Harold Hwang

List of Publications by Year
in descending order

215	33,228	9756 73	3638 180
papers	citations	h-index	g-index

225	225	225	24262
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Disentangling Coexisting Structural Order Through Phase Lock-In Analysis of Atomic-Resolution STEM Data. Microscopy and Microanalysis, 2022, 28, 404-411.	0.2	9
2	Electronic structure of superconducting nickelates probed by resonant photoemission spectroscopy. Matter, 2022, 5, 1806-1815.	5.0	15
3	Correlated Insulating Behavior in Infinite-Layer Nickelates. Frontiers in Physics, 2022, 10, .	1.0	2
4	Observation of an intermediate state during lithium intercalation of twisted bilayer MoS2. Nature Communications, 2022, 13, .	5.8	20
5	Heat Conductorâ€“Insulator Transition in Electrochemically Controlled Hybrid Superlattices. Nano Letters, 2022, 22, 5443-5450.	4.5	10
6	Theory of superconductivity in doped quantum paraelectrics. Npj Quantum Materials, 2022, 7, .	1.8	8
7	Doping evolution of the Mottâ€“Hubbard landscape in infinite-layer nickelates. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	101
8	Isotropic Pauli-limited superconductivity in the infinite-layer nickelate Nd0.775Sr0.225NiO2. Nature Physics, 2021, 17, 473-477.	6.5	50
9	Universal behavior of the bosonic metallic ground state in a two-dimensional superconductor. Npj Quantum Materials, 2021, 6, .	1.8	10
10	Highly Efficient Surface Charge Transfer in Fe₂TiO₅ Epitaxial Thin Film Photoanodes. ACS Applied Energy Materials, 2021, 4, 2098-2106.	2.5	5
11	Electronic Structure Trends Across the Rare-Earth Series in Superconducting Infinite-Layer Nickelates. Physical Review X, 2021, 11, .	2.8	57
12	Strain Gradient Elasticity in SrTiO₃ Membranes: Bending versus Stretching. Nano Letters, 2021, 21, 2470-2475.	4.5	39
13	Epitaxial Stabilization and Oxygen Evolution Reaction Activity of Metastable Columbite Iridium Oxide. ACS Applied Energy Materials, 2021, 4, 3074-3082.	2.5	7
14	Stabilization of Sr₃Al₂O₆ Growth Templates for Ex Situ Synthesis of Freestanding Crystalline Oxide Membranes. Nano Letters, 2021, 21, 4454-4460.	4.5	25
15	Understanding Degradation Mechanisms in SrIrO₃ Oxygen Evolution Electrocatalysts: Chemical and Structural Microscopy at the Nanoscale. Advanced Functional Materials, 2021, 31, 2101542.	7.8	16
16	Non-universal current flow near the metal-insulator transition in an oxide interface. Nature Communications, 2021, 12, 3311.	5.8	9
17	Charge order textures induced by non-linear couplings in a half-doped manganite. Nature Communications, 2021, 12, 3747.	5.8	12
18	Probing the dynamics of ferroelectric topological oscillators with the electron beam. Microscopy and Microanalysis, 2021, 27, 690-692.	0.2	2

#	Article	IF	Citations
19	Emergent chirality in a polar meron to skyrmion transition revealed by 4D-STEM. Microscopy and Microanalysis, 2021, 27, 348-350.	0.2	7
20	Magnetic excitations in infinite-layer nickelates. Science, 2021, 373, 213-216.	6.0	110
21	Fracture and fatigue of thin crystalline SrTiO3 membranes. Applied Physics Letters, 2021, 119, .	1.5	10
22	Nickelate Superconductivity without Rareâ€Earth Magnetism: (La,Sr)NiO₂. Advanced Materials, 2021, 33, e2104083.	11.1	139
23	Insulator-to-metal crossover near the edge of the superconducting dome in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Nd</mml:mi><mml:mrow><mml:mn>1</mml:n Physical Review Research, 2021, 3, .	1.8	11
24	Orbital and spin character of doped carriers in infinite-layer nickelates. Physical Review B, 2021, 104, .	1.1	50
25	Magnetism and Conductivity Along Structural Domain Walls of SrTiO3. Journal of Superconductivity and Novel Magnetism, 2020, 33, 195-197.	0.8	1
26	Spectral weight reduction of two-dimensional electron gases at oxide surfaces across the ferroelectric transition. Scientific Reports, 2020, 10, 16834.	1.6	1
27	Beyond Substrates: Strain Engineering of Ferroelectric Membranes. Advanced Materials, 2020, 32, e2003780.	11.1	58
28	Overcoming Practical Limitations to Probe Electronic Structure in Novel Quantum Materials. Microscopy and Microanalysis, 2020, 26, 724-727.	0.2	0
29	Mapping Topological Dipole Textures, Chirality, and the Potential Energy Landscape of Polar Skyrmions Using 4D-STEM. Microscopy and Microanalysis, 2020, 26, 968-970.	0.2	1
30	High Resolution Transmission Electron Microscopy Study on the Degradation of IrO_x/SrIrO₃ as an Oxygen Evolution Catalyst. Microscopy and Microanalysis, 2020, 26, 3168-3169.	0.2	2
31	Strain-induced room-temperature ferroelectricity in SrTiO3 membranes. Nature Communications, 2020, 11, 3141.	5.8	121
32	A Superconducting Praseodymium Nickelate with Infinite Layer Structure. Nano Letters, 2020, 20, 5735-5740.	4.5	172
33	Extreme tensile strain states in La _{0.7} Ca _{0.3} MnO ₃ membranes. Science, 2020, 368, 71-76.	6.0	151
34	Superconducting Dome in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Nd</mml:mi></mml:mrow><mml:mrow><mml:mn>1-x</mml:mn><mml:mn> Infinite Layer Films. Physical Review Letters, 2020, 125, 027001.	2.9	202
35	Robust <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>d</mml:mi><mml:mrow><mml:msup><mml:mi> -wave superconductivity of infinite-layer nickelates. Physical Review B, 2020, 101, .	1.1	151
36	Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities. Nature Nanotechnology, 2020, 15, 231-237.	15.6	65

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37	Electronic structure of the parent compound of superconducting infinite-layer nickelates. Nature Materials, 2020, 19, 381-385.	13.3	205
38	Aspects of the synthesis of thin film superconducting infinite-layer nickelates. APL Materials, 2020, 8, .	2.2	107
39	Phase diagram of infinite layer praseodymium nickelate <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Pr</mml:mi><mml:mrow><mml:mn>1</m thin films. Physical Review Materials, 2020, 4, .	2.9	30
40	Ferromagnetic resonance of perpendicularly magnetized Tm3Fe5O12/Pt heterostructures. Applied Physics Letters, 2019, 115, .	1.5	23
41	Superconductivity in an infinite-layer nickelate. Nature, 2019, 572, 624-627.	13.7	673
42	A termination-insensitive and robust electron gas at the heterointerface of two complex oxides. Nature Communications, 2019, 10, 4026.	5.8	16
43	A Two-Dimensional MoS₂ Catalysis Transistor by Solid-State Ion Gating Manipulation and Adjustment (SIGMA). Nano Letters, 2019, 19, 7293-7300.	4.5	46
44	Large-Area Crystalline BaSnO₃ Membranes with High Electron Mobilities. ACS Applied Electronic Materials, 2019, 1, 1269-1274.	2.0	29
45	Freestanding Oxide Ferroelectric Tunnel Junction Memories Transferred onto Silicon. Nano Letters, 2019, 19, 3999-4003.	4.5	64
46	Delta-doped SrTiO3 top-gated field effect transistor. Applied Physics Letters, 2019, 114, 231605.	1.5	4
47	Oxygen Evolution Reaction Activity in IrOx/SrIrO3 Catalysts: Correlations between Structural Parameters and the Catalytic Activity. Journal of Physical Chemistry Letters, 2019, 10, 1516-1522.	2.1	24
48	Probing the band alignment in rectifying SrIrO3/Nb:SrTiO3 heterostructures. Applied Physics Letters, 2019, 114, .	1.5	3
49	Heteroepitaxial vertical perovskite hot-electron transistors down to the monolayer limit. Nature Communications, 2019, 10, 5312.	5.8	10
50	Strain-tunable magnetism at oxide domain walls. Nature Physics, 2019, 15, 269-274.	6.5	65
51	Freestanding crystalline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>YB</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>7</mml:mn><mml:mo>â</mml:mo><mml:mi>x</mml:mi></mml:mrow>	0.9	38
52	Strain Tuning in Complex Oxide Epitaxial Films Using an Ultrathin Strontium Aluminate Buffer Layer. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700339.	1.2	13
53	Tuning of Plasmons in Transparent Conductive Oxides by Carrier Accumulation. ACS Photonics, 2018, 5, 1493-1498.	3.2	37
54	Gate-Induced Interfacial Superconductivity in 1T-SnSe₂. Nano Letters, 2018, 18, 1410-1415.	4.5	81

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55	Polaronic behavior in a weak-coupling superconductor. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1475-1480.	3.3	67
56	Atomically engineered epitaxial anatase TiO2 metal-semiconductor field-effect transistors. Applied Physics Letters, 2018, 112, .	1.5	5
57	Gate-Induced Metalâ€“Insulator Transition in MoS₂ by Solid Superionic Conductor LaF₃. Nano Letters, 2018, 18, 2387-2392.	4.5	60
58	Direct Electron Detection for Atomic-Resolution EELS Mapping at Cryogenic Temperature. Microscopy and Microanalysis, 2018, 24, 454-455.	0.2	6
59	Inhomogeneous barrier heights at dipole-controlled SrRuO3/Nb:SrTiO3 Schottky junctions. Applied Physics Letters, 2018, 113, 221603.	1.5	7
60	Carrier density and disorder tuned superconductor-metal transition in a two-dimensional electron system. Nature Communications, 2018, 9, 4008.	5.8	55
61	Superconducting Tunneling Spectroscopy of Spin-Orbit Coupling and Orbital Depairing in Nb:SrTiO3. Physical Review Letters, 2018, 121, 167003.	2.9	9
62	Measurement of elastoresistivity at finite frequency by amplitude demodulation. Review of Scientific Instruments, 2018, 89, 103901.	0.6	10
63	Ultralow Damping in Nanometer-Thick Epitaxial Spinel Ferrite Thin Films. Nano Letters, 2018, 18, 4273-4278.	4.5	48
64	Spontaneous Ionic Polarization in Ammonia-Based Ionic Liquid. ACS Applied Energy Materials, 2018, 1, 2717-2720.	2.5	2
65	Observation of signatures of subresolution defects in two-dimensional superconductors with a scanning SQUID. Physical Review B, 2018, 98, .	1.1	2
66	Synthesis and electronic properties of Fe2TiO5 epitaxial thin films. APL Materials, 2018, 6, .	2.2	18
67	Ubiquitous strong electronâ€“phonon coupling at the interface of FeSe/SrTiO3. Nature Communications, 2017, 8, 14468.	5.8	51
68	Electrical tuning of a quantum plasmonic resonance. Nature Nanotechnology, 2017, 12, 866-870.	15.6	72
69	High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting Bi2O2Se. Nature Nanotechnology, 2017, 12, 530-534.	15.6	507
70	Ultrathin Epitaxial Barrier Layer to Avoid Thermally Induced Phase Transformation in Oxide Heterostructures. ACS Applied Materials & Interfaces, 2017, 9, 54-59.	4.0	27
71	Dielectric collapse at the LaAlO3/SrTiO3 (001) heterointerface under applied electric field. Scientific Reports, 2017, 7, 9516.	1.6	6
72	Mapping cation diffusion through lattice defects in epitaxial oxide thin films on the water-soluble buffer layer Sr3Al2O6 using atomic resolution electron microscopy. APL Materials, 2017, 5, .	2.2	13

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73	Enhancing the barrier height in oxide Schottky junctions using interface dipoles. Applied Physics Letters, 2017, 111, 091602.	1.5	6
74	Imaging and tuning polarity at SrTiO3 domainÂwalls. Nature Materials, 2017, 16, 1203-1208.	13.3	68
75	Gated tuned superconductivity and phonon softening in monolayer and bilayer MoS2. Npj Quantum Materials, 2017, 2, .	1.8	33
76	Two-dimensional limit of crystalline order in perovskite membrane films. Science Advances, 2017, 3, eaao5173.	4.7	103
77	Enhanced Sensitivity of Atomic-Resolution Spectroscopic Imaging by Direct Electron Detection. Microscopy and Microanalysis, 2017, 23, 366-367.	0.2	14
78	Band Edge Engineering of Oxide Photoanodes for Photoelectrochemical Water Splitting: Integration of Subsurface Dipoles with Atomicâ€Scale Control. Advanced Energy Materials, 2016, 6, 1502154.	10.2	39
79	Evolution of the Valley Position in Bulk Transition-Metal Chalcogenides and Their Monolayer Limit. Nano Letters, 2016, 16, 4738-4745.	4.5	80
80	Variation in superconducting transition temperature due to tetragonal domains in two-dimensionally doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></m Physical Review B, 2016, 94, .	1.1	30
81	Impurity Segregation via Extended Defects in Oxide Thin Films Probed by Aberration-Corrected STEM-EELS. Microscopy and Microanalysis, 2016, 22, 1518-1519.	0.2	0
82	Thermodynamic guiding principles in selective synthesis of strontium iridate Ruddlesden-Popper epitaxial films. APL Materials, 2016, 4, .	2.2	41
83	Depth resolved domain mapping in tetragonal SrTiO3 by micro-Laue diffraction. Applied Physics Letters, 2016, 108, 182901.	1.5	6
84	Magnetic anisotropy, damping, and interfacial spin transport in Pt/LSMO bilayers. AIP Advances, 2016, 6, .	0.6	35
85	Anisotropic Transport at the LaAlO₃/SrTiO₃ Interface Explained by Microscopic Imaging of Channel-Flow over SrTiO₃ Domains. ACS Applied Materials & Interfaces, 2016, 8, 12514-12519.	4.0	42
86	A highly active and stable IrO _x /SrIrO ₃ catalyst for the oxygen evolution reaction. Science, 2016, 353, 1011-1014.	6.0	1,606
87	Synthesis of freestanding single-crystal perovskite films and heterostructures by etching of sacrificial water-solubleÂlayers. Nature Materials, 2016, 15, 1255-1260.	13.3	387
88	Dual-Gate Modulation of Carrier Density and Disorder in an Oxide Two-Dimensional Electron System. Nano Letters, 2016, 16, 6130-6136.	4.5	45
89	Photoinduced Demagnetization and Insulator-to-Metal Transition in Ferromagnetic InsulatingBaFeO3Thin Films. Physical Review Letters, 2016, 116, 256402.	2.9	20
90	High Responsivity Phototransistors Based on Fewâ€Layer ReS₂ for Weak Signal Detection. Advanced Functional Materials, 2016, 26, 1938-1944.	7.8	270

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91	Tuning Band Alignment Using Interface Dipoles at the Pt/Anatase TiO₂ Interface. Advanced Materials, 2015, 27, 7458-7461.	11.1	14
92	Strain Control at Two-Dimensional Oxide Interfaces Probed by Aberration-Corrected STEM-EELS. Microscopy and Microanalysis, 2015, 21, 1137-1138.	0.2	0
93	Polarization-sensitive broadband photodetector using a black phosphorus vertical pâ€“n junction. Nature Nanotechnology, 2015, 10, 707-713.	15.6	1,007
94	Electrically Tunable Coherent Optical Absorption in Graphene with Ion Gel. Nano Letters, 2015, 15, 1570-1576.	4.5	85
95	Enhanced Electrical Transparency by Ultrathin LaAlO3 Insertion at Oxide Metal/Semiconductor Heterointerfaces. Nano Letters, 2015, 15, 1622-1626.	4.5	24
96	Optical Study of Tetragonal Domains in LaAlO3/SrTiO3. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1017-1020.	0.8	16
97	Pressure induced metallization with absence of structural transition in layered molybdenum diselenide. Nature Communications, 2015, 6, 7312.	5.8	193
98	Direct Imaging of Nanoscale Conductance Evolution in Ion-Gel-Gated Oxide Transistors. Nano Letters, 2015, 15, 4730-4736.	4.5	28
99	Controlling band alignments by artificial interface dipoles at perovskite heterointerfaces. Nature Communications, 2015, 6, 6759.	5.8	58
100	Inelastic x-ray scattering in heterostructures: electronic excitations in LaAlO₃/SrTiO₃. Journal of Physics Condensed Matter, 2015, 27, 335501.	0.7	8
101	Origin of the Magnetoresistance in Oxide Tunnel Junctions Determined through Electric Polarization Control of the Interface. Physical Review X, 2015, 5, .	2.8	29
102	Quantum longitudinal and Hall transport at the LaAlO3/SrTiO3 interface at low electron densities. Solid State Communications, 2014, 197, 25-29.	0.9	38
103	Spatial density profile of electrons near the LaAlO3/SrTiO3 heterointerface revealed by time-resolved photoluminescence spectroscopy. Applied Physics Letters, 2014, 104, .	1.5	16
104	Quantification and impact of nonparabolicity of the conduction band of indium tin oxide on its plasmonic properties. Applied Physics Letters, 2014, 105, 181117.	1.5	69
105	Large-Scale Production of Graphene Nanoribbons from Electrospun Polymers. Journal of the American Chemical Society, 2014, 136, 17284-17291.	6.6	26
106	Visualizing the interfacial evolution from charge compensation to metallic screening across the manganite metalâ€“insulator transition. Nature Communications, 2014, 5, 3464.	5.8	73
107	Visible-light-enhanced gating effect at the LaAlO3/SrTiO3 interface. Nature Communications, 2014, 5, 5554.	5.8	79
108	Atomically Engineered Metalâ€“Insulator Transition at the TiO₂/LaAlO₃ Heterointerface. Nano Letters, 2014, 14, 6743-6746.	4.5	24

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109	Generation and electric control of spinâ€“valley-coupled circular photogalvanic current in WSe2. Nature Nanotechnology, 2014, 9, 851-857.	15.6	278
110	BaFeO3 cubic single crystalline thin film: A ferromagnetic insulator. Applied Physics Letters, 2013, 103, .	1.5	33
111	Enhancing Electron Mobility at the LaAlO₃/SrTiO₃ Interface by Surface Control. Advanced Materials, 2013, 25, 4735-4738.	11.1	71
112	Detection of Berryâ€™s Phase in a Bulk Rashba Semiconductor. Science, 2013, 342, 1490-1493.	6.0	244
113	Shubnikovâ€“de Haas oscillations in the bulk Rashba semiconductor BiTeI. Physical Review B, 2013, 87, .	1.1	29
114	Controlled Growth of High-Quality Monolayer WS₂ Layers on Sapphire and Imaging Its Grain Boundary. ACS Nano, 2013, 7, 8963-8971.	7.3	696
115	Locally enhanced conductivity due to the tetragonal domain structure in LaAlO3/SrTiO3 heterointerfaces. Nature Materials, 2013, 12, 1091-1095.	13.3	172
116	Strongly Spin-Orbit Coupled Two-Dimensional Electron Gas Emerging near the Surface of Polar Semiconductors. Physical Review Letters, 2013, 110, 107204.	2.9	154
117	Titanium dx y ferromagnetism at the LaAlO3/SrTiO3Âinterface. Nature Materials, 2013, 12, 703-706.	13.3	303
118	Landau Level Spectroscopy of Dirac Electrons in a Polar Semiconductor with Giant Rashba Spin Splitting. Physical Review Letters, 2013, 111, 166403.	2.9	27
119	Compositional and gate tuning of the interfacial conductivity in LaAlO3/LaTiO3/SrTiO3 heterostructures. Applied Physics Letters, 2013, 102, .	1.5	19
120	Spontaneous B-site order and metallic ferrimagnetism in LaSrVMoO6 grown by pulsed laser deposition. Applied Physics Letters, 2013, 102, .	1.5	7
121	Transistor operation and mobility enhancement in top-gated LaAlO3/SrTiO3 heterostructures. Applied Physics Letters, 2013, 103, .	1.5	64
122	Stoichiometry control of the electronic properties of the LaAlO3/SrTiO3 heterointerface. Applied Physics Letters, 2013, 102, .	1.5	63
123	Tunable coupling of two-dimensional superconductors in bilayer SrTiO<mml:math 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. Physical Review B, 2013, 88, .	1.1	6
124	Coexistence of two-dimensional and three-dimensional Shubnikovâ€“de Haas oscillations in Ar<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math>-irradiated KTaO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 88, .	1.1	44
125	Intrinsic spin-orbit coupling in superconducting<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>δ</mml:mi></mml:math>-doped SrTiO<mml:math 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. Physical Review B, 2012, 86, .	1.1	49
126	Metal-to-insulator transition in anatase TiO2 thin films induced by growth rate modulation. Applied Physics Letters, 2012, 101, .	1.5	18

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127	Subband Structure of a Two-Dimensional Electron Gas Formed at the Polar Surface of the Strong Spin-Orbit Perovskite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>KTaO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2012, 108, 117602.	2.9	173
128	Gate-tuned superfluid density at the superconducting LaAlO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>interface. Physical Review B, 2012, 86, .	1.1	94
129	Scanning Probe Manipulation of Magnetism at the LaAlO₃/SrTiO₃ Heterointerface. Nano Letters, 2012, 12, 4055-4059.	4.5	43
130	Magnetotransport effects in polar versus non-polar SrTiO3based heterostructures. Physical Review B, 2012, 86, .	1.1	23
131	Emergent phenomena at oxide interfaces. Nature Materials, 2012, 11, 103-113.	13.3	2,086
132	Scanning SQUID susceptometry of a paramagnetic superconductor. Physical Review B, 2012, 85, .	1.1	46
133	LaVO 4 : Eu Phosphor films with enhanced Eu solubility. Applied Physics Letters, 2011, 98, .	1.5	36
134	Direct imaging of the coexistence of ferromagnetism and superconductivity atÂtheÂLaAlO3/SrTiO3 interface. Nature Physics, 2011, 7, 767-771.	6.5	765
135	A heteroepitaxial perovskite metal-base transistor. Nature Materials, 2011, 10, 198-201.	13.3	104
136	Built-in and induced polarization across LaAlO3/SrTiO3 heterojunctions. Nature Physics, 2011, 7, 80-86.	6.5	178
137	Tuning the Electron Gas at an Oxide Heterointerface via Free Surface Charges. Advanced Materials, 2011, 23, 1744-1747.	11.1	60
138	Electric field penetration in Au/Nb:SrTiO3 Schottky junctions probed by bias-dependent internal photoemission. Applied Physics Letters, 2011, 98, .	1.5	33
139	Electronic charges and electric potential at LaAlO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	1.1	64
140	Fermi Surface and Superconductivity in Low-Density High-Mobility <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="bold-italic">Î´</mml:mi></mml:math>-Doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="bold">SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2011, 107, 106801.	2.9	46
141	Reentrant insulating state in ultrathin manganite films. Applied Physics Letters, 2011, 99, 092513.	1.5	24
142	Nanometer-scale epitaxial strain release in perovskite heterostructures using â€œSrAlOxâ€•sliding buffer layers. Applied Physics Letters, 2011, 98, 171901.	1.5	5
143	Finite size effect and phase diagram of ultra-thin La0.7Sr0.3MnO3. Solid State Communications, 2010, 150, 598-601.	0.9	37
144	Enhancing the electron mobility via delta-doping in SrTiO3. Applied Physics Letters, 2010, 97, .	1.5	52

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145	Microscopic origins for stabilizing room-temperature ferromagnetism in ultrathin manganite layers. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11682-11685.	3.3	135
146	Charge Writing at the LaAlO₃/SrTiO₃ Surface. Nano Letters, 2010, 10, 2588-2591.	4.5	107
147	An Emergent Change of Phase for Electronics. Science, 2010, 327, 1601-1602.	6.0	253
148	Dramatic mobility enhancements in doped SrTiO3 thin films by defect management. Applied Physics Letters, 2010, 97, .	1.5	88
149	Mn 3 O 4 precipitates in laser-ablated manganite films. Applied Physics Letters, 2009, 95, .	1.5	19
150	Termination control of the interface dipole in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>La</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.7</mml:m Physical Review B, 2009, 79, .	1.1	80
151	Magnetodielectric coupling in nonmagnetic Au/GaAs:Si Schottky barriers. Physical Review B, 2009, 80, .	1.1	10
152	Dominant Mobility Modulation by the Electric Field Effect at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaAlO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>/</mml:mo><mml:msub><mml Physical Review Letters, 2009, 103, 226802.	2.9	246
153	Spectroscopic Evidence for Competing Reconstructions in Polar Multilayers<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaAlO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>/</mml:mo><mml:msub><mml Physical Review Letters, 2009, 102, 236401.	2.9	40
154	Interface reconstruction in V-oxide heterostructures determined by x-ray absorption spectroscopy. Applied Physics Letters, 2009, 95, 023115.	1.5	11
155	Resonant soft x-ray scattering studies of interface reconstructions in SrTiO3/LaAlO3 superlattices. Journal of Applied Physics, 2009, 106, 083705.	1.1	22
156	Multiple conducting carriers generated in LaAlO3/SrTiO3 heterostructures. Applied Physics Letters, 2009, 95, .	1.5	104
157	Two-dimensional normal-state quantum oscillations in a superconducting heterostructure. Nature, 2009, 462, 487-490.	13.7	222
158	Modulation doping of a Mott quantum well by a proximate polar discontinuity. Physical Review B, 2009, 79, .	1.1	41
159	Epitaxial growth and characterization of Eu0.5Sr0.5CoO3 thin films by off-axis sputtering. Applied Physics Letters, 2009, 95, 122505.	1.5	4
160	Thickness dependence of the mobility at the LaAlO3/SrTiO3 interface. Applied Physics Letters, 2009, 94, 222111.	1.5	96
161	Enhanced Thermodynamic Stability of Epitaxial Oxide Thin Films. Advanced Materials, 2008, 20, 2528-2532.	11.1	71
162	Complex oxides on fire. Nature Materials, 2008, 7, 694-695.	13.3	65

#	Article	IF	Citations
163	Atomic-Scale Chemical Imaging of Composition and Bonding by Aberration-Corrected Microscopy. Science, 2008, 319, 1073-1076.	6.0	566
164	Two-Dimensional Electron Gases at Oxide Interfaces. MRS Bulletin, 2008, 33, 1027-1034.	1.7	238
165	Carrier doping in anatase TiO2 film by perovskite overlayer deposition. Applied Physics Letters, 2008, 93, 082112.	1.5	15
166	Negative differential resistance induced by Mn substitution at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SrRuO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:… interfaces. Physical Review B, 2008, 77, .	1.1	16
167	[illegible]<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">La</mml:mi><mml:mi mathvariant="normal">Al</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>â^•</mml:mo><mml:mi mathvariant="normal">La</mml:mi><mml:mi mathvariant="normal">V</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>multilayers.	1.1	31
168	Transport mechanisms in manganite-titanate heterojunctions. Physical Review B, 2007, 75, .	1.1	36
169	Characterization of the Schottky barrier in SrRuO3â^•Nb:SrTiO3 junctions. Applied Physics Letters, 2007, 90, 143507.	1.5	71
170	Temperature-dependent polarity reversal in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Au</mml:mi><mml:mo>â^•</mml:mo><mml:mi mathvariant="normal">Nb</mml:mi><mml:mo>:</mml:mo><mml:mi mathvariant="normal">Sr</mml:mi><mml:mi mathvariant="normal">Ti</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>Schottky	1.1	52
171	Asymmetric interface profiles in LaVO3â^•SrTiO3 heterostructures grown by pulsed laser deposition. Applied Physics Letters, 2007, 91, 163101.	1.5	35
172	Polar Discontinuity Doping of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaVO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>/</mml:mo><mml:msub><mml:… Physical Review Letters, 2007, 99, 236805.	2.9	207
173	Atomic Control of the Electronic Structure at Complex Oxide Heterointerfaces. MRS Bulletin, 2006, 31, 28-35.	1.7	41
174	Why some interfaces cannot be sharp. Nature Materials, 2006, 5, 204-209.	13.3	1,374
175	Rectifying NdNiO3â^•Nb:SrTiO3 junctions as a probe of the surface electronic structure of NdNiO3. Applied Physics Letters, 2006, 88, 142111.	1.5	17
176	APPLIED PHYSICS: Tuning Interface States. Science, 2006, 313, 1895-1896.	6.0	77
177	Electronic structure of the Mott insulator LaVO3 in a quantum well geometry. Applied Physics Letters, 2006, 89, 251916.	1.5	27
178	Nanometer Scale Electronic Reconstruction at the Interface betweenLaVO3andLaVO4. Physical Review Letters, 2006, 97, 256803.	2.9	50
179	Lattice-polarization effects on electron-gas charge densities in ionic superlattices. Physical Review B, 2006, 73, .	1.1	76
180	Oxygen vacancies shine blue. Nature Materials, 2005, 4, 803-804.	13.3	45

#	Article	IF	Citations
181	Atomically flat (110) SrTiO3 and heteroepitaxy. Applied Physics Letters, 2005, 86, 171908.	1.5	49
182	Atomic-scale imaging of nanoengineered oxygen vacancy profiles in SrTiO3. Nature, 2004, 430, 657-661.	13.7	585
183	Surface depletion in doped SrTiO3 thin films. Applied Physics Letters, 2004, 84, 1716-1718.	1.5	65
184	A high-mobility electron gas at the LaAlO3/SrTiO3 heterointerface. Nature, 2004, 427, 423-426.	13.7	4,140
185	Quantitative atomic-scale profiles of oxygen vacancies in SrTiO3. Microscopy and Microanalysis, 2003, 9, 110-111.	0.2	6
186	Epitaxial growth and electronic structure of LaTiOx films. Applied Physics Letters, 2002, 80, 3922-3924.	1.5	115
187	Quantum cascade lasers with double metal-semiconductor waveguide resonators. Applied Physics Letters, 2002, 80, 3060-3062.	1.5	104
188	Strong self-phase modulation in planar chalcogenide glass waveguides. Optics Letters, 2002, 27, 363.	1.7	39
189	Artificial Charge Modulations in La-doped SrTiO3 Superlattices. Microscopy and Microanalysis, 2002, 8, 576-577.	0.2	0
190	Artificial charge-modulationin atomic-scale perovskite titanate superlattices. Nature, 2002, 419, 378-380.	13.7	932
191	High-frequency modulation without the relaxation oscillation resonance in quantum cascade lasers. Applied Physics Letters, 2001, 79, 2526-2528.	1.5	131
192	Josephson Junctions with Tunable Weak Links. Science, 2001, 292, 252-254.	6.0	21
193	Magnon damping by magnon-phonon coupling in manganese perovskites. Physical Review B, 2000, 61, 9553-9557.	1.1	120
194	Monolithic active mode locking of quantum cascade lasers. Applied Physics Letters, 2000, 77, 169-171.	1.5	53
195	Large Kerr effect in bulk Se-based chalcogenide glasses. Optics Letters, 2000, 25, 254.	1.7	311
196	Gain Switching and Active Mode Locking Of Mid-Infrared Quantum Cascade Lasers. Optics and Photonics News, 2000, 11, 22.	0.4	2
197	Intergrain Magnetoresistance via Second-Order Tunneling in Perovskite Manganites. Physical Review Letters, 1999, 82, 4508-4511.	2.9	190
198	Softening and Broadening of the Zone Boundary Magnons inPr0.63Sr0.37MnO3. Physical Review Letters, 1998, 80, 1316-1319.	2.9	118

#	Article	IF	Citations
199	Magnetic anisotropy of doped manganite thin films and crystals. Journal of Applied Physics, 1998, 83, 7064-7066.	1.1	103
200	Evolution of the Low-Frequency Spin Dynamics in Ferromagnetic Manganites. Physical Review Letters, 1998, 80, 4012-4015.	2.9	165
201	Charge-ordered stripes in La1â^'xCaxMnO3 with x>0.5 (invited). Journal of Applied Physics, 1997, 81, 4326-4330.	1.1	170
202	Structural effects on the magnetic and transport properties of perovskiteA1â^'xAxâ€²MnO3(x=0.25,0.30). Physical Review B, 1997, 56, 8265-8276.	1.1	811
203	The role of strain in magnetic anisotropy of manganite thin films. Applied Physics Letters, 1997, 71, 140-142.	1.5	287
204	Low-field magnetoresistance in the pyrochlore Tl2Mn2O7. Nature, 1997, 389, 942-944.	13.7	89
205	Enhanced Intergrain Tunneling Magnetoresistance in Half-Metallic CrO2Films. Science, 1997, 278, 1607-1609.	6.0	218
206	Charge localization by static and dynamic distortions of theMnO6octahedra in perovskite manganites. Physical Review B, 1996, 54, 8992-8995.	1.1	259
207	Enhancing the low field magnetoresistive response in perovskite manganites. Applied Physics Letters, 1996, 68, 3494-3496.	1.5	49
208	Spin-Polarized Intergrain Tunneling inLa2/3Sr1/3MnO3. Physical Review Letters, 1996, 77, 2041-2044.	2.9	1,725
209	Lattice Effects on the Magnetoresistance in Doped LaMnO3. Physical Review Letters, 1995, 75, 914-917.	2.9	1,898
210	Pressure effects on the magnetoresistance in doped manganese perovskites. Physical Review B, 1995, 52, 15046-15049.	1.1	300
211	Electrochemical and high pressure superoxygenation of YCuO_{2+x} and LaCuO_{2+x} delafossites. Journal of Materials Research, 1994, 9, 314-317.	1.2	33
212	Scaling of the temperature dependent Hall effect inLa2â^'xSrxCuO4. Physical Review Letters, 1994, 72, 2636-2639.	2.9	369
213	Charge dynamics in (La, Sr)2CuO4: from underdoping to overdoping. Journal of Low Temperature Physics, 1994, 95, 23-31.	0.6	20
214	Charge-ordered states in (La,Sr)2NiO4for hole concentrationsnh=1/3 and 1/2. Physical Review B, 1994, 49, 7088-7091.	1.1	212
215	Oxygen-deficient barium lead oxide perovskites. Physical Review B, 1993, 47, 11525-11528.	1.1	29