

Victor Lopez-Richard

List of Publications by Year in descending order

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129
papers

1,290
citations

448610

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docs citations

129
times ranked

1374
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin-dependent analysis of homogeneous and inhomogeneous exciton decoherence in magnetic fields. <i>Physical Review B</i> , 2022, 105, .	1.1	0
2	Resonant Tunneling Diodes: Mid-Infrared Sensing at Room Temperature. <i>Nanomaterials</i> , 2022, 12, 1024.	1.9	4
3	Temperature, detriment, or advantage for memory emergence: The case of ZnO. <i>Journal of Chemical Physics</i> , 2022, 157, .	1.2	3
4	The Ubiquitous Memristive Response in Solids. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 5351-5356.	1.6	4
5	Magnetic and power tuning of spin-asymmetric multiple excitons in a GaAs quantum well. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2021, 129, 114599.	1.3	1
6	Optical Mapping of Nonequilibrium Charge Carriers. <i>Journal of Physical Chemistry C</i> , 2021, 125, 14741-14750.	1.5	7
7	Determination of Carrier Density and Dynamics via Magneto-electroluminescence Spectroscopy in Resonant-Tunneling Diodes. <i>Physical Review Applied</i> , 2021, 15, .	1.5	4
8	Insights into the nature of optically active defects of ZnO. <i>Journal of Luminescence</i> , 2020, 227, 117536.	1.5	15
9	Multichannel scattering mechanism behind the reentrant conductance feature in nanowires subject to strong spin-orbit coupling. <i>Physical Review B</i> , 2020, 102, .	1.1	2
10	Resonant tunneling of electrons in AlSb/GaInAsSb double barrier quantum wells. <i>AIP Advances</i> , 2020, 10, 055024.	0.6	7
11	Abordagem integradora para implementa�o de um sistema de gest�o de seguran�a e impactos de visita�o em �reas naturais protegidas. <i>Turismo Em �lise</i> , 2020, 31, 597-618.	0.0	1
12	Evidence for the formation of metallic In after laser irradiation of InP. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	4
13	Defect-induced magnetism in II-VI quantum dots. <i>Physical Review B</i> , 2019, 99, .	1.1	5
14	Dark-exciton valley dynamics in transition metal dichalcogenide alloy monolayers. <i>Scientific Reports</i> , 2019, 9, 4575.	1.6	20
15	Topology Driven g -Factor Tuning in Type-II Quantum Dots. <i>Physical Review Applied</i> , 2019, 11, .	1.5	8
16	Photomodulation of transport in monolayer dichalcogenides. <i>Physical Review B</i> , 2018, 98, .	1.1	4
17	From Dot to Ring: Tunable Exciton Topology in Type-II InAs/GaAsSb Quantum Dots. <i>Nanoscience and Technology</i> , 2018, , 57-88.	1.5	0
18	Electroluminescence on-off ratio control of $\hat{\alpha}$ GaAs/AlGaAs-based resonant tunneling structures. <i>Physical Review B</i> , 2018, 98, .	1.1	6

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19	Azobenzene Adsorption on the MoS ₂ (0001) Surface: A Density Functional Investigation within van der Waals Corrections. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18895-18901.	1.5	15
20	Quantum well electronic states in a tilted magnetic field. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 325503.	0.7	1
21	Nanoscale Tipping Bucket Effect in a Quantum Dot Transistor-Based Counter. <i>Nano Letters</i> , 2017, 17, 2273-2279.	4.5	5
22	Collective modes of trapped spinor Bose-Einstein condensates. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 215303.	0.6	0
23	Temperature tuning from direct to inverted bistable electroluminescence in resonant tunneling diodes. <i>Journal of Applied Physics</i> , 2017, 122, 154502.	1.1	12
24	Interplay between structure asymmetry, defect-induced localization, and spin-orbit interaction in Mn-doped quantum dots. <i>Physical Review B</i> , 2017, 95, .	1.1	5
25	Light sensitive memristor with bi-directional and wavelength-dependent conductance control. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	35
26	Mimicking of pulse shape-dependent learning rules with a quantum dot memristor. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	6
27	Optical and transport properties correlation driven by amorphous/crystalline disorder in InP nanowires. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 475303.	0.7	1
28	Effective particle-hole symmetry breaking, quasi-bond state engineering and optical absorption in graphene based gated dot-ring nanostructures. <i>RSC Advances</i> , 2016, 6, 51845-51855.	1.7	0
29	Excitonic spin-splitting in quantum wells with a tilted magnetic field. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 055503.	0.7	2
30	A Memristive Pascaline. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2016, 63, 558-562.	2.2	10
31	Damping of confined excitation modes of one-dimensional condensates in an optical lattice. <i>Physical Review A</i> , 2015, 92, .	1.0	3
32	Carrier transfer in vertically stacked quantum ring-quantum dot chains. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	15
33	Nanothermometer Based on Resonant Tunneling Diodes: From Cryogenic to Room Temperatures. <i>ACS Nano</i> , 2015, 9, 6271-6277.	7.3	23
34	Berry phase and Rashba fields in quantum rings in tilted magnetic field. <i>Physical Review B</i> , 2015, 92, .	1.1	9
35	Photocurrent-voltage relation of resonant tunneling diode photodetectors. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	26
36	Excited states of exciton-polariton condensates in 2D and 1D harmonic traps. <i>Physical Review B</i> , 2014, 89, .	1.1	6

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37	Structural and magnetic confinement of holes in the spin-polarized emission of coupled quantum ring-quantum dot chains. <i>Physical Review B</i> , 2014, 90, .	1.1	10
38	Low temperature magneto-photoluminescence of GaAsBi /GaAs quantum well heterostructures. <i>Journal of Applied Physics</i> , 2014, 115, 123518.	1.1	11
39	Electron transport in quantum dot chains: Dimensionality effects and hopping conductance. <i>Journal of Applied Physics</i> , 2013, 113, 183709.	1.1	20
40	Magnetic phase diagram of non-magnetic few-electron quantum dot molecules. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 055301.	1.3	1
41	Magneto-optical investigation of two-dimensional gases in n-type resonant tunneling diodes. <i>Semiconductor Science and Technology</i> , 2012, 27, 015018.	1.0	3
42	Spin-current switch based on vertical asymmetric double quantum dots containing single manganese. <i>Journal of Applied Physics</i> , 2012, 111, 07C320.	1.1	0
43	Quantum oscillations of spin polarization in a GaAs/AlGaAs double quantum well. <i>Physical Review B</i> , 2012, 86, .	1.1	7
44	Tuning hole mobility in InP nanowires. <i>Applied Physics Letters</i> , 2012, 101, 182104.	1.5	1
45	In-plane mapping of buried InGaAs quantum rings and hybridization effects on the electronic structure. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	12
46	Paramagnetic shift in thermally annealed $\text{Cd}_x\text{Zn}_{1-x}\text{Se}$ quantum dots. <i>New Journal of Physics</i> , 2012, 14, 043038.	1.2	11
47	Temperature-dependent Raman study of thermal parameters in CdS quantum dots. <i>Nanotechnology</i> , 2012, 23, 125701.	1.3	34
48	Magneto-optical properties in IV-VI lead-salt semimagnetic nanocrystals. <i>Nanoscale Research Letters</i> , 2012, 7, 374.	3.1	4
49	Voltage-driven ring confinement in a graphene sheet: assessing conditions for bound state solutions. <i>Nanotechnology</i> , 2012, 23, 385201.	1.3	5
50	The migration of Mn^{2+} ions in $\text{Cd}_{1-x}\text{Mn}_x\text{S}$ nanocrystals: Thermal annealing control. <i>Solid State Communications</i> , 2012, 152, 337-340.	0.9	9
51	Superfluidity and collective oscillations of trapped Bose-Einstein condensates in a periodical potential. <i>European Physical Journal D</i> , 2012, 66, 1.	0.6	3
52	Anisotropic Confinement, Electronic Coupling and Strain Induced Effects Detected by Valence-Band Anisotropy in Self-Assembled Quantum Dots. <i>Nanoscale Research Letters</i> , 2011, 6, 56.	3.1	10
53	Gate-controlled electron g-factor in lateral quantum dot molecules. <i>Journal of Applied Physics</i> , 2011, 110, 124309.	1.1	2
54	Tailoring Electronic Transparency of Twin-Plane 1D Superlattices. <i>ACS Nano</i> , 2011, 5, 5519-5525.	7.3	21

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55	Hole-mediated ferromagnetism in coupled semimagnetic quantum dots. <i>Physical Review B</i> , 2011, 84, .	1.1	8
56	Tunable magnetic property of lateral quantum dot molecules. <i>Journal of Physics: Conference Series</i> , 2011, 334, 012064.	0.3	2
57	Radiative versus nonradiative optical processes in PbS nanocrystals. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	18
58	Circular polarization in a non-magnetic resonant tunneling device. <i>Nanoscale Research Letters</i> , 2011, 6, 101.	3.1	2
59	Carrier transfer in the optical recombination of quantum dots. <i>Physical Review B</i> , 2011, 83, .	1.1	6
60	Zeeman splitting and spin dynamics tuning by exciton charging in two-dimensional systems. <i>Physical Review B</i> , 2011, 84, .	1.1	13
61	Spin injection from two-dimensional electron and hole gases in resonant tunneling diodes. <i>Applied Physics Letters</i> , 2011, 99, 233507.	1.5	11
62	Cooperative Effects in the Photoluminescence of (In,Ga)As/GaAs Quantum Dot Chain Structures. <i>Nanoscale Research Letters</i> , 2010, 5, 991-1001.	3.1	8
63	Tunability of magnetization in lateral few electron double quantum dots. <i>Journal of Applied Physics</i> , 2010, 108, 094325.	1.1	2
64	Characterization of spin-state tuning in thermally annealed semiconductor quantum dots. <i>Physical Review B</i> , 2010, 82, .	1.1	12
65	Aharonov-Bohm Interference in Neutral Excitons: Effects of Built-In Electric Fields. <i>Physical Review Letters</i> , 2010, 104, 086401.	2.9	80
66	Contrasting LH-HH subband splitting of strained quantum wells grown along [001] and [113] directions. <i>Physical Review B</i> , 2010, 81, .	1.1	5
67	Spin channels exploring finite superlattices: Vertical and lateral transport. <i>Physical Review B</i> , 2010, 81, .	1.1	5
68	Control of $p\text{-}d$ exchange interaction in single Mn-doped vertically coupled asymmetric double quantum dots. <i>Physical Review B</i> , 2010, 82, .	1.1	2
69	Optical phonons in spherical core/shell semiconductor nanoparticles: Effect of hydrostatic pressure. <i>Physical Review B</i> , 2010, 82, .	1.1	7
70	Bose-Einstein condensation in an optical lattice: A perturbation approach. <i>Physical Review A</i> , 2009, 79, .	1.0	9
71	Spin polarization in quantum wires: Influence of Dresselhaus spin-orbit interaction and cross-section effects. <i>Physical Review B</i> , 2009, 79, .	1.1	9
72	Eigenstate symmetries and information transfer in parabolic quantum reflectors. <i>Physical Review B</i> , 2009, 79, .	1.1	0

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73	Morphology in semimagnetic Pb $^{1-x}$ MnxSe nanocrystals: Thermal annealing effects. Applied Physics Letters, 2009, 94, .	1.5	28
74	Electrical control of singlet-triplet entanglement in lateral quantum dot molecules. Applied Physics Letters, 2009, 95, 083101.	1.5	10
75	Analytical Model for Heterogeneous Crystallization Kinetics of Spherical Glass Particles. Journal of the American Ceramic Society, 2009, 92, 2616-2618.	1.9	9
76	Markovian and Non-Markovian Light-Emission Channels in Strained Quantum Wires. Nano Letters, 2009, 9, 3129-3136.	4.5	24
77	Mechanisms of interdot coupling in (In,Ga)As/GaAs quantum dot arrays. Applied Physics Letters, 2009, 94, .	1.5	21
78	Formal analytical solutions for the Grossâ€Pitaevskii equation. Physica D: Nonlinear Phenomena, 2008, 237, 2342-2352.	1.3	27
79	Role of X valley on the dynamics of electron transport through a GaAs/AlAs double-barrier structure. Physical Review B, 2008, 78, .	1.1	5
80	Polarization resolved luminescence in asymmetric n-type GaAs/AlGaAs resonant tunneling diodes. Applied Physics Letters, 2008, 92, .	1.5	16
81	Inversion asymmetry spin splitting in self-assembled quantum rings. Physical Review B, 2008, 77, .	1.1	8
82	Negative magnetopolarization in thermally annealed self-assembled quantum dots. Physical Review B, 2008, 77, .	1.1	11
83	LÃmpada de Hg para experimentos e demonstraÃ§Ãµes de fÃsica moderna: introduÃ§Ã£o ao efeito fotoelÃ©trico e outros tÃpicos. Revista Brasileira De Ensino De Fisica, 2008, 30, 4502.1-4502.6.	0.2	1
84	Light controlled spin polarization in asymmetric n-type resonant tunneling diode. Applied Physics Letters, 2007, 91, .	1.5	14
85	Circular polarization from a nonmagnetic p-i-n resonant tunneling diode. Applied Physics Letters, 2007, 90, 062120.	1.5	17
86	Spinâ€orbit effects in single electron quantum rings. Semiconductor Science and Technology, 2007, 22, 301-306.	1.0	4
87	Controlled optical switching in DMS quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 344-346.	0.8	2
88	Gerenciamento de riscos em programas de aventura. Turismo Em anÃlise, 2007, 18, 94.	0.0	2
89	Electric-field inversion asymmetry: Rashba and Stark effects for holes in resonant tunneling devices. Physical Review B, 2006, 74, .	1.1	23
90	Boseâ€Einstein condensates: Analytical methods for the Grossâ€Pitaevskii equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 354, 115-118.	0.9	10

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91	Voltage-controlled hole spin injection in nonmagnetic GaAs/AlAs resonant tunneling structures. <i>Physical Review B</i> , 2006, 73, .	1.1	21
92	Manipulation of g-factor in diluted magnetic semiconductor quantum dots: Optical switching control. <i>Applied Physics Letters</i> , 2006, 88, 052101.	1.5	11
93	Spin carrier dynamics under full spin-orbit coupling. <i>Microelectronics Journal</i> , 2005, 36, 480-483.	1.1	2
94	Phonon-assisted tunneling in coupled semiconductor quantum dots. <i>Physical Review B</i> , 2005, 71, .	1.1	15
95	Symmetries and anisotropies of the electronic states within full spin-orbit coupling. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, 1788-1792.	0.7	1
96	Spin-hybridization effects in quantum dots. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
97	Intraband magnetoabsorption as a probing tool for the quantum dot charge. <i>Applied Physics Letters</i> , 2005, 87, 231101.	1.5	6
98	Kinetics of excitonic complexes on tunneling devices. <i>Physical Review B</i> , 2005, 71, .	1.1	8
99	Multichannel field-effect spin-barrier selector: Spin-carrier dynamics under full spin-orbit coupling. <i>Physical Review B</i> , 2005, 72, .	1.1	9
100	Turismo de aventura: conceitos e paradigmas fundamentais. <i>Turismo Em análise</i> , 2004, 15, 199.	0.0	2
101	Local density of states in parabolic quantum corrals. <i>Physical Review B</i> , 2004, 69, .	1.1	5
102	Influence of quantum dot shape on the Landé g-factor determination. <i>Physical Review B</i> , 2004, 69, .	1.1	55
103	Spin-orbit coupling and intrinsic spin mixing in quantum dots. <i>Physical Review B</i> , 2004, 69, .	1.1	72
104	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
105	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
106	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
107	Spin-orbit and electronic interactions in narrow-gap quantum dots. <i>Physical Review B</i> , 2004, 70, .	1.1	41
108	Optical transitions in a single CdTe spherical quantum dot. <i>Physical Review B</i> , 2003, 68, .	1.1	23

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109	Photoluminescence of GaAs/Al _x Ga _{1-x} As multiple quantum well structures containing δ -doping superlattices. Physical Review B, 2003, 67, .	1.1	9
110	Resonant magnetotunneling of photogenerated holes in double barrier structures. Journal of Applied Physics, 2003, 93, 5830-5832.	1.1	2
111	Magneto-optical properties of nanocrystals: Zeeman splitting. Physical Review B, 2003, 67, .	1.1	19
112	Multiband electron resonant Raman scattering in quantum wells in a magnetic field. Physical Review B, 2003, 67, .	1.1	4
113	Raman spectra of a two-dimensional electron gas in narrow-gap semiconductor quantum wells in magnetic fields: Spin-flip and anisotropic effects. Physical Review B, 2002, 66, .	1.1	3
114	Electron optical-phonon scattering rates in spherical CdSe quantum dots in an external magnetic field. Physical Review B, 2002, 65, .	1.1	7
115	Spin-Flip Effect in Narrow-Gap Semiconductor Quantum Wells. Physica Status Solidi (B): Basic Research, 2002, 231, 263-277.	0.7	3
116	Dielectric response in narrow-gap semiconductor quantum wells in a magnetic field. Journal of Applied Physics, 2001, 89, 6400-6407.	1.1	6
117	Anomalous Landé factor in narrow-gap semiconductor heterostructures. Solid State Communications, 2000, 114, 649-654.	0.9	8
118	Erratum to "Anomalous Landé factor in narrow-gap semiconductor heterostructures". Solid State Communications, 2000, 115, 515.	0.9	3
119	Magneto-optical anisotropy in the absorption coefficient of narrow-gap quantum wells. Physica B: Condensed Matter, 2000, 284-288, 1928-1929.	1.3	1
120	Interband and intersubband absorption in HgCdTe multiple quantum wells. Physical Review B, 1999, 59, 10158-10164.	1.1	8
121	Polaron renormalization and lifetime broadening effects on Raman scattering under magnetic field. Physica B: Condensed Matter, 1999, 263-264, 813-815.	1.3	0
122	Interband magneto-absorption in narrow-gap semiconductor quantum wells. Brazilian Journal of Physics, 1999, 29, 679-684.	0.7	0
123	Strain-induced enhancement of resonant current of holes in multilayered heterostructures. Physical Review B, 1998, 57, 4525-4543.	1.1	28
124	Resonant Raman scattering in a magnetic field assisted by Fröhlich interaction in zinc-blende-type semiconductors. Physical Review B, 1998, 58, 16136-16143.	1.1	7
125	Magneto-resonant Raman scattering in zinc-blende-type semiconductors: Electron-phonon interaction mediated by a deformation potential. Physical Review B, 1997, 56, 15691-15700.	1.1	6
126	Resonant electron-phonon coupling: Magnetopolarons in InP. Physical Review B, 1996, 54, 10502-10507.	1.1	14

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127	Electronic structure of semimagnetic semiconductor heterostructures. Semiconductor Science and Technology, 1988, 3, 564-571.	1.0	9
128	Non-parabolicity due to conduction-valence band coupling. Journal of Physics C: Solid State Physics, 1987, 20, L727-L733.	1.5	8
129	Anomalies on the Zeeman splitting and dielectric response due to the lack of inversion symmetry in narrow-gap semiconductor quantum wells. , 0, , .		0