

Claude Berthier

List of Publications by Year in descending order

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117
papers

6,219
citations

81900

39
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69250

77
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119
all docs

119
docs citations

119
times ranked

4571
citing authors

#	ARTICLE	IF	CITATIONS
1	Microscopic investigation of ionic conductivity in alkali metal salts-poly(ethylene oxide) adducts. Solid State Ionics, 1983, 11, 91-95.	2.7	1,011
2	Magnetic-field-induced charge-stripe order in the high-temperature superconductor YBa ₂ Cu ₃ O _y . Nature, 2011, 477, 191-194.	27.8	660
3	Magnetic Superstructure in the Two-Dimensional Quantum Antiferromagnet SrCu ₂ (BO ₃) ₂ . Science, 2002, 298, 395-399.	12.6	288
4	Incipient charge order observed by NMR in the normal state of YBa ₂ Cu ₃ O _y . Nature Communications, 2015, 6, 6438.	12.8	211
5	Emergence of charge order from the vortex state of a high-temperature superconductor. Nature Communications, 2013, 4, 2113.	12.8	210
6	⁶³ Cu NMR Evidence for Enhanced Antiferromagnetic Correlations around Zn Impurities in YBa ₂ Cu ₃ O _{6.7} . Physical Review Letters, 2000, 84, 3422-3425.	7.8	199
7	Spin Gap in HgBa ₂ Ca ₂ Cu ₃ O _{8+δ} Single Crystals from ⁶³ Cu NMR. Physical Review Letters, 1996, 76, 4238-4241.	7.8	143
8	NMR, DSC, and conductivity study of a poly(ethylene oxide) complex electrolyte : PEO(LiClO ₄) _x . Solid State Ionics, 1986, 18-19, 295-299.	2.7	141
9	Evidence of Andreev bound states as a hallmark of the FFLO phase in $\hat{\mu}^{\pm}$ -(BEDT-TTF) ₂ Cu(NCS) ₂ . Nature Physics, 2014, 10, 928-932.	16.7	140
10	Evidence for a connection between charge density waves and the pressure enhancement of superconductivity in 2H-NbSe ₂ . Solid State Communications, 1976, 18, 1393-1395.	1.9	132
11	Observation of an anisotropic Dirac cone reshaping and ferrimagnetic spin polarization in an organic conductor. Nature Communications, 2016, 7, 12666.	12.8	120
12	NMR, conductivity and neutron scattering investigation of ionic dynamics in the anhydrous polymer	2.7	108
13	Statics and dynamics of weakly coupled antiferromagnetic spin- $\frac{1}{2}$ in a magnetic field. Physical Review B, 2011, 83, ...	3.2	107
14	Zero temperature phase transitions in spin-ladders: Phase diagram and dynamical studies of. European Physical Journal B, 1998, 6, 167-181.	1.5	102
15	Thermal analysis and NMR study of a poly(ethylene oxide) complex electrolyte : PEO(LiCF ₃ SO ₃) _x . Journal De Physique, 1984, 45, 739-744.	1.8	101
16	Charge Segregation, Cluster Spin Glass, and Superconductivity in La _{1.94} Sr _{0.06} CuO ₄ . Physical Review Letters, 1999, 83, 604-607.	7.8	100
17	Nuclear Magnetic Resonance Study of the S=1/2 Heisenberg Ladder Cu ₂ (C ₅ H ₁₂ N ₂) ₂ Cl ₄ : Quantum Phase Transition and Critical Dynamics. Physical Review Letters, 1998, 80, 2713-2716.	7.8	99
18	Nuclear magnetic relaxation study of poly(ethylene oxide) lithium salt based electrolytes. Journal of Chemical Physics, 1993, 98, 10026-10036.	3.0	90

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19	NMR evidence for localized spins on Cu(2) sites from Cu NMR in YBa ₂ Cu ₃ O ₇ and YBa ₂ Cu ₃ O _{6.75} single crystals. Physical Review B, 1989, 39, 7332-7335.	3.2	89
20	NMR Determination of 2D Electron Spin Polarization at $t^{\dagger} = 1/2$. Physical Review Letters, 2000, 84, 354-357.	7.8	84
21	NMR study on a 2H-NbSe ₂ single crystal: A microscopic investigation of the charge density waves state. Journal of Physics C: Solid State Physics, 1978, 11, 797-814.	1.5	71
22	¹⁷ O NMR study of YBa ₂ Cu ₃ O _{7-δ} (T _c =92 K). Physica C: Superconductivity and Its Applications, 1989, 159, 689-696.	1.2	66
23	Identification of Nuclear Relaxation Processes in a Gapped Quantum Magnet: ¹ H NMR in the S=1/2 Heisenberg Ladder Cu ₂ (C ₅ H ₁₂ N ₂) ₂ Cl ₄ . Physical Review Letters, 1997, 79, 925-928.	7.8	62
24	Anomalous spin correlations and excitonic instability of interacting 2D Weyl fermions. Science, 2017, 358, 1403-1406.	12.6	62
25	NMR investigation of single-crystal YBa ₂ Cu ₃ O _{6+x} from the underdoped to the overdoped regime. Physical Review B, 1993, 47, 3461-3464.	3.2	61
26	NMR study of the charge-density wave in Rb _{0.30} MoO ₃ single crystal. Physical Review Letters, 1985, 55, 253-256.	7.8	59
27	NMR Evidence of the Fröhlich Mode in Rb _{0.30} MoO ₃ . Physical Review Letters, 1986, 56, 1854-1857.	7.8	59
28	Incomplete Devil's Staircase in the Magnetization Curve of SrCu_2BO_3 . Physical Review Letters, 2013, 110, 067210.	7.8	57
29	Confinement in Bechgaard Salts: Anomalous Magnetoresistance and Nuclear Relaxation. Physical Review Letters, 1995, 74, 5272-5275.	7.8	52
30	Attractive Tomonaga-Luttinger Liquid in a Quantum Spin Ladder. Physical Review Letters, 2013, 111, 106404.	7.8	50
31	NMR Evidence for a Magnetic Soliton Lattice in the High-Field Phase of CuGeO ₃ . Physical Review Letters, 1996, 77, 1861-1864.	7.8	49
32	NMR Imaging of the Soliton Lattice Profile in the Spin-Peierls Compound CuGeO ₃ . Physical Review Letters, 1999, 83, 420-423.	7.8	49
33	Emergence of Orbital Nematicity in the Tetragonal Phase of BaFe ₂ (As _{1-x} P _x) ₂ . Journal of the Physical Society of Japan, 2015, 84, 043705.	1.6	46
34	Charge density waves in layer structures: A NMR study on a 2Hf _{1-x} NbSe ₂ single crystal. Solid State Communications, 1976, 19, 131-135.	1.9	45
35	Measurement of the sliding charge-density-wave phase velocity in Rb _{0.3} MoO ₃ . Physical Review Letters, 1987, 59, 2348-2351.	7.8	43
36	NMR Evidence for a Generalized Spin-Peierls Transition in the High-Magnetic-Field Phase of the Spin Ladder Cu ₂ (C ₅ H ₁₂ N ₂) ₂ Cl ₄ . Physical Review Letters, 2000, 85, 4795-4798.	7.8	42

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37	Quantum-Critical Spin Dynamics in Quasi-One-Dimensional Antiferromagnets. Physical Review Letters, 2012, 109, 177206.	7.8	42
38	NMR, DSC and conductivity study of the polymer solid electrolytes P(EO) (LiCp+1F2p+3SO3)x. Solid State Ionics, 1988, 28-30, 1018-1022.	2.7	41
39	Semiconductor-metal transition upon intercalation in Li x ZrSe 2. Solid State Ionics, 1981, 5, 379-382.	2.7	39
40	The Na-TiS2 system: A critical discussion of the phase boundaries, structural and NMR studies. Journal of Physics and Chemistry of Solids, 1984, 45, 105-112.	4.0	37
41	Nuclear-spin-lattice relaxation rate of planar oxygen in YBa2Cu3O6.52 and YBa1.92Sr0.08Cu3O7 single crystals. Physical Review B, 1993, 48, 13848-13864.	3.2	35
42	NMR Evidence for the Persistence of a Spin Superlattice Beyond the $1/8$ Magnetization Plateau in SrCu_2		

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55	Crystal growth and magnetic property of MCo ₂ V ₂ O ₈ (M=Sr and Ba). Journal of Crystal Growth, 2011, 317, 128-131.	1.5	22
56	Magnetic-field-enhanced spin freezing on the verge of charge ordering in YBa ₂ Cu ₃ O _{7-x} . Physical Review B, 2001, 64, 104407.	3.2	22
57	(TM) ₂ X organic superconductors: interplay between 1-D charge localization and higher dimensionality cross-over. Synthetic Metals, 1995, 70, 719-725.	3.9	20
58	⁶³ Cu and ⁸⁹ Y NMR study of an optimally doped YBa ₂ Cu ₃ O _{6.94} single crystal. Physical Review B, 1997, 56, 11294-11298.	3.2	20
59	Evidence of screening charge depression in the vicinity of chromium and manganese impurities in aluminium at low temperature. Journal of Physics F: Metal Physics, 1973, 3, 1169-1177.	1.6	19
60	Quadrupolar nuclear resonance investigation of the screening charge around 3d impurities in aluminium. Journal of Physics F: Metal Physics, 1977, 7, 515-520.	1.6	19
61	NMR investigation of low energy excitations in high T _c superconductors. Physica Scripta, 1993, T49A, 131-136.	2.5	19
62	⁶³ Cu and ¹⁹⁹ Hg NMR in overdoped HgBa ₂ CaCu ₂ O _{6+δ} . Physica C: Superconductivity and Its Applications, 1996, 268, 197-204.	1.2	19
63	The -magnetization plateau state in the 2D quantum antiferromagnet SrCu ₂ (BO ₃) ₂ : spin superstructure, phase transition, and spin dynamics studied by high-field NMR. Physica B: Condensed Matter, 2004, 346-347, 27-33.	2.7	19
64	Nuclear magnetic resonance study of the magnetic-field-induced ordered phase in the NiCl ₂ ·4H ₂ O. Physical Review B, 2017, 95, .	1.2	19
65	Nuclear magnetic resonance in high magnetic field: Application to condensed matter physics. Comptes Rendus Physique, 2017, 18, 331-348.	0.9	19
66	Drift velocity and temporal phase fluctuations of sliding charge density waves in Rb _{0.3} MoO ₃ . Journal De Physique, 1990, 51, 59-89.	1.8	18
67	Magnetic-Order Crossover in Coupled Spin Ladders. Physical Review Letters, 2017, 118, 167206.	7.8	17
68	Quadrupolar nuclear resonance investigation of conduction electrons charge density around a scandium impurity in an aluminium matrix. Journal of Physics F: Metal Physics, 1973, 3, 1268-1273.	1.6	16
69	Normal state spin susceptibility in YBa ₂ Cu ₃ O _{6.92} single crystal from and nuclear magnetic resonance. Physica C: Superconductivity and Its Applications, 1999, 313, 255-270.	1.2	16
70	Solid Effect between Pure-Quadrupolar Nuclear Transitions in Dilute Alloys and Its Application to AlTi. Physical Review B, 1973, 7, 1854-1863.	3.2	15
71	EPR and NRM Investigation on TMTTF-TCNQ. Molecular Crystals and Liquid Crystals, 1976, 32, 261-265.	0.8	15
72	High-Field Phase Diagram and Spin Structure of Volborthite Cu ₃ V ₂ O ₇ (OH) ₂ ·2H ₂ O. Journal of the Physical Society of Japan, 2012, 81, 024703.	1.6	15

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73	<p>Space- and time-resolved magnetization in the Bose-Einstein condensed state of BaCuSi₂O₆</p> <p>Review</p>	3.2	15
74	<p>NMR study of the charge-ordered state near the superconducting transition in the organic superconductor</p>		

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91	Cu(2) nuclear resonance evidence for a magnetic phase in aged 60-K superconductors $R\text{Ba}_2\text{Cu}_3\text{O}_{6+x}$ ($R=\text{Tm}, \text{Y}$). <i>Physical Review B</i> , 1998, 57, 11792-11798.	3.2	8
92	Sliding of Charge Density Waves in a Static Electric Field. <i>Physica Scripta</i> , 1987, T19B, 578-584.	2.5	7
93	^{17}O nuclear spin-lattice relaxation in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ single crystals. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 185-189, 1139-1140.	1.2	7
94	Luttinger liquid physics in the spin ladder material $\text{CuBr}_4(\text{C}_5\text{H}_{12}\text{N}_2)_2$. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 656-658.	1.5	7
95	NMR and NQR study of the tetrahedral frustrated quantum spin system $\text{Cu}_2\text{Te}_2\text{O}_5\text{Br}_2$ in its paramagnetic phase. <i>Physical Review B</i> , 2010, 82, .	3.2	7
96	Microscopic Properties of the Pinwheel Kagome Compound $\text{Rb}_2\text{Cu}_3\text{SnF}_{12}$. <i>Physical Review Letters</i> , 2013, 110, 247203.	7.8	7
97	Effect of strains on the indirect nuclear spin-spin coupling in platinum. <i>Solid State Communications</i> , 1975, 17, 147-151.	1.9	6
98	Spin susceptibility in underdoped YBaCuO single crystals from NMR. <i>Physica C: Superconductivity and Its Applications</i> , 1994, 235-240, 1677-1678.	1.2	6
99	High-field magnetic phases of a two-leg spin ladder: $\text{Cu}_2(\text{C}_5\text{H}_{12}\text{N}_2)_2\text{Cl}_4$. <i>Physica B: Condensed Matter</i> , 2000, 280, 315-316.	2.7	6
100	Magnetic structure of azurite above the magnetization plateau at $\frac{1}{3}$ saturation. <i>Physical Review B</i> , 2011, 84, .	3.2	6
101	NMR evidence for lithium ordering in $\text{Li}_{0.29}\text{ZrSe}_2$. <i>Solid State Ionics</i> , 1983, 9-10, 467-469.	2.7	5
102	NMR study of the high magnetic field incommensurate phase of the CuGeO_3 spin-Peierls system. <i>Physica B: Condensed Matter</i> , 1998, 246-247, 22-26.	2.7	5
103	^{63}Cu NMR in the normal state of $\text{HgBa}_2\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$. <i>Journal of Low Temperature Physics</i> , 1996, 105, 371-376.	1.4	4
104	Field-dependent paramagnetic relaxation enhancement in solutions of Ni(II): What happens above the NMR proton frequency of 1 GHz ?. <i>Journal of Magnetic Resonance</i> , 2020, 314, 106737.	2.1	4
105	NMR Studies of Low-Dimensional Quantum Antiferromagnets. <i>Lecture Notes in Physics</i> , 2002, , 191-210.	0.7	4
106	NMR and NQR study of $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ and $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ ($x=0, 0.25$). <i>Physica C: Superconductivity and Its Applications</i> , 1988, 153-155, 741-742.	1.2	3
107	NMR study of $^{63,65}\text{Cu}$ in $\text{YBa}_2\text{Cu}_3\text{O}_7$ to 6.65 single crystals. <i>Physica C: Superconductivity and Its Applications</i> , 1989, 162-164, 265-266.	1.2	3
108	NMR evidence for a metastable vortex arrangement in the two-dimensional organic superconductor $\text{BEDT-TTF}_2\text{Cu}(\text{NCS})_2$. <i>Physical Review B</i> , 1999, 59, 12064-12071.	3.2	3

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109	HIGH FIELD NMR IN STRONGLY CORRELATED LOW-DIMENSIONAL FERMIONIC SYSTEMS. International Journal of Modern Physics B, 2002, 16, 3265-3270.	2.0	3
110	Phase diagram of in the vicinity of as determined by NMR. Physica B: Condensed Matter, 2008, 403, 986-989.	2.7	3
111	Density-functional calculation of the quadrupole splitting in the ^{23}Na NMR spectrum of the ferric wheel $\text{Na@Fe}_6(\text{tea})_6$ + for various broken-symmetry states of the Heisenberg spin model. European Physical Journal B, 2007, 55, 229-235.	1.5	2
112	NMR evidence of the Frohlich mode in $\text{Rb}_{0.30}\text{MoO}_3$. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1986, 143, 120-122.	0.9	1
113	NMR study of the CuGeO_3 spin-Peierls system. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 669-670.	2.3	1
114	The Grenoble Giga-NMR project. IEEE Transactions on Applied Superconductivity, 2000, 10, 732-735.	1.7	1
115	^{17}O and ^{63}Cu NMR study of anisotropic magnetic fluctuations in a single crystal of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$: Comparison with neutron diffraction. Journal of Magnetism and Magnetic Materials, 1992, 104-107, 589-590.	2.3	0
116	Spin superstructure in the -magnetization plateau phase of the 2D orthogonal dimer spin system $\text{SrCu}_2(\text{BO}_3)_2$. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 25-26.	2.3	0
117	Quantum tricritical fluctuations driving mass enhancement and reentrant superconductivity in URhGe . Journal of Physics: Conference Series, 2016, 683, 012010.	0.4	0