

Alexei Fedorov

List of Publications by Year in descending order

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125
papers

16,487
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26630

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128
times ranked

14732
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlling magnetoresistance by tuning semimetallicity through dimensional confinement and heteroepitaxy. <i>Science Advances</i> , 2021, 7, .	10.3	7
2	Experimental evidence of plasmarons and effective fine structure constant in electron-doped graphene/h-BN heterostructure. <i>Npj Quantum Materials</i> , 2021, 6, .	5.2	3
3	Electron-phonon coupling origin of the graphene $\tilde{\epsilon}^*$ -band kink via isotope effect. <i>Physical Review B</i> , 2021, 103, .	3.2	3
4	Identifying the fingerprints of topological states by tuning magnetoresistance in a semimetal: The case of topological half-Heusler $\text{Pt}_{1-x}\text{Mn}_x$. <i>Physical Review Materials</i> , 2021, 5, .	2.4	1
5	Coupling to zone-center optical phonons in VSe enhanced by charge density waves. <i>Physical Review B</i> , 2021, 104, .	3.2	2
6	The nature of ferromagnetism in the chiral helimagnet $\text{Cr}_1/3\text{NbS}_2$. <i>Communications Physics</i> , 2020, 3, .	5.3	17
7	Atomic-Scale Chemical Conversion of Single-Layer Transition Metal Dichalcogenides. <i>ACS Nano</i> , 2019, 13, 5611-5615.	14.6	2
8	Weak antilocalization in quasi-two-dimensional electronic states of epitaxial LuSb thin films. <i>Physical Review B</i> , 2019, 99, .	3.2	12
9	Concomitant enhancement of electron-phonon coupling and electron-electron interaction in graphene decorated with ytterbium. <i>Applied Surface Science</i> , 2019, 467-468, 1-4.	6.1	5
10	Unique Gap Structure and Symmetry of the Charge Density Wave in Single-Layer VSe . <i>Physical Review Letters</i> , 2018, 121, 196402.	7.8	139
11	Spectroscopic evidence of topological phase transition in the three-dimensional Dirac semimetal Cd_3As_2 . <i>Physical Review B</i> , 2018, 98, .	3.3	9
12	Observation of Quantum Hall effect in an ultra-thin $(\text{Bi}_{0.53}\text{Sb}_{0.47})_2\text{Te}_3$ film. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	12
13	Sn-doped $\text{Bi}_{1.1}\text{Sb}_{0.9}\text{Te}_2\text{S}$ bulk crystal topological insulator with excellent properties. <i>Nature Communications</i> , 2016, 7, 11456.	12.8	94
14	Magnetic effects in sulfur-decorated graphene. <i>Scientific Reports</i> , 2016, 6, 21460.	3.3	11
15	Nonrigid band shift and nonmonotonic electronic structure changes upon doping in the normal state of the pnictide high-temperature superconductor $\text{FeTe}_{1-x}\text{Se}_x$.		

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19	Gaps induced by inversion symmetry breaking and a second-generation Dirac cones in graphene/hexagonal boron nitride. <i>Nature Physics</i> , 2016, 12, 1111-1115.	16.7	179
20	Controlled thermodynamics for tunable electron doping of graphene on Ir(111). <i>Physical Review B</i> , 2016, 94, .	3.2	7
21	Dimensional Effects on the Charge Density Waves in Ultrathin Films of TiSe_2 . <i>Nano Letters</i> , 2016, 16, 6331-6336.	9.1	61
22	Disentangling the surface and bulk electronic structures of LaOFeAs . <i>Physical Review B</i> , 2016, 94, .	3.2	7
23	Electronic structure of transferred graphene/h-BN van der Waals heterostructures with nonzero stacking angles by nano-ARPES. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 444002.	1.8	14
24	Chiral magnetic effect in ZrTe_5 . <i>Nature Physics</i> , 2016, 12, 550-554.	16.7	793
25	Topological nature of the $\text{FeSe}_{1-x}\text{Te}_x$ $x > 0.5$. <i>Physical Review B</i> , 2015, 92, .	3.2	12
26	Monolayer charge-neutral graphene on platinum with extremely weak electron-phonon coupling. <i>Physical Review B</i> , 2015, 92, .	3.2	12
27	Tunable spin helical Dirac quasiparticles on the surface of three-dimensional HgTe . <i>Physical Review B</i> , 2015, 92, .	3.2	19
28	Robust Gapless Surface State and Rashba-Splitting Bands upon Surface Deposition of Magnetic Cr on Bi_2Se_3 . <i>Nano Letters</i> , 2015, 15, 2031-2036.	9.1	33
29	Gapped Surface States in a Strong-Topological-Insulator Material. <i>Physical Review Letters</i> , 2015, 114, 256401.	7.8	24
30	Formation and lithium doping of graphene on the surface of cobalt silicide. <i>Physics of the Solid State</i> , 2015, 57, 1040-1047.	0.6	9
31	Spin-Orbit Interactions and the Nematicity Observed in the Fe-Based Superconductors. <i>Physical Review Letters</i> , 2015, 114, 167001.	7.8	42
32	Potassium and ion beam induced electron accumulation in InN . <i>Surface Science</i> , 2015, 632, 154-157.	1.9	5
33	The Future of Photoemission Spectroscopy. <i>Synchrotron Radiation News</i> , 2014, 27, 2-3.	0.8	0
34	Observation of an electron band above the Fermi level in $\text{FeTe}_{0.55}\text{Se}_{0.45}$ from <i>in-situ</i> surface doping. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	18
35	Ytterbium-driven strong enhancement of electron-phonon coupling in graphene. <i>Physical Review B</i> , 2014, 90, .	3.2	19
36	ALS User Meeting and Workshops. <i>Synchrotron Radiation News</i> , 2014, 27, 5-9.	0.8	0

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37	Observation of a universal donor-dependent vibrational mode in graphene. Nature Communications, 2014, 5, 3257.	12.8	114
38	Electronic Structure Basis for the Extraordinary Magnetoresistance in WTe_2 . Physical Review Letters, 2014, 113, 216601.	7.8	241
39	Comparison of Sn-doped and nonstoichiometric vertical-Bridgman-grown crystals of the topological insulator Bi ₂ Te ₂ Se. Journal of Applied Physics, 2014, 115, 143708.	2.5	33
40	Anisotropic Eliashberg function and electron-phonon coupling in doped graphene. Physical Review B, 2013, 88, .	3.2	41
41	Fully gapped topological surface states in Bi ₂ Se ₃ films induced by a d-wave high-temperature superconductor. Nature Physics, 2013, 9, 621-625.	16.7	149
42	Minority-spin t_{2g} states and the degree of spin polarization in ferromagnetic metallic La _{2-x} Sr _{1+2x} Mn ₂ O ₇ (x = 0.38). Scientific Reports, 2013, 3, 3167.	3.3	12
43	Charge-Carrier Screening in Single-Layer Graphene. Physical Review Letters, 2013, 110, 146802.	7.8	58
44	Persistent coherence and spin polarization of topological surface states on topological insulators. Physical Review B, 2013, 88, .	3.2	18
45	Quasiparticle dynamics in reshaped helical Dirac cone of topological insulators. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2758-2762.	7.1	86
46	Chemically gated electronic structure of a superconducting doped topological insulator system. Journal of Physics: Conference Series, 2013, 449, 012037.	0.4	7
47	Electron-phonon coupling and intrinsic bandgap in highly-screened graphene. New Journal of Physics, 2012, 14, 095006.	2.9	40
48	Nonmonotonic Fermi surface evolution and its correlation with stripe ordering in bilayer manganites. Physical Review B, 2012, 86, .	3.2	3
49	Topological semimetal in a Bi-Bi ₂ Se ₃ infinitely adaptive superlattice phase. Physical Review B, 2012, 86, .	3.2	59
50	Panet Aal.Reply.. Physical Review Letters, 2012, 108, .	7.8	4
51	Itinerant electrons, local moments, and magnetic correlations in the pnictide superconductors CeFeAsO $F < mml:msub < mml:mrow /> < mml:mrow < mml:mn > 1 < /mml:mn > < mml:mo > \hat{ } < /mml:mo > < mml:mi > x < /mml:mi > < /mml:mrow > < /mml:msub > < /mml:math >$		

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55	Weak Anti-localization and Quantum Oscillations of Surface States in Topological Insulator Bi ₂ Se ₃ . Scientific Reports, 2012, 2, 726.	3.3	172
56	Measurement of an Exceptionally Weak Electron-Phonon Coupling on the Surface of the Topological Insulator Bi_2Se_3 . Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2012, 108, 187001.	7.8	140
57	Spatial and Energy Distribution of Topological Edge States in Single Bi(111) Bilayer. Physical Review Letters, 2012, 109, 016801.	7.8	293
58	Epitaxial growth of Bi ₂ Se ₃ topological insulator thin films on Si (111). Journal of Applied Physics, 2011, 109, .	2.5	126
59	Electronic Structure of Superconducting KCa_8C_6 and Nonsuperconducting LiC_6 Graphite Intercalation Compounds: Evidence for a Graphene-Sheet-Driven Superconducting State. Physical Review Letters, 2011, 106, 257004.	7.8	68
60	Electronic structure of optimally doped pnictide $\text{Ba}_{0.6}\text{K}_{0.4}\text{Fe}_2\text{As}_2$: a comprehensive angle-resolved photoemission spectroscopy investigation. Journal of Physics Condensed Matter, 2011, 23, 135701.	1.8	88
61	Electronic Structure of the Topological Insulator Bi_2Se_3 . Angle-Resolved Photoemission Spectroscopy: Evidence for a Nearly Full Surface Spin Polarization. Physical Review Letters, 2011, 106, 257004.	7.8	92
62	Epitaxial growth of high mobility Bi ₂ Se ₃ thin films on CdS. Applied Physics Letters, 2011, 98, 242102.	3.3	85
63	A topological insulator surface under strong Coulomb, magnetic and disorder perturbations. Nature Physics, 2011, 7, 32-37.	16.7	527
64	Direct measurement of quantum phases in graphene via photoemission spectroscopy. Physical Review B, 2011, 84, .	3.2	91
65	Spin-orbital ground states of superconducting doped topological insulators: A Majorana platform. Physical Review B, 2011, 83, .	3.2	33
66	Widespread spin polarization effects in photoemission from topological insulators. Physical Review B, 2011, 84, .	3.2	111
67	Many-body interactions in quasi-freestanding graphene. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11365-11369.	7.1	200
68	Localization of electrons due to orbitally ordered bi-stripes in the bilayer manganite $\text{La}_{1-x}\text{Sr}_x\text{Mn}_2\text{O}_7$ ($x \approx 0.59$). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11799-11803.	7.1	12
69	The all-organic route to doping graphene. Physics Magazine, 2010, 3, .	0.1	6
70	Observation of topological order in a superconducting doped topological insulator. Nature Physics, 2010, 6, 855-859.	16.7	412
71	Quasifreestanding multilayer graphene films on the carbon face of SiC. Physical Review B, 2010, 81, .	3.2	34
72	A high-efficiency spin-resolved photoemission spectrometer combining time-of-flight spectroscopy with exchange-scattering polarimetry. Review of Scientific Instruments, 2010, 81, 053904.	1.3	63

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73	Evolution of Fermi surface and normal-state gap in the chemically substituted cuprates $\text{Bi}_2\text{Sr}_2\hat{x}\text{Bi}_x\text{CuO}_6$. Physical Review B, 2009, 79, .	3.2	18
74	Anisotropic Electron-Phonon Coupling and Dynamical Nesting on the Graphene Sheets in Superconducting CaC_6 using Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2009, 102, 107007.	7.8	78
75	Electronic properties of iron arsenic high temperature superconductors revealed by angle resolved photoemission spectroscopy (ARPES). Physica C: Superconductivity and Its Applications, 2009, 469, 491-497.	1.2	25
76	A tunable topological insulator in the spin helical Dirac transport regime. Nature, 2009, 460, 1101-1105.	27.8	1,737
77	Observation of Time-Reversal-Protected Single-Dirac-Cone Topological Insulator States in Bi_2Te_3 . Physical Review Letters, 2009, 103, 146401.	7.8	881
78	Origin of the energy bandgap in epitaxial graphene. Nature Materials, 2008, 7, 259-260.	27.5	175
79	K-Doping Dependence of the Fermi Surface of the Iron-Arsenic $\text{La}_{1-x}\text{Fe}_x\text{As}_2$ Using Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2008, 101, 177005.	7.8	114
80	Self-doping effects in epitaxially grown graphene. Applied Physics Letters, 2008, 93, .	3.3	33
81	Metal to Insulator Transition in Epitaxial Graphene Induced by Molecular Doping. Physical Review Letters, 2008, 101, 086402.	7.8	245
82	Observation of an inverted band structure near the surface of InN . Europhysics Letters, 2008, 83, 47003.	2.0	7
83	Kohn anomaly and interplay of electron-electron and electron-phonon interactions in epitaxial graphene. Physical Review B, 2008, 78, .	3.2	65
84	Electronic structure of the metallic ground state of $\text{La}_{2-x}\text{Sr}_x\text{Mn}_2\text{O}_7$ for $x \sim 0.59$ and comparison with $x=0.36, 0.38$ compounds as revealed by angle-resolved photoemission. Physical Review B, 2008, 78, .	3.2	17
85	Momentum dependence of superconducting gap, strong-coupling dispersion kink, and tightly bound Cooper pairs in the high- T_c $(\text{Sr}, \text{Ba})_{1-x}(\text{K}, \text{Na})_x\text{Fe}_2\text{As}_2$ superconductors. Physical Review B, 2008, 78, .	3.2	127
86	High-Energy Kink Observed in the Electron Dispersion of High-Temperature Cuprate Superconductors. Physical Review Letters, 2007, 98, 167003.	7.8	129
87	Angle-resolved photoemission study of the metal-insulator transition in bismuth cobaltates. Physical Review B, 2007, 76, .	3.2	5
88	Determination of the Hole Lifetime from Photoemission: $\text{Ti}3d$ States in TiTe_2 . Physical Review Letters, 2007, 98, 217604.	7.8	28
89	Substrate-induced bandgap opening in epitaxial graphene. Nature Materials, 2007, 6, 770-775.	27.5	2,115
90	A local metallic state in globally insulating $\text{La}_{1.24}\text{Sr}_{1.76}\text{Mn}_2\text{O}_7$ well above the metal-insulator transition. Nature Physics, 2007, 3, 248-252.	16.7	45

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91	Unusual oxygen isotope effects in cuprates?. Nature, 2007, 446, E5-E5.	27.8	36
92	Laser Based Angle-Resolved Photoemission, the Sudden Approximation, and Quasiparticle-Like Spectral Peaks in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$. Physical Review Letters, 2006, 96, 017005.	7.8	157
93	The Ground State of the Pseudogap in Cuprate Superconductors. Science, 2006, 314, 1914-1916.	12.6	221
94	First direct observation of Dirac fermions in Graphite. Nature Physics, 2006, 2, 595-599.	16.7	466
95	Synthesis and characterization of atomically thin graphite films on a silicon carbide substrate. Journal of Physics and Chemistry of Solids, 2006, 67, 2172-2177.	4.0	423
96	Nature of oxygen dopant-induced states in high-temperature $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ superconductors: A photoemission investigation. Physical Review B, 2006, 74, .	3.2	14
97	Quantized Electron Accumulation States in Indium Nitride Studied by Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2006, 97, 237601.	7.8	103
98	Low-Lying Quasiparticle States and Hidden Collective Charge Instabilities in Parent Cobaltate Superconductors. Physical Review Letters, 2006, 96, 216405.	7.8	71
99	Quasiparticlelike Peaks, Kinks, and Electron-Phonon Coupling at the $(\pi, 0)$ Regions in the CMR Oxide $\text{La}_{2-x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$. Physical Review Letters, 2006, 97, 056401.	7.8	56
100	Orbital Dependence of the Fermi Liquid State in Sr_2RuO_4 . Physical Review Letters, 2005, 94, 107003.	7.8	25
101	Fermi Surface Evolution and Luttinger Theorem in Na_xCoO_2 : A Systematic Photoemission Study. Physical Review Letters, 2005, 95, 146401.	7.8	140
102	Quasiparticle Spectra, Charge-Density Waves, Superconductivity, and Electron-Phonon Coupling in 2H-NbSe_2 . Physical Review Letters, 2004, 92, 086401.	7.8	163
103	Quasiparticle Line Shape of Sr_2RuO_4 and Its Relation to Anisotropic Transport. Physical Review Letters, 2004, 92, 137002.	7.8	36
104	Bilayer splitting and coherence effects in optimal and underdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$. Physical Review B, 2004, 69, .	3.2	41
105	Fermi Surface and Quasiparticle Dynamics of $\text{Na}_{0.7}\text{CoO}_2$ Investigated by Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2004, 92, 246402.	7.8	214
106	Mass-renormalized electronic excitations at $(\pi, 0)$ in the superconducting state of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$. Physical Review B, 2003, 68, .	3.2	145
107	Quasiparticle Liquid in the Highly Overdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$. Physical Review Letters, 2002, 88, 167006.	7.8	54
108	Spin-resolved photoemission study of photohole lifetimes in ferromagnetic gadolinium. Physical Review B, 2002, 65, .	3.2	33

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109	ARPES EVIDENCE FOR A QUASIPARTICLE LIQUID IN OVERDOPED $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. Surface Review and Letters, 2002, 09, 1091-1096.	1.1	0
110	Doping and Temperature Dependence of the Mass Enhancement Observed in the Cuprate $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. Physical Review Letters, 2001, 87, 177007.	7.8	331
111	Direct observation of temperature-dependent Fermi surface nesting vectors in a quasi-one-dimensional conductor. Journal of Physics Condensed Matter, 2000, 12, L191-L198.	1.8	24
112	Smith et al. Reply. Physical Review Letters, 2000, 85, 3986-3986.	7.8	8
113	Charge-Density-Wave-Induced Modifications to the Quasiparticle Self-Energy in 2H-TaSe_2 . Physical Review Letters, 2000, 85, 4759-4762.	7.8	85
114	Temperature Dependent Scattering Rates at the Fermi Surface of Optimally Doped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. Physical Review Letters, 2000, 85, 828-831.	7.8	171
115	Many-Body Effects in Angle-Resolved Photoemission: Quasiparticle Energy and Lifetime of a $\text{Mo}(110)$ Surface State. Physical Review Letters, 1999, 83, 2085-2088.	7.8	307
116	Electronic Structure near the Fermi Surface in the Quasi-One-Dimensional Conductor $\text{Li}_0.9\text{Mo}_6\text{O}_{17}$. Physical Review Letters, 1999, 83, 1235-1238.	7.8	38
117	Evidence for Quantum Critical Behavior in the Optimally Doped Cuprate $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. Science, 1999, 285, 2110-2113.	12.6	512
118	Temperature Dependent Photoemission Studies of Optimally Doped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$. Physical Review Letters, 1999, 82, 2179-2182.	7.8	145
119	Temperature Dependence of the Exchange Splitting of the Surface State on $\text{Gd}(0001)$: Evidence against Spin-Mixing Behavior. Physical Review Letters, 1996, 77, 3415-3418.	7.8	67
120	Temperature-dependent study of the partially filled surface state on $\text{Tb}(0001)$. Journal of Electron Spectroscopy and Related Phenomena, 1995, 76, 535-539.	1.7	6
121	Temperature-dependent exchange splitting of unoccupied electronic states in $\text{Gd}(0001)$. Physical Review B, 1994, 50, 2739-2742.	3.2	30
122	Surface Shifts of $4f$ Electron-Addition and Electron-Removal States in $\text{Gd}(0001)$. Physical Review Letters, 1994, 73, 601-604.	7.8	41
123	Partially occupied surface state at the Fermi level of $\text{La}(0001)$. Physical Review B, 1994, 49, 5117-5120.	3.2	20
124	Electronic and magnetic structure of rare-earth materials studied by high-resolution photoemission. Journal of Electron Spectroscopy and Related Phenomena, 1994, 68, 515-524.	1.7	5
125	Surface shift of the unoccupied $4f$ state in La metal. Physical Review Letters, 1993, 70, 1719-1722.	7.8	30