Alev Devrim GÃ¼Ã§lÃ¼

List of Publications by Year
in descending order

49 papers	1,406 citations	361413 20 h-index	315739 38 g-index
50 all docs	50 docs citations	50 times ranked	1060 citing authors

#	Article	IF	Citations
1	Magnetism and Correlations in Fractionally Filled Degenerate Shells of Graphene Quantum Dots. Physical Review Letters, 2009, 103, 246805.	7.8	127
2	Excitonic absorption in gate-controlled graphene quantum dots. Physical Review B, 2010, 82, .	3.2	121
3	Zero-energy states in triangular and trapezoidal graphene structures. Physical Review B, 2010, 81, .	3.2	102
4	Electronic properties of gated triangular graphene quantum dots: Magnetism, correlations, and geometrical effects. Physical Review B, 2012, 85, .	3.2	97
5	Graphene Quantum Dots. Nanoscience and Technology, 2014, , .	1.5	89
6	Correlation-induced inhomogeneity in circular quantum dots. Nature Physics, 2006, 2, 336-340.	16.7	72
7	Effect of edge reconstruction and passivation on zero-energy states and magnetism in triangular graphene quantum dots with zigzag edges. Physical Review B, 2011, 83, .	3.2	69
8	Electric-field controlled spin in bilayer triangular graphene quantum dots. Physical Review B, 2011, 84, .	3.2	59
9	Electronic and optical properties of semiconductor and graphene quantum dots. Frontiers of Physics, 2012, 7, 328-352.	5.0	57
10	Electronic and magnetic properties of triangular graphene quantum rings. Physical Review B, 2011, 83, .	3.2	56
11	Microscopic theory of the optical properties of colloidal graphene quantum dots. Physical Review B, 2014, 89, .	3.2	55
12	Incipient Wigner localization in circular quantum dots. Physical Review B, 2007, 76, .	3.2	50
13	Spin and electronic correlations in gated graphene quantum rings. Physical Review B, 2010, 82, .	3.2	49
14	Quantum Monte Carlo study of composite fermions in quantum dots: The effect of Landau-level mixing. Physical Review B, 2005, 72, .	3.2	37
15	Localization in an inhomogeneous quantum wire. Physical Review B, 2009, 80, .	3.2	35
16	Zero-energy states of graphene triangular quantum dots in a magnetic field. Physical Review B, 2013, 88, .	3.2	33
17	Interaction-induced strong localization in quantum dots. Physical Review B, 2008, 77, .	3.2	27
18	Electron-electron interactions and topology in the electronic properties of gated graphene nanoribbon rings in MÃ¶bius and cylindrical configurations. Physical Review B, 2013, 87, .	3.2	26

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19	Maximum-density droplet to lower-density droplet transition in quantum dots. Physical Review B, 2005, 72, .	3.2	21
20	Optical control of magnetization and spin blockade in graphene quantum dots. Physical Review B, 2013, 87, .	3.2	21
21	Wigner crystallization in topological flat bands. New Journal of Physics, 2018, 20, 063023.	2.9	21
22	Kondo resonance in a quantum dot molecule. Physical Review B, 2003, 68, .	3.2	20
23	Theory of optical properties of graphene quantum dots. Physica Status Solidi - Rapid Research Letters, 2016, 10, 102-110.	2.4	19
24	Disordered quantum dots:â€ƒA diffusion quantum Monte Carlo study. Physical Review B, 2003, 68, .	3.2	18
25	Magnetic phases of graphene nanoribbons under potential fluctuations. Physical Review B, 2016, 93, .	3.2	16
26	Electronic Shells of Dirac Fermions in Graphene Quantum Rings in a Magnetic Field. Acta Physica Polonica A, 2009, 116, 832-834.	0.5	12
27	Geometric blockade in a quantum dot:â€‚â€‚Transport properties by exact diagonalization. Physical Review B, 2002, 66, .	3.2	11
28	Composite-fermion antiparticle description of the hole excitation in a maximum-density droplet with a small number of electrons. Physical Review B, 2005, 72, .	3.2	9
29	Spin-spin correlations of magnetic adatoms on graphene. Physical Review B, 2015, 91, .	3.2	9
30	Sublattice engineering and voltage control of magnetism in triangular single and biâ€‰layer graphene quantum dots. Physica Status Solidi - Rapid Research Letters, 2016, 10, 58-67.	2.4	8
31	Electronic and magnetic properties of graphene quantum dots with two charged vacancies. Solid State Communications, 2020, 322, 114096.	1.9	8
32	Effects of long-range disorder and electronic interactions on the optical properties of graphene quantum dots. Physical Review B, 2017, 95, .	3.2	7
33	Effects of interedge scattering on the Wigner crystallization in graphene nanoribbons. Physical Review B, 2017, 95, .	3.2	7
34	Effects of random atomic disorder on the magnetic stability of graphene nanoribbons with zigzag edges. Physical Review B, 2018, 98, .	3.2	7
35	Defect induced Anderson localization and magnetization in graphene quantum dots. Solid State Communications, 2018, 281, 44-48.	1.9	5
36	Collapse of the vacuum in hexagonal graphene quantum dots: A comparative study between tight-binding and mean-field Hubbard models. Physical Review B, 2020, 101, .	3.2	5

#	Article	IF	Citations
37	Wigner crystallization at graphene edges. Physical Review B, 2016, 93, .	3.2	3
38	Atomic collapse in disordered graphene quantum dots. Physical Review B, 2020, 102, .	3.2	3
39	Atomic collapse in graphene quantum dots in a magnetic field. Solid State Communications, 2022, 351, 114763.	1.9	3
40	Photoluminescence study of carrier dynamics and recombination in a strained InGaAsP/InP multiple-quantum-well structure. Journal of Applied Physics, 1999, 86, 3391-3397.	2.5	2
41	Magnetic Properties of Gated Graphene Nanostructures. Nanoscience and Technology, 2014, , 111-144.	1.5	2
42	Comparison between the Monte Carlo method and the drift-diffusion approximation in quantum-well laser simulation. Journal of Applied Physics, 1998, 84, 4673-4676.	2.5	1
43	Optical Properties of Graphene Nanostructures. Nanoscience and Technology, 2014, , 145-168.	1.5	1
44	Spin-orbit coupling and optical detection of spin polarisation in triangular graphene quantum dots. International Journal of Nanotechnology, 2015, 12, 174.	0.2	1
45	Single-Particle Properties of Graphene Quantum Dots. Nanoscience and Technology, 2014, , 39-90.	1.5	1
46	Graphene Nanostructures and Quantum Dots. Nanoscience and Technology, 2014, , 29-38.	1.5	1
47	Optical Properties of Graphene Quantum Dots with Fractionally Filled Degenerate Shell of Zero Energy States. AIP Conference Proceedings, 2011, , .	0.4	0
48	Graphene-based integrated electronic, photonic and spintronic circuit. , 2013, , .		0
49	Electronâ€“Electron Interactions in Graphene Quantum Dots. Nanoscience and Technology, 2014, , 91-110.	1.5	0