Matvey Entin

List of Publications by Citations

85 papers	757 citations	14 h-index	24 g-index
89 ext. papers	850 ext. citations	1.5 avg, IF	4.16 L-index

#	Paper	IF	Citations
85	Spin-orbit interaction of electrons on a curved surface. *Physical Review B*, **2001**, 64,	3.3	83
84	Valley separation in graphene by polarized light. *Physical Review B*, **2011**, 84,	3.3	69
83	Electrons in a twisted quantum wire. *Physical Review B*, **2002**, 66,	3.3	39
82	Theory of resonant photon drag in monolayer graphene. *Physical Review B*, **2010**, 81,	3.3	38
81	Spin-plasmon oscillations of the two-dimensional electron gas. *Journal of Experimental and Theoretical Physics*, **2001**, 92, 153-158	1	34
80	Scattering processes in a two-dimensional semimetal. *JETP Letters*, **2009**, 89, 290-293	1.2	32
79	One-dimensional two-barrier quantum pump with harmonically oscillating barriers: Perturbative, strong-signal, and nonadiabatic regimes. *Physical Review B*, **2006**, 74,	3.3	31
78	Photogalvanic current in artificial asymmetric nanostructures. *European Physical Journal B*, **2007**, 56, 323-333	1.2	28
77	Spectrum and kinetics of electrons in curved nanostructures. *Physics-Uspekhi*, **2005**, 48, 953-958	2.8	21
76	Ratchet transport of interacting particles. *Physical Review E*, **2008**, 78, 041127	2.4	19
75	Optical and photoelectric properties of helical quantum wires. *JETP Letters*, **2003**, 78, 213-217	1.2	19
74	Moving zero-gap Wannier-Mott excitons in graphene. *Europhysics Letters*, **2013**, 102, 37012	1.6	18
73	Photocurrent in nanostructures with asymmetric antidots: Exactly solvable model. *Physical Review B*, **2006**, 73,	3.3	18
72	Current quadratic in field and photogalvanic effect in crystals without inversion centre. *Physica Status Solidi (B): Basic Research*, **1977**, 83, K97-K100	1.3	16
71	Spin response of 2D electrons to a lateral electric field. *Semiconductors*, **2001**, 35, 1081-1087	0.7	14
70	Relaxation of the optical density of glass modulated with bichromatic radiation. *JETP Letters*, **1996**, 63, 176-181	1.2	14
69	Theory of one-dimensional double-barrier quantum pump in two-frequency signal regime. *Europhysics Letters*, **2007**, 77, 67002	1.6	13

68	Quantum mechanics of graphene with a one-dimensional potential. *Journal of Experimental and Theoretical Physics*, **2012**, 115, 694-705	1	12
67	Suppression of spin-orbit effects in a 1D system. *Europhysics Letters*, **2004**, 68, 853-859	1.6	12
66	Linearity of the edge states energy spectrum in the 2D topological insulator. *Europhysics Letters*, **2017**, 118, 57002	1.6	11
65	Electrons in a curvilinear quantum wire. *Journal of Experimental and Theoretical Physics*, **2003**, 96, 766-774	1	10
64	Theory of one-dimensional quantum pump based on a two-barrier structure. *Journal of Experimental and Theoretical Physics*, **2005**, 100, 920-928	1	10
63	The effect of electron-hole scattering on transport properties of a 2D semimetal in the HgTe quantum well. *Journal of Experimental and Theoretical Physics*, **2013**, 117, 933-943	1	9
62	Spin orientation of two-dimensional electrons in electric field. *JETP Letters*, **2000**, 72, 134-137	1.2	9
61	Conductivity of Fe-doped LiNbO3 crystals. *Physica Status Solidi A*, **1977**, 44, K91-K94		9
60	Edge capacitance of a two-dimensional topological insulator. *Physical Review B*, **2017**, 96,	3.3	8
59	Mechanism of conductivity of a Fe-doped LiNbO3 crystal. *Physica Status Solidi A*, **1980**, 59, K97-K102		8
58	Circular photogalvanic effect caused by the transitions between edge and 2D states in a 2D topological insulator. *JETP Letters*, **2016**, 104, 771-775	1.2	8
57	Photovoltage in curved one-dimensional systems. *Physical Review B*, **2009**, 79,	3.3	7
56	Photogalvanic current in electron gas over a liquid helium surface. *JETP Letters*, **2014**, 98, 816-822	1.2	6
55	Photogalvanic current in a parabolic well. *JETP Letters*, **2013**, 97, 639-643	1.2	6
54	Stationary drag photocurrent caused by strong effective running wave in quantum wires: Quantization of current. *Physical Review B*, **2010**, 81,	3.3	6
53	Scale invariance in percolation theory and fractals. *JETP Letters*, **1996**, 64, 467-472	1.2	6
52	Moving gapless indirect excitons in monolayer graphene. *Nanoscale Research Letters*, **2012**, 7, 599	5	6
51	Edge absorption and circular photogalvanic effect in 2D topological insulator edges. *JETP Letters*, **2016**, 103, 711-716	1.2	6

50	Surface states in a HgTe quantum well and scattering by surface roughness. *JETP Letters*, **2015**, 101, 330-333	1.2	5
49	Edge states on the curved boundary of a 2D topological insulator. *Europhysics Letters*, **2017**, 120, 37003	1.6	5
48	High-frequency blockade in tight-binding one-dimensional lattice with single vibrating site. *Europhysics Letters*, **2008**, 84, 47008	1.6	5
47	Holographic storage in LiNbO3 crystal at high temperatures. *Physica Status Solidi A*, **1976**, 38, K139-K142		5
46	Mobility of Dirac electrons in HgTe quantum wells. *JETP Letters*, **2016**, 104, 388-391	1.2	5
45	Microwave Absorption in 2D Topological Insulators with a Developed Edge States Network. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1800652	1.3	4
44	Backscattering in a 2D topological insulator and the conductivity of a 2D strip. *JETP Letters*, **2015**, 100, 561-565	1.2	4
43	Conductivity of a two-dimensional HgTe layer near the critical width: The role of developed edge states network and random mixture of p- and n-domains. *Physical Review B*, **2020**, 101,	3.3	4
42	Dephasing in gapless carbon nanotubes and nanostrips and the suppression of interference in a quantum interferometer based on them. *JETP Letters*, **2014**, 99, 410-414	1.2	4
41	Edge absorption and pure spin current in a 2D topological insulator in the Volkov-Pankratov model. *Journal of Physics Condensed Matter*, **2017**, 29, 435303	1.8	4
40	Coherent photogalvanic valley Hall effect. *JETP Letters*, **2017**, 106, 565-570	1.2	4
39	Photogalvanic current in a double quantum well. *JETP Letters*, **2013**, 98, 38-42	1.2	4
38	High-frequency resonant blockade in one-dimensional quantum pump with oscillating potential wells. *Journal of Experimental and Theoretical Physics*, **2007**, 105, 495-501	1	4
37	Optical Orientation and Polarized Luminescence in Silicon. *Physica Status Solidi (B): Basic Research*, **1983**, 118, 63-72	1.3	4
36	Dynamic optical storage in LiNbO3 crystals. *Physica Status Solidi A*, **1978**, 45, K17-K22		4
35	Thermopower of a Two-Dimensional Semimetal in a HgTe Quantum Well. *JETP Letters*, **2018**, 107, 789-793	1.2	4
34	Photogalvanic effect in monolayer transition metal dichalcogenides under double illumination. *Journal of Physics Condensed Matter*, **2019**, 31, 325302	1.8	3
33	Intervalley scattering by charged impurities in graphene. *JETP Letters*, **2015**, 101, 325-329	1.2	3

32	Exact solution for many-body Hamiltonian of interacting particles with linear spectrum. *Europhysics Letters*, **2017**, 120, 17003	1.6	3
31	Inductive current in a quantum ring. *JETP Letters*, **2004**, 80, 421-425	1.2	3
30	Equilibrium charge of small metal particles and hopping transport in a metal-insulator composite. *JETP Letters*, **1999**, 70, 520-525	1.2	3
29	Localization of edge electrons in a 2D topological insulator strip. *JETP Letters*, **2015**, 100, 566-569	1.2	2
28	Edge excitons in a 2D topological insulator in a magnetic field. *JETP Letters*, **2016**, 103, 328-333	1.2	2
27	Photocurrent in a two-dimensional ribbon with the conic electron spectrum. *JETP Letters*, **2015**, 102, 599-602	1.2	2
26	Conductivity of 2D multi-component electron gas partially-quantized by magnetic field. *European Physical Journal B*, **2011**, 81, 225-230	1.2	2
25	Edge States and Capacitance of a 2D Topological Insulator. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1800675	1.3	1
24	Surface photocurrent in an electron gas over liquid He subjected to a quantizing magnetic field. *JETP Letters*, **2015**, 101, 744-749	1.2	1
23	High-frequency dielectric constant of a two-dimensionally disordered model medium. *Journal of Experimental and Theoretical Physics*, **1998**, 87, 365-368	1	1
22	Resonant tunnelling via two impurity levels in a vertical tunnelling nanostructure. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 505-508		1
21	The distribution of equilibrium magnetization currents in systems with dimensional quantization in a finite magnetic field. *Journal of Experimental and Theoretical Physics*, **2003**, 97, 138-143	1	1
20	The surface energy of an electron gas in model crystals. *Journal of Experimental and Theoretical Physics*, **2003**, 97, 174-179	1	1
19	Quantum hall effect in an antidot lattice: Macroscopic limit. *Journal of Experimental and Theoretical Physics*, **2000**, 90, 646-654	1	1
18	Photogalvanic effect in crystal with dislocations. *Physica Status Solidi (B): Basic Research*, **1983**, 119, 473-481	1	1
17	The Photoexcited Flow of Nonequilibrium Phonons along a Crystal Surface. *Physica Status Solidi (B): Basic Research*, **1984**, 126, 487-493	1.3	1
16	[illegible]. *Journal of Experimental and Theoretical Physics Letters*, **2017**, 549-554	1.3	1
15	Optical amplification of photoinduced polarizability gratings in phosphate glasses. *JETP Letters*, **2004**, 80, 26-29	1.2	0

14	Hopping Mechanism of Coherent Photovoltaic Effect and Photoinduced Polar Anisotropy In Glass. **1999**, 191-202		0
13	Thermo emf in a two-dimensional electron-hole system in HgTe quantum wells in the presence of magnetic field. The role of the diffusive and the phonon-drag contributions. *Low Temperature Physics*, **2021**, 47, 2-6	0.7	0
12	Is the Edge States Energy Spectrum of a 2D Topological Insulator Linear?. *Semiconductors*, **2018**, 52, 526-530	0.7	
11	Scattering of Electrons between Edge and Two-Dimensional States of a Two-Dimensional Topological Insulator and the Conductivity of the Topological Insulator Strip in a Metallic State. *JETP Letters*, **2019**, 109, 331-333	1.2	
10	Enhancement of the photovoltaic effect in a two-dimensionally disordered medium. *Semiconductors*, **1997**, 31, 829-830	0.7	
9	Quantum corrections to the conductivity of a two-dimensional system with antidots. *Semiconductors*, **1998**, 32, 1304-1308	0.7	
8	DISTRIBUTION OF EQUILIBRIUM EDGE CURRENTS. *International Journal of Nanoscience*, **2003**, 02, 611-617	0.6	
7	Friedel oscillations of a magnetic field penetrating into a normal metal and a size-quantized system. *JETP Letters*, **2002**, 75, 470-473	1.2	
6	Theory of the vertical Hall effect in a dimensionally quantized system. *JETP Letters*, **2003**, 77, 493-496	1.2	
5	Edge contribution to the electronic energy of cut microcrystals. *JETP Letters*, **2001**, 73, 149-151	1.2	
4	In memory of Viktor Iosifovich Belinicher. *Physics-Uspekhi*, **2002**, 45, 101-102	2.8	
3	Transport Properties of Two-Dimensional Topological Insulators and Excitonic Condensates. *Optoelectronics, Instrumentation and Data Processing*, **2020**, 56, 545-552	0.6	
2	HgTe . *Journal of Experimental and Theoretical Physics Letters*, **2018**, 814-818	1.3	
1	Gapless Dirac Electron Mobility and Quantum Time in HgTe Quantum Wells. *Semiconductors*, **2018**, 52, 1468-1472	0.7	