

# Christophe Berthod

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2771596/publications.pdf>

Version: 2024-02-01

56  
papers

2,212  
citations

304743

22  
h-index

214800

47  
g-index

57  
all docs

57  
docs citations

57  
times ranked

2707  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resonant Inelastic X-Ray Scattering Study of Electron-Exciton Coupling in High- $T_c$ Cuprates. Physical Review X, 2022, 12, .	8.9	3
2	Theory of cross quantum capacitance. Physical Review Research, 2021, 3, .	3.6	9
3	Periodicity of superconducting shape resonances in thin films. Physical Review B, 2020, 102, .	3.2	2
4	Role of a higher-dimensional interaction in stabilizing charge density waves in quasi-one-dimensional $\text{NbSe}_3$ revealed by angle-resolved photoemission spectroscopy. Physical Review B, 2020, 101, .	3.2	9
5	Band Filling and Cross Quantum Capacitance in Ion-Gated Semiconducting Transition Metal Dichalcogenide Monolayers. Nano Letters, 2019, 19, 8836-8845.	9.1	32
6	High-Resolution Photoemission on $\text{SrO}$ Reveals Correlation-Enhanced Effective Spin-Orbit Coupling and Dominantly Local Self-Energies. Physical Review X, 2019, 9, .	8.9	90
7	Impurity coupled to a lattice with disorder. Physical Review A, 2018, 98, .	2.5	5
8	Signatures of nodeless multiband superconductivity and particle-hole crossover in the vortex cores of $\text{FeTe}$ . Physical Review B, 2018, 98, .	3.2	6
9	Tilted vortex cores and superconducting gap anisotropy in $2\text{H-NbSe}_2$ . Communications Physics, 2018, 1, .	5.3	14
10	Modulation of the superconducting critical temperature due to quantum confinement at the $\text{LaAlO}_3/\text{SrTiO}_3$ interface. Physical Review B, 2017, 96, .	3.2	22
11	Observation of Carolus de Gennes' Matignon Vortex States in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ . Physical Review Letters, 2017, 119, 237001.	7.8	11
12	Dimensional Crossover in a Charge Density Wave Material Probed by Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2017, 118, 206401.	7.8	22
13	Rise and fall of shape resonances in thin films of BCS superconductors. Physical Review B, 2016, 94, .	3.2	21
14	BCS superconductivity near the band edge: Exact results for one and several bands. Physical Review B, 2016, 94, .	3.2	22
15	Revisiting the vortex-core tunnelling spectroscopy in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ . Nature Communications, 2016, 7, 11139.	12.8	21
16	Vortex spectroscopy in the vortex glass: A real-space numerical approach. Physical Review B, 2016, 94, .	3.2	13
17	Interplay of the pseudogap and the BCS gap for heteropairs in $40\text{K}-6\text{Li}$ mixture. Europhysics Letters, 2016, 116, 36003.	2.0	0
18	Second-order response theory of radio-frequency spectroscopy for cold atoms. Physical Review A, 2015, 92, .	2.5	1

#	ARTICLE	IF	CITATIONS
19	Bogoliubov quasiparticles coupled to the antiferromagnetic spin mode in a vortex core. Physical Review B, 2015, 92, .	3.2	2
20	Collapse of the Mott Gap and Emergence of a Nodal Liquid in Lightly Doped $\text{Sr}_2\text{VO}_4$ . Physical Review Letters, 2015, 115, 176402.	7.8	140
21	Large modulation of the Shubnikov-de Haas oscillations by the Rashba interaction at the $\text{LaAlO}_3/\text{SrTiO}_3$ interface. New Journal of Physics, 2014, 16, 112002.	2.9	46
22	A theory of the strain-dependent critical field in $\text{Nb}_3\text{Sn}$ , based on anharmonic phonon generation. Superconductor Science and Technology, 2014, 27, 025008.	3.5	17
23	Optical Response of $\text{Sr}_2\text{VO}_4$ : Universal Fermi-Liquid Scaling and Quasiparticles Beyond Landau Theory. Physical Review Letters, 2014, 113, 087404.	7.8	61
24	Non-Drude universal scaling laws for the optical response of local Fermi liquids. Physical Review B, 2013, 87, .	3.2	50
25	Quasiparticle spectra of Abrikosov vortices in a uniform supercurrent flow. Physical Review B, 2013, 88, .	3.2	9
26	Strong-coupling analysis of scanning tunneling spectra in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{10}$ . Physical Review Letters, 2013, 111, 087001.	3.2	22
27	Spectroscopic evidence for Fermi liquid-like energy and temperature dependence of the relaxation rate in the pseudogap phase of the cuprates. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5774-5778.	7.1	108
28	Two-Dimensional Fermi Liquid with Attractive Interactions. Physical Review Letters, 2012, 109, 130403.	7.8	41
29	Tunneling conductance and local density of states in tight-binding junctions. Physical Review B, 2011, 84, .	3.2	32
30	First direct observation of the Van Hove singularity in the tunnelling spectra of cuprates. Nature Communications, 2011, 2, 221.	12.8	46
31	Multiband Superconductivity in the Chevrel Phases $\text{SnMo}_6\text{S}_8$ and $\text{PbMo}_6\text{S}_8$ . Physical Review Letters, 2010, 105, .	7.8	36
32	Levy de Castro et al. Reply. Physical Review Letters, 2010, 105, .	7.8	3
33	Tunneling spectra of strongly coupled superconductors: Role of dimensionality. Physical Review B, 2010, 82, .	3.2	8
34	Scanning Tunneling Spectroscopy of High T <sub>c</sub> Cuprates. Nanoscience and Technology, 2010, , 231-255.	1.5	0
35	Imaging the Essential Role of Spin Fluctuations in High-T <sub>c</sub> Superconductivity. Physical Review Letters, 2009, 103, 227001.	7.8	40
36	Scanning Tunneling Spectroscopy in the Superconducting State and Vortex Cores of the $\text{Fe}^{2+}$ -Pyrochlore $\text{KOs}_2\text{O}_6$ . Physical Review Letters, 2008, 101, 057004.	7.8	10

#	ARTICLE	IF	CITATIONS
37	Hall effect on the triangular lattice. <i>Physical Review B</i> , 2008, 78, .	3.2	7
38	Preeminent Role of the Van Hove Singularity in the Strong-Coupling Analysis of Scanning Tunneling Spectroscopy for Two-Dimensional Cuprate Superconductors. <i>Physical Review Letters</i> , 2008, 101, 267004.	7.8	41
39	Node-like excitations in superconducting PbMo6S8 probed by scanning tunneling spectroscopy. <i>Physical Review B</i> , 2007, 75, .	3.2	9
40	Hall effect in strongly correlated low-dimensional systems. <i>Physical Review B</i> , 2007, 75, .	3.2	13
41	Scanning tunneling spectroscopy of high-temperature superconductors. <i>Reviews of Modern Physics</i> , 2007, 79, 353-419.	45.6	817
42	Breakup of the Fermi Surface Near the Mott Transition in Low-Dimensional Systems. <i>Physical Review Letters</i> , 2006, 97, 136401.	7.8	50
43	Heterovalent interlayers and interface states: An ab initio study of GaAs $\hat{c}$ -Si $\hat{c}$ -GaAs(110) and (100) heterostructures. <i>Physical Review B</i> , 2005, 71, .	3.2	7
44	Vorticity and vortex-core states in type-II superconductors. <i>Physical Review B</i> , 2005, 71, .	3.2	27
45	Modeling scanning tunneling spectra of Bi2Sr2CaCu2O8+ $\hat{c}$ . <i>Physical Review B</i> , 2003, 67, .	3.2	57
46	Schottky barrier heights at polar metal/semiconductor interfaces. <i>Physical Review B</i> , 2003, 68, .	3.2	43
47	Cooperon propagator description of high-temperature superconductivity. <i>Physica C: Superconductivity and Its Applications</i> , 2001, 364-365, 467-470.	1.2	2
48	Density of States in High-Tc Superconductor Vortices. <i>Physical Review Letters</i> , 2001, 87, 277002.	7.8	23
49	Gorkov equations for a pseudogapped high-temperature superconductor. <i>Physical Review B</i> , 2001, 63, .	3.2	16
50	Ideal unreactive metal/semiconductor interfaces: $\hat{c}$ The case of Zn/ZnSe(001). <i>Physical Review B</i> , 2001, 63, .	3.2	8
51	Schottky barrier tuning with heterovalent interlayers: Al/Ge/GaAs versus Al/Si/GaAs. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 2114.	1.6	3
52	Koster-Slater model for the interface-state problem. <i>Physical Review B</i> , 2000, 62, R10622-R10625.	3.2	7
53	Formation energy, lattice relaxation, and electronic structure of Al/Si/GaAs(100) junctions. <i>Physical Review B</i> , 1998, 57, 9757-9762.	3.2	16
54	Al/ZnSe(100) Schottky-barrier height versus initial ZnSe surface reconstruction. <i>Physical Review B</i> , 1998, 57, R9431-R9434.	3.2	10

#	ARTICLE	IF	CITATIONS
55	Local interface dipoles and the tuning of the Al/GaAs(100) Schottky-barrier height with ultrathin Si interlayers. Europhysics Letters, 1996, 36, 67-72.	2.0	26
56	dc transport in perturbed multichannel quantum wires. Physical Review B, 1994, 50, 18299-18311.	3.2	31