

# Jordi Gomis-Bresco

## List of Publications by Year in descending order

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53  
papers

1,519  
citations

361413

20  
h-index

302126

39  
g-index

53  
all docs

53  
docs citations

53  
times ranked

1709  
citing authors

#	ARTICLE	IF	CITATIONS
1	A one-dimensional optomechanical crystal with a complete phononic band gap. Nature Communications, 2014, 5, 4452.	12.8	138
2	Anisotropy-induced photonic bound states in the continuum. Nature Photonics, 2017, 11, 232-236.	31.4	138
3	Reduction of the thermal conductivity in free-standing silicon nano-membranes investigated by non-invasive Raman thermometry. APL Materials, 2014, 2, .	5.1	125
4	Progress and perspectives on phononic crystals. Journal of Applied Physics, 2021, 129, .	2.5	105
5	Complete ground state gain recovery after ultrashort double pulses in quantum dot based semiconductor optical amplifier. Applied Physics Letters, 2007, 90, 033508.	3.3	90
6	A novel contactless technique for thermal field mapping and thermal conductivity determination: Two-Laser Raman Thermometry. Review of Scientific Instruments, 2014, 85, 034901.	1.3	87
7	Phonons in Slow Motion: Dispersion Relations in Ultrathin Si Membranes. Nano Letters, 2012, 12, 3569-3573.	9.1	83
8	Phonon dispersion in hypersonic two-dimensional phononic crystal membranes. Physical Review B, 2015, 91, .	3.2	79
9	Impact of Coulomb Scattering on the Ultrafast Gain Recovery in InGaAs Quantum Dots. Physical Review Letters, 2008, 101, 256803.	7.8	61
10	Finite element analysis of true and pseudo surface acoustic waves in one-dimensional phononic crystals. Journal of Applied Physics, 2016, 119, .	2.5	61
11	Quantifying the Robustness of Topological Slow Light. Physical Review Letters, 2021, 126, 027403.	7.8	54
12	Optomechanic interaction in a corrugated phoxonic nanobeam cavity. Physical Review B, 2014, 89, .	3.2	46
13	Impact of carrier-carrier scattering and carrier heating on pulse train dynamics of quantum dot semiconductor optical amplifiers. Applied Physics Letters, 2011, 99, .	3.3	44
14	A self-stabilized coherent phonon source driven by optical forces. Scientific Reports, 2015, 5, 15733.	3.3	39
15	Measurement and modeling of the effective thermal conductivity of sintered silver pastes. International Journal of Thermal Sciences, 2016, 108, 185-194.	4.9	35
16	InGaAs Quantum Dots Coupled to a Reservoir of Nonequilibrium Free Carriers. IEEE Journal of Quantum Electronics, 2009, 45, 1121-1128.	1.9	28
17	Topological properties of bound states in the continuum in geometries with broken anisotropy symmetry. Physical Review A, 2018, 98, .	2.5	27
18	Random population model to explain the recombination dynamics in single InAs/GaAs quantum dots under selective optical pumping. New Journal of Physics, 2011, 13, 023022.	2.9	24

#	ARTICLE	IF	CITATIONS
19	Ultrafast Relaxation Dynamics via Acoustic Phonons in Carbon Nanotubes. Nano Letters, 2012, 12, 2249-2253.	9.1	22
20	Nonlinear gain dynamics of quantum dot optical amplifiers. Semiconductor Science and Technology, 2011, 26, 014008.	2.0	21
21	Time-resolved amplified spontaneous emission in quantum dots. Applied Physics Letters, 2010, 97, 251106.	3.3	20
22	Dynamical back-action at 5.5 GHz in a corrugated optomechanical beam. AIP Advances, 2014, 4, .	1.3	18
23	Dielectric screening effects on transition energies in aligned carbon nanotubes. Physical Review B, 2012, 85, .	3.2	17
24	Acoustic phonon propagation in ultra-thin Si membranes under biaxial stress field. New Journal of Physics, 2014, 16, 073024.	2.9	17
25	Angular control of anisotropy-induced bound states in the continuum. Optics Letters, 2019, 44, 5362.	3.3	16
26	Modification of Akhieser mechanism in Si nanomembranes and thermal conductivity dependence of the $Q$ -factor of high frequency nanoresonators. Semiconductor Science and Technology, 2014, 29, 124010.	2.0	15
27	Lateral carrier tunnelling in stacked In(Ga)As/GaAs quantum rings. European Physical Journal B, 2006, 54, 217-223.	1.5	13
28	Analytical description of gain depletion and recovery in quantum dot optical amplifiers. New Journal of Physics, 2010, 12, 063012.	2.9	12
29	Self-sustained coherent phonon generation in optomechanical cavities. Journal of Optics (United Kingdom), 2011, 12, 120701.	2.2	12
30	Shape dependent electronic structure and exciton dynamics in small In(Ga)As quantum dots. European Physical Journal B, 2006, 54, 471-477.	1.5	11
31	Effect of carrier transfer on the PL intensity in self-assembled In (Ga) As/GaAs quantum rings. EPJ Applied Physics, 2006, 35, 159-163.	0.7	10
32	Exciton, biexciton and trion recombination dynamics in a single quantum dot under selective optical pumping. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2100-2103.	2.7	9
33	In-line metrology for roll-to-roll UV assisted nanoimprint lithography using diffractometry. APL Materials, 2018, 6, 058502.	5.1	8
34	Unidirectional guided resonances in anisotropic waveguides. Optics Letters, 2021, 46, 2545.	3.3	7
35	Transition from Dirac points to exceptional points in anisotropic waveguides. Physical Review Research, 2019, 1, .	3.6	7
36	Optical and mechanical mode tuning in an optomechanical crystal with light-induced thermal effects. Journal of Applied Physics, 2014, 116, 093506.	2.5	5

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37	Slow light mediated by mode topological transitions in hyperbolic waveguides. Optics Letters, 2021, 46, 58.	3.3	5
38	Size filtering effect in vertical stacks of In(Ga)As/GaAs self-assembled quantum rings. Materials Science and Engineering C, 2006, 26, 297-299.	7.3	2
39	Gain Dynamics after Ultrashort Pulse Trains in Quantum Dot based Semiconductor Optical Amplifiers. , 2007, , .		2
40	In-line metrology setup for periodic nanostructures based on sub-wavelength diffraction. Proceedings of SPIE, 2015, , .	0.8	2
41	Temperature dependent optical properties of stacked InGaAs/GaAs quantum rings. Materials Science and Engineering C, 2008, 28, 887-890.	7.3	1
42	Cavity modes and optomechanic interactions in strip waveguide. IOP Conference Series: Materials Science and Engineering, 2014, 68, 012003.	0.6	1
43	A novel contactless technique for thermal conductivity determination: Two-laser Raman thermometry. , 2014, , .		1
44	A diffractometer for quality control in nano fabrication processing based on subwavelength diffraction. Proceedings of SPIE, 2015, , .	0.8	1
45	Thermal conductivity reduction in Si free-standing membranes investigated using Raman thermometry. , 2013, , .		0
46	Nanoscale thermal transport and phonon dynamics in ultra-thin Si based nanostructures. , 2013, , .		0
47	Flexural mode dispersion in ultra-thin Ge membranes. , 2013, , .		0
48	A PhoXonic crystal: Photonic and phononic bandgaps in a 1D optomechanical crystal. , 2014, , .		0
49	Self-pulsing and phonon lasing in optomechanical crystals. , 2016, , .		0
50	Bound states in the continuum in anisotropic structures. , 2017, , .		0
51	Existence Loci of Bound States in the Continuum in the Parameter Space of Anisotropic Planar Structures. , 2019, , .		0
52	Waveguide Stopped Light Mediated by Mode Transitions. , 2019, , .		0
53	Scattering of electrons with acoustic phonons in single-walled carbon nanotubes. , 2012, , .		0