

Alain Sacuto

List of Publications by Year in descending order

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106
papers

3,428
citations

159585

30
h-index

149698

56
g-index

108
all docs

108
docs citations

108
times ranked

3696
citing authors

#	ARTICLE	IF	CITATIONS
1	Elasto-Raman scattering: Arsenic optical phonon as a probe of nematicity in BaFe_2As_2 . Physical Review B, 2022, 105, .	5.2	10
2	Possible observation of the signature of the bad metal phase and its crossover to a Fermi liquid in $\text{(BEDT-TTF)}_2\text{Cu}(\text{NCS})_2$ bulk and nanoparticles by Raman scattering. Journal of Physics Condensed Matter, 2021, 33, 125403.	1.8	2
3	Amplitude mode of charge density wave in $\text{TTF}[\text{Ni}(\text{dmit})_2]_2$ observed by electronic Raman scattering. Physical Review B, 2021, 103, .	3.2	0
4	Elastic properties assessment in the multiferroic BiFeO_3 by pump and probe method. Applied Physics Letters, 2021, 118, .	3.3	7
5	Lattice-shifted nematic quantum critical point in $\text{FeSe}_{1-x}\text{S}_x$. Npj Quantum Materials, 2021, 6, .	5.2	13
6	Exploration of Hg-based cuprate superconductors by Raman spectroscopy under hydrostatic pressure. Physical Review B, 2021, 103, .	3.2	3
7	Elastic and magnetoelastic properties of TbMnO_3 single crystal by nanosecond time resolved acoustics and first-principles calculations. Journal of Physics Condensed Matter, 2021, 33, 495402.	1.8	2
8	La supraconductivité à haute température dans les oxydes de cuivre : où en est-on ? , 2021, , 4-17.	0.1	0
9	Anisotropic Kondo pseudogap in URu_2Si_2 . Physical Review B, 2020, 101, .	3.2	12
10	Impact of the surface phase transition on magnon and phonon excitations in BiFeO_3 nanoparticles. Applied Physics Letters, 2020, 116, .	3.3	5
11	Universal relationship between the energy scales of the pseudogap phase, the superconducting state, and the charge-density-wave order in copper oxide superconductors. Physical Review B, 2020, 101, .	3.2	12
12	Reproducible nanostructuring of the superconducting $\text{(BEDT-TTF)}_2\text{Cu}(\text{NCS})_2$ phase. Synthetic Metals, 2020, 261, 116310.	3.9	4
13	Switchable two-dimensional electron gas based on ferroelectric CaSrTiO_3 . Physical Review Materials, 2020, 4, .	2.4	15
14	Nematic fluctuations in the cuprate superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\delta$. Nature Communications, 2019, 10, 5209.	12.8	42
15	A magnetic phase diagram for nanoscale epitaxial BiFeO_3 films. Applied Physics Reviews, 2019, 6, .	11.3	19
16	Crystal growth and doping control of $\text{HgBa}_2\text{CuO}_4+\delta$, the model compound for high-T superconductors. Materials Research Bulletin, 2019, 118, 110479.	5.2	7
17	Intimate link between charge density wave, pseudogap and superconducting energy scales in cuprates. Nature Physics, 2019, 15, 771-775.	16.7	64
18	Pressure-Induced Collapse of the Charge Density Wave and Higgs Mode Visibility in $\text{HgBa}_2\text{CuO}_4+\delta$. Physical Review Letters, 2019, 122, 127001.	7.8	55

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19	Magnetic transitions in CaMnO_7 : Raman observation of spin-phonon couplings. Physical Review B, 2019, 99, .	3.2	5
20	Probing chiral electronic excitations in bilayer graphene by Raman scattering. Physical Review Materials, 2019, 3, .	2.4	5
21	Influence of flexoelectricity on the spin cycloid in (110)-oriented BiFeO_3 films. Physical Review Materials, 2019, 3, .	2.4	9
22	Higgs-mode radiance and charge-density-wave order in HfO_2 . Physical Review B, 2018, 97, .	3.2	6
23	Colossal electromagnon excitation in the non-cycloidal phase of TbMnO_3 under pressure. Npj Quantum Materials, 2018, 3, .	5.2	10
24	Raman and ARPES combined study on the connection between the existence of the pseudogap and the topology of the Fermi surface in BiO_8 . Physical Review B, 2018, 97, .	2.2	12
25	Collapse of Critical Nematic Fluctuations in FeSe under Pressure. Physical Review Letters, 2018, 121, 077001.	7.8	19
26	Raman active high energy excitations in URu_2Si_2 . Physica B: Condensed Matter, 2017, 506, 19-22.	2.7	4
27	Strain and Magnetic Field Induced Spin-Structure Transitions in Multiferroic BiFeO_3 . Advanced Materials, 2017, 29, 1602327.	21.0	76
28	Vertical temperature boundary of the pseudogap under the superconducting dome in the phase diagram of BiO_8 . Physical Review B, 2017, 96, .	2.2	11
29	Crystal Growth and Characterization of $\text{HgBa}_2\text{Ca}_2\text{Cu}_8\text{O}_{28}$ Superconductors with the Highest Critical Temperature at Ambient Pressure. Inorganic Chemistry, 2017, 56, 9396-9399.	4.0	12
30	Role of the rare earth in lattice and magnetic coupling in multiferroic hMnO_2 . Physical Review B, 2017, 95, .	3.2	2
31	Charge-induced nematicity in FeSe. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9177-9181.	7.1	83
32	$\hat{\Gamma}$ -collective mode as resonance in cuprate superconductors. Physical Review B, 2016, 93, .	3.2	11
33	Unconventional High-Energy-State Contribution to the Cooper Pairing in the Underdoped Copper-Oxide Superconductor $\text{HgBa}_2\text{Ca}_2\text{Cu}_8\text{O}_{28}$. Physical Review Letters, 2016, 116, 197001.	7.8	17
34	Gate-Dependent Electronic Raman Scattering in Graphene. Physical Review Letters, 2016, 116, 066805.	7.8	21
35	Three energy scales in the superconducting state of hole-doped cuprates detected by electronic Raman scattering. Physical Review B, 2015, 92, .	3.2	11
36	Driving Spin Excitations by Hydrostatic Pressure in BiFeO_3 . Physical Review Letters, 2015, 115, 267204.	7.8	11

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37	Collapse of the Normal-State Pseudogap at a Lifshitz Transition in the BiO_2 . Physical Review Letters, 2015, 114, 147001.	7.8	82
38	Lattice dynamics of the heavy-fermion compound URu_2Si_2 . Physical Review B, 2015, 91, .	3.2	18
39	Symmetry of the Excitations in the Hidden Order State of URu_2Si_2 . Physical Review Letters, 2014, 113, 266405.	7.8	29
40	Amplitude Higgs mode in the HfO_2 . Physical Review B, 2014, 89, .	3.2	124
41	Lattice and spin excitations in multiferroic YMnO . Temperature-induced change in the Fermi surface topology in the spin density wave phase of $\text{Sr}(\text{Fe}_{1-x}\text{Co}_x)_2\text{P}_2\text{O}_{14}$. Physical Review B, 2012, 89, .	3.2	24
42		3.2	8
43	Raman scattering study of the lattice dynamic of URu_2Si_2 and sample's preparation. Journal of the Korean Physical Society, 2013, 62, 1427-1430.	0.7	5
44	Raman-Scattering Measurements and Theory of the Energy-Momentum Spectrum for Underdoped $\text{Bi}_2\text{Sr}_2\text{CaCuO}_8+x$ Superconductors: Evidence of an s-Wave Structure for the Pseudogap. Physical Review Letters, 2013, 111, 107001.	7.8	64
45		3.2	167
46	Crafting the magnonic and spintronic response of BiFeO_3 films by epitaxial strain. Nature Materials, 2013, 12, 641-646.	27.5	311
47	New insights into the phase diagram of the copper oxide superconductors from electronic Raman scattering. Reports on Progress in Physics, 2013, 76, 022502.	20.1	29
48	Pseudogap in Cuprates by Electronic Raman Scattering. Journal of Physics: Conference Series, 2013, 449, 012011.	0.4	9
49	Lattice and spin excitations in multiferroic YbMnO . Physical Review B, 2012, 86, .	3.2	16
50	Electromagnon and phonon excitations in multiferroic TbMnO_3 . Physical Review B, 2012, 86, .	3.2	21
51	Magnetic Field Induced Dehybridization of the Electromagnons in Multiferroic TbMnO_3 . Physical Review Letters, 2011, 107, 027202.	7.8	24
52	Electronic Raman scattering in copper oxide superconductors: Understanding the phase diagram. Comptes Rendus Physique, 2011, 12, 480-501.	0.9	19
53		3.2	43
54	Electric-field control of spin waves at room temperature in multiferroic BiFeO_3 . Nature Materials, 2010, 9, 975-979.	27.5	227

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55	Impact of the spin-density-wave order on the superconducting gap of $Ba_{1-x}Bi_x$. Physical Review B, 2010, 82, .	3.2	28
56	Magnetolectric excitations in multiferroic $TbMnO_3$. Raman scattering. Physical Review B, 2010, 81, .	3.2	39
57	Loss of antinodal coherence with a single d -wave superconducting gap leads to two energy scales for underdoped cuprate superconductors. Physical Review B, 2010, 82, .	3.2	26
58	Quantitative Raman measurement of the evolution of the Cooper-pair density with doping in $Bi_{2-x}Sb_x$. Physical Review B, 2009, 80, .	3.2	31
59	Polar phonons and spin excitations coupling in multiferroic $BiFeO_3$. Physical Review B, 2009, 79, .	3.2	82
60	Piezoelectric measurements on $BiFeO_3$ single crystal by Raman scattering. Journal of Magnetism and Magnetic Materials, 2009, 321, 1699-1701.	2.3	20
61	Possible interplay between a two phonon mode and high energy magnetic excitations in $BiFeO_3$. European Physical Journal B, 2009, 67, 209-212.	1.5	23
62	Doping dependence of the lattice dynamics in $Ba_{1-x}Bi_x$. Physical Review B, 2009, 80, .	3.2	77
63	Nodal and antinodal gaps in the superconducting state of cuprates. Journal of Physics and Chemistry of Solids, 2008, 69, 3049-3051.	4.0	1
64	Possible Observation of Cycloidal Electromagnons in $BiFeO_3$. Physical Review Letters, 2008, 101, 037601.	7.8	191
65	Temperature dependence and resonance effects in Raman scattering of phonons in $NdFeAsO_x$ crystals. Physical Review B, 2008, 78, .	3.2	27
66	Breakpoint in the evolution of the gap through the cuprate phase diagram. Physical Review B, 2008, 77, .	3.2	43
67	Temperature Dependence of the Gap Size near the Brillouin-Zone Nodes of $HgBa_2CuO_{4-y}$. Investigations of the relationship between T_c and the superconducting gap under magnetic and nonmagnetic impurity substitutions in $YBa_2Cu_3O_{7-x}$. Physical Review Letters, 2008, 101, 077003.	7.8	40
68	Investigations of the relationship between T_c and the superconducting gap under magnetic and nonmagnetic impurity substitutions in $YBa_2Cu_3O_{7-x}$. Physical Review Letters, 2008, 101, 077003.	3.2	21
69	High-Crystalline Single- and Double-Walled Carbon Nanotube Mats Grown by Chemical Vapor Deposition. Journal of Physical Chemistry C, 2007, 111, 15154-15159.	3.1	25
70	Experimental evidences for a strong coupling between electrons and the apical oxygen phonon of $HgBa_2CuO_{4+y}$. Physica C: Superconductivity and Its Applications, 2007, 460-462, 380-381.	1.2	1
71	Dichotomy in quasiparticles dynamics of underdoped cuprates in the superconducting state. Physica C: Superconductivity and Its Applications, 2007, 460-462, 358-361.	1.2	2
72	Confocal Raman and TEM measurements at the same area on nanoparticles. Microelectronic Engineering, 2007, 84, 419-423.	2.4	5

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73	Two energy scales and two distinct quasiparticle dynamics in the superconducting state of underdoped cuprates. <i>Nature Physics</i> , 2006, 2, 537-543.	16.7	301
74	Cu-Ag core-shell nanoparticles: A direct correlation between micro-Raman and electron microscopy. <i>Physical Review B</i> , 2006, 73, .	3.2	80
75	Interplay between the A _{1g} electronic Raman scattering peak and the neutron magnetic resonance. <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 503-508.	4.0	6
76	Coupling between quasiparticles and a bosonic mode in the normal state of HgBa ₂ CuO ₄ + δ . <i>Europhysics Letters</i> , 2006, 73, 594-600.	2.0	6
77	Nakamae et al. Reply. <i>Physical Review Letters</i> , 2006, 96, .	7.8	15
78	Interplay between the pseudogap and superconductivity in underdoped HgBa ₂ CuO ₄ + δ single crystals. <i>Physical Review B</i> , 2005, 71, .	3.2	29
79	Two distinct electronic contributions in the fully symmetric Raman response of high-T _c cuprates. <i>Physical Review B</i> , 2005, 71, .	3.2	17
80	Nakamae et al. Reply. <i>Physical Review Letters</i> , 2005, 95, .	7.8	5
81	Intrinsic Low Temperature Paramagnetism in B-DNA. <i>Physical Review Letters</i> , 2005, 94, 248102.	7.8	41
82	Iodine insertion in pentacene thin films investigated by infrared and Raman spectroscopy. <i>Physical Review B</i> , 2004, 70, .	3.2	33
83	Resonant Raman scattering in mercurate single crystals. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 785-788.	1.2	16
84	Evidence for Two Distinct Energy Scales in the Raman Spectra of YBa ₂ (Cu _{1-x} Ni _x) ₃ O _{6.95} . <i>Physical Review Letters</i> , 2002, 88, 177401.	7.8	37
85	Analysis of the Superconducting Gap by Electronic Raman Scattering in HgBa ₂ Ca ₂ Cu ₃ O ₈ + δ Single Crystals. , 2002, , 291-308.		0
86	Electronic Raman scattering on under-doped mercurate high-T _c superconductors: the symmetry of the order parameter. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 1667-1668.	1.2	0
87	Raman scattering on oxide phases related to the mercurate high-T _c superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 2253-2254.	1.2	4
88	Electronic Raman scattering on the underdoped HgBa ₂ Ca ₂ Cu ₃ O ₈ + δ high-T _c superconductor: The symmetry of the order parameter. <i>Physical Review B</i> , 2000, 61, 7122-7129.	3.2	30
89	Electronic Raman scattering in HgBa ₂ Ca ₂ Cu ₃ O ₈ + δ single crystals: Analysis of the superconducting state. <i>Physical Review B</i> , 1998, 58, 11721-11733.	3.2	34
90	Nodes of the superconducting gap probed by electronic Raman scattering in HgBa ₂ CaCu ₂ O ₆ + δ single crystals. <i>Europhysics Letters</i> , 1997, 39, 207-212.	2.0	38

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91	Determination of the a and b crystalline axes in YBa ₂ Cu ₃ O ₇ single crystal by a polarizing light set up. Physica C: Superconductivity and Its Applications, 1997, 282-287, 471-472.	1.2	0
92	Symmetry of the superconducting gap in HgBa ₂ CaCu ₂ O ₆ + δ single crystals from electronic Raman scattering. Physica C: Superconductivity and Its Applications, 1997, 282-287, 1013-1014.	1.2	1
93	Normal-modes study of HgBa ₂ Ca ₂ Cu ₃ O ₈ + δ single crystals by a micro-Raman analysis. Physica C: Superconductivity and Its Applications, 1996, 259, 209-217.	1.2	23
94	Straightforward identification of the a and b crystalline axes in single crystal by a polarizing microscope set-up. Superconductor Science and Technology, 1996, 9, 483-487.	3.5	2
95	Charge transfer in YBa ₂ Cu ₃ O ₆ doped with fluorine: Infrared reflectance and Raman scattering studies. Physical Review B, 1995, 52, 7619-7628.	3.2	14
96	An electronic Raman scattering study on YBa ₂ Cu ₃ O ₇ in the superconducting state. Journal of Physics Condensed Matter, 1994, 6, 1057-1064.	1.8	8
97	Free carriers density enhancement in the CuO ₂ planes of the YBa ₂ Cu ₃ O ₆ F _y compounds at the insulator/metal transition: A Raman scattering analysis. Physica C: Superconductivity and Its Applications, 1994, 235-240, 1293-1294.	1.2	2
98	Current induced optical birefringence in superconducting YBaCuO (123) and BiSrCaCuO (2212) thin films. Physica C: Superconductivity and Its Applications, 1994, 235-240, 2099-2100.	1.2	2
99	Heteroepitaxy of GaSe layered semiconductor compound on Si(111) 7 Å— 7 substrate: a Van der Waals epitaxy?. Journal of Crystal Growth, 1994, 135, 1-10.	1.5	57
100	Combination of IBA techniques and Raman spectroscopy to study defects in ¹⁸ O labelled YBaCuO thin films. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 462-467.	1.4	4
101	Cu-O chains contribution to the electronic Raman scattering of a YBa ₂ Cu ₃ O ₇ single crystal. Solid State Communications, 1993, 85, 589-592.	1.9	5
102	Study of oxygen content and of disorder in YBaCuO thin films with enlarged c-axis lattice parameter. Journal of Alloys and Compounds, 1993, 195, 675-678.	5.5	11
103	Selective ¹⁸ O labelling in a-axis oriented YBaCuO thin films. Journal of Alloys and Compounds, 1993, 195, 137-140.	5.5	3
104	Raman scattering on YBa ₂ Cu ₃ O ₇ + δ single crystals with variable oxygen content. Journal of Alloys and Compounds, 1993, 195, 359-362.	5.5	9
105	Use of RBS and Raman spectroscopy to study oxygen mobility in YBaCuO thin films by ¹⁸ O tracing experiments. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 179-183.	1.4	11
106	Raman spectra of Nd _{1.85} Ce _{0.15} CuO ₄ . Solid State Communications, 1991, 78, 99-101.	1.9	11