

# Artem Mishchenko

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2599241/artem-mishchenko-publications-by-year.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

88

papers

19,094

citations

40

h-index

94

g-index

94

ext. papers

22,152

ext. citations

13.4

avg, IF

6.7

L-index

#	Paper	IF	Citations
88	Edge photocurrent in bilayer graphene due to inter-Landau-level transitions. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	2
87	The promoting effect of water on the electrodeposition of Eu in a dicyanamide ionic liquid. <i>Electrochimica Acta</i> , <b>2021</b> , 379, 138169	6.7	4
86	Twisted monolayer and bilayer graphene for vertical tunneling transistors. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 183106	3.4	2
85	Tunable van Hove singularities and correlated states in twisted monolayer bilayer graphene. <i>Nature Physics</i> , <b>2021</b> , 17, 619-626	16.2	33
84	Indirect Excitons and Trions in MoSe <sub>2</sub> /WSe <sub>2</sub> van der Waals Heterostructures. <i>Nano Letters</i> , <b>2020</b> , 20, 1869-1875	18.5	34
83	Edge photocurrent driven by terahertz electric field in bilayer graphene. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	5
82	Novel phenomena in two-dimensional semiconductors <b>2020</b> , 25-79		
81	Long-range ballistic transport of Brown-Zak fermions in graphene superlattices. <i>Nature Communications</i> , <b>2020</b> , 11, 5756	17.4	10
80	In situ manipulation of van der Waals heterostructures for twistrionics. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	23
79	Electronic phase separation in multilayer rhombohedral graphite. <i>Nature</i> , <b>2020</b> , 584, 210-214	50.4	31
78	Field-induced insulating states in a graphene superlattice. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	2
77	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> , <b>2019</b> , 109, 482-489	1.2	4
76	High-temperature electronic devices enabled by hBN-encapsulated graphene. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 123104	3.4	19
75	Observation of Regions of Negative Differential Conductivity and Current Generation during Tunneling through Zero-Dimensional Defect Levels of the h-BN Barrier in Graphene/h-BN/Graphene Heterostructures. <i>Semiconductors</i> , <b>2019</b> , 53, 1038-1041	0.7	0
74	Graphene Thermal Emitter with Enhanced Joule Heating and Localized Light Emission in Air. <i>ACS Photonics</i> , <b>2019</b> , 6, 2117-2125	6.3	23
73	Stacking Order in Graphite Films Controlled by van der Waals Technology. <i>Nano Letters</i> , <b>2019</b> , 19, 8526-8532	15.3	26
72	Dimensional reduction, quantum Hall effect and layer parity in graphite films. <i>Nature Physics</i> , <b>2019</b> , 15, 437-442	16.2	23

71	Composite super-moiré lattices in double-aligned graphene heterostructures. <i>Science Advances</i> , <b>2019</b> , 5, eaay8897	14.3	36
70	Photoquantum Hall Effect and Light-Induced Charge Transfer at the Interface of Graphene/InSe Heterostructures. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1805491	15.6	13
69	Planar and van der Waals heterostructures for vertical tunnelling single electron transistors. <i>Nature Communications</i> , <b>2019</b> , 10, 230	17.4	29
68	Stacking transition in rhombohedral graphite. <i>Frontiers of Physics</i> , <b>2019</b> , 14, 1	3.7	15
67	Excess resistivity in graphene superlattices caused by umklapp electron-electron scattering. <i>Nature Physics</i> , <b>2019</b> , 15, 32-36	16.2	25
66	High-order fractal states in graphene superlattices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 5135-5139	11.5	37
65	Observation of Spin and Valley Splitting of Landau Levels under Magnetic Tunneling in Graphene/Boron Nitride/Graphene Structures. <i>JETP Letters</i> , <b>2018</b> , 107, 238-242	1.2	1
64	Unusual Suppression of the Superconducting Energy Gap and Critical Temperature in Atomically Thin NbSe. <i>Nano Letters</i> , <b>2018</b> , 18, 2623-2629	11.5	39
63	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr <sub>3</sub> . <i>Nature Electronics</i> , <b>2018</b> , 1, 344-349	28.4	167
62	Growth of graphene on tantalum and its protective properties. <i>Carbon</i> , <b>2018</b> , 139, 29-34	10.4	3
61	Graphene hot-electron light bulb: incandescence from hBN-encapsulated graphene in air. <i>2D Materials</i> , <b>2018</b> , 5, 011006	5.9	29
60	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. <i>Communications Physics</i> , <b>2018</b> , 1,	5.4	25
59	Indirect excitons in van der Waals heterostructures at room temperature. <i>Nature Communications</i> , <b>2018</b> , 9, 1895	17.4	83
58	Edge currents shunt the insulating bulk in gapped graphene. <i>Nature Communications</i> , <b>2017</b> , 8, 14552	17.4	55
57	Exfoliation of natural van der Waals heterostructures to a single unit cell thickness. <i>Nature Communications</i> , <b>2017</b> , 8, 14410	17.4	66
56	Magnetoresistance of vertical Co-graphene-NiFe junctions controlled by charge transfer and proximity-induced spin splitting in graphene. <i>2D Materials</i> , <b>2017</b> , 4, 031004	5.9	52
55	Stacking transition in bilayer graphene caused by thermally activated rotation. <i>2D Materials</i> , <b>2017</b> , 4, 011013	5.9	18
54	Propagating Plasmons in a Charge-Neutral Quantum Tunneling Transistor. <i>ACS Photonics</i> , <b>2017</b> , 4, 3012-3017	5.9	13

53	Giant Quantum Hall Plateau in Graphene Coupled to an InSe van der Waals Crystal. <i>Physical Review Letters</i> , <b>2017</b> , 119, 157701	7.4	33
52	High-temperature quantum oscillations caused by recurring Bloch states in graphene superlattices. <i>Science</i> , <b>2017</b> , 357, 181-184	33.3	83
51	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 223-227	28.7	723
50	Selective spectroscopy of tunneling transitions between the Landau levels in vertical double-gate graphene/Boron nitride/graphene heterostructures. <i>JETP Letters</i> , <b>2016</b> , 104, 334-340	1.2	5
49	Fluorination Clusters on Graphene Resolved by Conductive AFM. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , <b>2016</b> , 19-24	0.1	0
48	Phonon-Assisted Resonant Tunneling of Electrons in Graphene-Boron Nitride Transistors. <i>Physical Review Letters</i> , <b>2016</b> , 116, 186603	7.4	63
47	Macroscopic self-reorientation of interacting two-dimensional crystals. <i>Nature Communications</i> , <b>2016</b> , 7, 10800	17.4	86
46	Quantum oscillations of the critical current and high-field superconducting proximity in ballistic graphene. <i>Nature Physics</i> , <b>2016</b> , 12, 318-322	16.2	144
45	Sieving hydrogen isotopes through two-dimensional crystals. <i>Science</i> , <b>2016</b> , 351, 68-70	33.3	173
44	Control of excitons in multi-layer van der Waals heterostructures. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 101901	30.1	49
43	Wafer-Scale and Wrinkle-Free Epitaxial Growth of Single-Orientated Multilayer Hexagonal Boron Nitride on Sapphire. <i>Nano Letters</i> , <b>2016</b> , 16, 3360-6	11.5	130
42	Molecular transport through capillaries made with atomic-scale precision. <i>Nature</i> , <b>2016</b> , 538, 222-225	50.4	325
41	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. <i>Science</i> , <b>2016</b> , 353, 575-9	33.3	63
40	Magnetotransport in single-layer graphene in a large parallel magnetic field. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	6
39	2D materials and van der Waals heterostructures. <i>Science</i> , <b>2016</b> , 353, aac9439	33.3	3469
38	Quality Heterostructures from Two-Dimensional Crystals Unstable in Air by Their Assembly in Inert Atmosphere. <i>Nano Letters</i> , <b>2015</b> , 15, 4914-21	11.5	289
37	A Facile Route for Patterned Growth of Metal-Insulator Carbon Lateral Junction through One-Pot Synthesis. <i>ACS Nano</i> , <b>2015</b> , 9, 8352-60	16.7	7
36	Nonlocal Response and Anamorphosis: The Case of Few-Layer Black Phosphorus. <i>Nano Letters</i> , <b>2015</b> , 15, 6991-5	11.5	36

35	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. <i>Nature Physics</i> , <b>2015</b> , 11, 1057-1062	16.2	49
34	Graphene-hexagonal boron nitride resonant tunneling diodes as high-frequency oscillators. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 103105	3.4	48
33	Cross sectional STEM imaging and analysis of multilayered two dimensional crystal heterostructure devices. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 107-108	0.5	1
32	Lifting of the Landau level degeneracy in graphene devices in a tilted magnetic field. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	13
31	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. <i>Nature Materials</i> , <b>2015</b> , 14, 301-6	27	1116
30	Electronic properties of graphene encapsulated with different two-dimensional atomic crystals. <i>Nano Letters</i> , <b>2014</b> , 14, 3270-6	11.5	345
29	Electrical and optical characterization of atomically thin WS <sub>2</sub> . <i>Dalton Transactions</i> , <b>2014</b> , 43, 10388-91	4.3	43
28	Electron transfer kinetics on mono- and multilayer graphene. <i>ACS Nano</i> , <b>2014</b> , 8, 10089-100	16.7	132
27	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 808-13	28.7	341
26	Detecting topological currents in graphene superlattices. <i>Science</i> , <b>2014</b> , 346, 448-51	33.3	481
25	Hierarchy of Hofstadter states and replica quantum Hall ferromagnetism in graphene superlattices. <i>Nature Physics</i> , <b>2014</b> , 10, 525-529	16.2	137
24	Proton transport through one-atom-thick crystals. <i>Nature</i> , <b>2014</b> , 516, 227-30	50.4	505
23	Quantum capacitance measurements of electron-hole asymmetry and next-nearest-neighbor hopping in graphene. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	66
22	Vertical field-effect transistor based on graphene-WS <sub>2</sub> heterostructures for flexible and transparent electronics. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 100-3	28.7	1342
21	Resonant tunnelling and negative differential conductance in graphene transistors. <i>Nature Communications</i> , <b>2013</b> , 4, 1794	17.4	451
20	Strong light-matter interactions in heterostructures of atomically thin films. <i>Science</i> , <b>2013</b> , 340, 1311-4	33.3	1850
19	Cloning of Dirac fermions in graphene superlattices. <i>Nature</i> , <b>2013</b> , 497, 594-7	50.4	884
18	Probing the nature of defects in graphene by Raman spectroscopy. <i>Nano Letters</i> , <b>2012</b> , 12, 3925-30	11.5	1341

17	Ab initio study of the thermopower of biphenyl-based single-molecule junctions. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	39
16	Cooperative and Noncooperative Assembly of Oligopyrenotides Resolved by Atomic Force Microscopy. <i>Macromolecules</i> , <b>2012</b> , 45, 5986-5992	5.5	19
15	Single molecular conductance of tolans: experimental and theoretical study on the junction evolution dependent on the anchoring group. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 2292-304	16.4	294
14	Field-effect tunneling transistor based on vertical graphene heterostructures. <i>Science</i> , <b>2012</b> , 335, 947-50	3.3	1991
13	Conduction mechanisms in biphenyl dithiol single-molecule junctions. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	73
12	Charge transport in single molecular junctions at the solid/liquid interface. <i>Topics in Current Chemistry</i> , <b>2012</b> , 313, 121-88		19
11	An approach to measure electromechanical properties of atomic and molecular junctions. <i>Journal of Physics Condensed Matter</i> , <b>2012</b> , 24, 164210	1.8	16
10	An MCBJ case study: The influence of Eonjugation on the single-molecule conductance at a solid/liquid interface. <i>Beilstein Journal of Nanotechnology</i> , <b>2011</b> , 2, 699-713	3	130
9	Conformationally controlled electron delocalization in n-type rods: synthesis, structure, and optical, electrochemical, and spectroelectrochemical properties of dicyanocyclophanes. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 7236-50	4.8	23
8	Electrochemical scanning tunnelling spectroscopy of a ferrocene-modified n-Si(111)-surface: electrolyte gating and ambipolar FET behaviour. <i>Chemical Communications</i> , <b>2011</b> , 47, 9807-9	5.8	19
7	Single-molecule junctions based on nitrile-terminated biphenyls: a promising new anchoring group. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 184-7	16.4	192
6	Charge transport with single molecules--an electrochemical approach. <i>Chimia</i> , <b>2010</b> , 64, 383-90	1.3	15
5	Influence of conformation on conductance of biphenyl-dithiol single-molecule contacts. <i>Nano Letters</i> , <b>2010</b> , 10, 156-63	11.5	252
4	Catechol-Based Macrocyclic Rods: En Route to Redox-Active Molecular Switches. <i>European Journal of Organic Chemistry</i> , <b>2009</b> , 2009, 6140-6150	3.2	34
3	Chemisch kontrollierte Leitfähigkeit: Torsionswinkelabhängigkeit in Biphenyldithiol-Einzelmolekülbrückkontakten. <i>Angewandte Chemie</i> , <b>2009</b> , 121, 9048-9052	3.6	24
2	Chemically controlled conductivity: torsion-angle dependence in a single-molecule biphenyldithiol junction. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 8886-90	16.4	129
1	Electrochemical gate-controlled electron transport of redox-active single perylene bisimide molecular junctions. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 374122	1.8	32