Gaia Grimaldi

List of Publications by Year
in descending order

91 papers	983 citations	394286 19 h-index	552653 26 g-index
91 all docs	91 docs citations	91 times ranked	596 citing authors

#	Article	IF	Citations
1	Influence of artificial pinning on vortex lattice instability in superconducting films. New Journal of Physics, 2012, 14, 053006.	1.2	46
2	Speed limit to the Abrikosov lattice in mesoscopic superconductors. Physical Review B, 2015, 92, .	1.1	44
3	Quasiparticle scattering time in niobium superconducting films. Physical Review B, 2011, 84, .	1.1	41
4	Vortex pinning properties in Fe-chalcogenides. Superconductor Science and Technology, 2015, 28, 125001.	1.8	40
5	Evidence of pinning crossover and the role of twin boundaries in the peak effect in FeSeTe iron based superconductor. Superconductor Science and Technology, 2018, 31, 015014.	1.8	40
6	Controlling flux flow dissipation by changing flux pinning in superconducting films. Applied Physics Letters, 2012, 100, .	1.5	35
7	Dynamic ordering and instability of the vortex lattice in Nb films exhibiting moderately strong pinning. Physical Review B, 2009, 80, .	1.1	28
8	Evidence for low-field crossover in the vortex critical velocity of type-II superconducting thin films. Physical Review B, 2010, 82, .	1.1	27
9	A precursor mechanism triggering the second magnetization peak phenomenon in superconducting materials. Scientific Reports, 2021, 11, 7247.	1.6	25
10	Comparison of Superconducting Properties of $ hbox{FeSe}_{0.5}hbox{Te}_{0.5}$ Thin Films Grown on Different Substrates. IEEE Transactions on Applied Superconductivity, 2013, 23, 7500704-7500704.	1.1	23
11	Effects of high-energy proton irradiation on the superconducting properties of Fe(Se,Te) thin films. Superconductor Science and Technology, 2018, 31, 054001.	1.8	22
12	Competition between intrinsic and extrinsic effects in the quenching of the superconducting state in Fe(Se,Te) thin films. Physical Review B, 2016, 93, .	1.1	21
13	Angular dependence of vortex instability in a layered superconductor: the case study of Fe(Se,Te) material. Scientific Reports, 2018, 8, 4150.	1.6	21
14	Pinning energy and anisotropy properties of a Fe(Se, Te) iron based superconductor. Nanotechnology, 2019, 30, 254001.	1.3	21
15	Pinning mechanism in electron-doped HTS Nd$_{1.85}$Ce$_{0.15}$CuO$_{4-delta }$ epitaxial films. Superconductor Science and Technology, 2014, 27, 124011.	1.8	20
16	Nonequilibrium fluctuations as a distinctive feature of weak localization. Scientific Reports, 2015, 5, 10705.	1.6	20
17	Mixed state properties of iron based Fe(Se,Te) superconductor fabricated by Bridgman and by self-flux methods. Journal of Applied Physics, 2018, 123, .	1.1	20
18	Flux distribution and critical currents in a one-dimensional row of a Josephson junction square lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 223, 463-469.	0.9	19

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19	Continuous reel-to-reel measurement of critical currents of coated conductors. Applied Physics Letters, 2001, 79, 4390-4392.	1.5	19
20	Thickness dependence of vortex critical velocity in wide Nb films. Physica C: Superconductivity and Its Applications, 2008, 468, 765-768.	0.6	19
21	Improvements of high-field pinning properties of polycrystalline Fe(Se,Te) material by heat treatments. Journal of Materials Science, 2019, 54, 5092-5100.	1.7	19
22	Flux flow velocity instability in wide superconducting films. Journal of Physics: Conference Series, 2008, 97, 012111.	0.3	18
23	Transport properties and high upper critical field of a Fe(Se,Te) iron based superconductor. European Physical Journal: Special Topics, 2019, 228, 725-731.	1.2	17
24	Introduction to the focus on superconductivity for energy. Superconductor Science and Technology, 2015, 28, 070201.	1.8	16
25	Weak or Strong Anisotropy in Fe(Se,Te) Superconducting Thin Films Made of Layered Iron-Based Material?. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.1	16
26	Epitaxial growth of YBa2Cu3O7-Î´on Ni89V11non-magnetic biaxially textured substrate using NiO as buffer layer. Superconductor Science and Technology, 2000, 13, 1467-1469.	1.8	15
27	Depairing current density of Nd2â^'xCexCuO4â^'Î´ superconducting films. Physica C: Superconductivity and Its Applications, 2013, 495, 66-68.	0.6	14
28	Fabrication and Characterization of Sintered Iron-Chalcogenide Superconductors. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	13
29	Disorder-sensitive pump-probe measurements on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mtext>Nd</mml:mtext><mml:mrow></mml:mrow></mml:msub></mml:mrow></mml:math> Physical Review B, 2016, 94, .	1.1	12
30	Quenching Current by Flux-Flow Instability in Iron-Chalcogenides Thin Films. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	12
31	Magnetic imaging of YBCO coated conductors by Hall probes. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1009-1011.	0.6	11
32	Fabrication and Physical Properties of Polycrystalline Iron-Chalcogenides Superconductors. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	11
33	Non-linear Flux Flow Resistance of Type-II Superconducting Films. Journal of Superconductivity and Novel Magnetism, 2011, 24, 81-87.	0.8	10
34	Anisotropic Effect of Proton Irradiation on Pinning Properties of Fe(Se,Te) Thin Films. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	10
35	Superconducting and structural properties of YBCO thick films grown on biaxially oriented CeO2/NiO/Ni-V architecture. Physica C: Superconductivity and Its Applications, 2000, 341-348, 2501-2502.	0.6	9
36	Properties of biaxially oriented Y2O3 based buffer layers deposited on cube textured non-magnetic Ni-V substrates for YBCO coated conductors. Physica C: Superconductivity and Its Applications, 2000, 341-348, 2503-2504.	0.6	9

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37	Influence of film thickness on the critical current of YBa/sub 2/Cu/sub 3/O/sub 7-x/ thick films on Ni-V biaxially textured substrates. IEEE Transactions on Applied Superconductivity, 2001, 11, 3158-3161.	1.1	9
38	Magnetic field and temperature dependence of the critical vortex velocity in type-II superconducting films. Journal of Physics Condensed Matter, 2009, 21, 254207.	0.7	9
39	Transport and optical properties of epitaxial Nd1.83Ce0.17Cu04â^Ĺ´thin films. Journal of Physics: Conference Series, 2014, 507, 012018.	0.3	9
40	Electron doped superconducting cuprates for photon detectors. Measurement: Journal of the International Measurement Confederation, 2018, 122, 502-506.	2.5	9
41	High Pinning Force Values of a Fe(Se, Te) Single Crystal Presenting a Second Magnetization Peak Phenomenon. Materials, 2021, 14, 5214.	1.3	9
42	Irreversibility line and magnetic field dependence of the critical current in superconducting MgB2bulk samples. Superconductor Science and Technology, 2003, 16, 534-537.	1.8	8
43	Characterization of Nd2â^'xCexCuO4Â±Ĺ´ (x = 0 and 0.15) Ultrathin Films Grown by DC Sputtering Technique. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4.	1.1	8
44	Second Magnetization Peak Effect in a Fe(Se,Te) iron based superconductor. Journal of Physics: Conference Series, 2019, 1226, 012012.	0.3	8
45	Nanoscale analysis of superconducting Fe(Se,Te) epitaxial thin films and relationship with pinning properties. Scientific Reports, 2021, 11, 20100.	1.6	8
46	DC transport properties of epitaxial superconducting SmBa2Cu3O7â^'x films. Physica C: Superconductivity and Its Applications, 2004, 401, 277-281.	0.6	7
47	Irreversible dynamics of Abrikosov vortices in type-two superconductors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 329, 379-384.	0.9	7
48	Pinning effects on the vortex critical velocity in type-II superconducting thin films. Physica C: Superconductivity and Its Applications, 2010, 470, 904-906.	0.6	7
49	A Study of Current Stability in the Dissipative Flux Flow State of Superconducting Films. IEEE Transactions on Applied Superconductivity, 2013, 23, 8200704-8200704.	1.1	7
50	Comparison of the pinning energy in Fe(Se_{1â^'x}Te_x) compound between single crystals and thin films. Journal of Physics: Conference Series, 2014, 507, 012029.	0.3	7
51	Tuning the Resistive Switching of Superconducting Films by Geometry Effects. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.1	7
52	Anisotropy Effects on the Quenching Current of Fe(Se,Te) Thin Films. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.1	6
53	Mixed state properties analysis in AC magnetic field of strong pinning Fe(Se,Te) single crystal. Superconductor Science and Technology, 2020, 33, 094006.	1.8	6
54	Proton Irradiation Effects on the Superconducting Properties of Fe(Se,Te) Thin Films. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	6

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55	Impact of the Starting Powder Composition on ${m GdSr}_{2}{m RuCu}_{2}{m O}_{8}$ Melt-Textured Processes. IEEE Transactions on Applied Superconductivity, 2009, 19, 2945-2948.	1.1	5
56	Silver doping effects on irreversibility field and pinning energy of a FeSe iron based superconductor. Journal of Physics: Conference Series, 2020, 1548, 012024.	0.3	5
57	Critical current anisotropy in Fe(Se,Te) films irradiated by 3.5 MeV protons. Journal of Physics: Conference Series, 2020, 1559, 012042.	0.3	5
58	Magnetic field sweep rate influence on the critical current capabilities of a Fe(Se,Te) crystal. Journal of Applied Physics, 2020, 128, .	1.1	5
59	Experimental analysis of the phase dynamics in small parallel arrays of Josephson junctions. Journal of Applied Physics, 1997, 82, 3607-3611.	1.1	4
60	Inhomogeneous magnetic flux focusing in superconducting Josephson networks. Physical Review B, 1999, 59, 13608-13611.	1.1	4
61	Epitaxial growth of heterostructures on biaxially textured metallic substrates for YBa₂Cu₃O_{7-x} tape fabrication. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 979-990.	0.6	4
62	Changing the flux flow state in weak pinning superconducting films. Physica C: Superconductivity and Its Applications, 2014, 503, 140-142.	0.6	4
63	Stability Mechanisms of High Current Transport in Iron-Chalcogenide Superconducting Films. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	4
64	Vortex lattice instability at the nanoscale in a parallel magnetic field. Nanotechnology, 2019, 30, 424001.	1.3	4
65	Critical phenomenon of vortex motion in superconductors: Vortex instability and flux pinning. Low Temperature Physics, 2020, 46, 375-378.	0.2	4
66	Flux flow instability as a probe for quasiparticle energy relaxation time in Fe-chalcogenides. Superconductor Science and Technology, 2020, 33, 104005.	1.8	4
67	Critical current hysteresis in low angle Y-Ba-Cu-O bicrystals. IEEE Transactions on Applied Superconductivity, 2001, 11, 3776-3779.	1.1	3
68	Electrical transport properties of sputtered Nd2â^'Ce CuO4Â± thin films. Physica B: Condensed Matter, 2018, 536, 742-746.	1.3	3
69	Epitaxial growth of heterostructures on biaxially textured metallic substrates for YBa 2 Cu 3 O 7-x tape fabrication. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 979-990.	0.6	3
70	Voltageâ€“current characteristics of c-axis oriented YBa2Cu3O7â^'Î´ films deposited by dc sputtering. Physica C: Superconductivity and Its Applications, 2000, 340, 225-229.	0.6	2
71	Structural and superconducting properties of EuBa2Cu3O7Âxthin films grown by off-axis pulsed laser deposition. Superconductor Science and Technology, 2004, 17, 1009-1013.	1.8	2
72	A basic thermodynamic problem in the dynamic interaction between vortices and defects. Physica C: Superconductivity and Its Applications, 2006, 437-438, 258-261.	0.6	2

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73	Geometry Effects on Switching Currents in Superconducting Ultra Thin Films. , 2017, , .		2
74	Nd2-<italic> _x </italic>Ce<italic> _x </italic>CuO4Â±Î´ Ultrathin Films Crystalline Properties. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.1	2
75	Transport and Point Contact Measurements on Pr1â^'xCexPt4Ge12 Superconducting Polycrystals. Nanomaterials, 2020, 10, 1810.	1.9	2
76	Critical Current and Pinning Features of a CaKFe4As4 Polycrystalline Sample. Materials, 2021, 14, 6611.	1.3	2
77	Superconductivity induced by structural reorganization in the electron-doped cuprate Nd2â^'xCexCuO4. Physical Review B, 2022, 105, .	1.1	2
78	MAGNETIC BEHAVIOR OF MAGNESIUM DIBORIDE SUPERCONDUCTING THIN FILMS. International Journal of Modern Physics B, 2003, 17, 597-601.	1.0	1
79	Additional Non Equilibrium Processes in the Dynamic Interaction between Flux Quanta and Defects. AIP Conference Proceedings, 2006, , .	0.3	1
80	Transport Properties of Over-doped Epitaxial NdCeCuO Films. Journal of Superconductivity and Novel Magnetism, 2011, 24, 169-172.	0.8	1
81	Voltage stability under current bias in superconducting microbridges. , 2017, , .		1
82	A Study of Ultra-Thin Superconducting Films at High Bias Currents in Different Cooling Environments. Journal of Superconductivity and Novel Magnetism, 2020, 33, 1911-1916.	0.8	1
83	Dimensionality of the Superconductivity in the Transition Metal Pnictide WP. Materials, 2022, 15, 1027.	1.3	1
84	DEVELOPMENT OF BUFFER LAYER STRUCTURES FOR YBa2Cu3O7-Î´ COATED CONDUCTORS ON TEXTURED Ni-V SUBSTRATE. International Journal of Modern Physics B, 2000, 14, 3128-3133.	1.0	0
85	Voltage current analysis in YBa2Cu3O7â^'Î´/CeO2/NiO/Ni89V11 structure. Physica C: Superconductivity and Its Applications, 2001, 354, 223-226.	0.6	0
86	Vortex lattice ordering in the flux flow state of Nb thin films. Physica C: Superconductivity and Its Applications, 2010, 470, 911-913.	0.6	0
87	Growth of NCCO superconducting ultra-thin films for photon detectors. , 2017, , .		0
88	Nd<inf>2-X</inf>Ce<inf>X</inf>CuO<inf>4Â±delta/</inf>Nd<inf>2</inf>CuO<inf>4</inf> Ultra-Thin Films Grown by DC Sputtering Technique. , 2017, , .		0
89	Impact of the Cooling Technique on the Voltage Stability in Thin Supercoducting Microbridges. , 2018, , .		0
90	Low temperature point contact spectroscopy and transport measurements on filled skutterudite compounds. , 2019, , .		0

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91	Effective Magnetic Field Dependence of the Flux Pinning Energy in FeSe0.5Te0.5 Superconductor. Materials, 2021, 14, 5289.	1.3	0