

Shaffique Adam

List of Publications by Year in descending order

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citations

87401

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all docs

89
docs citations

89
times ranked

13988
citing authors

#	ARTICLE	IF	CITATIONS
1	Dissipation-enabled hydrodynamic conductivity in a tunable bandgap semiconductor. <i>Science Advances</i> , 2022, 8, eabi8481.	4.7	15
2	Progress in Epitaxial Thin-Film Na_3Bi as a Topological Electronic Material. <i>Advanced Materials</i> , 2021, 33, e2005897.	11.1	18
3	Tunable Optical Properties of Thin Films Controlled by the Interface Twist Angle. <i>Nano Letters</i> , 2021, 21, 2832-2839.	4.5	26
4	Tunable van Hove singularities and correlated states in twisted monolayer-bilayer graphene. <i>Nature Physics</i> , 2021, 17, 619-626.	6.5	103
5	Geometric Control of Universal Hydrodynamic Flow in a Two-Dimensional Electron Fluid. <i>Physical Review X</i> , 2021, 11, .	2.8	29
6	Carrier transport theory for twisted bilayer graphene in the metallic regime. <i>Nature Communications</i> , 2021, 12, 5737.	5.8	17
7	Quantum Transport in Air-Stable Na_3Bi Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35542-35546.	4.0	7
8	Moiré patterns in graphene-rhenium disulfide vertical heterostructures. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	9
9	Evidence of Rotational Frictional Coupling in Polaronic Trions. <i>Physical Review Letters</i> , 2020, 125, 086803.	2.9	14
10	Antiferromagnetism and chiral d -wave superconductivity from an effective t - J model for twisted bilayer graphene. <i>Physical Review B</i> , 2020, 101, .	1.1	5
11	Enhanced hydrodynamic transport in near magic angle twisted bilayer graphene. <i>Physical Review B</i> , 2020, 101, .	1.1	10
12	Superconductivity from collective excitations in magic-angle twisted bilayer graphene. <i>Physical Review Research</i> , 2020, 2, .	1.3	33
13	Temperature collapse of the electric conductivity in bilayer graphene. <i>Physical Review Research</i> , 2020, 2, .	1.3	2
14	Giant gate-tunable bandgap renormalization and excitonic effects in a 2D semiconductor. <i>Science Advances</i> , 2019, 5, eaaw2347.	4.7	80
15	Polaronic Trions at the $\text{MoS}_2/\text{SrTiO}_3$ Interface. <i>Advanced Materials</i> , 2019, 31, 1903569.	11.1	26
16	Electronic ground state in bilayer graphene with realistic Coulomb interactions. <i>Physical Review B</i> , 2019, 100, .	1.1	7
17	Phase coherent transport in bilayer and trilayer MoS_2 . <i>Physical Review B</i> , 2019, 100, .	1.1	2
18	First-principles quantum corrections for carrier correlations in double-layer two-dimensional heterostructures. <i>Physical Review B</i> , 2019, 99, .	1.1	6

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19	Gauge-phonon dominated resistivity in twisted bilayer graphene near magic angle. Physical Review B, 2019, 99, .	1.1	30
20	Absence of strong localization at low conductivity in the topological surface state of low-disorder <math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>S</mml:mi><mml:mi>b</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></math> Physical Review B, 2019, 99, .	1.1	8
21	Universal Fermi-surface anisotropy renormalization for interacting Dirac fermions with long-range interactions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26431-26434.	3.3	7
22	Response to Comment on "The role of electron-electron interactions in two-dimensional Dirac fermions". Science, 2019, 366, .	6.0	1
23	Phonon-Mediated Colossal Magnetoresistance in Graphene/Black Phosphorus Heterostructures. Nano Letters, 2018, 18, 3377-3383.	4.5	30
24	Theoretical determination of hydrodynamic window in monolayer and bilayer graphene from scattering rates. Physical Review B, 2018, 97, .	1.1	52
25	Electric-field-tuned topological phase transition in ultrathin Na ₃ Bi. Nature, 2018, 564, 390-394.	13.7	155
26	Theory of Coulomb drag in spatially inhomogeneous 2D materials. Communications Physics, 2018, 1, .	2.0	18
27	Dynamic band-structure tuning of graphene moiré superlattices with pressure. Nature, 2018, 557, 404-408.	13.7	223
28	Tailoring sample-wide pseudo-magnetic fields on a graphene "black phosphorus heterostructure. Nature Nanotechnology, 2018, 13, 828-834.	15.6	113
29	Singlet superconductivity enhanced by charge order in nested twisted bilayer graphene Fermi surfaces. Solid State Communications, 2018, 282, 38-44.	0.9	44
30	The role of electron-electron interactions in two-dimensional Dirac fermions. Science, 2018, 361, 570-574.	6.0	82
31	Emergence of Tertiary Dirac Points in Graphene Moiré Superlattices. Nano Letters, 2017, 17, 3576-3581.	4.5	28
32	Tuning magnetoresistance in molybdenum disulphide and graphene using a molecular spin transition. Nature Communications, 2017, 8, 677.	5.8	20
33	Moiré band model and band gaps of graphene on hexagonal boron nitride. Physical Review B, 2017, 96, .	1.1	68
34	Equivalence of effective medium and random resistor network models for disorder-induced saturating linear magnetoresistance. Physical Review B, 2017, 96, .	1.1	22
35	Spatial charge inhomogeneity and defect states in topological Dirac semimetal thin films of Na ₃ Bi. Science Advances, 2017, 3, eaao6661.	4.7	15
36	Electrostatic modulation of the electronic properties of Dirac semimetal Na ₃ Bi thin films. Physical Review Materials, 2017, 1, .	0.3	15

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37	A modified Schottky model for graphene-semiconductor (3D/2D) contact: A combined theoretical and experimental study. , 2016, , .		19
38	Electronic Properties of High-Quality Epitaxial Topological Dirac Semimetal Thin Films. Nano Letters, 2016, 16, 3210-3214.	4.5	47
39	Spin dynamics in bilayer graphene: Role of electron-hole puddles and Dyakonov-Perel mechanism. Physical Review B, 2016, 94, .	1.1	4
40	Quantum Transport and Observation of Dyakonov-Perel Spin-Orbit Scattering in Monolayer MoS_2 Physical Review Letters, 2016, 116, 046803.	2.9	59
41	Electronic spin transport in dual-gated bilayer graphene. NPG Asia Materials, 2016, 8, e274-e274.	3.8	39
42	Charge Puddles in Graphene near the Dirac Point. Physical Review Letters, 2016, 116, 126804.	2.9	54
43	Magnetic oscillation of optical phonon in ABA- and ABC-stacked trilayer graphene. Physical Review B, 2015, 91, .	1.1	8
44	Terahertz conductivity of graphene on boron nitride. Physical Review B, 2015, 92, .	1.1	8
45	Local spectroscopy of moiré-induced electronic structure in gate-tunable twisted bilayer graphene. Physical Review B, 2015, 92, .	1.1	114
46	Transport and magnetotransport in three-dimensional Weyl semimetals. Physical Review B, 2015, 92, .	1.1	33
47	Interaction-Driven Metal-Insulator Transition in Strained Graphene. Physical Review Letters, 2015, 115, 186602.	2.9	52
48	Origin of band gaps in graphene on hexagonal boron nitride. Nature Communications, 2015, 6, 6308.	5.8	253
49	Transport and particle-hole asymmetry in graphene on boron nitride. Physical Review B, 2015, 91, .	1.1	33
50	Tunable room-temperature ferromagnet using an iron-oxide and graphene oxide nanocomposite. Scientific Reports, 2015, 5, 11430.	1.6	11
51	Theory for electron transport in graphene. Synthetic Metals, 2015, 210, 2-8.	2.1	3
52	van der Waals Force: A Dominant Factor for Reactivity of Graphene. Nano Letters, 2015, 15, 319-325.	4.5	65
53	Gate-tunable coherent perfect absorption of terahertz radiation in graphene. 2D Materials, 2014, 1, 031001.	2.0	24
54	Disorder-Induced Magnetoresistance in a Two-Dimensional Electron System. Physical Review Letters, 2014, 113, 047206.	2.9	47

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55	Transport Properties of Monolayer MoS ₂ Grown by Chemical Vapor Deposition. Nano Letters, 2014, 14, 1909-1913.	4.5	431
56	Direct Imaging of Charged Impurity Density in Common Graphene Substrates. Nano Letters, 2013, 13, 3576-3580.	4.5	70
57	Surface conduction of topological Dirac electrons in bulk insulating Bi ₂ Se ₃ . Nature Physics, 2012, 8, 459-463.	6.5	330
58	Two-dimensional transport and screening in topological insulator surface states. Physical Review B, 2012, 85, .	1.1	53
59	Semiclassical Boltzmann transport theory for graphene multilayers. Physical Review B, 2011, 83, .	1.1	19
60	Mechanism for puddle formation in graphene. Physical Review B, 2011, 84, .	1.1	58
61	Graphene Carrier Transport Theory. Nanoscience and Technology, 2011, , 357-394.	1.5	3
62	Electronic transport in two-dimensional graphene. Reviews of Modern Physics, 2011, 83, 407-470.	16.4	2,857
63	Landau levels and band bending in few-layer epitaxial graphene. Physical Review B, 2011, 83, .	1.1	8
64	High-resolution tunnelling spectroscopy of a graphene quartet. Nature, 2010, 467, 185-189.	13.7	171
65	Temperature dependence of the diffusive conductivity of bilayer graphene. Physical Review B, 2010, 82, .	1.1	21
66	Charged impurity scattering in bilayer graphene. Physical Review B, 2010, 82, .	1.1	81
67	Effective medium theory for disordered two-dimensional graphene. Physical Review B, 2009, 79, .	1.1	83
68	Carbon conductor corrupted. Nature, 2009, 458, 38-39.	13.7	12
69	Theory of charged impurity scattering in two-dimensional graphene. Solid State Communications, 2009, 149, 1072-1079.	0.9	97
70	Crossover from quantum to Boltzmann transport in graphene. Physical Review B, 2009, 79, .	1.1	81
71	Scattering mechanisms and Boltzmann transport in graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1022-1025.	1.3	77
72	Transport in suspended graphene. Solid State Communications, 2008, 146, 356-360.	0.9	64

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73	Tuning the Effective Fine Structure Constant in Graphene: Opposing Effects of Dielectric Screening on Short- and Long-Range Potential Scattering. <i>Physical Review Letters</i> , 2008, 101, 146805.	2.9	321
74	Charged-impurity scattering in graphene. <i>Nature Physics</i> , 2008, 4, 377-381.	6.5	1,318
75	Boltzmann transport and residual conductivity in bilayer graphene. <i>Physical Review B</i> , 2008, 77, .	1.1	129
76	Density Inhomogeneity Driven Percolation Metal-Insulator Transition and Dimensional Crossover in Graphene Nanoribbons. <i>Physical Review Letters</i> , 2008, 101, 046404.	2.9	98
77	Statistics of random voltage fluctuations and the low-density residual conductivity of graphene. <i>Physical Review B</i> , 2007, 76, .	1.1	52
78	Transport in chemically doped graphene in the presence of adsorbed molecules. <i>Physical Review B</i> , 2007, 76, .	1.1	153
79	A self-consistent theory for graphene transport. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18392-18397.	3.3	1,085
80	Measurement of Scattering Rate and Minimum Conductivity in Graphene. <i>Physical Review Letters</i> , 2007, 99, 246803.	2.9	905
81	Carrier Transport in Two-Dimensional Graphene Layers. <i>Physical Review Letters</i> , 2007, 98, 186806.	2.9	1,078
82	Theory of the spin-torque-driven ferromagnetic resonance in a ferromagnet/normal-metal/ferromagnet structure. <i>Physical Review B</i> , 2006, 74, .	1.1	36
83	Mesoscopic anisotropic magnetoconductance fluctuations in ferromagnets. <i>Physical Review B</i> , 2006, 73, .	1.1	10
84	Current-induced transverse spin-wave instability in thin ferromagnets: Beyond linear stability analysis. <i>Physical Review B</i> , 2006, 73, .	1.1	17
85	Scaling approach to electron-electron interactions in a chaotic quantum dot. <i>Physical Review B</i> , 2003, 68, .	1.1	10
86	Conductance-peak height correlations for a Coulomb-blockaded quantum dot in a weak magnetic field. <i>Physical Review B</i> , 2003, 68, .	1.1	4
87	Magnetic-field dependence of energy levels in ultrasmall metal grains. <i>Physical Review B</i> , 2002, 66, .	1.1	16
88	Enhanced mesoscopic fluctuations in the crossover between random-matrix ensembles. <i>Physical Review B</i> , 2002, 66, .	1.1	19
89	Sensitivity of an underwater acoustic array to ultra-high energy neutrinos. <i>Astroparticle Physics</i> , 2002, 17, 279-292.	1.9	40