Mihail D Croitoru

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3839303/publications.pdf

Version: 2024-02-01

83	1,494	331259	360668
papers	citations	21	35
		h-index	g-index

84	84	84	792
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Size-dependent enhancement of superconductivity in Al and Sn nanowires: Shape-resonance effect. Physical Review B, 2006, 74, .	1.1	101
2	Nonmonotonic Field Dependence of Damping and Reappearance of Rabi Oscillations in Quantum Dots. Physical Review Letters, 2007, 98, 227403.	2.9	98
3	Real-time path integrals for quantum dots: Quantum dissipative dynamics with superohmic environment coupling. Physical Review B, 2011, 83, .	1.1	88
4	Oscillations of the superconducting temperature induced by quantum well states in thin metallic films: Numerical solution of the Bogoliubovâ€“de Gennes equations. Physical Review B, 2007, 75, .	1.1	84
5	Dependence of superconducting properties on the size and shape of a nanoscale superconductor: From nanowire to film. Physical Review B, 2007, 76, .	1.1	59
6	Long-time dynamics and stationary nonequilibrium of an optically driven strongly confined quantum dot coupled to phonons. Physical Review B, 2011, 84, .	1.1	59
7	Shape resonances in the superconducting order parameter of ultrathin nanowires. Physical Review B, 2006, 73, .	1.1	56
8	In-Plane Magnetic Field Anisotropy of the Fulde-Ferrell-Larkin-Ovchinnikov State in Layered Superconductors. Physical Review Letters, 2012, 108, 207005.	2.9	39
9	Biexciton state preparation in a quantum dot via adiabatic rapid passage: Comparison between two control protocols and impact of phonon-induced dephasing. Physical Review B, 2013, 87, .	1.1	39
10	Magnetic-field induced quantum-size cascades in superconducting nanowires. Physical Review B, 2008, 78, .	1.1	38
11	Atypical BCS-BEC crossover induced by quantum-size effects. Physical Review A, 2012, 86, .	1.0	35
12	Metallic nanograins: Spatially nonuniform pairing induced by quantum confinement. Physical Review B, 2011, 83, .	1.1	33
13	New Andreev-Type States in Superconducting Nanowires. Physical Review Letters, 2007, 99, 067007.	2.9	31
14	Quantum-size effects on T c in superconducting nanofilms. Europhysics Letters, 2006, 76, 498-504.	0.7	30
15	Giant drop in the Bardeen-Cooper-Schrieffer coherence length induced by quantum size effects in superconducting nanowires. Physical Review B, 2010, 82, .	1.1	30
16	Influence of the pulse shape and the dot size on the decay and reappearance of Rabi rotations in laser driven quantum dots. Physical Review B, 2011, 84, .	1.1	27
17	Ultrafast terahertz-field-induced dynamics of superconducting bulk and quasi-1D samples. New Journal of Physics, 2013, 15, 055016.	1.2	25
18	An efficient way of including thermal diffuse scattering in simulation of scanning transmission electron microscopic images. Ultramicroscopy, 2006, 106, 933-940.	0.8	23

#	Article	IF	Citations
19	Interaction of a quantum-dot cavity system with acoustic phonons: Stronger light-matter coupling can reduce the visibility of strong coupling effects. Physical Review B, 2012, 86, .	1.1	23
20	Superconducting nanowires: Interplay of discrete transverse modes with supercurrent. Physical Review B, 2009, 80, .	1.1	22
21	Atomically flat superconducting nanofilms: multiband properties and mean-field theory. Superconductor Science and Technology, 2015, 28, 054001.	1.8	22
22	Dynamics of quantum dots with strong electron phonon coupling: Correlation expansion vs. path integrals. Physica Status Solidi (B): Basic Research, 2011, 248, 839-842.	0.7	19
23	Role of nonlocality and Landau damping in the dynamics of a quantum dot coupled to surface plasmons. Physical Review B, 2016, 93, .	1.1	19
24	Persistent oscillations of the order parameter and interaction quench phase diagram for a confined Bardeen-Cooper-Schrieffer Fermi gas. Physical Review A, 2018, 98, .	1.0	19
25	Quantum transport in a nanosize silicon-on-insulator metal-oxide-semiconductor field-effect transistor. Journal of Applied Physics, 2003, 93, 1230-1240.	1.1	18
26	Parity-fluctuation induced enlargement of the ratio<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>Î”</mml:mi><mml:mi>E</mml:mi></mml:msub><mml:mo>/</mml:mo><mml:msub metallic grains. Physical Review B, 2011, 84, .	1.1	18
27	Quantum transport in a nanosize double-gate metal-oxide-semiconductor field-effect transistor. Journal of Applied Physics, 2004, 96, 2305-2310.	1.1	17
28	Focused ion beam/scanning electron microscopy tomography and conventional transmission electron microscopy assessment of Ni4Ti3 morphology in compression-aged Ni-rich Niâ€“Ti single crystals. Scripta Materialia, 2010, 62, 399-402.	2.6	17
29	Resonance in-plane magnetic field effect as a means to reveal the Fulde-Ferrell-Larkin-Ovchinnikov state in layered superconductors. Physical Review B, 2012, 86, .	1.1	17
30	Phonon limited superconducting correlations in metallic nanograins. Scientific Reports, 2015, 5, 16515.	1.6	17
31	Quench dynamics of an ultracold Fermi gas in the BCS regime: Spectral properties and confinement-induced breakdown of the Higgs mode. Physical Review A, 2015, 91, .	1.0	16
32	High pulse area undamping of Rabi oscillations in quantum dots coupled to phonons. Physica Status Solidi (B): Basic Research, 2006, 243, 2233-2240.	0.7	15
33	Superconducting nanofilms: Andreev-type states induced by quantum confinement. Physical Review B, 2008, 78, .	1.1	15
34	Dynamical vanishing of the order parameter in a confined Bardeen-Cooper-Schrieffer Fermi gas after an interaction quench. Physical Review A, 2018, 97, .	1.0	15
35	Universal flux patterns and their interchange in superconductors between types I and II. Communications Physics, 2020, 3, .	2.0	15
36	In Search of Unambiguous Evidence of the Fuldeâ€“Ferrellâ€“Larkinâ€“Ovchinnikov State in Quasi-Low Dimensional Superconductors. Condensed Matter, 2017, 2, 30.	0.8	14

#	Article	IF	Citations
37	Competition between pure dephasing and photon losses in the dynamics of a dot-cavity system. Physical Review B, 2014, 90, .	1.1	13
38	Influence of Disorder on Superconducting Correlations in Nanoparticles. Journal of Superconductivity and Novel Magnetism, 2016, 29, 605-609.	0.8	13
39	Correlated disorder as a way towards robust superconductivity. Communications Physics, 2022, 5, .	2.0	13
40	Extended Lawrence-Doniach model: The temperature evolution of the in-plane magnetic field anisotropy. Physical Review B, 2012, 86, .	1.1	12
41	Peculiarities of the orbital effect in the Fulde-Ferrell-Larkin-Ovchinnikov state in quasi-one-dimensional superconductors. Physical Review B, 2014, 89, .	1.1	12
42	Resonant tunneling and localized states in a graphene monolayer with a mass gap. Physical Review B, 2015, 91, .	1.1	12
43	Pure Goldstone mode in the quench dynamics of a confined ultracold Fermi gas in the BCS-BEC crossover regime. Physical Review A, 2017, 96, .	1.0	12
44	Microscopic description of surface superconductivity. Physical Review B, 2020, 102, .	1.1	12
45	Bipolaron stability in an ellipsoidal potential well. Physica Status Solidi (B): Basic Research, 2003, 237, 244-251.	0.7	11
46	Quantum transport in an ultra-thin SOI MOSFET: Influence of the channel thickness on the Iâ€“V characteristics. Solid State Communications, 2008, 147, 31-35.	0.9	11
47	Impact of dark superpositions on the relaxation dynamics of an optically driven phonon-coupled exciton-biexciton quantum-dot system. Physical Review B, 2012, 85, .	1.1	11
48	The Cooper problem in nanoscale: enhancement of the coupling due to confinement. Superconductor Science and Technology, 2012, 25, 124001.	1.8	10
49	The Fuldeâ€“Ferrellâ€“Larkinâ€“Ovchinnikov state in layered d-wave superconductors: in-plane anisotropy and resonance effects in the angular dependence of the upper critical field. Journal of Physics Condensed Matter, 2013, 25, 125702.	0.7	10
50	Superconducting nanowires: quantum confinement and spatially dependent Hartreeâ€“Fock potential. Journal of Physics Condensed Matter, 2009, 21, 435701.	0.7	9
51	Field-Direction Dependence of the Upper Critical Field in Organic Superconductors. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1283-1287.	0.8	9
52	Superanomalous Skin Effect for Surface Plasmon Polaritons. Physical Review Letters, 2017, 119, 176801.	2.9	9
53	Nanoarchitecture: Toward Quantumâ€Size Tuning of Superconductivity. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800317.	1.2	9
54	Influence of a nonuniform thermal quench and circular polarized radiation on spontaneous current generation in superconducting rings. Physical Review B, 2022, 105, .	1.1	9

#	Article	IF	Citations
55	Electroluminescence spectra of an STM-tip-induced quantum dot. Physical Review B, 2003, 68, .	1.1	8
56	Atomic resolution electron tomography: a dream?. International Journal of Materials Research, 2006, 97, 872-879.	0.1	8
57	Nanoscale superconductivity: Nanowires and nanofilms. Physica C: Superconductivity and Its Applications, 2008, 468, 593-598.	0.6	7
58	Ultra-small metallic grains: effect of statistical fluctuations of the chemical potential on superconducting correlations and vice versa. Journal of Physics Condensed Matter, 2012, 24, 275701.	0.7	7
59	Statistical method for thickness measurement of amorphous objects. Applied Physics Letters, 2007, 90, 241911.	1.5	6
60	Nanowires and nanofilms: Superconductivity in quantum-size regime. Physica C: Superconductivity and Its Applications, 2008, 468, 326-330.	0.6	5
61	FFLO-wave-vector Lock-in Effect in Quasi-1D Superconductors. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1305-1308.	0.8	5
62	Quantum Size Effect in Superconducting Aluminum Films. Physics of the Solid State, 2019, 61, 1559-1562.	0.2	5
63	Measurement of specimen thickness by phase change determination in TEM. Ultramicroscopy, 2008, 108, 1616-1622.	0.8	4
64	Quantum cascades in nano-engineered superconductors: geometrical, thermal and paramagnetic effects. Journal of Physics Condensed Matter, 2012, 24, 265702.	0.7	4
65	Orientational Effect of the In-Plane Magnetic Field on the FFLO Modulation in Layered Superconductors. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1657-1661.	0.8	4
66	Multiband superconductors with degenerate excitation gaps. Journal of Physics Condensed Matter, 2020, 32, 455702.	0.7	4
67	SUPERCONDUCTING NANOWIRES: QUANTUM-CONFINEMENT EFFECT ON THE CRITICAL MAGNETIC FIELD AND SUPERCURRENT. International Journal of Modern Physics B, 2009, 23, 4257-4268.	1.0	3
68	Coherent dynamics of confinement-induced multiband superconductors. Physica C: Superconductivity and Its Applications, 2014, 503, 183-186.	0.6	3
69	Spectral characteristics of the coherent dynamics of the order parameter in superconducting nanorods. Physica C: Superconductivity and Its Applications, 2017, 533, 133-136.	0.6	3
70	Andreev-type states induced by quantum confinement. Journal of Surface Investigation, 2008, 2, 611-615.	0.1	2
71	Nonâ€Locality Effects in Excitation and Spatial Propagation of Surface Plasmonâ€Polaritons. Annalen Der Physik, 2017, 529, 1600387.	0.9	2
72	Moore's law: new playground for quantum physics. Physica Status Solidi (B): Basic Research, 2003, 237, 426-432.	0.7	1

#	Article	IF	Citations
73	Electroluminescence spectra of an STM-tip-induced quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 270-274.	1.3	1
74	Laser driven dynamics of a quantum dot coupled to phonons: Dependence of the reappearance of Rabi rotations on the pulse length and shape. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1281-1283.	0.8	1
75	Soliton formation in the FFLO phase. Physical Review B, 2016, 94, .	1.1	1
76	Electroluminescence Spectra of an STM-Tip-Induced Quantum Dot. AIP Conference Proceedings, 2003, , .	0.3	0
77	Obstacles on the Road Towards Atomic Resolution Tomography. Microscopy and Microanalysis, 2005, 11, .	0.2	0
78	Influence of the characteristics of the STM-tip on the electroluminescence spectra. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 27, 13-20.	1.3	0
79	Superconductivity In The Quantum-Size Regime. NATO Science for Peace and Security Series B: Physics and Biophysics, 2008, , 79-103.	0.2	0
80	Simulation of the electron radiation damage in an amorphous Ge sample. , 2008, , 305-306.		0
81	REAL TIME PATH INTEGRALS IN STUDIES OF QUANTUM DOTS DYNAMICS: NON-MONOTONOUS DECAY RATE AND REAPPEARANCE OF RABI ROTATIONS. , 2008, , .		0
82	Tuning the Superconducting Properties of Nanomaterials. NATO Science for Peace and Security Series B: Physics and Biophysics, 2009, , 1-14.	0.2	0
83	SUPERCONDUCTING NANOWIRES: QUANTUM-CONFINEMENT EFFECT ON THE CRITICAL MAGNETIC FIELD AND SUPERCURRENT. , 2009, , .		0