

# Augusto M Alcalde

## List of Publications by Year in descending order

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49  
papers

598  
citations

687220

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642610

23  
g-index

49  
all docs

49  
docs citations

49  
times ranked

483  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tunneling induced transparency and slow light in quantum dot molecules. Physical Review B, 2012, 85, .	1.1	119
2	Robust states in semiconductor quantum dot molecules. Physical Review B, 2010, 81, .	1.1	57
3	Influence of quantum dot shape on the Landé g-factor determination. Physical Review B, 2004, 69, .	1.1	55
4	Synthesis process controlled magnetic properties of Pb <sub>1-x</sub> MnxS nanocrystals. Applied Physics Letters, 2007, 90, 253114.	1.5	43
5	Quantum interference and control of the optical response in quantum dot molecules. Applied Physics Letters, 2013, 103, .	1.5	29
6	Interaction of a focused laser beam and a coaxial powder jet in laser surface processing. Journal of Laser Applications, 2007, 19, 84-88.	0.8	23
7	Optical properties of PbSe quantum dots embedded in oxide glass. Journal of Non-Crystalline Solids, 2006, 352, 3522-3524.	1.5	19
8	Scattering rates due to electron-phonon interaction in CdS <sub>1-x</sub> Sex quantum dots. Semiconductor Science and Technology, 2000, 15, 1082-1086.	1.0	18
9	Nonparabolicity effects on electron-phonon scattering rates in quantum wells. Physical Review B, 1997, 56, 9619-9624.	1.1	17
10	Electron-phonon scattering rates in II-VI quantum dots: contribution of the macroscopic deformation potential. Solid State Communications, 2000, 116, 247-252.	0.9	16
11	Electron-phonon-induced spin relaxation in InAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 20, 228-231.	1.3	16
12	Phonon modulation of the spin-orbit interaction as a spin relaxation mechanism in quantum dots. Physical Review B, 2008, 77, .	1.1	15
13	Electron-phonon relaxation rates in InGaAs-InP and HgCdTe-CdTe quantum wells. Journal of Applied Physics, 1999, 85, 7276-7281.	1.1	14
14	Optical phonons and Raman scattering in ternary II-VI spheroidal nanocrystals embedded in a glass matrix. Journal of Non-Crystalline Solids, 2006, 352, 3618-3623.	1.5	13
15	Atom-mediated effective interactions between modes of a bimodal cavity. Physical Review A, 2011, 84, .	1.0	12
16	Manipulation of g-factor in diluted magnetic semiconductors quantum dots: Optical switching control. Applied Physics Letters, 2006, 88, 052101.	1.5	11
17	Finite element method for electronic properties of semiconductor nanocrystals. Journal of Applied Physics, 2003, 94, 3462-3469.	1.1	9
18	Engineering selective linear and nonlinear Jaynes-Cummings interactions and applications. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 205501.	0.6	9

#	ARTICLE	IF	CITATIONS
19	Atomic force microscopy and optical characterization of PbS quantum dots grown in glass matrix. <i>Microelectronics Journal</i> , 2003, 34, 647-649.	1.1	8
20	Influence of the quantum dot shape on the determination of the electronic structure and electron decoherence. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2005, 26, 331-336.	1.3	8
21	Using quantum state protection via dissipation in a quantum-dot molecule to solve the Deutsch problem. <i>Physical Review A</i> , 2012, 85, .	1.0	7
22	Annealing time on carrier dynamics of ZnTe nanoparticles embedded in a near ultraviolet-transparent glass. <i>Chemical Physics Letters</i> , 2014, 599, 146-153.	1.2	7
23	Nonparabolicity effects on transition rates due to confined phonons in GaAs-AlGaAs quantum wells. <i>Solid State Communications</i> , 1995, 96, 763-766.	0.9	6
24	Photoluminescence and optical absorption in CdSxSe1-x nanocrystals. <i>Microelectronics Journal</i> , 2003, 34, 643-645.	1.1	6
25	Zeeman effect and magnetic anomalies in narrow-gap semiconductor quantum dots. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 20, 286-289.	1.3	6
26	Intraband magnetoabsorption as a probing tool for the quantum dot charge. <i>Applied Physics Letters</i> , 2005, 87, 231101.	1.5	6
27	Synthesis and characterization of MnTe nanocrystals in glass. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 3540-3543.	1.5	5
28	Surface phonons modes: a tool to determine the quantum dot morphology. <i>Brazilian Journal of Physics</i> , 2006, 36, 832-835.	0.7	5
29	Excitonic entanglement of protected states in quantum dot molecules. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016, 380, 3111-3116.	0.9	5
30	Photovoltaic efficiency of intermediate band solar cells based on CdTe/CdMnTe coupled quantum dots. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 445301.	0.7	5
31	Electron spin-phonon relaxation in quantum dots. <i>Brazilian Journal of Physics</i> , 2004, 34, 705-707.	0.7	4
32	Zeeman effect and magnetic field induced spin-hybridization in semiconductor quantum dots. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 6949-6960.	0.7	4
33	Spin-flip relaxation due to phonon macroscopic deformation potential in quantum dots. <i>Microelectronics Journal</i> , 2005, 36, 1034-1037.	1.1	4
34	Spin relaxation rates in quantum dots: Role of the phonon modulated spin-orbit interaction. <i>Solid State Communications</i> , 2008, 148, 255-258.	0.9	4
35	Magneto-optical properties in IV-VI lead-salt semimagnetic nanocrystals. <i>Nanoscale Research Letters</i> , 2012, 7, 374.	3.1	4
36	Acoustic and optical phonon scattering rates in spherical quantum dots: magnetic effects. <i>Physica B: Condensed Matter</i> , 2002, 316-317, 459-463.	1.3	2

#	ARTICLE	IF	CITATIONS
37	The effects of external magnetic field on the surface charge distribution of spherical nanoparticles. <i>Microelectronics Journal</i> , 2003, 34, 471-473.	1.1	1
38	Electron-phonon scattering in graded quantum dots. <i>Brazilian Journal of Physics</i> , 2006, 36, 372-374.	0.7	1
39	Phonon modulation of the spin-orbit interaction as a spin relaxation mechanism in InSb quantum dots. <i>Journal of Physics: Conference Series</i> , 2007, 92, 012062.	0.3	1
40	Electron Spin Relaxation Due to Phonon Modulation of the Rashba Interaction in Quantum Dots. <i>Journal of Superconductivity and Novel Magnetism</i> , 2010, 23, 175-177.	0.8	1
41	Photoluminescence Study of Ammonium-Free Chemical Bath Deposition of CdS Nanoparticles on Polyester Substrate. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 807-814.	0.9	1
42	Electron-acoustic phonon scattering rates in spherical quantum dots: contribution of the macroscopic deformation potential. <i>Brazilian Journal of Physics</i> , 2002, 32, 284-286.	0.7	1
43	Photovoltaic efficiency at maximum power of a quantum dot molecule. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 442, 128179.	0.9	1
44	Intra- and Intersubband Transition Rates Due to Emission of Optic Phonons in Quantum Wells: Effects of The Subband Nonparabolicity. , 1996, , 73-75.		0
45	Effective g -factor control in II-VI quantum dots: morphological effects. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 807-810.	0.8	0
46	Spin relaxation due to the phonon modulation of the spin-orbit interaction in quantum dots. <i>Microelectronics Journal</i> , 2005, 36, 241-243.	1.1	0
47	Spin-hybridization effects in quantum dots. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
48	Dissipative dynamics in coupled quantum dots: control of tunneling and electromagnetically induced transparency. , 2010, , .		0
49	Spin relaxation in quantum dots: Role of the phonon modulated spin-orbit interaction. , 2010, , .		0