David C Larbalestier

List of Publications by Year
in descending order

479	22,597	10388	14208
papers	citations	72 h-index	128 g-index

489	489	489	5769
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Tc superconducting materials for electric power applications. Nature, 2001, 414, 368-377.	27.8	1,130
2	Strongly linked current flow in polycrystalline forms of the superconductor MgB2. Nature, 2001, 410, 186-189.	27.8	883
3	Oxygen-defect flux pinning, anomalous magnetization and intra-grain granularity in YBa2Cu307â€“Î´. Nature, 1990, 346, 332-335.	27.8	762
4	High-T_c superconducting materials for electric power applications. , 2010, , 311-320.		644
5	Two-band superconductivity in LaFeAsO0.89F0.11 at very high magnetic fields. Nature, 2008, 453, 903-905.	27.8	490
6	High critical current density and enhanced irreversibility field in superconducting MgB2 thin films. Nature, 2001, 411, 558-560.	27.8	477
7	45.5-tesla direct-current magnetic field generated with a high-temperature superconducting magnet. Nature, 2019, 570, 496-499.	27.8	432
8	Small anisotropy, weak thermal fluctuations, and high field superconductivity in Co-doped iron pnictide Ba(Fe1â^'xCox)2As2. Applied Physics Letters, 2009, 94, .	3.3	337
9	Critical state in disk-shaped superconductors. Physical Review B, 1989, 40, 9350-9353.	3.2	320
10	Upper critical fields and thermally-activated transport of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>NdFeAsO</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.7< crystal. Physical Review B, 2008, 78, .	3.2	303
11	Isotropic round-wire multifilament cuprate superconductor for generation of magnetic fields above 30 T. Nature Materials, 2014, 13, 375-381.	27.5	296
12	Very high upper critical fields in MgB2produced by selective tuning of impurity scattering. Superconductor Science and Technology, 2004, 17, 278-286.	3.5	281
13	New Fe-based superconductors: properties relevant for applications. Superconductor Science and Technology, 2010, 23, 034003.	3.5	253
14	Weak-link-free behaviour of high-angle YBa2Cu3O7â€“Î´ grain boundaries in high magnetic fields. Nature, 1990, 347, 167-169.	27.8	230
15	High-field superconductivity in alloyedMgB2thin films. Physical Review B, 2005, 71, .	3.2	228
16	High intergrain critical current density in fine-grain (Ba0.6K0.4)Fe2As2 wires and bulks. Nature Materials, 2012, 11, 682-685.	27.5	220
17	High critical current density and improved irreversibility field in bulk MgB2 made by a scaleable, nanoparticle addition route. Applied Physics Letters, 2002, 81, 2026-2028.	3.3	204
18	The compctition between martensite and omega in quenched Ti-Nb alloys. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 1677-1686.	1.4	197

#	Article	IF	Citations
19	Template engineering of Co-doped BaFe2As2 single-crystal thin films. Nature Materials, 2010, 9, 397-402.	27.5	185
20	Position-sensitive measurements of the local critical current density in Ag sheathed high-temperature superconductor (Bi, Pb)2Sr2Ca2Cu3Oy tapes. Physica C: Superconductivity and Its Applications, 1994, 221, 299-303.	1.2	179
21	High Field Magnets With HTS Conductors. IEEE Transactions on Applied Superconductivity, 2010, 20, 576-582.	1.7	175
22	Superconducting materials for large scale applications. Proceedings of the IEEE, 2004, 92, 1639-1654.	21.3	174
23	Design of a Superconducting 32 T Magnet With REBCO High Field Coils. IEEE Transactions on Applied Superconductivity, 2012, 22, 4300704-4300704.	1.7	173
24	A general scaling relation for the critical current density in Nb3Sn. Superconductor Science and Technology, 2006, 19, R100-R116.	3.5	170
25	Recent Developments in 2G HTS Coil Technology. IEEE Transactions on Applied Superconductivity, 2009, 19, 2218-2222.	1.7	165
26	Improved upper critical field in bulk-form magnesium diboride by mechanical alloying with carbon. Applied Physics Letters, 2005, 86, 202502.	3.3	164
27	Weak-link behavior of grain boundaries in superconducting Ba(Fe1â^'xCox)2As2 bicrystals. Applied Physics Letters, 2009, 95, .	3.3	163
28	Progress in Nanoengineered Microstructures for Tunable Highâ€Current, Highâ€Temperature Superconducting Wires. Advanced Materials, 2008, 20, 391-407.	21.0	162
29	Electronic anisotropy, magnetic field-temperature phase diagram and their dependence on resistivity inc-axis oriented MgB2thin films. Superconductor Science and Technology, 2001, 14, 315-319.	3.5	157
30	Influence of boron powder purification on the connectivity of bulk MgB2. Superconductor Science and Technology, 2006, 19, L33-L36.	3.5	151
31	35.4â€‰T field generated using a layer-wound superconducting coil made of (RE)Ba2Cu3O7â^'x (RE = rare) Tj ETQq1 1 0.784314 rgBT	3.3	150
32	Critical current distributions in superconducting composites. Cryogenics, 1986, 26, 643-653.	1.7	148
33	Quantitative description of a very high critical current density Nbâ€Ti superconductor during its final optimization strain. II. Flux pinning mechanisms. Journal of Applied Physics, 1989, 66, 5971-5983.	2.5	147
34	Magnetic granularity, percolation and preferential current flow in a silver-sheathed Bi1.8Pb0.4Sr2Ca2Cu3O8+x tape. Physica C: Superconductivity and Its Applications, 1995, 246, 133-144.	1.2	136
35	Significant enhancement of upper critical fields by doping and strain in iron-based superconductors. Physical Review B, 2011, 84, .	3.2	135
36	Evaluation of connectivity, flux pinning, and upper critical field contributions to the critical current density of bulk pure and SiC-alloyed MgB2. Applied Physics Letters, 2006, 89, 132508.	3.3	134

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37	Magneto-optical study of flux penetration and critical current densities in [001] tiltYBa2Cu3O7âˆ'Îthin-film bicrystals. Physical Review B, 1996, 53, 8687-8697.	3.2	127
38	The behavior of grain boundaries in the Fe-based superconductors. Reports on Progress in Physics, 2011, 74, 124511.	20.1	127
39	Progress in the Development of a Superconducting 32 T Magnet With REBCO High Field Coils. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	126
40	Nanoscale-SiC doping for enhancing Jc and Hc2 in superconducting MgB2. Journal of Applied Physics, 2004, 96, 7549-7555.	2.5	125
41	Comparative high-field magnetotransport of the oxypnictide superconductorsRFeAsO1âˆ'xFx(R=La, Nd) andSmFeAsO1âˆ'Îˇ. Physical Review B, 2008, 78, .	3.2	121
42	Strongly enhanced vortex pinning from 4 to 77 K in magnetic fields up to 31 T in 15 mol.% Zr-added (Gd,) Tj ETQq0 0 0 rgBT /Overlock 1	5.1	121
43	Evidence for two distinct scales of current flow in polycrystalline Sm and Nd iron oxypnictides. Superconductor Science and Technology, 2008, 21, 095008.	3.5	118
44	Flux pinning by ordered oxygenâ€deficient phases in nearly stoichiometric YBa2Cu3O7âˆ'Îˇsingle crystals. Applied Physics Letters, 1992, 60, 1741-1743.	3.3	113
45	Influence of nickel substrate grain structure on YBa2Cu3O7âˆ'x supercurrent connectivity in deformation-textured coated conductors. Applied Physics Letters, 2000, 77, 2906-2908.	3.3	112
46	Quantitative description of a highJcNbâ€Ti superconductor during its final optimization strain. I. Microstructure,Tc,â€‰Hc2, and resistivity. Journal of Applied Physics, 1989, 66, 5962-5970.	2.5	106
47	Flux Flow of Abrikosov-Josephson Vortices along Grain Boundaries in High-Temperature Superconductors. Physical Review Letters, 2002, 88, 097001.	7.8	105
48	Evidence for channel conduction in low misorientation angle [001] tilt YBa2Cu3O7âˆ'x bicrystal films. Applied Physics Letters, 1996, 69, 577-579.	3.3	103
49	The compctition between the alpha and omega phases in aged Ti-Nb alloys. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 1687-1694.	1.4	101
50	Direct evidence for residual, preferentially-oriented cracks in rolled and pressed Ag-clad BSCCO-2223 tapes and their effect on the critical current density. Superconductor Science and Technology, 1996, 9, 393-398.	3.5	97
51	Properties of recent IBADâ€“MOCVD coated conductors relevant to their high field, low temperature magnet use. Superconductor Science and Technology, 2011, 24, 035001.	3.5	97
52	Effect of geometry on the critical currents of thin films. Physical Review B, 1994, 49, 1274-1288.	3.2	94
53	Experiments concerning the connective nature of superconductivity in YBa2Cu3O7. Journal of Applied Physics, 1987, 62, 3308-3313.	2.5	93
54	The influence of Nb3Sn strand geometry on filament breakage under bend strain as revealed by metallography. Superconductor Science and Technology, 2003, 16, 1005-1011.	3.5	93

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55	Strong to weak coupling transition in low misorientation angle thin filmYBa2Cu3O7â^'xbicrystals. Physical Review B, 1999, 60, 1409-1417.	3.2	92
56	The upper critical field of filamentary Nb3Sn conductors. Journal of Applied Physics, 2005, 97, 093909.	2.5	91
57	Microstructural analysis of high critical current density Ag-clad Biî—¸Srî—¸Caî—¸Cuî—¸O (2:2:1:2) tapes. Physica C: Superconductivity and Its Applications, 1992, 192, 293-305.	1.2	90
58	Current-limiting mechanisms in individual filaments extracted from superconducting tapes. Nature, 1998, 392, 906-909.	27.8	89
59	A Round TableÂDiscussion on$rm MgB_2$Toward a Wide Market or a Niche Production?â€"A Summary. IEEE Transactions on Applied Superconductivity, 2006, 16, 1457-1464.	1.7	88
60	Further evidence that the critical current density of (Bi, Pb)2Sr2Ca2Cu3Ox silver-sheathed tapes is controlled by residual layers of (Bi, Pb)2Sr2CaCu2Oy at (001) twist boundaries. Physica C: Superconductivity and Its Applications, 1994, 219, 378-388.	1.2	85
61	Reconstruction of Current Flow and Imaging of Current-Limiting Defects in Polycrystalline Superconducting Films. Science, 1997, 275, 367-369.	12.6	85
62	Synthesis and properties of c-axis oriented epitaxial MgB2 thin films. Applied Physics Letters, 2002, 81, 1851-1853.	3.3	85
63	Development of nanometer scale structures in composites of Nbî—¸Ti and their effect on the superconducting critical current density. Acta Metallurgica, 1987, 35, 2523-2536.	2.1	83
64	Evidence for local composition variations within YBa2Cu3O7â^'Î´grain boundaries. Applied Physics Letters, 1989, 55, 393-395.	3.3	83
65	Evidence for preferential formation of the (Bi,Pb)2Sr2Ca2Cu3Oxphase at the Ag interface in Agâ€sheathed (Bi,Pb)2Sr2Ca2Cu3Oxtapes. Applied Physics Letters, 1993, 62, 1553-1555.	3.3	83
66	Progress in Performance Improvement and New Research Areas for Cost Reduction of 2G HTS Wires. IEEE Transactions on Applied Superconductivity, 2011, 21, 3049-3054.	1.7	83
67	Bubble formation within filaments of melt-processed Bi2212 wires and its strongly negative effect on the critical current density. Superconductor Science and Technology, 2011, 24, 075009.	3.5	82
68	A study of the competitive reactions occuring during the heat treatment of silver-sheathed Bi1.8Pb0.4Sr2.0Ca2.2Cu3.0Oy aerosol spray pyrolysis powder. Physica C: Superconductivity and Its Applications, 1994, 220, 81-92.	1.2	80
69	Electromagnetic, atomic structure and chemistry changes induced by Ca-doping of low-angle YBa2Cu3O7â€"Î´ grain boundaries. Nature Materials, 2005, 4, 470-475.	27.5	79
70	Angular dependence ofJ_cfor YBCO coated conductors at low temperature and very high magnetic fields. Superconductor Science and Technology, 2010, 23, 014003.	3.5	76
71	Electromagnetic granularity, critical current density, and low-Tc phase formation at the grain boundaries in (Bi,Pb)2Sr2Ca2Cu3OÏ‡ silver-sheathed tapes. Physica C: Superconductivity and Its Applications, 1992, 198, 261-272.	1.2	75
72	Comparison of growth texture in round Bi2212 and flat Bi2223 wires and its relation to high critical current density development. Scientific Reports, 2015, 5, 8285.	3.3	74

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73	Electrical transport across grain boundaries in bicrystals of YBa2Cu3O7Î´. Physica C: Superconductivity and Its Applications, 1991, 185-189, 315-320.	1.2	73
74	Microstructural factors important for the development of high critical current density Nb3Sn strand. Cryogenics, 2008, 48, 283-292.	1.7	73
75	Nanoscale grains, high irreversibility field and large critical current density as a function of high-energy ball milling time in C-doped magnesium diboride. Superconductor Science and Technology, 2008, 21, 035009.	3.5	73
76	Intergrain current flow in a randomly oriented polycrystalline SmFeAsO0.85 oxypnictide. Applied Physics Letters, 2009, 95, .	3.3	73
77	Observations and implications of grain boundary dislocation networks in high-angle YBa₂Cu₃O_{7â^'Î´} grain boundaries. Journal of Materials Research, 1990, 5, 919-928.	2.6	71
78	Improved strong magnetic field performance of low angle grain boundaries of calcium and oxygen overdoped YBa2Cu3Ox. Applied Physics Letters, 2000, 77, 3251-3253.	3.3	71
79	Doubled critical current density in Bi-2212 round wires by reduction of the residual bubble density. Superconductor Science and Technology, 2011, 24, 082001.	3.5	71
80	Suppression of the Critical Temperature of Superconducting NdFeAs(OF) Single Crystals by Kondo-Like Defect Sites Induced by<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math>-Particle Irradiation. Physical Review Letters, 2010, 104, 087002.	7.8	70
81	Artificially engineered superlattices of pnictide superconductors. Nature Materials, 2013, 12, 392-396.	27.5	70
82	Role of weak uncorrelated pinning introduced by BaZrO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>nanorods at low-temperature in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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91	Methods of introducing lead into bismuth-2223 and their effects on phase development and superconducting properties. Physica C: Superconductivity and Its Applications, 1994, 223, 163-172.	1.2	61
92	New perspectives on flux pinning in niobium-titanium composite superconductors. Acta Metallurgica, 1984, 32, 1871-1881.	2.1	60
93	A TEM-EELS study of hole concentrations near strongly and weakly coupled grain boundaries in electromagnetically characterized YBa2Cu3O7â˜Î´ bicrystals. Physica C: Superconductivity and Its Applications, 1994, 227, 183-196.	1.2	60
94	Filament to filament bridging and its influence on developing high critical current density in multifilamentary Bi₂Sr₂CaCu₂O_xround wires. Superconductor Science and Technology, 2010, 23, 025009.	3.5	60
95	Evidence for electromagnetic granularity in the polycrystalline iron-based superconductor LaO0.89F0.11FeAs. Applied Physics Letters, 2008, 92, 252501.	3.3	59
96	Record current density of 344 A mm^{â˜2}at 4.2 K and 17 T in CORC^{Â®}accelerator magnet cables. Superconductor Science and Technology, 2016, 29, 055009.	3.5	59
97	Weak links and the poor transport critical currents of the 123 compounds. Physica C: Superconductivity and Its Applications, 1988, 153-155, 1580-1585.	1.2	56
98	Significant enhancement of irreversibility field in clean-limit bulk MgB2. Applied Physics Letters, 2002, 81, 4577-4579.	3.3	56
99	Effect of grain refinement on enhancing critical current density and upper critical field in undoped MgB2â€˜ex situ tapes. Journal of Applied Physics, 2008, 104, .	2.5	55
100	Flux-pinning mechanism of proximity-coupled planar defects in conventional superconductors: Evidence that magnetic pinning is the dominant pinning mechanism in niobium-titanium alloy. Physical Review B, 1996, 53, 6638-6652.	3.2	54
101	The 40 T Superconducting Magnet Project at the National High Magnetic Field Laboratory. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	54
102	Conversion of La2CuO4â˜Î´ to a superconductor by treatment in fluorine gas. Solid State Communications, 1988, 65, 51-54.	1.9	53
103	Austenitic stainless steels at cryogenic temperatures 1â€”Structural stability and magnetic properties. Cryogenics, 1973, 13, 160-168.	1.7	52
104	Development of high critical current densities in niobium 46.5 wt% titanium. Cryogenics, 1987, 27, 171-177.	1.7	52
105	Progress in superconducting performance of rolled multifilamentary Bi-2223 HTS composite conductors. IEEE Transactions on Applied Superconductivity, 1997, 7, 2026-2029.	1.7	52
106	Stable, predictable and training-free operation of superconducting Bi-2212 Rutherford cable racetrack coils at the wire current density of 1000â€‰A/mm2. Scientific Reports, 2019, 9, 10170.	3.3	52
107	Current transfer lengths and the origin of linear components in the voltage - current curves of Ag-sheathed BSCCO components. Superconductor Science and Technology, 1997, 10, 769-777.	3.5	50
108	Simulations of the effects of tin composition gradients on the superconducting properties of Nb3Sn conductors. Journal of Applied Physics, 2004, 96, 2122-2130.	2.5	50

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109	Evidence for strong flux pinning by small, dense nanoprecipitates in a Sm-doped YBa2Cu3O7â^'Î´ coated conductor. Applied Physics Letters, 2006, 88, 212508.	3.3	50
110	Analyses of the plastic deformation of coated conductors deconstructed from ultra-high field test coils. Superconductor Science and Technology, 2020, 33, 095012.	3.5	50
111	Resistive transitions and the origin of thenvalue in superconductors with a Gaussian criticalâ€ccurrent distribution. Journal of Applied Physics, 1993, 74, 3312-3315.	2.5	49
112	High-Performance Bi-2212 Round Wires Made With Recent Powders. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	49
113	Suppression of magnetic granularity by transport current in (Bi,Pb)2Sr2Ca2Cu3Ox tapes. Applied Physics Letters, 1995, 67, 2720-2722.	3.3	48
114	Analytical technique for deriving the distribution of critical currents in a superconducting wire. Applied Physics Letters, 1986, 48, 1403-1405.	3.3	47
115	Experimental evidence for granular superconductivity in Y-Ba-Cu-O at 100 to 160 K. Physical Review Letters, 1987, 58, 2798-2801.	7.8	47
116	Evidence that filament fracture occurs in an ITER toroidal field conductor after cyclic Lorentz force loading in SULTAN. Superconductor Science and Technology, 2012, 25, 075007.	3.5	47
117	Cooling rate effects on the microstructure, critical current density, and T/sub c/ transition of one- and two-powder BSCCO-2223 Ag-sheathed tapes. IEEE Transactions on Applied Superconductivity, 1995, 5, 1275-1278.	1.7	46
118	Demonstration of an iron-pnictide bulk superconducting magnet capable of trapping over 1 T. Superconductor Science and Technology, 2015, 28, 112001.	3.5	46
119	Study of powder density, Ag:superconductor ratio, and microhardness of BSCCO-2212 Ag-sheathed wires and tapes during wire drawing and rolling. IEEE Transactions on Applied Superconductivity, 1995, 5, 1279-1282.	1.7	45
120	Superconductor Flux Pinning and Grain Boundary Control. Science, 1996, 274, 736-737.	12.6	45
121	Inter- and intragrain transport measurements in YBa2Cu3O7â^'x deformation textured coated conductors. Applied Physics Letters, 2001, 79, 3998-4000.	3.3	45
122	Grain orientations and grain boundary networks of YBa2Cu3O7â^'Î´ films deposited by metalorganic and pulsed laser deposition on biaxially textured Niâ€"W substrates. Journal of Materials Research, 2006, 21, 923-934.	2.6	45
123	Combined microstructural and magneto-optical study of current flow in polycrystalline forms of Nd and Sm Fe-oxypnictides. Superconductor Science and Technology, 2009, 22, 015010.	3.5	45
124	Reduction of Gas Bubbles and Improved Critical Current Density in Bi-2212 Round Wire by Swaging. IEEE Transactions on Applied Superconductivity, 2013, 23, 6400206-6400206.	1.7	45
125	Development of very high Jc in Ba(Fe1-xCox)2As2 thin films grown on CaF2. Scientific Reports, 2014, 4, 7305.	3.3	45
126	Small grains: a key to high-field applications of granular Ba-122 superconductors?. Superconductor Science and Technology, 2016, 29, 025004.	3.5	44

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127	A CORC^{Â®} cable insert solenoid: the first high-temperature superconducting insert magnet tested at currents exceeding 4 kA in 14 T background magnetic field. Superconductor Science and Technology, 2020, 33, 05LT03.	3.5	44
128	Electromagnetic coupling character of [001] twist boundaries in sintered Bi2Sr2CaCu2O8+x bicrystals. Physica C: Superconductivity and Its Applications, 1994, 230, 189-198.	1.2	43
129	Critical current properties and the nature of the electromagnetic coupling in melt-textured YBa2Cu3O6+x bicrystals of general misorientation. Physica C: Superconductivity and Its Applications, 1997, 280, 221-233.	1.2	43
130	Void and phase evolution during the processing of Bi-2212 superconducting wires monitored by combined fast synchrotron micro-tomography and x-ray diffraction. Superconductor Science and Technology, 2011, 24, 115004.	3.5	43
131		3.2	43
132	Through-process study of factors controlling the critical current density of Ag-sheathed (Bi,Pb)2Sr2Ca2Cu3Oxtapes. Superconductor Science and Technology, 2001, 14, 548-556.	3.5	42
133	Self-assembled oxide nanopillars in epitaxial BaFe2As2 thin films for vortex pinning. Applied Physics Letters, 2011, 98, .	3.3	42
134	Beneficial influence of Hf and Zr additions to Nb4at%Ta on the vortex pinning of Nb₃Sn with and without an O source. Superconductor Science and Technology, 2019, 32, 044006.	3.5	42
135	Evidence for electromagnetic granularity in polycrystalline Sm1111 iron-pnictides with enhanced phase purity. Superconductor Science and Technology, 2011, 24, 045010.	3.5	41
136	Understanding quench in no-insulation (NI) REBCO magnets through experiments and simulations. Superconductor Science and Technology, 2020, 33, 035002.	3.5	41
137	Manufacture and evaluation of Nb<inf>3</inf>Sn conductors fabricated by the MJR method. IEEE Transactions on Magnetics, 1983, 19, 1124-1127.	2.1	40
138	Significantly enhanced critical current density in Ag-sheathed (Bi,Pb)2Sr2Ca2Cu3Ox composite conductors prepared by overpressure processing in final heat treatment. Applied Physics Letters, 2004, 84, 2127-2129.	3.3	40
139	Microstructure, Microchemistry and the Development of Very High<tex>$rm Nb_3rm Sn$</tex>Layer Critical Current Density. IEEE Transactions on Applied Superconductivity, 2005, 15, 3474-3477.	1.7	40
140	High critical current densities in industrial scale composites made from high homogeneity Nb 46.5 Ti. IEEE Transactions on Magnetics, 1985, 21, 269-272.	2.1	39
141	Understanding the route to high critical current density in mechanically alloyed Mg(B1â^'xCx)2. Superconductor Science and Technology, 2007, 20, 650-657.	3.5	39
142	Thermally activated current transport inMgB2films. Physical Review B, 2004, 70, .	3.2	38
143	Microstructural changes produced in a multifilamentary Nb-Ti composite by cold work and heat treatment. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1984, 15, 843-852.	1.4	37
144	Texture relationships and interface structure in Ag-sheathed Bi(Pb)-Sr-Ca-Cu-O superconducting tapes. Journal of Materials Science, 1994, 1, 401.	1.2	37

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145	Through-thickness superconducting and normal-state transport properties revealed by thinning of thick film ex situ YBa2Cu3O7â˚x coated conductors. Applied Physics Letters, 2003, 83, 3951-3953.	3.3	37
146	Critical current limiting factors in post annealed (Bi; Pb)/sub 2/Sr/sub 2/Ca/sub 2/Cu/sub 3/O/sub x/ tapes. IEEE Transactions on Applied Superconductivity, 2003, 13, 3018-3021.	1.7	37
147	Microstructures of SiC nanoparticle-doped MgB2â˚•Fe tapes. Journal of Applied Physics, 2007, 102, 013913.	2.5	37
148	Mechanisms for enhanced supercurrent across meandered grain boundaries in high-temperature superconductors. Journal of Applied Physics, 2007, 102, 083912.	2.5	37
149	Conductors from Superconductors: Conventional Low-Temperature and New High-Temperature Superconducting Conductors. MRS Bulletin, 1993, 18, 50-56.	3.5	36
150	Evidence for Extensive Grain Boundary Meander and Overgrowth of Substrate Grain Boundaries in High Critical Current Density ex Situ YBa2Cu3O7â˚x Coated Conductors. Journal of Materials Research, 2005, 20, 2012-2020.	2.6	36
151	A high critical current density MOCVD coated conductor with strong vortex pinning centers suitable for very high field use. Superconductor Science and Technology, 2009, 22, 055013.	3.5	36
152	Examination of the trade-off between intrinsic and extrinsic properties in the optimization of a modern internal tin Nb₃Sn conductor. Superconductor Science and Technology, 2014, 27, 065013.	3.5	36
153	Determination of the flux pinning force of ?-Ti ribbons in Nb46.5wt% Ti produced by heat treatments of varying temperature, duration and frequency. Journal of Materials Science, 1988, 23, 3951-3957.	3.7	35
154	Flux penetration profiles in powdered DyBa2Cu3O7. Applied Physics Letters, 1988, 52, 590-591.	3.3	35
155	Mode of lead addition and its effects on phase formation and microstructure development in composite conductors. Superconductor Science and Technology, 1996, 9, 412-421.	3.5	35
156	On the role of pre-existing, unhealed cracks on the bending strain response of Ag-clad (Bi,Pb)2Sr2Ca2Cu3Ox tapes. Applied Physics Letters, 1997, 70, 1034-1036.	3.3	35
157	On the through-thickness critical current density of an YBa2Cu3O7â˚x film containing a high density of insulating, vortex-pinning nanoprecipitates. Applied Physics Letters, 2007, 90, 252502.	3.3	35
158	Intrinsic and extrinsic pinning in NdFeAs(O,F): vortex trapping and lock-in by the layered structure. Scientific Reports, 2016, 6, 36047.	3.3	35
159	Periodic pin array at the fluxon lattice scale in a highâ€field superconducting wire. Applied Physics Letters, 1994, 64, 1298-1300.	3.3	34
160	Measurements of the microstructural, microchemical and transition temperature gradients of A15 layers in a high-performance Nb3Sn powder-in-tube superconducting strand. Superconductor Science and Technology, 2006, 19, S27-S37.	3.5	34
161	Development of high critical current density in multifilamentary round-wire Bi2Sr2CaCu2O8+Î´ by strong overdoping. Applied Physics Letters, 2009, 95, 152516.	3.3	34
162	Critical current of dense Bi-2212 round wires as a function of axial strain. Superconductor Science and Technology, 2015, 28, 032001.	3.5	34

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163	Multifilamentary niobium tin magnet conductors. IEEE Transactions on Magnetics, 1975, 11, 247-250.	2.1	33
164	The road to conductors of high temperature superconductors: 10 years do make a difference!. IEEE Transactions on Applied Superconductivity, 1997, 7, 90-97.	1.7	33
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