

Sergei V Morozov

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

67
papers

105,510
citations

44
h-index

70
g-index

70
ext. papers

115,707
ext. citations

13.2
avg, IF

7.67
L-index

#	Paper	IF	Citations
67	Twisted monolayer and bilayer graphene for vertical tunneling transistors. <i>Applied Physics Letters</i> , 2021 , 118, 183106	3.4	2
66	Electrically Controlled Thermal Radiation from Reduced Graphene Oxide Membranes. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 27278-27283	9.5	4
65	Symmetry of diffraction patterns of two-dimensional crystal structures. <i>Ultramicroscopy</i> , 2021 , 228, 113336		
64	On the Role of Structural Imperfections of Graphene in Resonant Tunneling through Localized States in the h-BN Barrier of van-der-Waals Heterostructures. <i>Semiconductors</i> , 2020 , 54, 291-296	0.7	
63	Electronic phase separation in multilayer rhombohedral graphite. <i>Nature</i> , 2020 , 584, 210-214	50.4	31
62	Giant oscillations in a triangular network of one-dimensional states in marginally twisted graphene. <i>Nature Communications</i> , 2019 , 10, 4008	17.4	36
61	Tunneling in Graphene/h-BN/Graphene Heterostructures through Zero-Dimensional Levels of Defects in h-BN and Their Use as Probes to Measure the Density of States of Graphene. <i>JETP Letters</i> , 2019 , 109, 482-489	1.2	4
60	Composite super-moiré lattices in double-aligned graphene heterostructures. <i>Science Advances</i> , 2019 , 5, eaay8897	14.3	36
59	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr ₃ . <i>Nature Electronics</i> , 2018 , 1, 344-349	28.4	167
58	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. <i>Communications Physics</i> , 2018 , 1,	5.4	25
57	High-temperature quantum oscillations caused by recurring Bloch states in graphene superlattices. <i>Science</i> , 2017 , 357, 181-184	33.3	83
56	Temperature-driven single-valley Dirac fermions in HgTe quantum wells. <i>Physical Review B</i> , 2017 , 96,	3.3	23
55	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. <i>Nature Nanotechnology</i> , 2017 , 12, 223-227	28.7	723
54	Phonon-Assisted Resonant Tunneling of Electrons in Graphene-Boron Nitride Transistors. <i>Physical Review Letters</i> , 2016 , 116, 186603	7.4	63
53	Macroscopic self-reorientation of interacting two-dimensional crystals. <i>Nature Communications</i> , 2016 , 7, 10800	17.4	86
52	Temperature-driven massless Kane fermions in HgCdTe crystals. <i>Nature Communications</i> , 2016 , 7, 12576	17.4	47
51	High thermal conductivity of hexagonal boron nitride laminates. <i>2D Materials</i> , 2016 , 3, 011004	5.9	41

50	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. <i>Science</i> , 2016 , 353, 575-9	33.3	63
49	Ultrasensitive gas detection of large-area boron-doped graphene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 14527-32	11.5	146
48	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. <i>Nature Physics</i> , 2015 , 11, 1057-1062	16.2	49
47	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. <i>Nature Nanotechnology</i> , 2014 , 9, 808-13	28.7	341
46	Vertical field-effect transistor based on graphene-WS ₂ heterostructures for flexible and transparent electronics. <i>Nature Nanotechnology</i> , 2013 , 8, 100-3	28.7	1342
45	Interaction phenomena in graphene seen through quantum capacitance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 3282-6	11.5	197
44	Strong light-matter interactions in heterostructures of atomically thin films. <i>Science</i> , 2013 , 340, 1311-4	33.3	1850
43	Scanning gate microscopy on a graphene quantum point contact. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012 , 44, 1002-1004	3	6
42	How close can one approach the Dirac point in graphene experimentally?. <i>Nano Letters</i> , 2012 , 12, 4629-34	11.5	136
41	Strong Coulomb drag and broken symmetry in double-layer graphene. <i>Nature Physics</i> , 2012 , 8, 896-901	16.2	303
40	Field-effect tunneling transistor based on vertical graphene heterostructures. <i>Science</i> , 2012 , 335, 947-50	33.3	1991
39	Electron tunneling through ultrathin boron nitride crystalline barriers. <i>Nano Letters</i> , 2012 , 12, 1707-10	11.5	579
38	New effects in graphene with high carrier mobility. <i>Physics-Uspekhi</i> , 2012 , 55, 408-412	2.8	7
37	High-yield production and transfer of graphene flakes obtained by anodic bonding. <i>ACS Nano</i> , 2011 , 5, 7700-6	16.7	37
36	Dirac cones reshaped by interaction effects in suspended graphene. <i>Nature Physics</i> , 2011 , 7, 701-704	16.2	577
35	Micrometer-scale ballistic transport in encapsulated graphene at room temperature. <i>Nano Letters</i> , 2011 , 11, 2396-9	11.5	1203
34	Tunable metal-insulator transition in double-layer graphene heterostructures. <i>Nature Physics</i> , 2011 , 7, 958-961	16.2	417
33	Giant nonlocality near the Dirac point in graphene. <i>Science</i> , 2011 , 332, 328-30	33.3	217

32	Interaction-driven spectrum reconstruction in bilayer graphene. <i>Science</i> , 2011 , 333, 860-3	33.3	226
31	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. <i>Applied Physics Letters</i> , 2010 , 97, 153102	3.4	123
30	Electronic properties of a biased graphene bilayer. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 175503.8	12.1	
29	From one electron to one hole: quasiparticle counting in graphene quantum dots determined by electrochemical and plasma etching. <i>Small</i> , 2010 , 6, 1469-73	11	88
28	TRANSVERSE SPIN TRANSPORT IN GRAPHENE. <i>International Journal of Modern Physics B</i> , 2009 , 23, 2641-2646	5	
27	Influence of metal contacts and charge inhomogeneity on transport properties of graphene near the neutrality point. <i>Solid State Communications</i> , 2009 , 149, 1068-1071	1.6	152
26	Control of graphene's properties by reversible hydrogenation: evidence for graphane. <i>Science</i> , 2009 , 323, 610-3	33.3	3338
25	Effect of a high-kappa environment on charge carrier mobility in graphene. <i>Physical Review Letters</i> , 2009 , 102, 206603	7.4	304
24	Molecular doping of graphene. <i>Nano Letters</i> , 2008 , 8, 173-7	11.5	907
23	Giant intrinsic carrier mobilities in graphene and its bilayer. <i>Physical Review Letters</i> , 2008 , 100, 016602	7.4	2509
22	Graphene-based liquid crystal device. <i>Nano Letters</i> , 2008 , 8, 1704-8	11.5	1319
21	Electron transport in graphene. <i>Physics-Uspexhi</i> , 2008 , 51, 744-748	2.8	59
20	Electronic properties of graphene. <i>Physica Status Solidi (B): Basic Research</i> , 2007 , 244, 4106-4111	1.3	229
19	Detection of individual gas molecules adsorbed on graphene. <i>Nature Materials</i> , 2007 , 6, 652-5	27	6263
18	Room-temperature quantum Hall effect in graphene. <i>Science</i> , 2007 , 315, 1379	33.3	2342
17	Biased bilayer graphene: semiconductor with a gap tunable by the electric field effect. <i>Physical Review Letters</i> , 2007 , 99, 216802	7.4	1524
16	Submicron sensors of local electric field with single-electron resolution at room temperature. <i>Applied Physics Letters</i> , 2006 , 88, 013901	3.4	69
15	Strong suppression of weak localization in graphene. <i>Physical Review Letters</i> , 2006 , 97, 016801	7.4	734

14	Unconventional quantum Hall effect and Berry phase of 2D bilayer graphene. <i>Nature Physics</i> , 2006 , 2, 177-180	16.2	1621
13	Two-dimensional atomic crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 10451-3	11.5	8888
12	Ferromagnetic domain wall on nanometer scale. <i>Journal of Physics: Conference Series</i> , 2005 , 17, 101-107	0.3	1
11	Two-dimensional electron and hole gases at the surface of graphite. <i>Physical Review B</i> , 2005 , 72,	3.3	131
10	Two-dimensional gas of massless Dirac fermions in graphene. <i>Nature</i> , 2005 , 438, 197-200	50.4	16518
9	Intrinsic Pinning of a Ferromagnetic Domain Wall in Yttrium Iron Garnet Films with Strong Uniaxial Anisotropy. <i>Journal of Low Temperature Physics</i> , 2005 , 139, 65-72	1.3	4
8	METALLIC AND SEMICONDUCTOR HALL MICROPROBES FOR WIDE TEMPERATURE RANGE APPLICATIONS. <i>International Journal of Nanoscience</i> , 2004 , 03, 123-130	0.6	0
7	COERCIVITY OF SINGLE PINNING CENTER MEASURED BY HALL MICROMAGNETOMETRY. <i>International Journal of Nanoscience</i> , 2004 , 03, 87-94	0.6	2
6	Electric field effect in atomically thin carbon films. <i>Science</i> , 2004 , 306, 666-9	33.3	47045
5	Submicron probes for Hall magnetometry over the extended temperature range from helium to room temperature. <i>Journal of Applied Physics</i> , 2003 , 93, 10053-10057	2.5	36
4	Conductance anomalies in gated V-groove quantum wires. <i>Nanotechnology</i> , 2002 , 13, 487-490	3.4	4
3	Effect of channel doping on the low-frequency noise in GaN/AlGaN heterostructure field-effect transistors. <i>Applied Physics Letters</i> , 1999 , 75, 2064-2066	3.4	31
2	Low flicker-noise GaN/AlGaN heterostructure field-effect transistors for microwave communications. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 1999 , 47, 1413-1417	4.1	66
1	Electron tunneling through single-barrier heterostructures in a magnetic field. <i>Physical Review B</i> , 1994 , 50, 4897-4900	3.3	9