Oleg Kibis

List of Publications by Year
in descending order

100 papers	1,985 citations	257101 24 h-index	264894 42 g-index
102 all docs	102 docs citations	102 times ranked	822 citing authors

#	Article	IF	Citations
1	All-optical control of excitons in semiconductor quantum wells. Journal of Physics Condensed Matter, 2022, 34, 205301.	0.7	0
2	Floquet theory of spin dynamics under circularly polarized light pulses. Physical Review A, 2022, 105, .	1.0	8
3	Floquet engineering of excitons in semiconductor quantum dots. Physical Review B, 2022, 105, .	1.1	10
4	Optically induced persistent current in carbon nanotubes. Physical Review B, 2021, 103, .	1.1	7
5	Optically induced Kondo effect in semiconductor quantum wells. Journal of Physics Condensed Matter, 2021, 33, 495302.	0.7	5
6	Optically induced hybrid Boseâ€“Fermi system in quantum wells with different charge carriers. Optics Letters, 2021, 46, 5316.	1.7	8
7	Fano resonances in optical spectra of semiconductor quantum wells dressed by circularly polarized light. Optics Letters, 2021, 46, 50.	1.7	6
8	Light-induced electron pairing in two-dimensional systems. Journal of Physics: Conference Series, 2021, 2015, 012062.	0.3	0
9	Floquet engineering of carbon nanotubes. Journal of Physics: Conference Series, 2021, 2015, 012063.	0.3	1
10	Irradiation-induced Kondo resonance in two-dimensional electron systems. Journal of Physics: Conference Series, 2021, 2015, 012056.	0.3	0
11	Light-induced bound electron states in two-dimensional systems: Contribution to electron transport. Physical Review B, 2020, 102, .	1.1	13
12	Electron-photonic topological states on the surface of a bulk semiconductor driven by a high-frequency field. Journal of Physics: Conference Series, 2020, 1461, 012063.	0.3	0
13	Floquet engineering of 2D materials. Journal of Physics: Conference Series, 2020, 1461, 012064.	0.3	1
14	Fano resonances in quantum well absorption induced by electromagnetic dressing. AIP Conference Proceedings, 2020, , .	0.3	0
15	Floquet engineering of the Luttinger Hamiltonian. Physical Review B, 2020, 102, .	1.1	11
16	Floquet Engineering of Structures Based on Gapless Semiconductors. Semiconductors, 2020, 54, 1734-1736.	0.2	0
17	Optical Control of Electronic States in Three-Dimensional Topological Insulators. Journal of Structural Chemistry, 2020, 61, 668-671.	0.3	0
18	Structure of surface electronic states in strained mercury telluride. New Journal of Physics, 2019, 21, 043016.	1.2	7

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19	Electron pairing in nanostructures driven by an oscillating field. Physical Review B, 2019, 99, .	1.1	14
20	Optically induced topological states on the surface of mercury telluride. Physical Review B, 2019, 99, .	1.1	14
21	Topological Electronic States on the Surface of a Strained Gapless Semiconductor. Semiconductors, 2019, 53, 1867-1869.	0.2	1
22	On the possibility of a terahertz light emitting diode based on a dressed quantum well. Scientific Reports, 2019, 9, 16320.	1.6	4
23	Quantum ring with the Rashba spin-orbit interaction in the regime of strong light-matter coupling. Physical Review B, 2018, 97, .	1.1	28
24	Periodic array of quantum rings strongly coupled to circularly polarized light as a topological insulator. Physical Review B, 2018, 97, .	1.1	34
25	Semiconductor quantum well irradiated by a two-mode electromagnetic field as a terahertz emitter. Physical Review A, 2018, 97, .	1.0	5
26	Electronic properties of quantum rings dressed by a high-frequency electromagnetic field. Journal of Physics: Conference Series, 2018, 1092, 012055.	0.3	0
27	Quantum Rings Dressed by a High-Frequency Electromagnetic Field. Semiconductors, 2018, 52, 1806-1808.	0.2	0
28	Terahertz Optoelectronics of Quantum Rings and Nanohelices. Semiconductors, 2018, 52, 1813-1816.	0.2	2
29	Electromagnetic Dressing of Graphene. Journal of Structural Chemistry, 2018, 59, 867-869.	0.3	3
30	Floquet Engineering of Gapped 2D Materials. Semiconductors, 2018, 52, 523-525.	0.2	6
31	All-optical band engineering of gapped Dirac materials. Physical Review B, 2017, 95, .	1.1	79
32	Optically induced Lifshitz transition in bilayer graphene. Physical Review B, 2017, 96, .	1.1	36
33	Resonance fluorescence from an asymmetric quantum dot dressed by a bichromatic electromagnetic field. Physical Review A, 2017, 95, .	1.0	31
34	Defect-related transitions in luminescence of InAlAs on InP. Journal of Physics: Conference Series, 2017, 864, 012075.	0.3	0
35	Floquet control of dipolaritons in quantum wells. Optics Letters, 2017, 42, 2398.	1.7	11
36	Control of electronic transport in graphene by electromagnetic dressing. Scientific Reports, 2016, 6, 20082.	1.6	75

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37	Optically tunable spin transport on the surface of a topological insulator. New Journal of Physics, 2016, 18, 103014.	1.2	18
38	Effect of a magnetic field on intersubband polaritons in a quantum well: strong to weak coupling conversion. Optics Letters, 2016, 41, 3595.	1.7	1
39	Magnetoelectronic properties of graphene dressed by a high-frequency field. Physical Review B, 2016, 93, .	1.1	41
40	Optically controlled periodical chain of quantum rings. Physical Review B, 2016, 93, .	1.1	12
41	Datta-and-Das spin transistor controlled by a high-frequency electromagnetic field. Physical Review B, 2016, 93, .	1.1	18
42	Magnetic properties of a two-dimensional electron gas strongly coupled to light. Physical Review B, 2016, 93, .	1.1	34
43	Aharonov-Bohm effect for excitons in a semiconductor quantum ring dressed by circularly polarized light. Physical Review B, 2015, 91, .	1.1	22
44	Control of spin dynamics in a two-dimensional electron gas by electromagnetic dressing. Physical Review B, 2015, 92, .	1.1	37
45	Electronic transport in a two-dimensional electron gas strongly coupled to light. , 2015, , .		1
46	Terahertz Applications of Carbon Nanotubes and Graphene Nanoribbons. , 2015, , .		3
47	Multiphoton dynamics of qutrits in the ultrastrong coupling regime with a quantized photonic field. Journal of Experimental and Theoretical Physics, 2015, 121, 925-933.	0.2	1
48	Multiphoton interaction of a qutrit with single-mode quantized field in the ultrastrong and deep strong coupling regimes. Journal of Nanophotonics, 2015, 9, 093064.	0.4	1
49	Aharonovâ€“Bohm effect induced by circularly polarized light. Superlattices and Microstructures, 2015, 87, 149-153.	1.4	1
50	Transport properties of a two-dimensional electron gas dressed by light. Physical Review B, 2015, 91, .	1.1	61
51	Optically induced Aharonov-Bohm effect in mesoscopic rings. Physical Review B, 2014, 90, .	1.1	21
52	Band gaps induced by vacuum photons in closed semiconductor cavities. Physical Review A, 2014, 90, .	1.0	2
53	Semiconductor cavity QED: Band gap induced by vacuum fluctuations. Physical Review A, 2014, 89, .	1.0	2
54	How to suppress the backscattering of conduction electrons?. Europhysics Letters, 2014, 107, 57003.	0.7	23

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55	Persistent current induced by vacuum fluctuations in a quantum ring. Physical Review B, 2013, 87, .	1.1	33
56	Persistent current induced by quantum light. Physical Review B, 2012, 86, .	1.1	18
57	Electronic properties of asymmetrical quantum dots dressed by laser field. Physica Status Solidi (B): Basic Research, 2012, 249, 914-917.	0.7	2
58	Graphene coupling to circularly polarized photons. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1265-1268.	0.8	1
59	Asymmetric quantum dot in a microcavity as a nonlinear optical element. Physical Review A, 2012, 85, .	1.0	35
60	Dissipationless Electron Transport in Photon-Dressed Nanostructures. Physical Review Letters, 2011, 107, 106802.	2.9	69
61	Band gap in graphene induced by vacuum fluctuations. Physical Review B, 2011, 84, .	1.1	45
62	Mechanisms of terahertz emission from carbon nanotubes. Physica B: Condensed Matter, 2010, 405, 3054-3056.	1.3	7
63	Lightâ€“matter coupling in nanostructures without an inversion center. Superlattices and Microstructures, 2010, 47, 216-218.	1.4	0
64	Metal-insulator transition in graphene induced by circularly polarized photons. Physical Review B, 2010, 81, .	1.1	179
65	Terahertz processes in carbon nanotubes. Journal of Nanophotonics, 2010, 4, 041665.	0.4	52
66	MAGNETICALLY CONTROLLED TERAHERTZ ABSORPTION AND EMISSION IN CARBON NANOTUBES. International Journal of Modern Physics B, 2009, 23, 2846-2850.	1.0	37
67	Carbon nanotubes as a basis for terahertz emitters and detectors. Microelectronics Journal, 2009, 40, 776-778.	1.1	56
68	Matter Coupling to Strong Electromagnetic Fields in Two-Level Quantum Systems with Broken Inversion Symmetry. Physical Review Letters, 2009, 102, 023601.	2.9	88
69	Superlattice properties of semiconductor nanohelices in a transverse electric field. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1899-1901.	1.3	12
70	Carbon nanotubes as a basis for novel terahertz devices. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1766-1768.	1.3	8
71	Terahertz applications of carbon nanotubes. Superlattices and Microstructures, 2008, 43, 399-407.	1.4	99
72	Prospective Terahertz Applications of Carbon Nanotubes. NATO Science for Peace and Security Series B: Physics and Biophysics, 2008, , 81-93.	0.2	0

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73	Carbon nanotubes as terahertz emitters and detectors. AIP Conference Proceedings, 2007, , .	0.3	0
74	Helical nanostructures and Aharonov-Bohm quantum rings in a transverse electric field. AIP Conference Proceedings, 2007, , .	0.3	3
75	Electrodynamics of chiral carbon nanotubes in the helical parametrization scheme. Journal of Nanophotonics, 2007, 1, 013505.	0.4	7
76	Generation of Terahertz Radiation by Hot Electrons in Carbon Nanotubes. Nano Letters, 2007, 7, 3414-3417.	4.5	100
77	Semiconductor nanohelix in electric field: A superlattice of the new type. Technical Physics Letters, 2007, 33, 878-880.	0.2	16
78	Terahertz emitters and detectors based on carbon nanotubes. , 2006, , .		12
79	Carbon Nanotubes: A New Type of Emitter in the Terahertz Range. Technical Physics Letters, 2005, 31, 671.	0.2	48
80	A new type of superlattice based on carbon nanotubes. AIP Conference Proceedings, 2005, , .	0.3	0
81	Superlattice Properties of Helical Nanostructures in a Transverse Electric Field. Electromagnetics, 2005, 25, 425-435.	0.3	42
82	Superlattice properties of carbon nanotubes in a transverse electric field. Physical Review B, 2005, 71, .	1.1	73
83	Superlattice behavior of carbon nanotubes in a transverse electric field. , 2004, , .		0
84	Electronic phenomena in chiral carbon nanotubes in the presence of a magnetic field. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 741-744.	1.3	23
85	Electrical rectification by magnetic edge states. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 699-702.	1.3	24
86	Features of electron-phonon interaction in nanotubes with chiral symmetry placed in a magnetic field. Physics of the Solid State, 2001, 43, 2336-2343.	0.2	21
87	Thermomagnetic effect in a two-dimensional electron system with an asymmetric quantizing potential. Physical Review B, 2000, 61, 15603-15605.	1.1	16
88	Effect of the configuration of a quantum wire on the electron-phonon interaction. Semiconductors, 1999, 33, 1121-1123.	0.2	1
89	Novel effects of electron-phonon interaction in quasi-two-dimensional structures located in a magnetic field. Journal of Experimental and Theoretical Physics, 1999, 88, 527-532.	0.2	22
90	Elimination of the electron-phonon interaction in superlattices in a quantizing magnetic field. Semiconductors, 1998, 32, 657-658.	0.2	1

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91	New quantum electron transport phenomena in low-dimensional systems in a magnetic field. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 244, 432-436.	0.9	20
92	Asymmetry of elementary interactions in 2D systems in a magnetic field. Physica B: Condensed Matter, 1998, 256-258, 449-451.	1.3	5
93	Possible new quantum macroscopic effect in low-dimensional structures: The appearance of an electromotive force in a standing acoustic wave. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 237, 292-296.	0.9	19
94	New physical effects in MOS-structures. , 1998, , .		0
95	Anisotropic momentum transfer in low-dimensional electron systems in a magnetic field. JETP Letters, 1997, 66, 588-593.	0.4	18
96	Magnetocontrolled quantum states in helicoidal tubules. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 178, 335-337.	0.9	22
97	Electron-electron interaction in a spiral quantum wire. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 166, 393-394.	0.9	23
98	Anisotropic interaction between electrons and piezoelectric phonons in semiconductor heterojunctions in magnetic field. , 0, , .		0
99	Anisotropic electron-phonon interaction in silicon inversion layers in magnetic field. , 0, , .		0
100	Photovoltaic effect in chiral carbon nanotubes in presence of a magnetic field. , 0, , .		0