Sergei V Morozov

List of Publications by Year
in descending order

69	123,787	43973 48	98622 67
papers	citations	h-index	g-index

70	70	70	70149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Twisted monolayer and bilayer graphene for vertical tunneling transistors. Applied Physics Letters, 2021, 118, .	1.5	7
2	Electrically Controlled Thermal Radiation from Reduced Graphene Oxide Membranes. ACS Applied Materials & Interfaces, 2021, 13, 27278-27283.	4.0	12
3	Symmetry of diffraction patterns of two-dimensional crystal structures. Ultramicroscopy, 2021, 228, 113336.	0.8	0
4	Coherent Emission in the Vicinity of 10 THz due to Auger-Suppressed Recombination of Dirac Fermions in HgCdTe Quantum Wells. ACS Photonics, 2021, 8, 3526-3535.	3.2	17
5	Electronic phase separation in multilayer rhombohedral graphite. Nature, 2020, 584, 210-214.	13.7	81
6	On the Role of Structural Imperfections of Graphene in Resonant Tunneling through Localized States in the h-BN Barrier of van-der-Waals Heterostructures. Semiconductors, 2020, 54, 291-296.	0.2	0
7	Giant oscillations in a triangular network of one-dimensional states in marginally twisted graphene. Nature Communications, 2019, 10, 4008.	5.8	67
8	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. JETP Letters, 2019, 109, 482-489.	0.4	7
9	Composite super-moirÃ© lattices in double-aligned graphene heterostructures. Science Advances, 2019, 5, eaay8897.	4.7	74
10	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. Communications Physics, 2018, 1, .	2.0	33
11	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr3. Nature Electronics, 2018, 1, 344-349.	13.1	239
12	High-temperature quantum oscillations caused by recurring Bloch states in graphene superlattices. Science, 2017, 357, 181-184.	6.0	117
13	Temperature-driven single-valley Dirac fermions in HgTe quantum wells. Physical Review B, 2017, 96, .	1.1	38
14	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. Nature Nanotechnology, 2017, 12, 223-227.	15.6	996
15	THz magnetospectroscopy of double HgTe quantum well. , 2016, , .		0
16	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. Science, 2016, 353, 575-579.	6.0	88
17	Phonon-Assisted Resonant Tunneling of Electrons in Grapheneâ€“Boron Nitride Transistors. Physical Review Letters, 2016, 116, 186603.	2.9	78
18	Macroscopic self-reorientation of interacting two-dimensional crystals. Nature Communications, 2016, 7, 10800.	5.8	108

#	Article	IF	Citations
19	Temperature-driven massless Kane fermions in HgCdTe crystals. Nature Communications, 2016, 7, 12576.	5.8	73
20	High thermal conductivity of hexagonal boron nitride laminates. 2D Materials, 2016, 3, 011004.	2.0	66
21	Ultrasensitive gas detection of large-area boron-doped graphene. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14527-14532.	3.3	177
22	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. Nature Physics, 2015, 11, 1057-1062.	6.5	64
23	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. Nature Nanotechnology, 2014, 9, 808-813.	15.6	435
24	Vertical field-effect transistor based on grapheneâ€“WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	15.6	1,543
25	Interaction phenomena in graphene seen through quantum capacitance. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3282-3286.	3.3	239
26	Strong Light-Matter Interactions in Heterostructures of Atomically Thin Films. Science, 2013, 340, 1311-1314.	6.0	2,179
27	New effects in graphene with high carrier mobility. Physics-Uspekhi, 2012, 55, 408-412.	0.8	9
28	How Close Can One Approach the Dirac Point in Graphene Experimentally?. Nano Letters, 2012, 12, 4629-4634.	4.5	159
29	Strong Coulomb drag and broken symmetry in double-layer graphene. Nature Physics, 2012, 8, 896-901.	6.5	365
30	Field-Effect Tunneling Transistor Based on Vertical Graphene Heterostructures. Science, 2012, 335, 947-950.	6.0	2,268
31	Electron Tunneling through Ultrathin Boron Nitride Crystalline Barriers. Nano Letters, 2012, 12, 1707-1710.	4.5	724
32	Scanning gate microscopy on a graphene quantum point contact. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1002-1004.	1.3	8
33	Interaction-Driven Spectrum Reconstruction in Bilayer Graphene. Science, 2011, 333, 860-863.	6.0	262
34	High-Yield Production and Transfer of Graphene Flakes Obtained by Anodic Bonding. ACS Nano, 2011, 5, 7700-7706.	7.3	43
35	Dirac cones reshaped by interaction effects in suspended graphene. Nature Physics, 2011, 7, 701-704.	6.5	703
36	Micrometer-Scale Ballistic Transport in Encapsulated Graphene at Room Temperature. Nano Letters, 2011, 11, 2396-2399.	4.5	1,440

#	Article	IF	Citations
37	Tunable metalâ€“insulator transition in double-layer graphene heterostructures. Nature Physics, 2011, 7, 958-961.	6.5	486
38	Giant Nonlocality Near the Dirac Point in Graphene. Science, 2011, 332, 328-330.	6.0	255
39	From One Electron to One Hole: Quasiparticle Counting in Graphene Quantum Dots Determined by Electrochemical and Plasma Etching. Small, 2010, 6, 1469-1473.	5.2	98
40	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. Applied Physics Letters, 2010, 97, .	1.5	138
41	Electronic properties of a biased graphene bilayer. Journal of Physics Condensed Matter, 2010, 22, 175503.	0.7	209
42	TRANSVERSE SPIN TRANSPORT IN GRAPHENE. International Journal of Modern Physics B, 2009, 23, 2641-2646.	1.0	5
43	Influence of metal contacts and charge inhomogeneity on transport properties of graphene near the neutrality point. Solid State Communications, 2009, 149, 1068-1071.	0.9	168
44	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	6.0	3,748
45	Effect of a High-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Îº</mml:mi></mml:math>Environment on Charge Carrier Mobility in Graphene. Physical Review Letters, 2009, 102, 206603.	2.9	347
46	Molecular Doping of Graphene. Nano Letters, 2008, 8, 173-177.	4.5	1,025
47	Giant Intrinsic Carrier Mobilities in Graphene and Its Bilayer. Physical Review Letters, 2008, 100, 016602.	2.9	2,919
48	Graphene-Based Liquid Crystal Device. Nano Letters, 2008, 8, 1704-1708.	4.5	1,441
49	Electron transport in graphene. Physics-Uspekhi, 2008, 51, 744-748.	0.8	83
50	Biased Bilayer Graphene: Semiconductor with a Gap Tunable by the Electric Field Effect. Physical Review Letters, 2007, 99, 216802.	2.9	1,728
51	Electronic properties of graphene. Physica Status Solidi (B): Basic Research, 2007, 244, 4106-4111.	0.7	291
52	Detection of individual gas molecules adsorbed on graphene. Nature Materials, 2007, 6, 652-655.	13.3	7,114
53	Room-Temperature Quantum Hall Effect in Graphene. Science, 2007, 315, 1379-1379.	6.0	2,662
54	Strong Suppression of Weak Localization in Graphene. Physical Review Letters, 2006, 97, 016801.	2.9	809

#	Article	IF	Citations
55	Unconventional quantum Hall effect and Berryâ€™s phase of 2Ï€ in bilayer graphene. Nature Physics, 2006, 2, 177-180.	6.5	1,785
56	Submicron sensors of local electric field with single-electron resolution at room temperature. Applied Physics Letters, 2006, 88, 013901.	1.5	75
57	Two-dimensional gas of massless Dirac fermions in graphene. Nature, 2005, 438, 197-200.	13.7	18,948
58	Intrinsic Pinning of a Ferromagnetic Domain Wall in Yttrium Iron Garnet Films with Strong Uniaxial Anisotropy. Journal of Low Temperature Physics, 2005, 139, 65-72.	0.6	4
59	Two-dimensional atomic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10451-10453.	3.3	10,229
60	Ferromagnetic domain wall on nanometer scale. Journal of Physics: Conference Series, 2005, 17, 101-107.	0.3	1
61	Two-dimensional electron and hole gases at the surface of graphite. Physical Review B, 2005, 72, .	1.1	148
62	METALLIC AND SEMICONDUCTOR HALL MICROPROBES FOR WIDE TEMPERATURE RANGE APPLICATIONS. International Journal of Nanoscience, 2004, 03, 123-130.	0.4	2
63	COERCIVITY OF SINGLE PINNING CENTER MEASURED BY HALL MICROMAGNETOMETRY. International Journal of Nanoscience, 2004, 03, 87-94.	0.4	3
64	Electric Field Effect in Atomically Thin Carbon Films. Science, 2004, 306, 666-669.	6.0	56,177
65	Submicron probes for Hall magnetometry over the extended temperature range from helium to room temperature. Journal of Applied Physics, 2003, 93, 10053-10057.	1.1	37
66	Conductance anomalies in gated V-groove quantum wires. Nanotechnology, 2002, 13, 487-490.	1.3	4
67	Effect of channel doping on the low-frequency noise in GaN/AlGaN heterostructure field-effect transistors. Applied Physics Letters, 1999, 75, 2064-2066.	1.5	35
68	Low flicker-noise GaN/AlGaN heterostructure field-effect transistors for microwave communications. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 1413-1417.	2.9	80
69	Electron tunneling through single-barrier heterostructures in a magnetic field. Physical Review B, 1994, 50, 4897-4900.	1.1	9