Sergei V Morozov

List of Publications by Year
in descending order

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69	123,787	44042 48	98753 67
papers	citations	h-index	g-index

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

#	Article	IF	Citations
1	Electric Field Effect in Atomically Thin Carbon Films. Science, 2004, 306, 666-669.	6.0	56,177
2	Two-dimensional gas of massless Dirac fermions in graphene. Nature, 2005, 438, 197-200.	13.7	18,948
3	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
4	Detection of individual gas molecules adsorbed on graphene. Nature Materials, 2007, 6, 652-655.	13.3	7,114
5	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	6.0	3,748
6	Giant Intrinsic Carrier Mobilities in Graphene and Its Bilayer. Physical Review Letters, 2008, 100, 016602.	2.9	2,919
7	Room-Temperature Quantum Hall Effect in Graphene. Science, 2007, 315, 1379-1379.	6.0	2,662
8	Field-Effect Tunneling Transistor Based on Vertical Graphene Heterostructures. Science, 2012, 335, 947-950.	6.0	2,268
9	Strong Light-Matter Interactions in Heterostructures of Atomically Thin Films. Science, 2013, 340, 1311-1314.	6.0	2,179
10	Unconventional quantum Hall effect and Berryâ€™s phase of 2Ï€ in bilayer graphene. Nature Physics, 2006, 2, 177-180.	6.5	1,785
11	Biased Bilayer Graphene: Semiconductor with a Gap Tunable by the Electric Field Effect. Physical Review Letters, 2007, 99, 216802.	2.9	1,728
12	Vertical field-effect transistor based on grapheneâ€“WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	15.6	1,543
13	Graphene-Based Liquid Crystal Device. Nano Letters, 2008, 8, 1704-1708.	4.5	1,441
14	Micrometer-Scale Ballistic Transport in Encapsulated Graphene at Room Temperature. Nano Letters, 2011, 11, 2396-2399.	4.5	1,440
15	Molecular Doping of Graphene. Nano Letters, 2008, 8, 173-177.	4.5	1,025
16	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. Nature Nanotechnology, 2017, 12, 223-227.	15.6	996
17	Strong Suppression of Weak Localization in Graphene. Physical Review Letters, 2006, 97, 016801.	2.9	809
18	Electron Tunneling through Ultrathin Boron Nitride Crystalline Barriers. Nano Letters, 2012, 12, 1707-1710.	4.5	724

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19	Dirac cones reshaped by interaction effects in suspended graphene. Nature Physics, 2011, 7, 701-704.	6.5	703
20	Tunable metalâ€“insulator transition in double-layer graphene heterostructures. Nature Physics, 2011, 7, 958-961.	6.5	486
21	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. Nature Nanotechnology, 2014, 9, 808-813.	15.6	435
22	Strong Coulomb drag and broken symmetry in double-layer graphene. Nature Physics, 2012, 8, 896-901.	6.5	365
23	Effect of a High-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î°</mml:mi></mml:math>Environment on Charge Carrier Mobility in Graphene. Physical Review Letters, 2009, 102, 206603.	2.9	347
24	Electronic properties of graphene. Physica Status Solidi (B): Basic Research, 2007, 244, 4106-4111.	0.7	291
25	Interaction-Driven Spectrum Reconstruction in Bilayer Graphene. Science, 2011, 333, 860-863.	6.0	262
26	Giant Nonlocality Near the Dirac Point in Graphene. Science, 2011, 332, 328-330.	6.0	255
27	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
28	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr3. Nature Electronics, 2018, 1, 344-349.	13.1	239
29	Electronic properties of a biased graphene bilayer. Journal of Physics Condensed Matter, 2010, 22, 175503.	0.7	209
30	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
31	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
32	How Close Can One Approach the Dirac Point in Graphene Experimentally?. Nano Letters, 2012, 12, 4629-4634.	4.5	159
33	Two-dimensional electron and hole gases at the surface of graphite. Physical Review B, 2005, 72, .	1.1	148
34	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. Applied Physics Letters, 2010, 97, .	1.5	138
35	High-temperature quantum oscillations caused by recurring Bloch states in graphene superlattices. Science, 2017, 357, 181-184.	6.0	117
36	Macroscopic self-reorientation of interacting two-dimensional crystals. Nature Communications, 2016, 7, 10800.	5.8	108

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37	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
38	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. Science, 2016, 353, 575-579.	6.0	88
39	Electron transport in graphene. Physics-Uspekhi, 2008, 51, 744-748.	0.8	83
40	Electronic phase separation in multilayer rhombohedral graphite. Nature, 2020, 584, 210-214.	13.7	81
41	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
42	Phonon-Assisted Resonant Tunneling of Electrons in Grapheneâ€“Boron Nitride Transistors. Physical Review Letters, 2016, 116, 186603.	2.9	78
43	Submicron sensors of local electric field with single-electron resolution at room temperature. Applied Physics Letters, 2006, 88, 013901.	1.5	75
44	Composite super-moirÃ© lattices in double-aligned graphene heterostructures. Science Advances, 2019, 5, eaay8897.	4.7	74
45	Temperature-driven massless Kane fermions in HgCdTe crystals. Nature Communications, 2016, 7, 12576.	5.8	73
46	Giant oscillations in a triangular network of one-dimensional states in marginally twisted graphene. Nature Communications, 2019, 10, 4008.	5.8	67
47	High thermal conductivity of hexagonal boron nitride laminates. 2D Materials, 2016, 3, 011004.	2.0	66
48	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. Nature Physics, 2015, 11, 1057-1062.	6.5	64
49	High-Yield Production and Transfer of Graphene Flakes Obtained by Anodic Bonding. ACS Nano, 2011, 5, 7700-7706.	7.3	43
50	Temperature-driven single-valley Dirac fermions in HgTe quantum wells. Physical Review B, 2017, 96, .	1.1	38
51	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
52	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
53	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. Communications Physics, 2018, 1, .	2.0	33
54	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

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55	Electrically Controlled Thermal Radiation from Reduced Graphene Oxide Membranes. ACS Applied Materials & Interfaces, 2021, 13, 27278-27283.	4.0	12
56	Electron tunneling through single-barrier heterostructures in a magnetic field. Physical Review B, 1994, 50, 4897-4900.	1.1	9
57	New effects in graphene with high carrier mobility. Physics-Uspekhi, 2012, 55, 408-412.	0.8	9
58	Scanning gate microscopy on a graphene quantum point contact. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1002-1004.	1.3	8
59	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
60	Twisted monolayer and bilayer graphene for vertical tunneling transistors. Applied Physics Letters, 2021, 118, .	1.5	7
61	TRANSVERSE SPIN TRANSPORT IN GRAPHENE. International Journal of Modern Physics B, 2009, 23, 2641-2646.	1.0	5
62	Conductance anomalies in gated V-groove quantum wires. Nanotechnology, 2002, 13, 487-490.	1.3	4
63	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
64	COERCIVITY OF SINGLE PINNING CENTER MEASURED BY HALL MICROMAGNETOMETRY. International Journal of Nanoscience, 2004, 03, 87-94.	0.4	3
65	METALLIC AND SEMICONDUCTOR HALL MICROPROBES FOR WIDE TEMPERATURE RANGE APPLICATIONS. International Journal of Nanoscience, 2004, 03, 123-130.	0.4	2
66	Ferromagnetic domain wall on nanometer scale. Journal of Physics: Conference Series, 2005, 17, 101-107.	0.3	1
67	THz magnetospectroscopy of double HgTe quantum well. , 2016, , .		0
68	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
69	Symmetry of diffraction patterns of two-dimensional crystal structures. Ultramicroscopy, 2021, 228, 113336.	0.8	0