Dmitri K Efetov

List of Publications by Year
in descending order

46 papers	6,537 citations	136950 32 h-index	233421 45 g-index
48 all docs	48 docs citations	48 times ranked	7847 citing authors

#	Article	IF	Citations
1	Quantum critical behaviour in magic-angle twisted bilayer graphene. Nature Physics, 2022, 18, 633-638.	16.7	66
2	Observation of Reentrant Correlated Insulators and Interaction-Driven Fermi-Surface Reconstructions at One Magnetic Flux Quantum per MoirÃ© Unit Cell in Magic-Angle Twisted Bilayer Graphene. Physical Review Letters, 2022, 128, .	7.8	17
3	Chern mosaic and Berry-curvature magnetism in magic-angle graphene. Nature Physics, 2022, 18, 885-892.	16.7	37
4	Observation of flat bands in twisted bilayer graphene. Nature Physics, 2021, 17, 189-193.	16.7	144
5	Giant enhancement of third-harmonic generation in grapheneâ€"metal heterostructures. Nature Nanotechnology, 2021, 16, 318-324.	31.5	47
6	Measuring local moirÃ© lattice heterogeneity of twisted bilayer graphene. Physical Review Research, 2021, 3, .	3.6	16
7	The marvels of moirÃ© materials. Nature Reviews Materials, 2021, 6, 201-206.	48.7	262
8	Symmetry-broken Chern insulators and Rashba-like Landau-level crossings in magic-angle bilayer graphene. Nature Physics, 2021, 17, 710-714.	16.7	114
9	Josephson junction infrared single-photon detector. Science, 2021, 372, 409-412.	12.6	45
10	Twisted bilayer graphene. IV. Exact insulator ground states and phase diagram. Physical Review B, 2021, 103, .	3.2	123
11	Towards plasmonic-enhanced optical nonlinearities in graphene metal-heterostructures. , 2021, , .		0
12	A high-T _c van der Waals superconductor based photodetector with ultra-high responsivity and nanosecond relaxation time. 2D Materials, 2021, 8, 035053.	4.4	13
13	Ultrasensitive Calorimetric Measurements of the Electronic Heat Capacity of Graphene. Nano Letters, 2021, 21, 5330-5337.	9.1	10
14	Multiple flat bands and topological Hofstadter butterfly in twisted bilayer graphene close to the second magic angle. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	35
15	Observation of interband collective excitations in twisted bilayer graphene. Nature Physics, 2021, 17, 1162-1168.	16.7	47
16	Competing Zero-Field Chern Insulators in Superconducting Twisted Bilayer Graphene. Physical Review Letters, 2021, 127, 197701.	7.8	80
17	Graphene-based Josephson junction microwave bolometer. Nature, 2020, 586, 42-46.	27.8	88
18	Terahertz Photogalvanics in Twisted Bilayer Graphene Close to the Second Magic Angle. Nano Letters, 2020, 20, 7152-7158.	9.1	25

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19	Superconductivity and strong correlations in moirÃ© flat bands. Nature Physics, 2020, 16, 725-733.	16.7	448
20	High-order minibands and interband Landau level reconstruction in graphene moirÃ© superlattices. Physical Review B, 2020, 102, .	3.2	7
21	Untying the insulating and superconducting orders in magic-angle graphene. Nature, 2020, 583, 375-378.	27.8	323
22	Nanoscale Imaging and Control of Hexagonal Boron Nitride Single Photon Emitters by a Resonant Nanoantenna. Nano Letters, 2020, 20, 1992-1999.	9.1	23
23	Critical role of device geometry for the phase diagram of twisted bilayer graphene. Physical Review B, 2020, 101, .	3.2	22
24	Magic-Angle Bilayer Graphene Nanocalorimeters: Toward Broadband, Energy-Resolving Single Photon Detection. Nano Letters, 2020, 20, 3459-3464.	9.1	28
25	Superconductors, orbital magnets and correlated states in magic-angle bilayer graphene. Nature, 2019, 574, 653-657.	27.8	987
26	Thermal radiation control from hot graphene electrons coupled to a photonic crystal nanocavity. Nature Communications, 2019, 10, 109.	12.8	79
27	Probing the ultimate plasmon confinement limits with a van der Waals heterostructure. Science, 2018, 360, 291-295.	12.6	259
28	Ultrafast Graphene Light Emitters. Nano Letters, 2018, 18, 934-940.	9.1	109
29	Controlled Electrochemical Intercalation of Graphene/<i>h-</i>BN van der Waals Heterostructures. Nano Letters, 2018, 18, 460-466.	9.1	49
30	Compact mid-infrared graphene thermopile enabled by a nanopatterning technique of electrolyte gates. New Journal of Physics, 2018, 20, 083050.	2.9	5
31	Fast thermal relaxation in cavity-coupled graphene bolometers with a Johnson noise read-out. Nature Nanotechnology, 2018, 13, 797-801.	31.5	66
32	Active 2D materials for on-chip nanophotonics and quantum optics. Nanophotonics, 2017, 6, 1329-1342.	6.0	38
33	Inducing superconducting correlation in quantum Hall edge states. Nature Physics, 2017, 13, 693-698.	16.7	132
34	Tunable and high-purity room temperature single-photon emission from atomic defects in hexagonal boron nitride. Nature Communications, 2017, 8, 705.	12.8	351
35	A MoTe2-based light-emitting diode and photodetector for silicon photonic integrated circuits. Nature Nanotechnology, 2017, 12, 1124-1129.	31.5	344
36	Graphene-Based Josephson-Junction Single-Photon Detector. Physical Review Applied, 2017, 8, .	3.8	74

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37	Li Intercalation into Graphite: Direct Optical Imaging and Cahnâ€“Hilliard Reaction Dynamics. Journal of Physical Chemistry Letters, 2016, 7, 2151-2156.	4.6	92
38	Crossover from retro to specular Andreev reflections in bilayer graphene. Physical Review B, 2016, 94, .	3.2	25
39	Ambipolar transport and magneto-resistance crossover in a Mott insulator, Sr₂IrO₄. Journal of Physics Condensed Matter, 2016, 28, 505304.	1.8	14
40	Specular interband Andreev reflections at van der Waals interfaces between graphene and NbSe2. Nature Physics, 2016, 12, 328-332.	16.7	159
41	High-Responsivity Grapheneâ€“Boron Nitride Photodetector and Autocorrelator in a Silicon Photonic Integrated Circuit. Nano Letters, 2015, 15, 7288-7293.	9.1	185
42	Nanocrystalline Graphite Growth on Sapphire by Carbon Molecular Beam Epitaxy. Journal of Physical Chemistry C, 2011, 115, 4491-4494.	3.1	113
43	Multiband transport in bilayer graphene at high carrier densities. Physical Review B, 2011, 84, .	3.2	30
44	Controlling Electron-Phonon Interactions in Graphene at Ultrahigh Carrier Densities. Physical Review Letters, 2010, 105, 256805.	7.8	801
45	Electronic transport in locally gated graphene nanoconstrictions. Applied Physics Letters, 2007, 91, .	3.3	171
46	Electronic Transport and Quantum Hall Effect in Bipolar Graphene<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi><mml:mtext mathvariant="normal">âˆ’</mml:mtext><mml:mi>n</mml:mi><mml:mtext mathvariant="normal">âˆ’</mml:mtext><mml:mi>p</mml:mi></mml:math>Junctions. Physical Review Letters, 2007, 99, 166804.	7.8	434