Andrey A Sherstobitov

List of Publications by Year
in descending order

63 papers	691 citations	623734 14 h-index	610901 24 g-index
63 all docs	63 docs citations	63 times ranked	574 citing authors

#	Article	IF	Citations
1	Quantum corrections to the conductivity in two-dimensional systems: Agreement between theory and experiment. Physical Review B, 2001, 64, .	3.2	56
2	Quantum corrections to conductivity: From weak to strong localization. Physical Review B, 2002, 65, .	3.2	50
3	Weak antilocalization in quantum wells in tilted magnetic fields. Physical Review B, 2004, 70, .	3.2	49
4	Spin-orbit splitting of valence and conduction bands in HgTe quantum wells near the Dirac point. Physical Review B, 2016, 93, .	3.2	38
5	Antilocalization and spin-orbit coupling in the hole gas in strainedGaAsâˆ•InxGa1âˆ’xAsâˆ•GaAsquantum well heterostructures. Physical Review B, 2005, 71, .	3.2	37
6	Electron-electron interaction with decreasing conductance. Physical Review B, 2003, 67, .	3.2	35
7	Two-dimensional semimetal in a wide HgTe quantum well: Magnetotransport and energy spectrum. Physical Review B, 2013, 88, .	3.2	35
8	Diffusion and ballistic contributions of the interaction correction to the conductivity of a two-dimensional electron gas. Physical Review B, 2006, 74, .	3.2	33
9	Valence band energy spectrum of HgTe quantum wells with an inverted band structure. Physical Review B, 2017, 96, .	3.2	30
10	Giant suppression of the Drude conductivity due to quantum interference in the disordered two-dimensional systemGaAsâˆ•InxGa1âˆ’xAsâˆ•GaAs. Physical Review B, 2007, 75, .	3.2	25
11	Weak antilocalization in HgTe quantum wells with inverted energy spectra. Physical Review B, 2012, 85, .	3.2	23
12	Hole transport and valence-band dispersion law in a HgTe quantum well with a normal energy spectrum. Physical Review B, 2014, 89, .	3.2	17
13	Magnetic phase transitions, metastable states, and magnetic hysteresis in the antiferromagnetic compounds <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Fe</mml:mi><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub><mml:mi>TiS</mml:mi><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi>y</mml:mi></mml:mrow></mml:msub><mml:mi>Se</mml:mi><mml:msub><mml:mrow /><mml:mi>y</mml:mi></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 100, .	3.2	15
14	Hopping Conductivity and Coulomb Correlations in 2D Arrays of Geâˆ•Si Quantum Dots. Journal of Experimental and Theoretical Physics, 2005, 100, 722.	0.9	14
15	Role of doped layers in the dephasing of two-dimensional electrons in quantum-well structures. Physical Review B, 2001, 64, .	3.2	13
16	Hole-hole interaction in a strainedInxGa1âˆ’xAstwo-dimensional system. Physical Review B, 2005, 72, .	3.2	13
17	Transverse negative magnetoresistance of two-dimensional structures in the presence of a strong in-plane magnetic field: Weak localization as a probe of interface roughness. Physical Review B, 2004, 70, .	3.2	11
18	Remnant magnetoresistance and virgin magnetic state in Fe0.25TiS2. Journal of Magnetism and Magnetic Materials, 2021, 519, 167480.	2.3	11

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19	Renormalization of hole-hole interaction at decreasing Drude conductivity: Gated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Ga</mml:mi><mml:mi mathvariant="normal">As</mml:mi><mml:mo>â^•</mml:mo><mml:msub><mml:mi mathvariant="normal">In</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">Ga</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow>	3.2	10
20	Low magnetic field anomaly of the Hall effect in disordered two-dimensional systems: Interplay between weak localization and electron-electron interaction. Physical Review B, 2010, 82, .	3.2	10
21	Magneto-intersubband oscillations in two-dimensional systems with an energy spectrum split due to spin-orbit interaction. Physical Review B, 2020, 101, .	3.2	10
22	Nonmonotonic magnetoresistance of two-dimensional electron systems in the ballistic regime. Physical Review B, 2009, 79, .	3.2	9
23	Disorder and temperature renormalization of interaction contribution to the conductivity in two-dimensional<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> systems. Physical Review B, 2009, 79, .	3.2	9
24	Electron mass in a HgTe quantum well: Experiment versus theory. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 116, 113742.	2.7	9
25	Interference-induced metalliclike behavior of a two-dimensional hole gas in an asymmetricGaAsâ^•InxGa1â^’xAsâ^•GaAsquantum well. Physical Review B, 2007, 75, .	3.2	8
26	Nonohmic conductivity as a probe of crossover from diffusion to hopping in two dimensions. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 25, 42-46.	2.7	7
27	Weak antilocalization of holes in HgTe quantum wells with a normal energy spectrum. Physical Review B, 2015, 91, .	3.2	7
28	Features of Magneto-Intersubband Oscillations in HgTe Quantum Wells. JETP Letters, 2019, 110, 301-305.	1.4	7
29	Nonuniversality of the interference quantum correction to conductivity beyond the diffusion regime. Physical Review B, 2006, 73, .	3.2	6
30	Interaction correction to conductivity of Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Ga<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>As/GaAs double quantum well heterostructures near the balance. Physical Review B, 2011, 84, .	3.2	6
31	Anisotropic conductivity and weak localization in HgTe quantum wells with a normal energy spectrum. Physical Review B, 2013, 88, .	3.2	6
32	Dephasing and interwell transitions in double quantum well heterostructures. Physical Review B, 2010, 82, .	3.2	5
33	Structural and magnetic properties of ErFe2D3.1. Journal of Alloys and Compounds, 2012, 538, 79-84.	5.5	5
34	Magnetic order, phase transitions and electrical resistivity of Ho7Rh3 single crystals. Journal of Alloys and Compounds, 2016, 654, 126-132.	5.5	5
35	Spin-orbit splitting of the conduction band in HgTe quantum wells: Role of different mechanisms. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 110, 95-99.	2.7	5
36	Electron transport effects in the IR photoconductivity of InGaAs/GaAs structures with quantum dots. Technical Physics Letters, 2004, 30, 795-798.	0.7	4

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37	Hopping magnetoresistance in two-dimensional arrays of Ge/Si quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 296-299.	0.8	4
38	Energy relaxation rate of the two-dimensional hole gas in a GaAs/InGaAs/GaAs quantum well. Physical Review B, 2011, 83, .	3.2	4
39	Interaction correction to the conductivity of two-dimensional electron gas in InxGa1âˆ’xAs/InP quantum well structure with strong spin-orbit coupling. Physical Review B, 2012, 85, .	3.2	4
40	Zeeman splitting of the conduction band of HgTe quantum wells with a semimetallic spectrum. JETP Letters, 2016, 104, 241-247.	1.4	4
41	Zeeman splitting of conduction band in HgTe quantum wells near the Dirac point. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 91, 203-208.	2.7	4
42	Quantum Corrections to the Conductivity of a Natural Nd[sub 2 â€“][sub x]Ce[sub x]CuO[sub 4] Superlattice. Physics of the Solid State, 2005, 47, 1972.	0.6	3
43	INTERFERENCE INDUCED MAGNETORESISTANCE BEYOND THE DIFFUSION REGIME IN 2D SYSTEMS WITH SPIN-ORBIT COUPLING. International Journal of Modern Physics B, 2007, 21, 1669-1673.	2.0	3
44	g-Factor of low mobility 2D GaAs electron gas as determined from high magnetic field experiments. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 960-963.	2.7	3
45	Two-dimensional semimetal in wide HgTe quantum wells: Charge-carrier energy spectrum and magnetotransport. Semiconductors, 2013, 47, 1562-1566.	0.5	3
46	Conductance of a lateral pâ€”n junction in two-dimensional HgTe structures with an inverted spectrum: The role of edge states. JETP Letters, 2015, 101, 469-473.	1.4	3
47	Percolation and the electronâ€“electron interaction in an array of antidots. JETP Letters, 2016, 104, 473-478.	1.4	3
48	Anisotropy of the in-plane g -factor of electrons in HgTe quantum wells. Physical Review B, 2020, 101, .	3.2	3
49	Density of states measurements for the heavy subband of holes in HgTe quantum wells. Physical Review B, 2020, 101, .	3.2	3
50	<title>Conductivity of disordered 2D systems: from weak to strong localization</title>. , 2002, , .		2
51	Nonohmic conductivity under transition from weak to strong localization in GaAs/InGaAs structures with a two-dimensional electron gas. Semiconductors, 2003, 37, 705-709.	0.5	2
52	Weak localization in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Al</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> Physical Review B, 2008, 78, .	3.2	2
53	Energy spectrum and transport in narrow HgTe quantum wells. Semiconductors, 2015, 49, 39-43.	0.5	2
54	Nonohmic Conductance and Mechanisms of Energy Relaxation in 2D Electron Gas in GaAsâ•InGaAsâ•GaAs Heterostructures. Semiconductors, 2005, 39, 221.	0.5	1

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55	WEAK LOCALIZATION IN PATTERN 2D STRUCTURES WITH A SINGLE QUANTUM WELL. International Journal of Modern Physics B, 2009, 23, 2955-2959.	2.0	1
56	Renormalization of the contribution of the electronâ€"electron interaction to the conductivity of two-dimensional electron systems. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 72-74.	0.6	1
57	Interference quantum correction to conductivity of Al_xGa_{1â^'x}As/GaAs double quantum well heterostructures near the balance. Journal of Physics: Conference Series, 2012, 376, 012024.	0.4	1
58	Anomalous electron polarizability of HgTe quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 128, 114606.	2.7	1
59	Substitution Effects on the Magnetic Properties of Fe-Containing Chalcogenides with NiAs-Type Structures. Acta Physica Polonica A, 2018, 133, 447-449.	0.5	1
60	The metallic-like temperature dependence of the conductivity in two-dimensions. AIP Conference Proceedings, 2007, , .	0.4	0
61	Low-field anomaly of the hall effect in disordered two-dimensional systems. Semiconductors, 2010, 44, 1430-1434.	0.5	0
62	Zeeman Splitting of Electron Spectrum in HgTe Quantum Wells Near the Dirac Point. Semiconductors, 2018, 52, 519-522.	0.5	0
63	Manifestations of Quantum Confinement in Semiconductor Structures with Wide Doped Wells. Semiconductors, 2001, 35, 723.	0.5	0