

C Bell

List of Publications by Year in descending order

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93

papers

5,351

citations

94433

37

h-index

82547

72

g-index

96

all docs

96

docs citations

96

times ranked

5247

citing authors

#	ARTICLE	IF	CITATIONS
1	Direct imaging of the coexistence of ferromagnetism and superconductivity at the LaAlO ₃ /SrTiO ₃ interface. <i>Nature Physics</i> , 2011, 7, 767-771.	16.7	765
2	Titanium d _x y ferromagnetism at the LaAlO ₃ /SrTiO ₃ interface. <i>Nature Materials</i> , 2013, 12, 703-706.	27.5	303
3	Dominant Mobility Modulation by the Electric Field Effect at the $\text{LaAlO}_3/\text{SrTiO}_3$ Interface. <i>Physical Review Letters</i> , 2009, 103, 226802.	7.8	246
4	Detection of Berry's Phase in a Bulk Rashba Semiconductor. <i>Science</i> , 2013, 342, 1490-1493.	12.6	244
5	Two-dimensional normal-state quantum oscillations in a superconducting heterostructure. <i>Nature</i> , 2009, 462, 487-490.	27.8	222
6	Critical Current Oscillations in Strong Ferromagnetic Junctions. <i>Physical Review Letters</i> , 2006, 97, 177003.	7.8	201
7	Critical thickness for ferromagnetism in LaAlO ₃ /SrTiO ₃ heterostructures. <i>Nature Communications</i> , 2012, 3, 922.	12.8	186
8	Built-in and induced polarization across LaAlO ₃ /SrTiO ₃ heterojunctions. <i>Nature Physics</i> , 2011, 7, 80-86.	16.7	178
9	Subband Structure of a Two-Dimensional Electron Gas Formed at the Polar Surface of the Strong Spin-Orbit Perovskite KTaO_3 . <i>Physical Review Letters</i> , 2012, 108, 117602.	7.8	173
10	Locally enhanced conductivity due to the tetragonal domain structure in LaAlO ₃ /SrTiO ₃ heterointerfaces. <i>Nature Materials</i> , 2013, 12, 1091-1095.	27.5	172
11	Control of electronic conduction at an oxide heterointerface using surface polar adsorbates. <i>Nature Communications</i> , 2011, 2, 494.	12.8	149
12	Charge Writing at the LaAlO ₃ /SrTiO ₃ Surface. <i>Nano Letters</i> , 2010, 10, 2588-2591.	9.1	107
13	Zero to transition in superconductor-ferromagnet-superconductor junctions. <i>Physical Review B</i> , 2007, 76, .	3.2	99
14	Thickness dependence of the mobility at the LaAlO ₃ /SrTiO ₃ interface. <i>Applied Physics Letters</i> , 2009, 94, 222111.	3.3	96
15	Gate-tuned superfluid density at the superconducting LaAlO ₃ /SrTiO ₃ interface. <i>Physical Review B</i> , 2012, 86, .	3.2	94
16	Controllable Josephson current through a pseudospin-valve structure. <i>Applied Physics Letters</i> , 2004, 84, 1153-1155.	3.3	90
17	Dramatic mobility enhancements in doped SrTiO ₃ thin films by defect management. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	88
18	Spin Dynamics in a Superconductor-Ferromagnet Proximity System. <i>Physical Review Letters</i> , 2008, 100, 047002.	7.8	83

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19	Enhancing Electron Mobility at the LaAlO ₃ /SrTiO ₃ Interface by Surface Control. Advanced Materials, 2013, 25, 4735-4738.	21.0	71
20	An unforeseen polymorph of coronene by the application of magnetic fields during crystal growth. Nature Communications, 2016, 7, 11555.	12.8	68
21	Imaging and tuning polarity at SrTiO ₃ domain walls. Nature Materials, 2017, 16, 1203-1208.	27.5	68
22	Transistor operation and mobility enhancement in top-gated LaAlO ₃ /SrTiO ₃ heterostructures. Applied Physics Letters, 2013, 103, .	3.3	64
23	Fabrication of nanoscale heterostructure devices with a focused ion beam microscope. Nanotechnology, 2003, 14, 630-632.	2.6	63
24	Stoichiometry control of the electronic properties of the LaAlO ₃ /SrTiO ₃ heterointerface. Applied Physics Letters, 2013, 102, .	3.3	63
25	Characteristics of strong ferromagnetic Josephson junctions with epitaxial barriers. Physical Review B, 2005, 71, .	3.2	62
26	Structural Comparison of $\text{LaAlO}_3/\text{SrTiO}_3$ Heterointerfaces via Free Surface Charges. Advanced Materials, 2011, 23, 1744-1747.	7.8	61
27	Tuning the Electron Gas at an Oxide Heterointerface via Free Surface Charges. Advanced Materials, 2011, 23, 1744-1747.	21.0	60
28	Controlling band alignments by artificial interface dipoles at perovskite heterointerfaces. Nature Communications, 2015, 6, 6759.	12.8	58
29	Enhancing the electron mobility via delta-doping in SrTiO ₃ . Applied Physics Letters, 2010, 97, .	3.3	52
30	Intrinsic spin-orbit coupling in superconducting $\text{Nb}/\text{Fe}_{50}\text{Mn}_{50}$ heterostructures. Physical Review B, 2012, 86, .	3.2	49
31	Doped SrTiO_3 Heterointerfaces. Physical Review Letters, 2011, 107, 106801.	7.8	46
32	Scanning SQUID susceptometry of a paramagnetic superconductor. Physical Review B, 2012, 85, .	3.2	46
33	Dual-Gate Modulation of Carrier Density and Disorder in an Oxide Two-Dimensional Electron System. Nano Letters, 2016, 16, 6130-6136.	9.1	45
34	Proximity and Josephson effects in superconductor/antiferromagnetic Nb/ $\text{Fe}_{50}\text{Mn}_{50}$ heterostructures. Physical Review B, 2003, 68, .	3.2	44
35	Coexistence of two-dimensional and three-dimensional Shubnikov-de Haas oscillations in irradiated KTaO_3 heterointerfaces. Physical Review B, 2013, 88, .	3.2	44
36	Scanning Probe Manipulation of Magnetism at the LaAlO ₃ /SrTiO ₃ Heterointerface. Nano Letters, 2012, 12, 4055-4059.	9.1	43

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37	Anisotropic Transport at the LaAlO ₃ /SrTiO ₃ Interface Explained by Microscopic Imaging of Channel-Flow over SrTiO ₃ Domains. ACS Applied Materials & Interfaces, 2016, 8, 12514-12519.	8.0	42
38	Quantum longitudinal and Hall transport at the LaAlO ₃ /SrTiO ₃ interface at low electron densities. Solid State Communications, 2014, 197, 25-29.	1.9	38
39	Single-valley quantum Hall fermion in a dilute Mg _x Zn _{1-x} O/ZnO strongly correlated two-dimensional electron system. Physical Review B, 2012, 85, .	3.2	36
40	Perpendicular magnetic anisotropy and structural properties of NiCu/Cu multilayers. Journal of Applied Physics, 2004, 96, 512-518.	2.5	34
41	Flux-flow-induced giant magnetoresistance in all-amorphous superconductor-ferromagnet hybrids. Physical Review B, 2006, 74, .	3.2	34
42	Spin-dependent transport across Co/LaAlO ₃ /SrTiO ₃ heterojunctions. Applied Physics Letters, 2014, 105, 032406.	3.3	34
43	Common Origin of the Circular-Dichroism Pattern in Angle-Resolved Photoemission Spectroscopy of SrTiO ₃ and Cu ₂ Bi ₂ S ₃ . Physical Review Letters, 2011, 107, 077601.	7.8	33
44	Electric field penetration in Au/Nb:SrTiO ₃ Schottky junctions probed by bias-dependent internal photoemission. Applied Physics Letters, 2011, 98, .	3.3	33
45	Variation in superconducting transition temperature due to tetragonal domains in two-dimensionally doped SrTiO ₃ . Physical Review B, 2016, 94, .	3.2	30
46	Shubnikovâ€“de Haas oscillations in the bulk Rashba semiconductor BiTeI. Physical Review B, 2013, 87, .	3.2	29
47	Depairing current behavior in superconducting Nb ₃ Pd ₈₁ Ni ₁₉ bilayers. Physical Review B, 2007, 75, .	3.2	26
48	Enhanced lattice polarization in SrTiO ₃ measured using optical second-harmonic generation. Physical Review B, 2009, 80, .	3.2	26
49	High-velocity instabilities in the vortex lattice of Nb/permalloy bilayers. Physical Review B, 2007, 76, .	3.2	24
50	Reentrant insulating state in ultrathin manganite films. Applied Physics Letters, 2011, 99, 092513.	3.3	24
51	Atomically Engineered Metalâ€“Insulator Transition at the TiO ₂ /LaAlO ₃ Heterointerface. Nano Letters, 2014, 14, 6743-6746.	9.1	24
52	Enhanced Electrical Transparency by Ultrathin LaAlO ₃ Insertion at Oxide Metal/Semiconductor Heterointerfaces. Nano Letters, 2015, 15, 1622-1626.	9.1	24
53	Magnetotransport effects in polar versus non-polar SrTiO ₃ based heterostructures. Physical Review B, 2012, 86, .	3.2	23
54	Compositional and gate tuning of the interfacial conductivity in LaAlO ₃ /LaTiO ₃ /SrTiO ₃ heterostructures. Applied Physics Letters, 2013, 102, .	3.3	19

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55	Nonmonotonic behavior of the anisotropy coefficient in superconductor-ferromagnet-superconductor trilayers. Physical Review B, 2009, 80, .		3.2	18
56	Metal-to-insulator transition in anatase TiO ₂ thin films induced by growth rate modulation. Applied Physics Letters, 2012, 101, .		3.3	18
57	Transport properties of sharp antiferromagnetic boundaries in Gd/Fe multilayers. Physical Review B, 2004, 69, .		3.2	17
58	Optical Study of Tetragonal Domains in LaAlO ₃ /SrTiO ₃ . Journal of Superconductivity and Novel Magnetism, 2015, 28, 1017-1020.		1.8	16
59	Tunable correlated disorder in alloys. Physical Review Materials, 2021, 5, .		2.4	16
60	Tuning Band Alignment Using Interface Dipoles at the Pt/Anatase TiO ₂ Interface. Advanced Materials, 2015, 27, 7458-7461.		21.0	14
61	Electrical transport between epitaxial manganites and carbon nanotubes. Applied Physics Letters, 2006, 88, 083120.		3.3	13
62	Strain Tuning in Complex Oxide Epitaxial Films Using an Ultrathin Strontium Aluminate Buffer Layer. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700339.		2.4	13
63	In situfabrication of a cross-bridge Kelvin resistor structure by focused ion beam microscopy. Nanotechnology, 2004, 15, 786-789.		2.6	11
64	Universal Bound to the Amplitude of the Vortex Nernst Signal in Superconductors. Physical Review Letters, 2021, 126, 077001.		7.8	11
65	Sub-micron thin film intrinsic Josephson junctions. IEEE Transactions on Applied Superconductivity, 2003, 13, 821-824.		1.7	10
66	Submicron YBa ₂ Cu ₃ O ₇ bicrystal grain boundary junctions by focused ion beam. Superconductor Science and Technology, 2004, 17, 287-290.		3.5	10
67	Pseudo spin-valve behavior in oxide ferromagnet/superconductor/ferromagnet trilayers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 341, 313-319.		2.1	10
68	Resistive transitions in Nb/Cu _{0.41} Ni _{0.59} /Nb trilayers. JETP Letters, 2008, 88, 375-379.		1.4	10
69	Effect of the variation of the exchange energy on the superconducting critical temperature of S/F/S trilayers. European Physical Journal B, 2011, 80, 445-449.		1.5	10
70	Effect of ferromagnetism on superconductivity in manganite/cuprate heterostructures. Physica C: Superconductivity and Its Applications, 2004, 415, 118-124.		1.2	8
71	Sudden critical current drops induced in S/F structures. European Physical Journal B, 2009, 68, 73-77.		1.5	8
72	Inelastic x-ray scattering in heterostructures: electronic excitations in LaAlO ₃ /SrTiO ₃ . Journal of Physics Condensed Matter, 2015, 27, 335501.		1.8	8

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73	Low temperature magneto-morphological characterisation of coronene and the resolution of previously observed unexplained phenomena. <i>Scientific Reports</i> , 2016, 6, 38696.	3.3	8
74	Current-perpendicular-to-plane giant magnetoresistance in submicron pseudo-spin-valve devices. <i>Physical Review B</i> , 2005, 72, .	3.2	7
75	Magnetoresistance of spin valve structures based on the full Heusler alloy Co ₂ MnSi. <i>Journal of Applied Physics</i> , 2006, 100, 013910.	2.5	7
76	Inhomogeneous barrier heights at dipole-controlled SrRuO ₃ /Nb:SrTiO ₃ Schottky junctions. <i>Applied Physics Letters</i> , 2018, 113, 221603.	3.3	7
77	Modulation of the dc Josephson current in pseudo-spin-valve Josephson multilayers. <i>Superconductor Science and Technology</i> , 2005, 18, 921-926.	3.5	6
78	Transport and Magnetic Properties of Strong Ferromagnetic Pi-Junctions. <i>IEEE Transactions on Applied Superconductivity</i> , 2007, 17, 641-644.	1.7	6
79	Tunable coupling of two-dimensional superconductors in bilayer SrTiO ₃ . <i>Physical Review B</i> , 2013, 88, . $\text{xmlns:mml} = "http://www.w3.org/1998/Math/MathML"$ display="inline">>< mml:msub>< mml:mrow>/>< mml:mn>3</mml:mn></mml:msub></mml:math> heterostructures.	3.2	6
80	Dielectric collapse at the LaAlO ₃ /SrTiO ₃ (001) heterointerface under applied electric field. <i>Scientific Reports</i> , 2017, 7, 9516.	3.3	6
81	Superconductor/Ferromagnet Hybrids: Bilayers and Spin Switching. <i>Nanoscience and Technology</i> , 2010, , 323-347.	1.5	6
82	Nanometer-scale epitaxial strain release in perovskite heterostructures using "SrAlO _x " sliding buffer layers. <i>Applied Physics Letters</i> , 2011, 98, 171901.	3.3	5
83	Atomically engineered epitaxial anatase TiO ₂ metal-semiconductor field-effect transistors. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	5
84	Nanoscale superconductor-normal metal-superconductor junctions fabricated by focused ion beam. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 372-376, 14-17.	1.2	4
85	Spin Valve Josephson Junctions. <i>IEEE Transactions on Applied Superconductivity</i> , 2005, 15, 908-911.	1.7	4
86	Electronic structure of the SrTiO ₃ /LaAlO ₃ interface revealed by resonant soft x-ray scattering. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 24, 012012.	0.6	4
87	Observation of signatures of subresolution defects in two-dimensional superconductors with a scanning SQUID. <i>Physical Review B</i> , 2018, 98, .	3.2	2
88	Focused ion beam fabrication and properties of nanoscale Josephson junctions for sensors and other applications. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 1455-1462.	0.8	1
89	Magnetization rotation in a superconductor/ferromagnet bilayer ring structure. <i>Physical Review B</i> , 2009, 80, .	3.2	1
90	Growth Temperature Dependence of the LaAlO ₃ /SrTiO ₃ Interfacial Structure. <i>Journal of Physics: Conference Series</i> , 2011, 320, 012074.	0.4	1

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91	De-constricting the heat. Superconductor Science and Technology, 2015, 28, 080501.		3.5	1
92	Magnetic anisotropy in Fe/U and Ni/U bilayers. Physical Review B, 2021, 103, .		3.2	1
93	Giant-Magnetoresistive/Superconducting Contacts and Josephson Junction Devices. IEEE Transactions on Applied Superconductivity, 2005, 15, 904-907.		1.7	0