

Selvakumar Nair

List of Publications by Year in descending order

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58
papers

1,568
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331670

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Pseudopotential calculation of the excitonic fine structure of million-atom self-assembled $\text{In}_{1-x}\text{Ga}_x\text{As}/\text{GaAs}$ quantum dots. <i>Physical Review B</i> , 2003, 67, .	3.2	316
2	Quantum size effects in spherical semiconductor microcrystals. <i>Physical Review B</i> , 1987, 35, 4098-4101.	3.2	140
3	Optical absorption in semiconductor quantum dots: A tight-binding approach. <i>Physical Review B</i> , 1993, 47, 7132-7139.	3.2	106
4	High-temperature ferromagnetism in Mn-doped ZnO nanowires. <i>Applied Physics Letters</i> , 2006, 88, 263101.	3.3	95
5	Theory of exciton pair states and their nonlinear optical properties in semiconductor quantum dots. <i>Physical Review B</i> , 1997, 55, 5153-5170.	3.2	81
6	Optical anisotropy in self-assembled InP quantum dots. <i>Physical Review B</i> , 1999, 59, R5300-R5303.	3.2	79
7	External-field effects on the optical spectra of self-assembled InP quantum dots. <i>Physical Review B</i> , 2002, 66, .	3.2	58
8	Electron states in a quantum dot in an effective-bond-orbital model. <i>Physical Review B</i> , 1992, 45, 5969-5979.	3.2	53
9	Biexciton and Triexciton States in Quantum Dots in the Weak Confinement Regime. <i>Physical Review Letters</i> , 1997, 79, 3522-3525.	7.8	39
10	Phonon resonances in photoluminescence spectra of self-assembled quantum dots in an electric field. <i>Physical Review B</i> , 2001, 63, .	3.2	39
11	Carrier relaxation dynamics in InP quantum dots studied by artificial control of nonradiative losses. <i>Physical Review B</i> , 2000, 61, 15633-15636.	3.2	37
12	Surface Plasmon Polariton Resonance of Gold, Silver, and Copper Studied in the Kretschmann Geometry: Dependence on Wavelength, Angle of Incidence, and Film Thickness. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 124721.	1.6	33
13	Room temperature single nanowire ZnTe photoconductors grown by metal-organic chemical vapor deposition. <i>Applied Physics Letters</i> , 2010, 97, 063510.	3.3	29
14	Biexciton binding energy in parabolic GaAs quantum dots. <i>Physical Review B</i> , 2006, 73, .	3.2	28
15	Surface State Dynamics Dictating Transport in InAs Nanowires. <i>Nano Letters</i> , 2018, 18, 1387-1395.	9.1	28
16	LO Phonon Renormalization in Optically Excited CuCl Nanocrystals. <i>Physical Review Letters</i> , 1998, 80, 3105-3108.	7.8	25
17	Confined modes in finite-size photonic crystals. <i>Physical Review B</i> , 2005, 72, .	3.2	25
18	Imaging and single dot spectroscopy of InP self-assembled quantum dots. <i>Journal of Luminescence</i> , 2000, 87-89, 40-45.	3.1	24

#	ARTICLE	IF	CITATIONS
19	Polymer Multilayer Microspheres Loaded with Semiconductor Quantum Dots. <i>Advanced Functional Materials</i> , 2008, 18, 1961-1968.	14.9	24
20	Nanowire-array-based photonic crystal cavity by finite-difference time-domain calculations. <i>Physical Review B</i> , 2007, 75, .	3.2	22
21	Excitation-energy dependence of transient grating spectroscopy in β -carotene. <i>Physical Review B</i> , 2009, 80, .	3.2	22
22	Probing the Gate-Voltage-Dependent Surface Potential of Individual InAs Nanowires Using Random Telegraph Signals. <i>ACS Nano</i> , 2011, 5, 2191-2199.	14.6	20
23	Multi-Exciton States in Semiconductor Quantum Dots. <i>Physica Status Solidi A</i> , 2000, 178, 303-306.	1.7	19
24	Inverse exciton series in the optical decay of an excitonic molecule. <i>Physical Review B</i> , 1999, 59, R7837-R7840.	3.2	18
25	Coulomb effects in the optical spectra of highly excited semiconductor quantum dots. <i>Journal of Luminescence</i> , 2000, 87-89, 438-440.	3.1	14
26	Nano-optical probing of exciton wave-functions confined in a GaAs quantum dot. <i>Journal of Electron Microscopy</i> , 2004, 53, 193-201.	0.9	14
27	Highly confined mode above the light line in a two-dimensional photonic crystal slab. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	14
28	Weakly correlated exciton pair states in large quantum dots. <i>Physical Review B</i> , 1996, 53, R10516-R10519.	3.2	13
29	Measurement and modelling of water ingress into double-glass photovoltaic modules. <i>Progress in Photovoltaics: Research and Applications</i> , 2019, 27, 144-151.	8.1	12
30	Linear and nonlinear optical response of spherical anisotropic semiconductor microcrystallites. <i>Physical Review B</i> , 1989, 40, 12423-12432.	3.2	11
31	Hopfield coefficients measured by inverse polariton series. <i>Physical Review B</i> , 2001, 63, .	3.2	11
32	Electronic structure of semiconductor quantum dots. <i>Physica B: Condensed Matter</i> , 1995, 212, 245-250.	2.7	10
33	Exciton-phonon coupled states in CuCl quantum cubes. <i>Physical Review B</i> , 2000, 63, .	3.2	9
34	Photon echo study of excitons and excitonic complexes in self-assembled quantum dots. <i>Journal of Luminescence</i> , 2007, 122-123, 730-734.	3.1	9
35	Effect of light scattering on the transmission spectra of organic nanocrystals. <i>Applied Physics Letters</i> , 2011, 99, 053304.	3.3	9
36	Electron states in semiconductor quantum dots. <i>Journal of Chemical Physics</i> , 2014, 141, 204702.	3.0	9

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37	Surface Properties from Transconductance in Nanoscale Systems. Nano Letters, 2016, 16, 6028-6035.	9.1	9
38	Absorption and emission spectra of molecular excitons in single perylene nanocrystals. Physical Review B, 2011, 84, .	3.2	8
39	Optical size effect of organic nanocrystals studied by absorption spectroscopy within an integrating sphere. Chemical Physics Letters, 2014, 601, 128-133.	2.6	7
40	Nonlinear Chemical Sensitivity Enhancement of Nanowires in the Ultralow Concentration Regime. ACS Nano, 2020, 14, 964-973.	14.6	7
41	LO phonon resonances in photoluminescence spectra of InP self-assembled quantum dots in electric field. Journal of Luminescence, 2000, 87-89, 441-443.	3.1	5
42	Confinement effects in strain-induced InGaAs/GaAs quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 403-407.	2.7	4
43	Electrical transport in InAs/GaSb superlattice: role of surface states and interface roughness. Semiconductor Science and Technology, 2012, 27, 105025.	2.0	4
44	Plasmon Modulation Spectroscopy of Noble Metals to Reveal the Distribution of the Fermi Surface Electrons in the Conduction Band. Applied Sciences (Switzerland), 2017, 7, 1315.	2.5	4
45	Accurate modeling of electron-hole binding in CuCl. I. Exciton states. Physical Review B, 2020, 102, .	3.2	4
46	Transport and optical response of single nanowires. Journal of Materials Science: Materials in Electronics, 2009, 20, 480-486.	2.2	3
47	Hybrid microspheres with alternating layers of a polymer and metal nanoparticles. Canadian Journal of Chemistry, 2010, 88, 298-304.	1.1	3
48	Inverse exciton series for observation of bipolariton coupling. Journal of Luminescence, 2000, 87-89, 216-218.	3.1	2
49	Nanowire array based photonic crystal devices. , 2005, , .		2
50	Anisotropic optical response of InP self-assembled quantum dots studied by pump-probe spectroscopy. Physical Review B, 2007, 75, .	3.2	2
51	(Invited) Optical Response of II-VI ZnSe Nanowires. ECS Transactions, 2010, 28, 193-202.	0.5	2
52	Mapping the Coulomb Environment in Interference-Quenched Ballistic Nanowires. Nano Letters, 2018, 18, 124-129.	9.1	2
53	Conductive adhesive based shingled solar cells: Electrical degradation under cyclic loading. Solar Energy Materials and Solar Cells, 2022, 245, 111823.	6.2	2
54	Spectrally resolved transient grating signals from β -carotene in benzene solution. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S34.	0.8	1

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55	Accurate modeling of electron-hole binding in CuCl. II. Biexciton wavefunction. Physical Review B, 2020, 102, .	3.2	1
56	Mechanism of IR Photoresponse in Nanopatterned InAs/GaAs Quantum Dot p-i-n Photodiodes. IEEE Journal of Quantum Electronics, 2010, 46, 832-836.	1.9	0
57	Coulomb Effects in the Optical Spectra of Highly Excited Semiconductor Quantum Dots. Nanoscience and Technology, 2002, , 439-456.	1.5	0
58	Excitonic Optical Nonlinearities and Weakly Correlated Exciton-Pair States. Nanoscience and Technology, 2002, , 389-437.	1.5	0