Cyril Proust

List of Publications by Year
in descending order

43 papers	4,997 citations	172457 29 h-index	243625 44 g-index
44 all docs	44 docs citations	44 times ranked	2779 citing authors

#	Article	IF	Citations
1	Quantum oscillations and the Fermi surface in an underdoped high-Tc superconductor. Nature, 2007, 447, 565-568.	27.8	836
2	Electron pockets in the Fermi surface of hole-doped high-Tc superconductors. Nature, 2007, 450, 533-536.	27.8	443
3	Anomalous Criticality in the Electrical Resistivity of La _{2â€“ x} Sr _x CuO ₄. Science, 2009, 323, 603-607.	12.6	334
4	Change of carrier density at the pseudogap critical point of a cuprate superconductor. Nature, 2016, 531, 210-214.	27.8	296
5	Quantum oscillations in an overdoped high-Tc superconductor. Nature, 2008, 455, 952-955.	27.8	240
6	Small Fermi Surface Pockets in Underdoped High Temperature Superconductors: Observation of Shubnikovâ€“deÂHaas Oscillations in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>YBa</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2008, 100, 047004.	7.8	222
7	Heat Transport in a Strongly Overdoped Cuprate: Fermi Liquid and a Pured-Wave BCS Superconductor. Physical Review Letters, 2002, 89, 147003.	7.8	204
8	Universal T-linear resistivity and Planckian dissipation in overdoped cuprates. Nature Physics, 2019, 15, 142-147.	16.7	197
9	The Remarkable Underlying Ground States of Cuprate Superconductors. Annual Review of Condensed Matter Physics, 2019, 10, 409-429.	14.5	196
10	Lifshitz critical point in the cuprate superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">YBa</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">Cu</mml:mi><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mi>y</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>from high-field Hall effect measurements. Physical Review B, 2011, 83, .	3.2	189
11	Direct measurement of the upper critical field in cuprate superconductors. Nature Communications, 2014, 5, 3280.	12.8	171
12	Breakdown of Fermi-liquid theory in a copper-oxide superconductor. Nature, 2001, 414, 711-715.	27.8	163
13	Fermi-surface reconstruction by stripe order in cuprate superconductors. Nature Communications, 2011, 2, 432.	12.8	149
14	de Haasâ€“van Alphen Oscillations in the Underdoped High-Temperature Superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>YBa</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>6.5</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2008, 100, 187005.	7.8	145
15	Ultrasound Attenuation in Sr2RuO4: An Angle-Resolved Study of the Superconducting Gap Function. Physical Review Letters, 2001, 86, 5986-5989.	7.8	132
16	Universal quantum oscillations in the underdoped cuprate superconductors. Nature Physics, 2013, 9, 761-764.	16.7	130
17	Nernst and Seebeck Coefficients of the Cuprate Superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>YBa</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">O</mml:mi><mml:mn>6.67</mml:mn></mml:msub></mml:math>: A Study of Fermi [illegible]	7.8	118
18	Multiple Quantum Oscillations in the de Haasâ€“van Alphen Spectra of the Underdoped High-Temperature Superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>YBa</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">O</mml:mi><mml:mn>6.5</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2009, 103, 157003.	7.8	84

#	Article	IF	Citations
19	Quantum Oscillations in Hole-Doped Cuprates. Annual Review of Condensed Matter Physics, 2015, 6, 411-430.	14.5	75
20	Ultrasound evidence for a two-component superconducting order parameter in Sr2RuO4. Nature Physics, 2021, 17, 194-198.	16.7	74
21	Angle dependence of quantum oscillations inÂYBa2Cu3O6.59 shows free-spin behaviour ofÂquasiparticles. Nature Physics, 2011, 7, 234-238.	16.7	69
22	Evidence for a small hole pocket in the Fermi surface of underdoped YBa2Cu3Oy. Nature Communications, 2015, 6, 6034.	12.8	60
23	Hidden magnetism at the pseudogap critical point of a cuprate superconductor. Nature Physics, 2020, 16, 1064-1068.	16.7	58
24	Dichotomy in the T -linear resistivity in hole-doped cuprates. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 1626-1639.	3.4	53
25	Fermi-surface reconstruction and two-carrier model for the Hall effect in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>YBa</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub> Physical Review B, 2010, 82, .	3.2	41
26	Correlation between Fermi surface transformations and superconductivity in the electron-doped high-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Nd</mml:mi><mml:mrow><mml:mn>2</mml:mn> Physical Review B, 2015, 92, .	3.2	39
27	Doping dependence of the superconducting gap inTl2Ba2CuO6+Î´from heat transport. Physical Review B, 2007, 75, .	3.2	38
28	Heat transport inBi2+xSr2â^'xCuO6+Î´: Departure from the Wiedemann-Franz law in the vicinity of the metal-insulator transition. Physical Review B, 2005, 72, .	3.2	37
29	Quantum oscillations and the Fermi surface of high-temperature cuprate superconductors. Comptes Rendus Physique, 2011, 12, 446-460.	0.9	37
30	From quantum oscillations to charge order in high-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" overflow="scroll"><mml:msub><mml:mrow><mml:mi>T</mml:mi></mml:mrow><mml:mrow><mml:mi>c</mml:mi></mml:mrow></mml copper oxides in high magnetic fields. Comptes Rendus Physique, 2013, 14, 39-52.	0.9	28
31	Magnetoresistance of semimetals: The case of antimony. Physical Review Materials, 2018, 2, .	2.4	26
32	Coherentc-axis transport in the underdoped cuprate superconductor YBa2Cu3Oy. Physical Review B, 2012, 85, .	3.2	17
33	Inverse correlation between quasiparticle mass and T _c in a cuprate high- T _c superconductor. Science Advances, 2016, 2, e1501657.	10.3	17
34	Quantum oscillations in underdoped. Physica B: Condensed Matter, 2009, 404, 354-356.	2.7	15
35	Transport signatures of the pseudogap critical point in the cuprate superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow><mml:msub><mml:mi mathvariant="normal">La</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">CuO</mml:mi><mml:mrow><mml:mn>6</mml:m. Physical Review B, 2021, 104, .	3.2	15
36	Magnetic freeze-out and anomalous Hall effect in ZrTe5. Npj Quantum Materials, 2022, 7, .	5.2	11

#	Article	IF	Citations
37	Berry phase in cuprate superconductors. Physical Review B, 2015, 91, .	3.2	8
38	Quasi-isotropic orbital magnetoresistance in lightly doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>SrTiO</mml:mi></mml:mrow><mml:mn>3</ Physical Review Materials, 2021, 5, .	2.4	8
39	Giant Seebeck effect across the field-induced metal-insulator transition of InAs. Npj Quantum Materials, 2020, 5, .	5.2	8
40	High magnetic field ultrasound study of spin freezing in La1.88Sr0.12CuO4. Physical Review B, 2021, 103, .	3.2	6
41	Focus on fermiology of the cuprates. New Journal of Physics, 2014, 16, 045004.	2.9	3
42	Magnetotransport signatures of antiferromagnetism coexisting with charge order in the trilayer cuprate HgBa2Ca2Cu3O8+δ. Nature Communications, 2022, 13, 1568.	12.8	2
43	Effect of pseudogap on electronic anisotropy in the strain dependence of the superconducting <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub></mml:ma of underdoped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Y</mml:mi><mml:msub><mml:mrow><mml:mi>Ba</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2022, 105, .	3.2	1