

Christopher C Homes

List of Publications by Year in descending order

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101
docs citations

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times ranked

4881
citing authors

#	ARTICLE	IF	CITATIONS
1	Superfluid density in overdoped cuprates: Thin films versus bulk samples. Physical Review B, 2022, 105, .	3.2	5
2	Magnetic freeze-out and anomalous Hall effect in ZrTe5. Npj Quantum Materials, 2022, 7, .	5.2	11
3	Giant Polarization in Nanodielectrics: (Invited Paper). , 2021, , .		1
4	Anisotropic optical properties of detwinned BaFe_2As_2 . Physical Review B, 2020, 102, .	3.2	16
5	Distinguishing the gapped and Weyl semimetal scenario in ZrTe5 : Insights from an effective two-band model. Physical Review B, 2020, 102, .	3.2	9
6	Probing intraband excitations in ZrTe_5 : A high-pressure infrared and transport study. Physical Review B, 2020, 101, .	3.2	5
7	Optical conductivity of the type-II Weyl semimetal TaTe_4 . Physical Review B, 2020, 102, .	3.2	5
8	Low-energy excitations in type-II Weyl semimetal Te_2MoTe_4 evidenced through optical conductivity. Physical Review Materials, 2020, 4, .	2.4	16
9	Optical conductivity of metal alloys with residual resistivities near or above the Mott-Ioffe-Regel limit. Physical Review B, 2019, 100, .	3.2	5
10	Two-Dimensional Conical Dispersion in ZrTe_5 Evidenced by Optical Spectroscopy. Physical Review Letters, 2019, 122, 217402.	7.8	50
11	Perfect separation of intraband and interband excitations in PdCoO_2 . Physical Review B, 2019, 99, .	3.2	5
12	Unravelling the mechanism of the semiconducting-like behavior and its relation to superconductivity in CaFe_2As_2 . Physical Review B, 2019, 99, .	3.2	5
13	Photoenhanced metastable c-axis electrostatics in stripe-ordered cuprate $\text{La}_{1.885}\text{Ba}_{0.115}\text{CuO}_4$. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19875-19879.	7.1	51
14	Optical and photoemission investigation of structural and magnetic transitions in the iron-based superconductor $\text{Sr}_{0.67}\text{Na}_{0.33}\text{Fe}_2\text{As}_2$. Physical Review B, 2019, 100, .	3.2	5
15	Nonuniform carrier density in CdTe evidenced by optical spectroscopy. Physical Review B, 2018, 97, .	3.2	5
16	Vibrational anomalies in A_2FeAs_2 () Tj ETQq0 0 0 TgBT /Overlock 10 Tf	3.2	5
17	Unusual electronic and vibrational properties in the colossal thermopower material FeSb_2 . Scientific Reports, 2018, 8, 11692.	3.3	13
18	Anomalous phonon behavior in superconducting $\text{CaKFe}_4\text{As}_4$: An optical study. Physical Review B, 2017, 95, .	3.2	5

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19	Observation of an emergent coherent state in the iron-based superconductor KFe_2As_2 . Physical Review B, 2017, 95, .	3.2	9
20	Anisotropic electrodynamics of type-II Weyl semimetal candidate WTe_2 . Physical Review B, 2017, 95, .	3.2	17
21	AFe_3 (T_j ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 662 Td). Physical Review B, 2015, 92, .	3.2	21
22	Magneto-Optical Signature of Massless Kane Electrons in Cd_3As_2 . Physical Review Letters, 2016, 117, 136401.	7.8	98
23	Phonon anomalies in some iron telluride materials. Physical Review B, 2016, 93, .	3.2	18
24	Coexistence of clean- and dirty-limit superconductivity in LiFeAs. Physical Review B, 2016, 93, .	3.2	12
25	Anomalous phonon redshift in K-doped $BaFe_2As_2$ iron pnictides. Physical Review B, 2015, 92, .	3.2	16
26	From Hund's insulator to Fermi liquid: Optical spectroscopy study of K doping in $BaMn_2As_2$. Physical Review B, 2015, 92, .	3.2	26
27	Optical properties of the perfectly compensated semimetal WTe_2 . Physical Review B, 2015, 92, .	3.2	17
28	$FeTe_{0.5}$ A multiband superconductor in the clean and dirty limit. Physical Review B, 2015, 91, .	3.2	24
29	Optical and Transport Properties. Springer Series in Materials Science, 2015, , 187-219.	0.6	0
30	Spectral weight transfer in strongly correlated $Fe_1.03Te$. Physical Review B, 2014, 90, .	3.2	15
31	Strong Coupling of the Iron-Quadrupole and Anion-Dipole Polarizations in Ba_2FeAs_4 . Physical Review B, 2014, 89, .	7.8	23
32	Optical properties and electronic structure of the nonmetallic metal $FeCrAs$. Physical Review B, 2014, 89, .	3.2	13
33	Three-dimensional Dirac fermions in quasicrystals as seen via optical conductivity. Physical Review B, 2013, 87, .	3.2	157
34	Doping for superior dielectrics. Nature Materials, 2013, 12, 782-783.	27.5	98
35	Optical conductivity of nodal metals. Scientific Reports, 2013, 3, 3446.	3.3	14
36	Evidence of a full gap in $LaFeAsO$ thin films from infrared spectroscopy. Physical Review B, 2013, 87, .	3.2	12

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37	Linear Scattering Rate in $\text{Ba}_{0.6}\text{Fe}_{0.4}\text{Fe}_2$ by Optical Spectroscopy. Physical Review Letters, 2013, 111, 117001.	7.8	66
38	Do organic and other exotic superconductors fail universal scaling relations?. Scientific Reports, 2013, 3, .	3.3	29
39	Optical conductivity of superconducting $\text{K}_x\text{Fe}_2\text{As}_2$. Physical Review B, 2012, 86, 067003.	3.2	19
40	Effective medium approximation and the complex optical properties of the inhomogeneous superconductor $\text{Ba}_{0.8}\text{Fe}_{0.2}\text{Fe}_2$. Physical Review B, 2012, 86, 067003.	3.2	43
41	Phonon energy bands in the charged indominate spin ladder $\text{Sr}_{14}\text{O}_{41}$. Physical Review B, 2012, 86, 217403.	4.0	11
42	Optical properties of the iron-chalcogenide superconductor $\text{FeTe}_{0.55}\text{Se}_{0.45}$. Journal of Physics and Chemistry of Solids, 2011, 72, 505-510.	7.8	17
43	Incoherent c-Axis Interplane Response of the Iron Chalcogenide $\text{FeTe}_{0.55}\text{Se}_{0.45}$ Superconductor from Infrared Spectroscopy. Physical Review Letters, 2011, 106, 217001.	3.2	77
44	Optical properties of the iron arsenic superconductor BaFe_2As_2 . Physical Review B, 2010, 82, .	3.2	65
45	Electronic correlations and unusual superconducting response in the optical properties of the iron chalcogenide $\text{FeTe}_{0.55}\text{Se}_{0.45}$. Physical Review B, 2010, 81, .	3.2	16
46	Breakdown of the universal Josephson relation in spin-ordered cuprate superconductors. Physical Review B, 2010, 82, .	3.2	11
47	Scaling of the superfluid density in strongly underdoped $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$. Evidence for a Josephson phase. Physical Review B, 2009, 80, .	3.2	14
48	Infrared phonon anomaly in BaFe_2As_2 . Physical Review B, 2009, 80, .	3.2	19
49	Infrared spectra of the low-dimensional quantum magnet SrCu_2O_7 . Doping of a one-dimensional Mott insulator. Photoemission and optical studies of SrCu_2O_7 . Physical Review B, 2008, 77, .	3.2	18
50	Multiple bosonic mode coupling in the charge dynamics of the electron-doped superconductor $(\text{Pr}_{2-x}\text{Ce}_x)\text{CuO}_4$. Physical Review B, 2008, 78, .		
51	Infrared properties of ferropericla MgCu_3O_8 . Experiment and theory. Physical Review B, 2008, 77, .		

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55	High-pressure infrared spectroscopy: Tuning of the low-energy excitations in correlated electron systems. <i>Physical Review B</i> , 2007, 76, .	3.2	5
56	Optical and thermodynamic properties of the high-temperature superconductor $\text{HgBa}_2\text{CuO}_4 + \hat{\Gamma}$. <i>Physical Review B</i> , 2007, 75, .	3.2	42
57	Silicon beam splitter for far-infrared and terahertz spectroscopy. <i>Applied Optics</i> , 2007, 46, 7884.	2.1	55
58	Stripe order and vibrational properties of $\text{La}_2\text{NiO}_4 + \hat{\Gamma}$ for $\hat{\Gamma} = 2\hat{a} \cdot 15$: Measurements and ab initio calculations. <i>Physical Review B</i> , 2007, 75, .	3.2	15
59	Optical properties of TiO_2 in SiO_2 glass over a wide spectral range. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 838-842.	0.8	20
60	Charge Order, Metallic Behavior, and Superconductivity in $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$ with $x = 1/8$. <i>Physical Review Letters</i> , 2006, 96, 257002.	7.8	50
61	Optical determination of the superconducting energy gap in electron-doped $\text{Pr}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$. <i>Physical Review B</i> , 2006, 74, .	3.2	34
62	Scaling of the superfluid density in high-temperature superconductors. , 2005, , .		5
63	Infrared properties of electron-doped cuprates: Tracking normal-state gaps and quantum critical behavior in $\text{Pr}_{2-x}\text{Ce}_x\text{CuO}_4$. <i>Europhysics Letters</i> , 2005, 70, 225-231.	2.0	76
64	Electrodynamics of the nodal metal state in weakly doped high- T_c cuprates. <i>Physical Review B</i> , 2005, 72, .	3.2	119
65	Strong-coupling effects in cuprate high- T_c superconductors by magneto-optical studies. <i>Physical Review B</i> , 2005, 72, .	3.2	9
66	Scaling of the superfluid density in high-temperature superconductors. <i>Physical Review B</i> , 2005, 72, .	3.2	68
67	Coherence, incoherence, and scaling along the c-axis of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$. <i>Physical Review B</i> , 2005, 71, .	3.2	35
68	Technical Reports: Scaling Laws in High-temperature Superconductors as Revealed Through Infrared Spectroscopy. <i>Synchrotron Radiation News</i> , 2005, 18, 9-14.	0.8	0
69	Mott physics and the optical conductivity of electron-doped cuprates. <i>Physical Review B</i> , 2005, 72, .	3.2	74
70	Extracting the electron-boson spectral function $\hat{\Gamma} \pm 2F(\hat{\Gamma}\%)$ from infrared and photoemission data using inverse theory. <i>Physical Review B</i> , 2005, 71, .	3.2	74
71	Optical spectroscopy study of the electronic structure of $\text{Eu}_{1-x}\text{Ca}_x\text{B}_6$. <i>Physical Review B</i> , 2005, 71, .	3.2	15
72	Pressure-induced suppression of the spin-gapped insulator phase in BaVS_3 : An infrared optical study. <i>Physical Review B</i> , 2005, 71, .	3.2	11

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73	Marginal Fermi liquid analysis of 300 K reflectance of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$. <i>Physical Review B</i> , 2004, 69, .	3.2	26
74	Sum rules and energy scales in the high-temperature superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$. <i>Physical Review B</i> , 2004, 69, .	3.2	62
75	A universal scaling relation in high-temperature superconductors. <i>Nature</i> , 2004, 430, 539-541.	27.8	235
76	Energy Scales in the High-Tc Superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$. <i>Journal of Superconductivity and Novel Magnetism</i> , 2004, 17, 93-96.	0.5	0
77	A Universal Scaling Relation in High-Temperature Superconductors.. <i>ChemInform</i> , 2004, 35, no.	0.0	0
78	Charge transfer in the high dielectric constant materials $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ and $\text{CdCu}_3\text{Ti}_4\text{O}_{12}$. <i>Physical Review B</i> , 2003, 67, .	3.2	171
79	Mid-infrared conductivity from mid-gap states associated with charge stripes. <i>Physical Review B</i> , 2003, 67, .	3.2	42
80	Infrared properties of $\text{La}_{2-x}(\text{Ca,Sr})_x\text{CaCu}_2\text{O}_6$ single crystals. <i>Physical Review B</i> , 2003, 67, .	3.2	19
81	Global trends in the interplane penetration depth of layered superconductors. <i>Physical Review B</i> , 2002, 65, .	3.2	60
82	Optical studies of charge dynamics in optimally doped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$. <i>Physical Review B</i> , 2002, 66, .	3.2	59
83	Doping-dependent studies of the Anderson-Mott localization in polyaniline at the metal-insulator boundary. <i>Physical Review B</i> , 2002, 66, .	3.2	40
84	First-principles study of the structure and lattice dielectric response of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$. <i>Physical Review B</i> , 2002, 65, .	3.2	317
85	Optical Response of High-Dielectric-Constant Perovskite-Related Oxide. <i>Science</i> , 2001, 293, 673-676.	12.6	1,582
86	Infrared and Optical Properties of $\text{K}^-(\text{ET})_2\text{SF}_5\text{CF}_2\text{SO}_3$: Evidence for a 45 K Spin-Peierls Transition. <i>Chemistry of Materials</i> , 2001, 13, 1326-1333.	6.7	8
87	Optical Properties of c-Axis Oriented Superconducting MgB_2 Films. <i>Physical Review Letters</i> , 2001, 87, 277001.	7.8	75
88	Unconventional energetics of the pseudogap state and superconducting state in high-Tc cuprates. <i>Physical Review B</i> , 2001, 63, .	3.2	47
89	Synchrotron infrared photoacoustic spectroscopy. <i>Review of Scientific Instruments</i> , 2001, 72, 4331-4336.	1.3	6
90	Phonon Screening in High-Temperature Superconductors. <i>Physical Review Letters</i> , 2000, 84, 5391-5394.	7.8	31

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91	Effect of Ni impurities on the optical properties of $\text{YBa}_2\text{Cu}_3\text{O}_{6+y}$. <i>Physical Review B</i> , 1999, 60, 9782-9792.	3.2	40
92	Isotope Studies of the CMR Compounds $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3+\delta$. <i>Journal of Superconductivity and Novel Magnetism</i> , 1999, 12, 263-267.	0.5	14
93	Sum Rules and Interlayer Conductivity of High-Tc Cuprates. <i>Science</i> , 1999, 283, 49-52.	12.6	241
94	Infrared Studies of the Onset of Conductivity in Ultrathin Pb Films. <i>Physical Review Letters</i> , 1999, 83, 4880-4883.	7.8	44
95	Polarized reflectance measurements of the CDW transitions in Mo_4O_{11} and Mo_3O_{11} . <i>Physical Review B</i> , 1998, 58, 13565-13573.	3.2	18
96	Optical properties of $\text{Nd}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$. <i>Physical Review B</i> , 1997, 56, 5525-5534.	3.2	66
97	Surface impedance studies of YBCO. <i>European Physical Journal D</i> , 1996, 46, 3195-3202.	0.4	91
98	Softening of a reststrahlen band in CuO near the Néel transition. <i>Physical Review B</i> , 1995, 51, 3140-3150.	3.2	22
99	Technique for measuring the reflectance of irregular, submillimeter-sized samples. <i>Applied Optics</i> , 1993, 32, 2976.	2.1	321
100	Optical conductivity of c-axis oriented $\text{YBa}_2\text{Cu}_3\text{O}_{6.70}$: Evidence for a pseudogap. <i>Physical Review Letters</i> , 1993, 71, 1645-1648.	7.8	505
101	Optical conductivity of the stable icosahedral quasicrystal $\text{Al}_{63.5}\text{Cu}_{24.5}\text{Fe}_{12}$. <i>Physical Review Letters</i> , 1991, 67, 2694-2696.	7.8	99