

Dario Daghero

List of Publications by Year in descending order

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186209

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1809
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct Evidence for Two-Band Superconductivity in MgB ₂ Single Crystals from Directional Point-Contact Spectroscopy in Magnetic Fields. <i>Physical Review Letters</i> , 2002, 89, 247004.	2.9	238
2	Probing multiband superconductivity by point-contact spectroscopy. <i>Superconductor Science and Technology</i> , 2010, 23, 043001.	1.8	194
3	Phonon Dispersion and Lifetimes in MgB ₂ . <i>Physical Review Letters</i> , 2003, 90, 095506.	2.9	139
4	Single crystals of LnFeAsO _{1-x} F _x (Ln=La, Pr, Nd, Sm, Gd) and Ba _{1-x} Rb _x Fe ₂ As ₂ : Growth, structure and superconducting properties. <i>Physica C: Superconductivity and Its Applications</i> , 2009, 469, 370-380.	0.6	120
5	Al substitution in MgB ₂ crystals: Influence on superconducting and structural properties. <i>Physical Review B</i> , 2005, 71, .	1.1	110
6	Directional point-contact Andreev-reflection spectroscopy of Fe-based superconductors: Fermi surface topology, gap symmetry, and electron-boson interaction. <i>Reports on Progress in Physics</i> , 2011, 74, 124509.	8.1	85
7	The 2021 room-temperature superconductivity roadmap. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 183002.	0.7	79
8	Critical field of Al-doped MgB ₂ samples: Correlation with the suppression of the γ -band gap. <i>Physical Review B</i> , 2005, 71, .	1.1	76
9	Evidence for single-gap superconductivity in Mg(B _{1-x} C _x) ₂ single crystals with $x=0.132$ from point-contact spectroscopy. <i>Physical Review B</i> , 2005, 71, .	1.1	71
10	Multigap Superconductivity and Strong Electron-Boson Coupling in Fe-Based Superconductors: A Point-Contact Andreev-Reflection Study of $BaFe_{1-x}Co_x$. <i>Physical Review Letters</i> , 2009, 103, 237002.	2.9	68
11	Josephson Effect in MgB ₂ Break Junctions. <i>Physical Review Letters</i> , 2001, 87, 097001.	2.9	65
12	Large Conductance Modulation of Gold Thin Films by Huge Charge Injection via Electrochemical Gating. <i>Physical Review Letters</i> , 2012, 108, 066807.	2.9	63
13	Evidence for two-gap nodeless superconductivity in $SmFeAsO_{1-x}F_x$ from point-contact Andreev-reflection spectroscopy. <i>Physical Review B</i> , 2009, 80, .	1.1	61
14	Multi-Valley Superconductivity in Ion-Gated MoS ₂ Layers. <i>Nano Letters</i> , 2018, 18, 4821-4830.	4.5	58
15	Three-band Eliashberg theory and the superconducting gaps of iron pnictides. <i>Physical Review B</i> , 2009, 80, .	1.1	56
16	Coexistence of two order parameters and a pseudogap-like feature in the iron-based superconductor $LaFeAsO_{1-x}F_x$. <i>Physical Review B</i> , 2009, 79, .	1.1	55
17	Point-contact Andreev-reflection spectroscopy in $ReFeAsO_{1-x}F_x$ (Re = La, Sm): Possible evidence for two nodeless gaps. <i>Physica C: Superconductivity and Its Applications</i> , 2009, 469, 512-520.	0.6	53
18	Charge transport mechanisms in inkjet-printed thin-film transistors based on two-dimensional materials. <i>Nature Electronics</i> , 2021, 4, 893-905.	13.1	52

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19	Strong-coupling d-wave superconductivity in PuCoGa5 probed by point-contact spectroscopy. Nature Communications, 2012, 3, 786.	5.8	49
20	Electrical anisotropy in high-Tc granular superconductors in a magnetic field. Physical Review B, 2002, 66, .	1.1	46
21	Evidence for Gap Anisotropy in CaC_6 from Directional Point-Contact Spectroscopy. Physical Review Letters, 2008, 100, 207004.	2.9	46
22	Magnetic-field dependence of the gaps in a two-band superconductor: A point-contact study of MgB2 single crystals. Physical Review B, 2004, 69, .	1.1	41
23	Carbon substitutions in MgB2 within the two-band Eliashberg theory. Physical Review B, 2005, 71, .	1.1	36
24	Andreev-reflection spectroscopy in ZrB12 single crystals. Superconductor Science and Technology, 2004, 17, S250-S254.	1.8	35
25	Effect of Magnetic Impurities in a Two-Band Superconductor: A Point-Contact Study of Mn-Substituted MgB2 Single Crystals. Physical Review Letters, 2006, 97, 037001.	2.9	35
26	Point-contact spectroscopy in MgB2 single crystals in magnetic field. Physica C: Superconductivity and Its Applications, 2003, 385, 255-263.	0.6	31
27	Point-contact spectroscopy in neutron-irradiated MgB211. Physical Review B, 2006, 74, .	1.1	30
28	Evidence for pseudogap and phase-coherence gap separation by Andreev reflection experiments in Au/La 2 - x Sr x CuO 4 point-contact junctions. European Physical Journal B, 2001, 22, 411-414.	0.6	29
29	Control of bulk superconductivity in a BCS superconductor by surface charge doping via electrochemical gating. Physical Review B, 2017, 95, .	1.1	28
30	Proximity Eliashberg theory of electrostatic field-effect doping in superconducting films. Physical Review B, 2017, 96, .	1.1	24
31	Point-contact Andreev-reflection spectroscopy in segregation-free Mg _{1-x} Al _x B ₂ single crystals up to $x = 0.32$. Journal of Physics Condensed Matter, 2008, 20, 085225.	0.7	21
32	Point-contact Andreev-reflection spectroscopy in MgB2: The role of substitutions. Physica C: Superconductivity and Its Applications, 2007, 456, 134-143.	0.6	20
33	Predictions of Multiband s_{\pm} Strong-Coupling Eliashberg Theory Compared to Experimental Data in Iron Pnictides. Journal of Superconductivity and Novel Magnetism, 2011, 24, 247-253.	0.8	18
34	Point-contact Andreev-reflection spectroscopy in anisotropic superconductors: The importance of directionality (Review Article). Low Temperature Physics, 2013, 39, 199-210.	0.2	18
35	Huge field-effect surface charge injection and conductance modulation in metallic thin films by electrochemical gating. Applied Surface Science, 2013, 269, 17-22.	3.1	18
36	Superconducting Transition Temperature Modulation in NbN via EDL Gating. Journal of Superconductivity and Novel Magnetism, 2016, 29, 587-591.	0.8	18

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37	Point-contact Andreev-reflection spectroscopy in Fe(Te,Se) films: multiband superconductivity and electron-boson coupling. Superconductor Science and Technology, 2014, 27, 124014.	1.8	17
38	Fermi-Surface Topological Phase Transition and Horizontal Order-Parameter Nodes in CaFe ₂ As ₂ Under Pressure. Scientific Reports, 2016, 6, 26394.	1.6	16
39	Carrier mobility and scattering lifetime in electric double-layer gated few-layer graphene. Applied Surface Science, 2017, 395, 37-41. Doping and critical-temperature dependence of the energy gaps in Ba(Fe _{1-x} Mn _x) ₂ As ₂ . Applied Surface Science, 2018, 461, 17-22.	3.1	16
40		1.1	14
41	Independent determination of the two gaps by directional point-contact spectroscopy in MgB ₂ single crystals. Superconductor Science and Technology, 2003, 16, 171-175.	1.8	13
42	Neutron irradiation effects on two gaps in MgB ₂ . Physica C: Superconductivity and Its Applications, 2007, 456, 144-152.	0.6	13
43	Point-contact spectroscopy in Co-doped CaFe ₂ As ₂ : nodal superconductivity and topological Fermi surface transition. Superconductor Science and Technology, 2012, 25, 065007.	1.8	13
44	Temperature and junction-type dependency of Andreev reflection in MgB ₂ . Journal of Physics and Chemistry of Solids, 2002, 63, 2319-2323.	1.9	12
45	Point-contact spectroscopy in MgB ₂ : from fundamental physics to thin-film characterization. Superconductor Science and Technology, 2004, 17, S93-S100.	1.8	12
46	Effects of isoelectronic Ru substitution at the Fe site on the energy gaps of optimally F-doped SmFeAsO. Superconductor Science and Technology, 2012, 25, 084012.	1.8	12
47	Anomalous screening of an electrostatic field at the surface of niobium nitride. Applied Surface Science, 2018, 461, 17-22.	3.1	12
48	Two-dimensional hole transport in ion-gated diamond surfaces: A brief review (Review article). Low Temperature Physics, 2019, 45, 1143-1155.	0.2	11
49	Ambipolar suppression of superconductivity by ionic gating in optimally doped BaFe _{1-x} Mn _x As ₂ ultrathin films. Physical Review Materials, 2019, 3, .	0.9	11
50	A point-contact study of the superconducting gaps in Al-substituted and C-substituted MgB ₂ single crystals. Journal of Physics and Chemistry of Solids, 2006, 67, 360-364.	1.9	10
51	Effect of Al co-doping on the energy gaps of MgB ₂ . Superconductor Science and Technology, 2009, 22, 025012.	1.8	9
52	Point-Contact Andreev-Reflection Spectroscopy in Fe-Based Superconductors: Multigap Superconductivity and Strong Electron-Boson Interaction. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1297-1301.	0.8	9
53	Nodal multigap superconductivity in the anisotropic iron-based compound RbCa ₂ Fe ₄ As ₄ F ₂ . Npj Quantum Materials, 2022, 7, .	1.8	9
54	Electric field exfoliation and high-TC superconductivity in field-effect hole-doped hydrogenated diamond (111). Applied Surface Science, 2019, 496, 143709.	3.1	8

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55	Crystal growth, characterization, and point-contact Andreev-reflection spectroscopy of the noncentrosymmetric superconductor C_3Mo_3C . Physical Review B, 2018, 97, .	1.1	8
56	Tunneling conductance of SIN junctions with different gap symmetries and non-magnetic impurities by direct solution of real-axis Eliashberg equations. Physica C: Superconductivity and Its Applications, 2002, 377, 292-303.	0.6	7
57	Two-gap superconductivity in the Fe-1111 superconductor $LaFeAsO_{1-x}F_x$: A point-contact Andreev-reflection study. Open Physics, 2009, 7, .	0.8	7
58	Possible Multigap Superconductivity in $SmFeAsO_{0.8}F_{0.2}$: A Point-contact Andreev-reflection Spectroscopy Study. Journal of Superconductivity and Novel Magnetism, 2009, 22, 543-547.	0.8	6
59	Investigating point defects in irradiated boron-doped diamond films by temperature-dependent electrical properties and scanning tunneling microscopy and spectroscopy. Journal of Materials Research, 2010, 25, 444-457.	1.2	6
60	Effect of ion irradiation on surface morphology and superconductivity of $BaFe_2(As_{1-x}P_x)_2$ films. Applied Surface Science, 2017, 395, 9-15.	3.1	6
61	Anisotropy of the electrical resistance in high-Tc granular superconductors under magnetic field. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1869-1870.	0.6	5
62	The superconducting gaps of C-substituted and Al-substituted MgB_2 single crystals by point-contact spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1656-1661.	0.8	5
63	Recent achievements in MgB_2 physics and applications: A large-area SQUID magnetometer and point-contact spectroscopy measurements. Physica C: Superconductivity and Its Applications, 2006, 435, 59-65.	0.6	5
64	Effect of Heavy Al Doping on MgB_2 : A Point-Contact Study of Crystals and Polycrystals. Journal of Superconductivity and Novel Magnetism, 2007, 20, 555-558.	0.8	5
65	Investigation of Li-doped MgB_2 . Superconductor Science and Technology, 2009, 22, 095014.	1.8	5
66	Point contact spectroscopy in Fe-based superconductors: Recent advancements and future challenges. Current Opinion in Solid State and Materials Science, 2013, 17, 72-80.	5.6	5
67	Advanced surface characterization of $Ba(Fe_{0.92}Co_{0.08})_2As_2$ epitaxial thin films. Applied Surface Science, 2014, 312, 23-29.	3.1	5
68	Decoupling of critical temperature and superconducting gaps in irradiated films of a Fe-based superconductor. Superconductor Science and Technology, 2018, 31, 034005.	1.8	5
69	Superconductivity of underdoped $PrFeAs(O,F)$ investigated via point-contact spectroscopy and nuclear magnetic resonance. Physical Review B, 2020, 102, .	1.1	5
70	Strong band-filling-dependence of the scattering lifetime in gated MoS_2 nanolayers induced by the opening of intervalley scattering channels. Journal of Applied Physics, 2020, 128, 063907.	1.1	5
71	Evidence for One-Gap Superconductivity in $Mg(B_{1-x}C_x)_2$ Single Crystals at $x=0.132$ by Point-Contact Spectroscopy. Journal of Superconductivity and Novel Magnetism, 2005, 18, 681-685.	0.5	4
72	Point-Contact Andreev-Reflection Spectroscopy in the Fe-based Superconductor $LaFeAsO_{1-x}F_x$. Journal of Superconductivity and Novel Magnetism, 2009, 22, 553-557.	0.8	4

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73	Normal and superconducting properties of LiFeAs explained in the framework of four-band Eliashberg theory. <i>Physica C: Superconductivity and Its Applications</i> , 2013, 492, 21-24.	0.6	4
74	The Order-Parameter Symmetry and Fermi Surface Topology of 122 Fe-Based Superconductors: A Point-Contact Andreev-Reflection Study. <i>Journal of Superconductivity and Novel Magnetism</i> , 2013, 26, 1331-1337.	0.8	4
75	ab-plane resistivity and possible charge stripe ordering in strongly underdoped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ single crystals. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 1779-1780.	0.6	3
76	ELIASHBERG EQUATIONS AND THE PHENOMENOLOGY OF FIELD-EFFECT-DOPED C60. <i>International Journal of Modern Physics B</i> , 2002, 16, 1539-1546.	1.0	3
77	GAP MEASUREMENTS IN MgB_2 BREAK-JUNCTION AND POINT-CONTACT HETEROSTRUCTURES: TEST OF THE TWO-BAND MODELS. <i>International Journal of Modern Physics B</i> , 2002, 16, 1553-1561.	1.0	3
78	The determination of the electron-phonon interaction from tunneling data in the two-band superconductor MgB_2 . <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 353-354.	0.6	3
79	Andreev-reflection measurements in $\text{RuSr}_2\text{GdCu}_2\text{O}_8$. <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 597-600.	1.9	3
80	Resistivity in $\text{Ba}(\text{FeCo})\text{As}$: Comparison of thin films and single crystals. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 821-827.	0.7	3
81	TEMPERATURE AND DOPING DEPENDENCE OF ANDREEV REFLECTION IN $\text{Au}/\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ POINT-CONTACT JUNCTIONS. <i>International Journal of Modern Physics B</i> , 2000, 14, 3472-3479.	1.0	2
82	POSSIBLE EVIDENCE OF CHARGE-STRIPE ORDERING IN THE ab-PLANE RESISTIVITY OF STRONGLY UNDERDOPED $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ SINGLE CRYSTALS. <i>International Journal of Modern Physics B</i> , 2000, 14, 2779-2784.	1.0	2
83	POSSIBLE $d + id$ SCENARIO IN $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ BY POINT-CONTACT MEASUREMENTS. <i>International Journal of Modern Physics B</i> , 2003, 17, 649-654.	1.0	2
84	Directional point-contact spectroscopy of MgB_2 single crystals in magnetic fields: two-band superconductivity and critical fields. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 796-798.	0.6	2
85	Point-Contact Spectroscopy in Mn-Doped MgB_2 Single Crystals: Effects of Magnetic Impurities in a Two-Band Superconductor. <i>Journal of Superconductivity and Novel Magnetism</i> , 2007, 20, 523-526.	0.8	2
86	Anomalous Metallic Phase in Molybdenum Disulphide Induced via Gate-Driven Organic Ion Intercalation. <i>Nanomaterials</i> , 2022, 12, 1842.	1.9	2
87	Solution of real-axis Eliashberg equations with different parities and tunneling density of states. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 299-300.	0.6	1
88	REAL-AXIS SOLUTION OF ELIASHBERG EQUATIONS IN VARIOUS ORDER-PARAMETER SYMMETRIES AND TUNNELING CONDUCTANCE OF OPTIMALLY-DOPED HTSC. <i>International Journal of Modern Physics B</i> , 2000, 14, 2944-2949.	1.0	1
89	Doping dependence of the superconducting gap by Andreev reflection in $\text{Au}/\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ point-contact junctions. <i>Journal of Physics and Chemistry of Solids</i> , 2002, 63, 2369-2373.	1.9	1
90	Effect of the magnetic field on the gaps of MgB_2 : A directional point-contact study. <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 424-427.	1.9	1

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91	Point-contact study of the role of non-magnetic impurities and disorder in the superconductivity of MgB ₂ . Physica C: Superconductivity and Its Applications, 2007, 460-462, 975-976.	0.6	1
92	Possible mixed coupling mechanism in FeTe _{1-x} Se _x within a multiband Eliashberg approach. Journal of Physics Condensed Matter, 2015, 27, 435701.	0.7	1
93	Superconductivity on the Verge of a Pressure-Induced Lifshitz Transition in CaFe ₂ As ₂ : an Interpretation Within the Eliashberg Theory. Journal of Superconductivity and Novel Magnetism, 2018, 31, 771-776.	0.8	1
94	Conductance anisotropy in granular high-T _c superconductors in a magnetic field. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 1039-1045.	0.6	0
95	Point-Contact Spectroscopy in Doped and Irradiated MgB ₂ . Advances in Science and Technology, 2006, 47, 75.	0.2	0
96	The Superconducting Order Parameter in High-T _c Superconductors – A Point-Contact Spectroscopy Viewpoint. , 0, , .		0