

Ivan BoÅ¾oviÄ

List of Publications by Year in descending order

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128
papers

6,417
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117453

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Unconventional Electronic Structure Evolution with Hole Doping in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$: Angle-Resolved Photoemission Results. <i>Physical Review Letters</i> , 1996, 76, 4841-4844.	2.9	599
2	Vanishing of phase coherence in underdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$. <i>Nature</i> , 1999, 398, 221-223.	13.7	477
3	High-temperature interface superconductivity between metallic and insulating copper oxides. <i>Nature</i> , 2008, 455, 782-785.	13.7	456
4	Superconductor-insulator transition in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ at the pair quantum resistance. <i>Nature</i> , 2011, 472, 458-460.	13.7	438
5	Large-area single-crystal sheets of borophene on $\text{Cu}(111)$ surfaces. <i>Nature Nanotechnology</i> , 2019, 14, 44-49.	15.6	285
6	Epitaxial Strain and Superconductivity in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ Thin Films. <i>Physical Review Letters</i> , 2002, 89, 107001.	2.9	277
7	Dependence of the critical temperature in overdoped copper oxides on superfluid density. <i>Nature</i> , 2016, 536, 309-311.	13.7	272
8	High-Temperature Superconductivity in a Single Copper-Oxygen Plane. <i>Science</i> , 2009, 326, 699-702.	6.0	222
9	Persistence of magnetic excitations in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ from the undoped insulator to the heavily overdoped non-superconducting metal. <i>Nature Materials</i> , 2013, 12, 1019-1023.	13.3	218
10	Nonequilibrium Phase Transitions in Cuprates Observed by Ultrafast Electron Crystallography. <i>Science</i> , 2007, 316, 425-429.	6.0	210
11	No mixing of superconductivity and antiferromagnetism in a high-temperature superconductor. <i>Nature</i> , 2003, 422, 873-875.	13.7	155
12	Giant Proximity Effect in Cuprate Superconductors. <i>Physical Review Letters</i> , 2004, 93, 157002.	2.9	148
13	Fluctuating charge-density waves in a cuprate superconductor. <i>Nature Materials</i> , 2013, 12, 387-391.	13.3	145
14	Atomic-layer engineering of superconducting oxides: yesterday, today, tomorrow. <i>IEEE Transactions on Applied Superconductivity</i> , 2001, 11, 2686-2695.	1.1	140
15	Spin excitations in a single La_2CuO_4 layer. <i>Nature Materials</i> , 2012, 11, 850-854.	13.3	116
16	High-Temperature Superconducting Multilayers and Heterostructures Grown by Atomic Layer-By-Layer Molecular Beam Epitaxy. <i>Annual Review of Materials Research</i> , 1995, 25, 679-709.	5.5	115
17	Spontaneous breaking of rotational symmetry in copper oxide superconductors. <i>Nature</i> , 2017, 547, 432-435.	13.7	112
18	Scale-invariant magnetoresistance in a cuprate superconductor. <i>Science</i> , 2018, 361, 479-481.	6.0	100

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19	Large oscillations of the magnetoresistance in nanopatterned high-temperature superconducting films. Nature Nanotechnology, 2010, 5, 516-519.	15.6	96
20	Superconducting Transition at 38ÅK in Insulating-Overdoped La_2CuO_4 . Physical Review Letters, 2009, 102, 107004.	2.9	92
21	A Structural Probe of the Doped Holes in Cuprate Superconductors. Science, 2002, 297, 581-584.	6.0	91
22	Anomalous independence of interface superconductivity from carrier density. Nature Materials, 2013, 12, 877-881.	13.3	89
23	Insulator to metal transition in WO3 induced by electrolyte gating. Npj Quantum Materials, 2017, 2, .	1.8	74
24	A new frontier for superconductivity. Nature Physics, 2014, 10, 892-895.	6.5	68
25	Locating the Missing Superconducting Electrons in the Overdoped Cuprates La_2O_2 . Physical Review Letters, 2019, 122, 027003.	2.9	62
26	Atomic-layer engineering of cuprate superconductors. Journal of Superconductivity and Novel Magnetism, 1994, 7, 187-195.	0.5	61
27	Anomalous expansion of the copper-apical-oxygen distance in superconducting cuprate bilayers. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8103-8107.	3.3	61
28	Superconducting oxide multilayers and superlattices: Physics, chemistry, and nanoengineering. Physica C: Superconductivity and Its Applications, 1994, 235-240, 178-181.	0.6	57
29	Electron pairing in the pseudogap state revealed by shot noise in copper oxide junctions. Nature, 2019, 572, 493-496.	13.7	56
30	Madelung Strain in Cuprate Superconductors – A Route to Enhancement of the Critical Temperature. Advanced Materials, 2009, 21, 3644-3648.	11.1	52
31	Phase diagram of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ revisited. Nature Communications, 2018, 9, 5210.	5.8	43
32	Role of double TiO_2 layers at the interface of FeSe. Physical Review Letters, 2011, 2, 272.	1.1	40
33	The Meissner effect in a strongly underdoped cuprate above its critical temperature. Nature Communications, 2011, 2, 272.	5.8	39
34	Electron-Phonon Interactions in Superconducting $\text{La}_{1.84}\text{Sr}$. Physical Review Letters, 2008, 101, 247004.	2.9	38
35	Photoinduced expansion of cuprate superconductors: Evidence of strong electron-lattice coupling. Physical Review B, 2008, 77, .	1.1	34
36	Large-area borophene sheets on sacrificial Cu(111) films promoted by recrystallization from subsurface boron. Npj Quantum Materials, 2019, 4, .	1.8	34

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37	Doping dependence of the magnetic excitations in $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2017, 95, .	13.3	32
38	Emergence of superconductivity from the dynamically heterogeneous insulating state in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$. Nature Materials, 2013, 12, 47-51.	13.3	32
39	Inversion symmetry in $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2017, 95, .	1.1	28
40	High-precision measurement of magnetic penetration depth in superconducting films. Review of Scientific Instruments, 2016, 87, 113903.	0.6	28
41	Micrometre-scale single-crystalline borophene on a square-lattice Cu(100) surface. Nature Chemistry, 2022, 14, 377-383.	6.6	28
42	Magnetic phase diagram of low-doped $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2017, 95, .	1.1	27
43	Hall effect in quantum critical charge-cluster glass. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4284-4289.	3.3	26
44	Combinatorial measurements of Hall effect and resistivity in oxide films. Review of Scientific Instruments, 2008, 79, 033908.	0.6	23
45	High temperature interface superconductivity. Physica C: Superconductivity and Its Applications, 2016, 521-522, 38-49.	0.6	23
46	Growth of superconducting $\text{Bi}_2\text{Sr}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_x$ thin films by atomically layered epitaxy. Journal of Crystal Growth, 1991, 111, 973-977.	0.7	22
47	The plasmon density of states of a layered electron gas. Zeitschrift für Physik B-Condensed Matter, 1993, 90, 277-281.	1.1	22
48	Magnetic field and temperature dependence of complex conductance of ultrathin $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2017, 95, .	1.1	22
49	The Vanishing Superfluid Density in Cuprates and Why It Matters. Journal of Superconductivity and Novel Magnetism, 2018, 31, 2683-2690.	0.8	22
50	Oxygen Displacement in Cuprates under Ionic Liquid Field-Effect Gating. Scientific Reports, 2016, 6, 32378.	1.6	21
51	Sub-millikelvin stabilization of a closed cycle cryocooler. Review of Scientific Instruments, 2014, 85, 103902.	0.6	20
52	Pre-formed Cooper pairs in copper oxides and $\text{LaAlO}_3/\text{SrTiO}_3$ heterostructures. Nature Physics, 2020, 16, 712-717.	6.5	20
53	Two-Dimensional Magnetic and Superconducting Phases in Metal-Insulator $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$ Measured by Muon-Spin Rotation. Physical Review Letters, 2011, 106, 237003.	2.9	19
54	Two-dimensional superconductivity in the cuprates revealed by atomic-layer-by-layer molecular beam epitaxy. Superconductor Science and Technology, 2016, 29, 103001.	1.8	19

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55	Can high- <i>T_c</i> superconductivity in cuprates be explained by the conventional BCS theory?. Low Temperature Physics, 2018, 44, 519-527.	0.2	19
56	Symmetry-adapted linear combination of atomic orbitals bases and band-structure computation for quasi-one-dimensional solids. Physical Review B, 1984, 29, 4733-4746.	1.1	18
57	Electric field effect on superconductivity in La ₂ â ^x Sr _x CuO ₄ . Journal of Applied Physics, 2012, 111, 112632.	1.1	17
58	In-situ angle-resolved photoemission spectroscopy of copper-oxide thin films synthesized by molecular beam epitaxy. Journal of Electron Spectroscopy and Related Phenomena, 2022, 257, 146775.	0.8	17
59	La ₂ â ^x x Sr _x CuO ₄ superconductor nanowire devices. Physica C: Superconductivity and Its Applications, 2014, 506, 169-173.	0.6	14
60	Perspective: Extremely fine tuning of doping enabled by combinatorial molecular-beam epitaxy. APL Materials, 2015, 3, 062401.	2.2	14
61	Electronic nematicity in Sr ₂ RuO ₄ . Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10654-10659.	3.3	14
62	Study of optical plasmons in La _{1.85} Sr _{0.15} Cu ₂ O ₄ . Physica C: Superconductivity and Its Applications, 1991, 174, 435-439.	0.6	13
63	Optical Nanoscopy of High <i>T_c</i> Cuprate Nanoconstriction Devices Patterned by Helium Ion Beams. Nano Letters, 2017, 17, 1582-1586.	4.5	13
64	What is really extraordinary in cuprate superconductors?. Physica C: Superconductivity and Its Applications, 2019, 558, 30-37.	0.6	13
65	Surface Josephson plasma waves in a high-temperature superconductor. Npj Quantum Materials, 2020, 5, .	1.8	13
66	A conventional conundrum. Nature Physics, 2016, 12, 22-24.	6.5	11
67	Observation of cyclotron resonance and measurement of the hole mass in optimally doped $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2021, 103, .		
68	Role of Oxygen States in the Low Valence Nickelate $\text{La}_{1-x}\text{Sr}_x\text{NiO}_2$. Physical Review X, 2022, 12, .		
69	Low-temperature AC conductivity of Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Physica B: Condensed Matter, 2000, 280, 212-213.	1.3	10
70	Insights in High-Temperature Superconductivity from the Study of Films and Heterostructures Synthesized by Molecular Beam Epitaxy. Journal of Superconductivity and Novel Magnetism, 2009, 22, 223-227.	0.8	10
71	Insights from the study of high-temperature interface superconductivity. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4890-4903.	1.6	10
72	Purely electronic mechanism of electrolyte gating of indium tin oxide thin films. Scientific Reports, 2016, 6, 31239.	1.6	10

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73	Perspective: Rapid synthesis of complex oxides by combinatorial molecular beam epitaxy. APL Materials, 2016, 4, .	2.2	10
74	Engineering interfaces in cuprate superconductors. Physica B: Condensed Matter, 2008, 403, 1149-1150.	1.3	9
75	Scanning SQUID characterization of extremely overdoped $\text{La}_{1-x}\text{Sr}_x\text{CuO}_2$ films. Physical Review B, 2021, 103, .	1.1	6
76	Search for ferromagnetic order in overdoped copper-oxide superconductors. Scientific Reports, 2017, 7, 45896.	1.6	8
77	Constraints on Models of Electrical Transport in Optimally Doped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ from Measurements of Radiation-Induced Defect Resistance. Journal of Superconductivity and Novel Magnetism, 2010, 23, 339-342.	0.8	6
78	Comprehensive study of high-Tc interface superconductivity. Journal of Physics and Chemistry of Solids, 2010, 71, 1098-1104.	1.9	6
79	Distinct oxygen hole doping in different layers of $\text{Sr}_{1-x}\text{La}_x\text{CuO}_2$ films. Physical Review B, 2012, 85, .	1.1	6
80	Structural origin of enhanced critical temperature in ultrafine multilayers of cuprate superconducting films. Physical Review B, 2014, 89, .	1.1	6
81	Controlling Superconductivity in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ by Ozone and Vacuum Annealing. Journal of Superconductivity and Novel Magnetism, 2015, 28, 71-74.	0.8	6
82	Long-lived near-infrared photoinduced absorption in LaSrAlO_4 excited with visible light. Physical Review B, 2007, 76, .	1.1	5
83	Magnetic field, frequency and temperature dependence of complex conductance of ultrathin $\text{La}_{1.65}\text{Sr}_{0.45}\text{CuO}_4$ and La_2CuO_4 films and the organic superconductors $\text{I}^{\text{B}}\text{-(BEDT-TTF)}_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$. International Journal of Modern Physics B, 2015, 29, 1542012.	1.0	5
84	Detecting Electronic Nematicity by the Angle-Resolved Transverse Resistivity Measurements. Journal of Superconductivity and Novel Magnetism, 2019, 32, 1623-1628.	0.8	5
85	Tunneling spectroscopy of c -axis epitaxial cuprate junctions. Physical Review B, 2020, 101, .	1.1	5
86	Synthesis of $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ films via atomic layer-by-layer molecular beam epitaxy. APL Materials, 2022, 10, .	2.2	5
87	SUPERCONDUCTIVITY IN CUPRATE SUPERLATTICES. , 1996, , 99-207.		4
88	Absence of magnetic-field-induced effects in the mid-infrared transmission of $\text{La}_{1-x}\text{Sr}_x\text{CuO}_2$ films. Physical Review B, 2009, 79, .	1.1	4
89	Statistical Characterization and Process Control for Improved Growth of $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ Films. Journal of Superconductivity and Novel Magnetism, 2009, 22, 797-804.	0.8	4
90	Form factor dispersion at $\text{LaM}_{5,4}$ edges and average density of resonant atoms. Journal of Physics Condensed Matter, 2014, 26, 025303.	0.7	4

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91	On the origin of high-temperature superconductivity in cuprates. , 2017, , .		4
92	Interface Superconductivity in Cuprates Defies Fermi-Liquid Description. Journal of Superconductivity and Novel Magnetism, 2017, 30, 725-729.	0.8	4
93	Seven Decades of Ascent in Superconductivity. Journal of Superconductivity and Novel Magnetism, 2020, 33, 1-3.	0.8	4
94	Homogeneous superconducting gap in DyBa_2O_7 synthesized by oxide molecular beam epitaxy. Physical Review Materials, 2020, 4, .	0.8	4
95	Superconductivity in $\text{La}_{1.56}\text{Sr}_{0.44}\text{CuO}_4/\text{La}_2\text{CuO}_4$ Superlattices. Physics Procedia, 2012, 30, 271-274.	1.2	3
96	Magnetic field dependence of high-temperature superconductivity in $\text{La}_{1.55}\text{Sr}_{0.45}\text{CuO}_4$. Physical Review Letters, 2012, 109, 177001.	1.1	3
97	Strain and Electronic Nematicity in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$. Journal of Superconductivity and Novel Magnetism, 2020, 33, 93-98.	0.8	3
98	Doubling down on borophene electronics. Nature Materials, 2022, 21, 11-12.	13.3	3
99	Effect of radiation-induced defects on the superfluid density and optical conductivity of overdoped $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2022, 105, .	1.1	3
100	High Temperature Interface Superconductivity. Journal of Superconductivity and Novel Magnetism, 2013, 26, 2863-2865.	0.8	2
101	On field effect studies and superconductor-insulator transition in high- T_c cuprates. European Physical Journal: Special Topics, 2013, 222, 1217-1221.	1.2	2
102	Complex conductance of ultrathin $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ films and heterostructures. Low Temperature Physics, 2015, 41, 965-970.	0.2	2
103	Frequency dispersion of nonlinear response of thin superconducting films in the Berezinskii-Kosterlitz-Thouless state. Physical Review B, 2015, 91, .	1.1	2
104	On Local Pairs vs. BCS: Quo Vadis High- T_c Superconductivity. Journal of Superconductivity and Novel Magnetism, 2017, 30, 731-734.	0.8	2
105	The Demise of Superfluid Density in Overdoped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ Films Grown by Molecular Beam Epitaxy. Journal of Superconductivity and Novel Magnetism, 2017, 30, 1345-1348.	0.8	2
106	Pervasive electronic nematicity in a cuprate superconductor. Physica C: Superconductivity and Its Applications, 2018, 549, 95-98.	0.6	2
107	Combinatorial synthesis and high-throughput characterization of copper-oxide superconductors. Chinese Physics B, 2018, 27, 118102.	0.7	2
108	Angle-Resolved Transport Measurements Reveal Electronic Nematicity in Cuprate Superconductors. Journal of Superconductivity and Novel Magnetism, 2020, 33, 87-92.	0.8	2

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109	Method to create cuprate tunnel junctions with atomically sharp interfaces. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2022, 40, .	0.6	2
110	Topological Model of the Pseudogap State: Experimental Signatures. Frontiers in Physics, 2022, 9, .	1.0	2
111	Theodore H. Geballe at 90. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1419-1420.	0.8	1
112	Atomic-layer engineering of oxide superconductors. Proceedings of SPIE, 2012, , .	0.8	1
113	Critical Resistance at the Superconductor-Insulator Transition in Hole-Doped Cuprates. Journal of Superconductivity and Novel Magnetism, 2013, 26, 749-754.	0.8	1
114	Ground State of Underdoped Cuprates in Vicinity of Superconductor-to-Insulator Transition. Journal of Superconductivity and Novel Magnetism, 2017, 30, 1073-1076.	0.8	1
115	What is strange about high-temperature superconductivity in cuprates?. International Journal of Modern Physics B, 2017, 31, 1745005.	1.0	1
116	Is there a path from cuprates towards room-temperature superconductivity?. Quantum Studies: Mathematics and Foundations, 2018, 5, 55-63.	0.4	1
117	Large surface conductance and superconductivity in topological insulator microstructures. Applied Physics Letters, 2019, 115, 173507.	1.5	1
118	The Quest for High(er) T _c in BaBiO ₃ -Based Heterostructures. Journal of Superconductivity and Novel Magnetism, 2020, 33, 241-248.	0.8	1
119	Visualizing the unusual spectral weight transfer in DyBa ₂ Cu ₃ O ₇ thin film. Scientific Reports, 2022, 12, 830.	1.6	1
120	2D Mg-Cu Intermetallic Compounds with Nontrivial Band Topology and Dirac Nodal Lines. Advanced Electronic Materials, 2022, 8, 2100927.	2.6	1
121	About Physics, Myself, and Ginzburgs. Journal of Superconductivity and Novel Magnetism, 2007, 19, 469-475.	0.8	0
122	Sequence of hole resonances in complex oxide heterostructures. Journal of Physics Condensed Matter, 2014, 26, 155302.	0.7	0
123	Microwave nonlinear response of oxide superconducting films in the Berezinskii-Kosterlitz-Thouless state. , 2017, , .		0
124	Strong off-diagonal polarizability and electron-lattice coupling in high-temperature superconductors. , 2017, , .		0
125	Study of high-T _c interface superconductivity in La _{1.55} Sr _{0.45} CuO ₄ /La ₂ CuO ₄ heterostructures at high magnetic fields and frequencies. International Journal of Modern Physics B, 2017, 31, 1745016.	1.0	0
126	Electrolyte-Gated Oxides. Journal of Superconductivity and Novel Magnetism, 2020, 33, 223-228.	0.8	0

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127	An unstable pathway to room temperature superconductivity?. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2111471118.	3.3	0
128	Possible Jahn–Teller Effect and Strong Electron–Phonon Coupling in Beryllium Hydride. , 2007, , 43-55.		0