-index waveguiding enabled by coupled conformal surface plasmons. <i>Optics Letters</i> , 2014, 39, 2990. | 3.3 | 84 |
| 26 | Lasing action assisted by long-range surface plasmons. <i>Laser and Photonics Reviews</i> , 2014, 8, L65-L70. | 8.7 | 7 |
| 27 | Quantum Emitters Near a Metal Nanoparticle: Strong Coupling and Quenching. <i>Physical Review Letters</i> , 2014, 112, 253601. | 7.8 | 248 |
| 28 | Graphene supports the propagation of subwavelength optical solitons. <i>Laser and Photonics Reviews</i> , 2013, 7, L7. | 8.7 | 117 |
| 29 | A sense of direction. <i>Nature Nanotechnology</i> , 2013, 8, 479-480. | 31.5 | 6 |
| 30 | Wave-front phase-modulation control and focusing of second-harmonic light generated in transparent nonlinear random structures. <i>Physical Review A</i> , 2013, 87, . | 2.5 | 5 |
| 31 | Demonstration of second-harmonic generation by 4π -quasi-phasematching in a GaAs microdisk cavity. , 2013, , . | | 0 |
| 32 | Enabling single-mode behavior over large areas with photonic Dirac cones. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 9761-9765. | 7.1 | 53 |
| 33 | Spatial control of second-harmonic light from a disordered structure. , 2012, , . | | 4 |
| 34 | Terahertz wave control enabled by nano objects embedded in slot antennas. , 2012, , . | | 0 |
| 35 | Gain-assisted extraordinary optical transmission through periodic arrays of subwavelength apertures. <i>New Journal of Physics</i> , 2012, 14, 013020. | 2.9 | 23 |
| 36 | Generation of Terahertz Radiation via Purcell-Enhanced Nonlinear Frequency Mixing. <i>Springer Series in Optical Sciences</i> , 2012, , 325-341. | 0.7 | 1 |

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|----|--|------|-----------|
| 37 | Strong coupling between terahertz nano slot antennas separated by sub-skin depth barriers. , 2011, , . | | 0 |
| 38 | Low-threshold lasing action in photonic crystal slabs enabled by Fano resonances. Optics Express, 2011, 19, 1539. | 3.4 | 88 |
| 39 | Spatio-temporal theory of lasing action in optically-pumped rotationally excited molecular gases. Optics Express, 2011, 19, 7513. | 3.4 | 11 |
| 40 | Observation of speckle pattern formation in transparent nonlinear random media. Optics Letters, 2011, 36, 1347. | 3.3 | 7 |
| 41 | Controlling Terahertz Radiation with Nanoscale Metal Barriers Embedded in Nano Slot Antennas. ACS Nano, 2011, 5, 8340-8345. | 14.6 | 66 |
| 42 | Anomalous Band Formation in Arrays of Terahertz Nanoresonators. Physical Review Letters, 2011, 106, 013902. | 7.8 | 32 |
| 43 | Efficient low-power terahertz generation via on-chip triply-resonant nonlinear frequency mixing. Applied Physics Letters, 2010, 96, 101110. | 3.3 | 19 |
| 44 | Optical second-harmonic scattering from a non-diffusive random distribution of nonlinear domains. Optics Express, 2010, 18, 14202. | 3.4 | 15 |
| 45 | Light Scattering in a Random but Non Diffusive Nonlinear Medium. , 2010, , . | | 0 |
| 46 | Ultrafast photodetection in an all-silicon chip enabled by two-photon absorption. Applied Physics Letters, 2009, 94, 241103. | 3.3 | 24 |
| 47 | Difference-frequency generation with quantum-limited efficiency in triply-resonant nonlinear cavities. Optics Express, 2009, 17, 9241. | 3.4 | 22 |
| 48 | Design of an efficient terahertz source using triply resonant nonlinear photonic crystal cavities. Optics Express, 2009, 17, 20099. | 3.4 | 36 |
| 49 | Efficient Difference Frequency Generation in Triply Resonant Nonlinear Cavities. , 2009, , . | | 0 |
| 50 | Ultrafast Photodetection in an All-Silicon Chip Enabled by Two-Photon Absorption. , 2009, , . | | 0 |
| 51 | Efficiency and finite size effects in enhanced transmission through subwavelength apertures. Optics Express, 2008, 16, 9571. | 3.4 | 82 |
| 52 | A Unified Picture of Laser Physics. Science, 2008, 320, 623-624. | 12.6 | 2 |
| 53 | Theory of Extraordinary Transmission of Light through Quasiperiodic Arrays of Subwavelength Holes. Physical Review Letters, 2007, 99, 203905. | 7.8 | 53 |
| 54 | Transmission of light through periodic arrays of square holes: From a metallic wire mesh to an array of tiny holes. Physical Review B, 2007, 76, . | 3.2 | 36 |

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|----|--|------|-----------|
| 55 | Enhanced nonlinear optics in photonic-crystal microcavities. Optics Express, 2007, 15, 16161. | 3.4 | 155 |
| 56 | Modeling Nonlinear Optical Phenomena in Nanophotonics. Journal of Lightwave Technology, 2007, 25, 2539-2546. | 4.6 | 55 |
| 57 | Photonic crystals go dynamic. Nature Materials, 2007, 6, 799-800. | 27.5 | 9 |
| 58 | THEORY OF LIGHT TRANSMISSION THROUGH PERIODICALLY STRUCTURED NANO-APERTURES. , 2007, , 27-38. | | 0 |
| 59 | Resonant Transmission of Light Through Subwavelength Holes in Thick Metal Films. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1221-1227. | 2.9 | 17 |
| 60 | Theory of optical transmission through arrays of subwavelength apertures. Handai Nanophotonics, 2006, , 15-29. | 0.0 | 0 |
| 61 | How light emerges from an illuminated array of subwavelength holes. Nature Physics, 2006, 2, 120-123. | 16.7 | 97 |
| 62 | Photonic crystal optical waveguides for on-chip Bose-Einstein condensates. Physical Review A, 2006, 74, . | 2.5 | 14 |
| 63 | Extraordinary electromagnetic transmission through finite arrays of holes in a metal film. , 2005, , . | | 0 |
| 64 | Enhanced millimeter wave transmission through quasioptical subwavelength perforated plates. IEEE Transactions on Antennas and Propagation, 2005, 53, 1897-1903. | 5.1 | 87 |
| 65 | Resonant Transmission of Light Through Finite Chains of Subwavelength Holes in a Metallic Film. Physical Review Letters, 2004, 93, 227401. | 7.8 | 118 |
| 66 | Integrated optical devices design by genetic algorithm. Applied Physics Letters, 2004, 84, 4460-4462. | 3.3 | 105 |
| 67 | Transmission properties of a single metallic slit: From the subwavelength regime to the geometrical-optics limit. Physical Review E, 2004, 69, 026601. | 2.1 | 129 |
| 68 | Enhanced millimeter-wave transmission through subwavelength hole arrays. Optics Letters, 2004, 29, 2500. | 3.3 | 175 |
| 69 | Wavelength de-multiplexing properties of a single aperture flanked by periodic arrays of indentations. Photonics and Nanostructures - Fundamentals and Applications, 2003, 1, 55-62. | 2.0 | 13 |
| 70 | Anomalous refractive properties of a two-dimensional photonic band-gap prism. Physical Review B, 2003, 67, . | 3.2 | 18 |
| 71 | Wavelength Demultiplexing Structure Based on Coupled-Cavity Waveguides in Photonic Crystals. Fiber and Integrated Optics, 2003, 22, 151-160. | 2.5 | 12 |
| 72 | Wavelength Demultiplexing Structure Based on Coupled-Cavity Waveguides in Photonic Crystals. Fiber and Integrated Optics, 2003, 22, 151-160. | 2.5 | 0 |

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|----|--|----|-----------|
| 73 | <title>Transmission analysis and applications of bent waveguides in hexagonal photonic crystals</title>. , 2002, , . | | 2 |
| 74 | <title>Suzuki phase in two-dimensional photonic crystals</title>. , 2002, 4655, 251. | | 1 |