Javier MartÃ-n SÃ¡nchez

List of Publications by Year
in descending order

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65 papers	2,098 citations	279798 23 h-index	243625 44 g-index
65 all docs	65 docs citations	65 times ranked	2207 citing authors

#	Article	IF	Citations
1	In-plane anisotropic and ultra-low-loss polaritons in a natural van der Waals crystal. Nature, 2018, 562, 557-562.	27.8	506
2	Strain-Tunable GaAs Quantum Dot: A Nearly Dephasing-Free Source of Entangled Photon Pairs on Demand. Physical Review Letters, 2018, 121, 033902.	7.8	143
3	Broad spectral tuning of ultra-low-loss polaritons in a van der Waals crystal by intercalation. Nature Materials, 2020, 19, 964-968.	27.5	129
4	Twisted Nano-Optics: Manipulating Light at the Nanoscale with Twisted Phonon Polaritonic Slabs. Nano Letters, 2020, 20, 5323-5329.	9.1	126
5	Wavelength-tunable sources of entangled photons interfaced with atomic vapours. Nature Communications, 2016, 7, 10375.	12.8	106
6	Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO₃ from Nearâ€•and Farâ€Field Correlative Studies. Advanced Materials, 2020, 32, e1908176.	21.0	99
7	Strain-Tunable Single Photon Sources in WSe₂ Monolayers. Nano Letters, 2019, 19, 6931-6936.	9.1	71
8	Energy-Tunable Sources of Entangled Photons: A Viable Concept for Solid-State-Based Quantum Relays. Physical Review Letters, 2015, 114, 150502.	7.8	62
9	Strain-tuning of the optical properties of semiconductor nanomaterials by integration onto piezoelectric actuators. Semiconductor Science and Technology, 2018, 33, 013001.	2.0	58
10	Enabling propagation of anisotropic polaritons along forbidden directions via a topological transition. Science Advances, 2021, 7, .	10.3	53
11	Single Photon Emission from Site-Controlled InAs Quantum Dots Grown on GaAs(001) Patterned Substrates. ACS Nano, 2009, 3, 1513-1517.	14.6	50
12	Planar refraction and lensing of highly confined polaritons in anisotropic media. Nature Communications, 2021, 12, 4325.	12.8	48
13	Ordered InAs quantum dots on pre-patterned GaAs (001) by local oxidation nanolithography. Journal of Crystal Growth, 2005, 284, 313-318.	1.5	36
14	Focusing of in-plane hyperbolic polaritons in van der Waals crystals with tailored infrared nanoantennas. Science Advances, 2021, 7, eabj0127.	10.3	36
15	Uniaxial stress flips the natural quantization axis of a quantum dot for integrated quantum photonics. Nature Communications, 2018, 9, 3058.	12.8	35
16	Low density InAs quantum dots with control in energy emission and top surface location. Applied Physics Letters, 2008, 93, 183106.	3.3	34
17	Formation of Lateral Low Density In(Ga)As Quantum Dot Pairs in GaAs Nanoholes. Crystal Growth and Design, 2009, 9, 2525-2528.	3.0	33
18	Site-controlled lateral arrangements of InAs quantum dots grown on GaAs(001) patterned substrates by atomic force microscopy local oxidation nanolithography. Nanotechnology, 2009, 20, 125302.	2.6	27

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19	Electrically-Pumped Wavelength-Tunable GaAs Quantum Dots Interfaced with Rubidium Atoms. ACS Photonics, 2017, 4, 868-872.	6.6	27
20	New process for high optical quality InAs quantum dots grown on patterned GaAs(001) substrates. Nanotechnology, 2007, 18, 355302.	2.6	26
21	Self-assembling of Ge quantum dots in an alumina matrix. Physical Review B, 2010, 82, .	3.2	26
22	Effect of Pt bottom electrode texture selection on the tetragonality and physical properties of Ba0.8Sr0.2TiO3 thin films produced by pulsed laser deposition. Journal of Applied Physics, 2012, 112, .	2.5	23
23	Reversible Control of Inâ€Plane Elastic Stress Tensor in Nanomembranes. Advanced Optical Materials, 2016, 4, 682-687.	7.3	23
24	Inversion of the exciton built-in dipole moment in In(Ga)As quantum dots via nonlinear piezoelectric effect. Physical Review B, 2017, 96, .	3.2	23
25	Development of new high transparent hybrid organicâ€“inorganic monoliths with surface engraved diffraction pattern. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 492-499.	2.1	22
26	Atomic clouds as spectrally selective and tunable delay lines for single photons from quantum dots. Physical Review B, 2015, 92, .	3.2	18
27	Ordered InAs QDs using prepatterned substrates by monolithically integrated porous alumina. Journal of Crystal Growth, 2006, 294, 168-173.	1.5	16
28	Improvement of the fatigue and the ferroelectric properties of PZT films through a LSCO seed layer. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 1224-1229.	3.5	15
29	Structural and optical changes induced by incorporation of antimony into InAs/GaAs(001) quantum dots. Physical Review B, 2010, 82, .	3.2	14
30	Comparison of different bonding techniques for efficient strain transfer using piezoelectric actuators. Journal of Applied Physics, 2017, 121, 135303.	2.5	13
31	Active and Passive Tuning of Ultranarrow Resonances in Polaritonic Nanoantennas. Advanced Materials, 2022, 34, e2104954.	21.0	13
32	Photoluminescence and Stoichiometry Correlation in Nanocrystalline EuOx Thin Films: Tunable Color Emission. Journal of Physical Chemistry C, 2020, 124, 15434-15439.	3.1	12
33	Effects of dielectric stoichiometry on the photoluminescence properties of encapsulated WSe2 monolayers. Nano Research, 2018, 11, 1399-1414.	10.4	12
34	Carrier storage in Ge nanoparticles produced by pulsed laser deposition. Physica Status Solidi - Rapid Research Letters, 2012, 6, 223-225.	2.4	11
35	Experimental demonstration of the suppression of optical phonon splitting in 2D materials by Raman spectroscopy. 2D Materials, 2020, 7, 035017.	4.4	11
36	Structural and electrical studies of ultrathin layers with Si0.7Ge0.3 nanocrystals confined in a SiGe/SiO2 superlattice. Journal of Applied Physics, 2012, 111, 104323.	2.5	10

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37	Micro-machining of PMN-PT Crystals with Ultrashort Laser Pulses. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	10
38	New insights in the lattice dynamics of monolayers, bilayers, and trilayers of WSe₂ and unambiguous determination of few-layer-flakesâ€™ thickness. 2D Materials, 2020, 7, 025004.	4.4	10
39	Charge trapping properties and retention time in amorphous SiGe/SiO2 nanolayers. Journal Physics D: Applied Physics, 2013, 46, 095306.	2.8	9
40	Improvement of InAs quantum dots optical properties in close proximity to GaAs(001) substrate surface. Journal of Crystal Growth, 2008, 310, 4676-4680.	1.5	8
41	Influence of annealing conditions on the formation of regular lattices of voids and Ge quantum dots in an amorphous alumina matrix. Nanotechnology, 2012, 23, 405605.	2.6	8
42	On the Large Near-Field Enhancement on Nanocolumnar Gold Substrates. Scientific Reports, 2019, 9, 13933.	3.3	8
43	Optomechanical tuning of the polarization properties of micropillar cavity systems with embedded quantum dots. Physical Review B, 2020, 101, .	3.2	8
44	Growth of Low-Density Vertical Quantum Dot Molecules with Control in Energy Emission. Nanoscale Research Letters, 2010, 5, 1913-1916.	5.7	7
45	A shadowed off-axis production of Ge nanoparticles in Ar gas atmosphere by pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2013, 110, 585-590.	2.3	7
46	Extracting the Infrared Permittivity of SiO2 Substrates Locally by Near-Field Imaging of Phonon Polaritons in a van der Waals Crystal. Nanomaterials, 2021, 11, 120.	4.1	7
47	Shadowed off-axis production of Ge nanoparticles in Ar gas atmosphere by pulsed laser deposition: Morphological, structural and charge trapping properties. Applied Surface Science, 2013, 280, 632-640.	6.1	6
48	A frequency-tunable nanomembrane mechanical oscillator with embedded quantum dots. Applied Physics Letters, 2019, 115, .	3.3	6
49	SiGe layer thickness effect on the structural and optical properties of well-organized SiGe/SiO2multilayers. Nanotechnology, 2017, 28, 345701.	2.6	5
50	Van der Waals Semiconductors: Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO₃ from Nearâ€and Farâ€Field Correlative Studies (Adv. Mater. 29/2020). Advanced Materials, 2020, 32, 2070220.	21.0	5
51	Surface Localization of Buried IIIâ€“V Semiconductor Nanostructures. Nanoscale Research Letters, 2009, 4, 873-877.	5.7	4
52	Theoretical modelling of quaternary GaInAsSb/GaAs self-assembled quantum dots. Journal of Physics: Conference Series, 2010, 245, 012081.	0.4	4
53	Ferroelectric switching behavior of pulsed laser deposited Ba0.8Sr0.2TiO3 thin films. Current Applied Physics, 2012, 12, 1144-1147.	2.4	4
54	Ge nanocrystals with highly uniform size distribution deposited on alumina at room temperature by pulsed laser deposition: structural, morphological, and charge trapping properties. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	3

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55	Size-controlled Ge nanostructures for enhanced Er^3+ light emission. Optics Letters, 2014, 39, 4691.	3.3	3
56	IBA study of SiGe/SiO2 nanostructured multilayers. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 89-92.	1.4	3
57	Optical studies of amorphous Ge nanostructures in Al2O3 produced by pulsed laser deposition. Thin Solid Films, 2013, 541, 92-96.	1.8	2
58	Influence of strain relaxation in axial ${mathrm{In}}_{x}{mathrm{Ga}}_{1-x}{m{N}}/mathrm{GaN}$ nanowire heterostructures on their electronic properties. Nanotechnology, 2017, 28, 215204.	2.6	2
59	Emission properties of single InAs/GaAs quantum dot pairs and molecules grown in GaAs nanoholes. Journal of Physics: Conference Series, 2010, 210, 012028.	0.4	1
60	Influence of RF-sputtering power on formation of vertically stacked Si_{1âˆ’x}Ge_xnanocrystals between ultra-thin amorphous Al₂O₃layers: structural and photoluminescence properties. Journal Physics D: Applied Physics, 2013, 46, 385301.	2.8	1
61	Publisher's Note: Structural and optical changes induced by incorporation of antimony into InAs/GaAs(001) quantum dots [Phys. Rev. B82, 235316 (2010)]. Physical Review B, 2010, 82, .	3.2	0
62	Structural and Electrical Properties of Nanostructured Ba_{0.8}Sr_{0.2}TiO₃ Films Deposited by Pulsed Laser Deposition. Journal of Nano Research, 2012, 18-19, 299-306.	0.8	0
63	(Invited) Exploring the Potential of Si and Ge Amorphous Nanostructures for Photonic Applications. ECS Transactions, 2013, 53, 17-29.	0.5	0
64	Fabrication of Semiconductor Quantum Dot Molecules: Droplet Epitaxy and Local Oxidation Nanolithography Techniques. Lecture Notes in Nanoscale Science and Technology, 2014, , 1-28.	0.8	0
65	Site controlled InAs/GaAs nanostructures on Si nano-tips. , 2017, , .		0