

# Phil D C King

## List of Publications by Citations

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

117 papers	7,119 citations	47 h-index	83 g-index
121 ext. papers	8,045 ext. citations	8 avg, IF	5.45 L-index

#	Paper	IF	Citations
117	Creation and control of a two-dimensional electron liquid at the bare SrTiO <sub>3</sub> surface. <i>Nature Materials</i> , <b>2011</b> , 10, 114-8	27	401
116	Coexistence of the topological state and a two-dimensional electron gas on the surface of Bi(2)Se(3). <i>Nature Communications</i> , <b>2010</b> , 1, 128	17.4	361
115	Large tunable Rashba spin splitting of a two-dimensional electron gas in Bi <sub>2</sub> Se <sub>3</sub> . <i>Physical Review Letters</i> , <b>2011</b> , 107, 096802	7.4	351
114	Band gap, electronic structure, and surface electron accumulation of cubic and rhombohedral In <sub>2</sub> O <sub>3</sub> . <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	323
113	Controlling bulk conductivity in topological insulators: key role of anti-site defects. <i>Advanced Materials</i> , <b>2012</b> , 24, 2154-8	24	227
112	Surface electron accumulation and the charge neutrality level in In <sub>2</sub> O <sub>3</sub> . <i>Physical Review Letters</i> , <b>2008</b> , 101, 116808	7.4	217
111	Direct observation of spin-polarized bulk bands in an inversion-symmetric semiconductor. <i>Nature Physics</i> , <b>2014</b> , 10, 835-839	16.2	209
110	Emergent quantum confinement at topological insulator surfaces. <i>Nature Communications</i> , <b>2012</b> , 3, 1159	7.4	199
109	Strong electron correlations in the normal state of the iron-based FeSe <sub>0.42</sub> Te <sub>0.58</sub> superconductor observed by angle-resolved photoemission spectroscopy. <i>Physical Review Letters</i> , <b>2010</b> , 104, 097002	7.4	174
108	Conductivity in transparent oxide semiconductors. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 334214	14.8	151
107	Interplay of spin-orbit interactions, dimensionality, and octahedral rotations in semimetallic SrIrO(3). <i>Physical Review Letters</i> , <b>2015</b> , 114, 016401	7.4	148
106	Atomic-scale control of competing electronic phases in ultrathin LaNiO <sub>3</sub> . <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 443-7	28.7	140
105	Bandgap and effective mass of epitaxial cadmium oxide. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 022101	3.4	140
104	Subband structure of a two-dimensional electron gas formed at the polar surface of the strong spin-orbit perovskite KTaO <sub>3</sub> . <i>Physical Review Letters</i> , <b>2012</b> , 108, 117602	7.4	139
103	Electronic Structure and Enhanced Charge-Density Wave Order of Monolayer VSe. <i>Nano Letters</i> , <b>2018</b> , 18, 4493-4499	11.5	136
102	Tailoring the nature and strength of electron-phonon interactions in the SrTiO <sub>3</sub> (001) 2D electron liquid. <i>Nature Materials</i> , <b>2016</b> , 15, 835-9	27	126
101	Quasiparticle dynamics and spin-orbital texture of the SrTiO <sub>3</sub> two-dimensional electron gas. <i>Nature Communications</i> , <b>2014</b> , 5, 3414	17.4	120

100	InN/GaN valence band offset: High-resolution x-ray photoemission spectroscopy measurements. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	118
99	Shallow donor state of hydrogen in In <sub>2</sub> O <sub>3</sub> and SnO <sub>2</sub> : Implications for conductivity in transparent conducting oxides. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	116
98	Electronic structure of a quasi-freestanding MoS <sub>2</sub> monolayer. <i>Nano Letters</i> , <b>2014</b> , 14, 1312-6	11.5	110
97	Observation of Ultrafast Free Carrier Dynamics in Single Layer MoS <sub>2</sub> . <i>Nano Letters</i> , <b>2015</b> , 15, 5883-7	11.5	106
96	Valence-band electronic structure of CdO, ZnO, and MgO from x-ray photoemission spectroscopy and quasi-particle-corrected density-functional theory calculations. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	106
95	Determination of the branch-point energy of InN: Chemical trends in common-cation and common-anion semiconductors. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	96
94	Universality of electron accumulation at wurtzite c- and a-plane and zinc-blende InN surfaces. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 092101	3.4	96
93	Microscopic origin of electron accumulation in In <sub>2</sub> O <sub>3</sub> . <i>Physical Review Letters</i> , <b>2013</b> , 110, 056803	7.4	93
92	Ubiquitous formation of bulk Dirac cones and topological surface states from a single orbital manifold in transition-metal dichalcogenides. <i>Nature Materials</i> , <b>2018</b> , 17, 21-28	27	89
91	Control of a two-dimensional electron gas on SrTiO <sub>3</sub> (111) by atomic oxygen. <i>Physical Review Letters</i> , <b>2014</b> , 113, 177601	7.4	88
90	Spin-orbit splitting of the Shockley surface state on Cu(111). <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	84
89	Ultrafast dynamics of massive dirac fermions in bilayer graphene. <i>Physical Review Letters</i> , <b>2014</b> , 112, 257401	7.4	82
88	Valence band offset of InN/AlN heterojunctions measured by x-ray photoelectron spectroscopy. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 132105	3.4	81
87	Surface band-gap narrowing in quantized electron accumulation layers. <i>Physical Review Letters</i> , <b>2010</b> , 104, 256803	7.4	80
86	Fermiology and Superconductivity of Topological Surface States in PdTe <sub>2</sub> . <i>Physical Review Letters</i> , <b>2018</b> , 120, 156401	7.4	71
85	Negative electronic compressibility and tunable spin splitting in WSe <sub>2</sub> . <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 1043-7	28.7	70
84	Carrier-Density Control of the SrTiO <sub>3</sub> (001) Surface 2D Electron Gas studied by ARPES. <i>Advanced Materials</i> , <b>2015</b> , 27, 3894-9	24	70
83	Observation of quantized subband states and evidence for surface electron accumulation in CdO from angle-resolved photoemission spectroscopy. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	70

82	Ultrafast Band Structure Control of a Two-Dimensional Heterostructure. <i>ACS Nano</i> , <b>2016</b> , 10, 6315-22	16.7	69
81	Unification of the electrical behavior of defects, impurities, and surface states in semiconductors: Virtual gap states in CdO. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	69
80	Valence band offset of the ZnO/AlN heterojunction determined by x-ray photoemission spectroscopy. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 202108	3.4	69
79	Nonparabolic coupled Poisson-Schrödinger solutions for quantized electron accumulation layers: Band bending, charge profile, and subbands at InN surfaces. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	67
78	Maximal Rashba-like spin splitting via kinetic-energy-coupled inversion-symmetry breaking. <i>Nature</i> , <b>2017</b> , 549, 492-496	50.4	64
77	Tunable carrier multiplication and cooling in graphene. <i>Nano Letters</i> , <b>2015</b> , 15, 326-31	11.5	64
76	In adlayers on c-plane InN surfaces: A polarity-dependent study by x-ray photoemission spectroscopy. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	64
75	Observation of shallow-donor muonium in Ga2O3: Evidence for hydrogen-induced conductivity. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 062110	3.4	61
74	Spin-valley locking in the normal state of a transition-metal dichalcogenide superconductor. <i>Nature Communications</i> , <b>2016</b> , 7, 11711	17.4	61
73	Strain Control of Fermiology and Many-Body Interactions in Two-Dimensional Ruthenates. <i>Physical Review Letters</i> , <b>2016</b> , 116, 197003	7.4	56
72	Variation of band bending at the surface of Mg-doped InGaN: Evidence of p-type conductivity across the composition range. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	53
71	Surface Structure and Electronic Properties of In2O3(111) Single-Crystal Thin Films Grown on Y-Stabilized ZrO2(111). <i>Chemistry of Materials</i> , <b>2009</b> , 21, 4353-4355	9.6	51
70	Electron mobility in CdO films. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 073712	2.5	45
69	High-Resolution Photoemission on Sr2RuO4 Reveals Correlation-Enhanced Effective Spin-Orbit Coupling and Dominantly Local Self-Energies. <i>Physical Review X</i> , <b>2019</b> , 9,	9.1	44
68	Nearly free electrons in a 5d delafossite oxide metal. <i>Science Advances</i> , <b>2015</b> , 1, e1500692	14.3	42
67	Acoustic band gaps in periodically and quasiperiodically modulated waveguides. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 014902	2.5	41
66	Spectroscopic indications of polaronic behavior of the strong spin-orbit insulator Sr3Ir2O7. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	40
65	The influence of Sn doping on the growth of In2O3 on Y-stabilized ZrO2(100) by oxygen plasma assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 013703	2.5	38

64	Valence band density of states of zinc-blende and wurtzite InN from x-ray photoemission spectroscopy and first-principles calculations. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	37
63	Structural origin of apparent Fermi surface pockets in angle-resolved photoemission of BiBr(2-x)La(x)CuO(6+ $\delta$ ). <i>Physical Review Letters</i> , <b>2011</b> , 106, 127005	7.4	36
62	Unintentional conductivity of indium nitride: transport modelling and microscopic origins. <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 174201	1.8	35
61	Narrow-band anisotropic electronic structure of ReS <sub>2</sub> . <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	33
60	Band bending at the surfaces of In-rich InGaN alloys. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 113716	2.5	32
59	Spin and valley control of free carriers in single-layer WS <sub>2</sub> . <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	31
58	Correlated vs. conventional insulating behavior in the Jeff=12 vs. 32 bands in the layered iridate Ba <sub>2</sub> IrO <sub>4</sub> . <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	29
57	The influence of conduction band plasmons on core-level photoemission spectra of InN. <i>Surface Science</i> , <b>2008</b> , 602, 871-875	1.8	29
56	Orbital- and k <sub>z</sub> -Selective Hybridization of Se 4p and Ti 3d States in the Charge Density Wave Phase of TiSe <sub>2</sub> . <i>Physical Review Letters</i> , <b>2019</b> , 122, 076404	7.4	27
55	Hierarchical spin-orbital polarization of a giant Rashba system. <i>Science Advances</i> , <b>2015</b> , 1, e1500495	14.3	27
54	Evidence for topologically protected surface states and a superconducting phase in [Ti <sub>4</sub> ](Ti(1-x)Sn(x))Te <sub>3</sub> using photoemission, specific heat, and magnetization measurements, and density functional theory. <i>Physical Review Letters</i> , <b>2014</b> , 112, 017002	7.4	27
53	Quantifying electronic correlation strength in a complex oxide: A combined DMFT and ARPES study of LaNiO <sub>3</sub> . <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	27
52	Surface, bulk, and interface electronic properties of nonpolar InN. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 112102	3.3	26
51	Direct observation of a uniaxial stress-driven Lifshitz transition in Sr <sub>2</sub> RuO <sub>4</sub> . <i>Npj Quantum Materials</i> , <b>2019</b> , 4,	5	24
50	Band hybridization at the semimetal-semiconductor transition of Ta <sub>2</sub> NiSe <sub>5</sub> enabled by mirror-symmetry breaking. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	24
49	Itinerant ferromagnetism of the Pd-terminated polar surface of PdCoO. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 12956-12960	11.5	24
48	Unconventional magneto-transport in ultrapure PdCoO <sub>2</sub> and PtCoO <sub>2</sub> . <i>Npj Quantum Materials</i> , <b>2018</b> , 3,	5	23
47	Absence of giant spin splitting in the two-dimensional electron liquid at the surface of SrTiO <sub>3</sub> (001). <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	21

46	Optical absorption by dilute GaNSb alloys: Influence of N pair states. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 042110	3.4	20
45	Crossover from lattice to plasmonic polarons of a spin-polarised electron gas in ferromagnetic EuO. <i>Nature Communications</i> , <b>2018</b> , 9, 2305	17.4	19
44	Anomalous change in dielectric constant of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> under violet-to-ultraviolet irradiation. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 202903	3.4	19
43	Ramifications of optical pumping on the interpretation of time-resolved photoemission experiments on graphene. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2015</b> , 200, 340-346	1.7	18
42	X-ray photoemission spectroscopy determination of the InN/yttria stabilized cubic-zirconia valence band offset. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 112103	3.4	18
41	Surface electronic properties of undoped InAlN alloys. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 172105	3.4	17
40	Surface electronic properties of clean and S-terminated InSb(001) and (111)B. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 083709	2.5	17
39	The dynamics of ultraviolet-induced oxygen vacancy at the surface of insulating SrTiO <sub>3</sub> (0 0 1). <i>Applied Surface Science</i> , <b>2015</b> , 355, 210-212	6.7	16
38	Surface electronic properties of n- and p-type InGaN alloys. <i>Physica Status Solidi (B): Basic Research</i> , <b>2008</b> , 245, 881-883	1.3	16
37	Distinct behavior of localized and delocalized carriers in anatase TiO <sub>2</sub> (001) during reaction with O <sub>2</sub> . <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	16
36	Influence of growth conditions and polarity on interface-related electron density in InN. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 103703	2.5	15
35	Formation of heavy d-electron quasiparticles in Sr <sub>3</sub> Ru <sub>2</sub> O <sub>7</sub> . <i>New Journal of Physics</i> , <b>2013</b> , 15, 063029	2.9	14
34	Dual quantum confinement and anisotropic spin splitting in the multivalley semimetal PtSe <sub>2</sub> . <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	13
33	On the origin of the anomalous peak in the resistivity of TiSe <sub>2</sub> . <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	13
32	Formation and Observation of a Quasi-Two-Dimensional dxy Electron Liquid in Epitaxially Stabilized Sr(2-x)La(x)TiO <sub>4</sub> Thin Films. <i>Physical Review Letters</i> , <b>2015</b> , 115, 096405	7.4	13
31	Probing spin correlations using angle-resolved photoemission in a coupled metallic/Mott insulator system. <i>Science Advances</i> , <b>2020</b> , 6, eaaz0611	14.3	12
30	Proximity-induced ferromagnetism and chemical reactivity in few-layer VSe <sub>2</sub> heterostructures. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	12
29	In-adlayers on non-polar and polar InN surfaces: Ion scattering and photoemission studies. <i>Physica B: Condensed Matter</i> , <b>2007</b> , 401-402, 351-354	2.8	12

28	A tunable low-energy photon source for high-resolution angle-resolved photoemission spectroscopy. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 113103	1.7	11
27	Self-compensation in highly n-type InN. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 011903	3.4	10
26	Hybrid reflections from multiple x-ray scattering in epitaxial oxide films. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 131903	3.4	9
25	Electronically driven spin-reorientation transition of the correlated polar metal CaRuO <sub>3</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 15524-15529	11.5	9
24	Morphology control of epitaxial monolayer transition metal dichalcogenides. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	9
23	Nearly-free-electron system of monolayer Na on the surface of single-crystal HfSe <sub>2</sub> . <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	9
22	Hidden kagome-lattice picture and origin of high conductivity in delafossite PtCoO <sub>2</sub> . <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	8
21	Direct observation of the energy gain underpinning ferromagnetic superexchange in the electronic structure of CrGeTe <sub>3</sub> . <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	7
20	Momentum-resolved linear dichroism in bilayer MoS <sub>2</sub> . <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	7
19	Transient hot electron dynamics in single-layer TaS <sub>2</sub> . <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	6
18	A general route to form topologically-protected surface and bulk Dirac fermions along high-symmetry lines. <i>Electronic Structure</i> , <b>2019</b> , 1, 014002	2.6	6
17	Surface atomic structure of epitaxial LaNiO <sub>3</sub> thin films studied by in situ LEED-I(V). <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	5
16	Quasi-two-dimensional Fermi surface topography of the delafossite PdRhO <sub>2</sub> . <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	5
15	Ultrafast Triggering of Insulator-Metal Transition in Two-Dimensional VSe. <i>Nano Letters</i> , <b>2021</b> , 21, 1968-1975	12.5	5
14	Changes of Fermi surface topology due to the rhombohedral distortion in SnTe. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	4
13	The sub-band structure of atomically sharp dopant profiles in silicon. <i>Npj Quantum Materials</i> , <b>2020</b> , 5,	5	4
12	Electronic Properties of Post-transition Metal Oxide Semiconductor Surfaces. <i>Springer Series in Materials Science</i> , <b>2012</b> , 127-145	0.9	4
11	Weyl-like points from band inversions of spin-polarised surface states in NbGeSb. <i>Nature Communications</i> , <b>2019</b> , 10, 5485	17.4	4

10	Angle, Spin, and Depth Resolved Photoelectron Spectroscopy on Quantum Materials. <i>Chemical Reviews</i> , <b>2021</b> , 121, 2816-2856	68.1	3
9	Surface electronic properties of Mg-doped InAlN alloys. <i>Physica Status Solidi (B): Basic Research</i> , <b>2009</b> , 246, 1169-1172	1.3	2
8	Strong-coupling charge density wave in monolayer TiSe <sub>2</sub> . <i>2D Materials</i> , <b>2021</b> , 8, 015004	5.9	2
7	Switching of the electron-phonon interaction in 1T' <sub>2</sub> Se <sub>2</sub> assisted by hot carriers. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	2
6	Spectroscopic view of ultrafast charge carrier dynamics in single- and bilayer transition metal dichalcogenide semiconductors. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2021</b> , 250, 147093	1.7	2
5	The donor nature of muonium in undoped, heavily n-type and p-type InAs. <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 075803	1.8	1
4	Response to Comment on Bandgap and effective mass determination of epitaxial cadmium oxide[Appl. Phys. Lett. 92, 106103 (2008)]. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 106104	3.4	1
3	Mechanisms in the Formation of High Quality Schottky Contacts to n-type ZnO. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1035, 1		1
2	Tomographic mapping of the hidden dimension in quasi-particle interference. <i>Nature Communications</i> , <b>2021</b> , 12, 6739	17.4	1
1	Controlling topology with strain. <i>Nature Materials</i> , <b>2021</b> , 20, 1046-1047	27	0