

# David C Larbalestier

## List of Publications by Year in descending order

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479  
papers

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489  
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489  
docs citations

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times ranked

5769  
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#	ARTICLE	IF	CITATIONS
1	Analysis of local burnout in a sub-scale test coil for the 32 T magnet after spontaneous quenches during fast ramping. Superconductor Science and Technology, 2022, 35, 075009.	3.5	6
2	Influence of twist pitch on hysteretic losses and transport $J_c$ in overpressure processed high $J_c$ Bi-2212 round wires. Superconductor Science and Technology, 2022, 35, 064004.	3.5	6
3	A Real-Time Monitoring System for Investigating Electromagnetic Behaviors of an HTS Coil. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	9
4	Optimizing vortex pinning in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> superconducting films up to high magnetic fields. Communications Materials, 2022, 3, .	6.9	7
5	Effect of heat treatments on superconducting properties and connectivity in K-doped BaFe <sub>2</sub> As <sub>2</sub> . Scientific Reports, 2021, 11, 3143.	3.3	6
6	Correlation of critical current density to quasi-biaxial texture and grain boundary cleanliness in fully dense Bi-2212 wires. Superconductor Science and Technology, 2021, 34, 035018.	3.5	11
7	Conundrum of strongly coupled supercurrent flow in both under- and overdoped Bi-2212 round wires. Physical Review Materials, 2021, 5, .	2.4	5
8	Critical Current Distributions of Recent Bi-2212 Round Wires. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-6.	1.7	10
9	Effects of Wire Diameter and Filament Size on the Processing Window of Bi-2212 Round Wire. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-6.	1.7	11
10	Origin of the enhanced Nb <sub>3</sub> Sn performance by combined Hf and Ta doping. Scientific Reports, 2021, 11, 17845.	3.3	15
11	Influence of strain-driven segregation in low-angle grain boundaries on critical current density of Y <sub>0.9</sub> Nd <sub>0.1</sub> Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7-d</sub> . Superconductor Science and Technology, 2021, 34, 025008.	3.5	2
12	Understanding quench in no-insulation (NI) REBCO magnets through experiments and simulations. Superconductor Science and Technology, 2020, 33, 035002.	3.5	41
13	Process to densify Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> round wire with overpressure before coil winding and final overpressure heat treatment. Superconductor Science and Technology, 2020, 33, 025010.	3.5	6
14	Evidence of Kramer extrapolation inaccuracy for predicting high field Nb <sub>3</sub> Sn properties. Journal of Physics: Conference Series, 2020, 1559, 012062.	0.4	1
15	The Effect of Reinforcement Substrate Alloy Selection on Mechanical Properties of REBCO Coated Conductors. IOP Conference Series: Materials Science and Engineering, 2020, 756, 012023.	0.6	0
16	A study on the extent of Ag protrusions in different TiO <sub>2</sub> -coated Bi-2212 wires. IOP Conference Series: Materials Science and Engineering, 2020, 756, 012017.	0.6	1
17	A CORC <sup>®</sup> 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
18	Synthesis routes to eliminate oxide impurity segregation and their influence on intergrain connectivity in K-doped BaFe <sub>2</sub> As <sub>2</sub> polycrystalline bulks. Superconductor Science and Technology, 2020, 33, 084010.	3.5	14

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19	Development of general expressions for the temperature and magnetic field dependence of the critical current density in coated conductors with variable properties. Superconductor Science and Technology, 2020, 33, 044011.	3.5	18
20	Design and Performance Estimation of a 20 T 46 mm No-Insulation All-REBCO User Magnet. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	5
21	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
22	Influence of variable Ca-doping on the critical current density of low-angle grain boundaries in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> . Journal of Applied Physics, 2020, 128, .	2.5	3
23	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
24	Chemically degraded grain boundaries in fine-grain Ba <sub>0.6</sub> K <sub>0.4</sub> Fe <sub>2</sub> As <sub>2</sub> polycrystalline bulks. Applied Physics Express, 2020, 13, 113002.	2.4	9
25	Investigation of Precipitation and Segregation of Secondary Phase Byproducts in Intermetallic Superconducting Materials. Microscopy and Microanalysis, 2019, 25, 2246-2247.	0.4	0
26	Stable, predictable and training-free operation of superconducting Bi-2212 Rutherford cable racetrack coils at the wire current density of 1000 A/mm <sup>2</sup> . Scientific Reports, 2019, 9, 10170.	3.3	52
27	Ta, Ti and Hf effects on Nb <sub>3</sub> Sn high-field performance: temperature-dependent dopant occupancy and failure of Kramer extrapolation. Superconductor Science and Technology, 2019, 32, 124003.	3.5	18
28	Investigation of the melt-growth process of YbBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> powder in Ag-sheathed tapes. CrystEngComm, 2019, 21, 1369-1377.	2.6	1
29	45.5-tesla direct-current magnetic field generated with a high-temperature superconducting magnet. Nature, 2019, 570, 496-499.	27.8	432
30	An Integrated Coil Form Test Coil Design for High Current REBCO DC Solenoids. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	6
31	Design of Strain-Limited Bi-2223 Insert Coils for High-Field Magnets. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.7	1
32	High-Performance Bi-2212 Round Wires Made With Recent Powders. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	49
33	Prediction of the J <sub>C</sub> (B) Behavior of Bi-2212 Wires at High Field. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.7	6
34	Beneficial influence of Hf and Zr additions to Nb <sub>4</sub> at%Ta on the vortex pinning of Nb <sub>3</sub> Sn with and without an O source. Superconductor Science and Technology, 2019, 32, 044006.	3.5	42
35	Optimization of a Novel Melt-Growth Heat Treatment of YbBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> /Ag Tapes. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.7	0
36	Double-Disordered HTS-Coated Conductors and Their Assemblies Aimed for Ultra-High Fields: Large Area Tapes. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	20

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37	Effect of $\gamma$ -particle irradiation on a NdFeAs(O,F) thin film. Superconductor Science and Technology, 2018, 31, 034002.	3.5	7
38	Very-high thermal and electrical conductivity in overpressure-processed Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+x</sub> wires. Materials Research Express, 2018, 5, 056001.	1.6	13
39	Fabrication and Testing of a Bi-2223 Test Coil for High Field NMR Magnets. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.7	5
40	Evidence from EXAFS for Different Ta/Ti Site Occupancy in High Critical Current Density Nb <sub>3</sub> Sn Superconductor Wires. Scientific Reports, 2018, 8, 4798.	3.3	15
41	An intermetallic powder-in-tube approach to increased flux-pinning in Nb <sub>3</sub> Sn by internal oxidation of Zr. Superconductor Science and Technology, 2018, 31, 014002.	3.5	15
42	Evidence for preferential flux flow at the grain boundaries of superconducting RF-quality niobium. Superconductor Science and Technology, 2018, 31, 045001.	3.5	4
43	Controlling Cu-Sn mixing so as to enable higher critical current densities in RRP Nb <sub>3</sub> Sn wires. Superconductor Science and Technology, 2018, 31, 064001.	3.5	33
44	Tripled critical current in racetrack coils made of Bi-2212 Rutherford cables with overpressure processing and leakage control. Superconductor Science and Technology, 2018, 31, 105009.	3.5	26
45	Development of a persistent superconducting joint between Bi-2212/Ag-alloy multifilamentary round wires. Superconductor Science and Technology, 2017, 30, 025020.	3.5	18
46	An Experimental and Analytical Study of Periodic and Aperiodic Fluctuations in the Critical Current of Long Coated Conductors. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	17
47	Experimental Study of Potential Heat Treatment Issues of Large Bi-2212 Coils. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	12
48	Method for generating linear current-field characteristics and eliminating charging delay in no-insulation superconducting magnets. Superconductor Science and Technology, 2017, 30, 035020.	3.5	16
49	Bi-2223 Test Coils for High-Resolution NMR Magnets. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	14
50	$J_c$ (4.2 K, 31.2 T) beyond 1 kA/mm <sup>2</sup> of a ~3.2 μm thick, 20 mol% Zr-added MOCVD REBCO coated conductor. Scientific Reports, 2017, 7, 6853.	3.3	24
51	Development of low angle grain boundaries in lightly deformed superconducting niobium and their influence on hydride distribution and flux perturbation. Journal of Applied Physics, 2017, 121, .	2.5	15
52	Effects of Filament Size on Critical Current Density in Overpressure Processed Bi-2212 Round Wire. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4.	1.7	22
53	Tensile properties and critical current strain limits of reinforced Bi-2212 conductors for high field magnets. IOP Conference Series: Materials Science and Engineering, 2017, 279, 012022.	0.6	6
54	Improvement of small to large grain A15 ratio in Nb <sub>3</sub> Sn PIT wires by inverted multistage heat treatments. IOP Conference Series: Materials Science and Engineering, 2017, 279, 012019.	0.6	11

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55	Effect of sheath material and reaction overpressure on Ag protrusions into the TiO <sub>2</sub> insulation coating of Bi-2212 round wire. IOP Conference Series: Materials Science and Engineering, 2017, 279, 012021.	0.6	8
56	Development of Iron-based Superconducting Bulk Magnet. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq0 0 0 rgBT /Overlock 10	0.1	0
57	Lattice location of Ta and Ti in doped Nb <sub>3</sub> Sn. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C872-C872.	0.1	0
58	Record current density of 344 A mm <sup>-2</sup> at 4.2 K and 17 T in CORC <sup>®</sup> accelerator magnet cables. Superconductor Science and Technology, 2016, 29, 055009.	3.5	59
59	Understanding the densification process of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> round wires with overpressure processing and its effect on critical current density. Superconductor Science and Technology, 2016, 29, 105005.	3.5	19
60	Evaluation of critical current density and residual resistance ratio limits in powder in tube Nb <sub>3</sub> Sn conductors. Superconductor Science and Technology, 2016, 29, 085003.	3.5	30
61	Sample and length-dependent variability of 77 and 4.2 K properties in nominally identical RE123 coated conductors. Superconductor Science and Technology, 2016, 29, 054006.	3.5	31
62	Correlation of filament distortion and RRR degradation in drawn and rolled PIT and RRP Nb <sub>3</sub> Sn wires. Superconductor Science and Technology, 2016, 29, 084008.	3.5	8
63	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
64	Metallographic autopsies of full-scale ITER prototype cable-in-conduit conductors after full cyclic testing in SULTAN: III. The importance of strand surface roughness in long twist pitch conductors. Superconductor Science and Technology, 2016, 29, 074002.	3.5	18
65	Small grains: a key to high-field applications of granular Ba-122 superconductors?. Superconductor Science and Technology, 2016, 29, 025004.	3.5	44
66	Influence of the Oxygen Partial Pressure on the Phase Evolution During Bi-2212 Wire Melt Processing. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.7	8
67	Ceramic Insulation of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8-x</sub> Round Wire for High-Field Magnet Applications. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.7	5
68	Significant enhancement of compositional and superconducting homogeneity in Ti rather than Ta-doped Nb <sub>3</sub> Sn. Applied Physics Letters, 2016, 108, .	3.3	22
69	Comparison of growth texture in round Bi <sub>2212</sub> and flat Bi <sub>2223</sub> wires and its relation to high critical current density development. Scientific Reports, 2015, 5, 8285.	3.3	74
70	Large grain CBMM Nb ingot slices: An ideal test bed for exploring the microstructure-electromagnetic property relationships relevant to SRF. AIP Conference Proceedings, 2015, , .	0.4	0
71	Study of grain boundary transparency in (Yb <sub>1-x</sub> Ca <sub>x</sub> )Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> bicrystal thin films over a wide temperature, field, and field orientation range. Physical Review B, 2015, 91, .	3.2	12
72	Evidence of incomplete annealing at 800 Å°C and the effects of 120 Å°C baking on the crystal orientation and the surface superconducting properties of cold-worked and chemically polished Nb. Superconductor Science and Technology, 2015, 28, 075003.	3.5	10

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73	Development of TiO <sub>2</sub> electrical insulation coating on Ag-alloy sheathed Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> round-wire. Superconductor Science and Technology, 2015, 28, 035010.	3.5	17
74	Critical current of dense Bi-2212 round wires as a function of axial strain. Superconductor Science and Technology, 2015, 28, 032001.	3.5	34
75	Composition and connectivity variability of the A15 phase in PIT Nb <sub>3</sub> Sn wires. Superconductor Science and Technology, 2015, 28, 095001.	3.5	21
76	Metallographic autopsies of full-scale ITER prototype cable-in-conduit conductors after full testing in SULTAN: 1. The mechanical role of copper strands in a CICC. Superconductor Science and Technology, 2015, 28, 085005.	3.5	15
77	Broad Temperature Pinning Study of 15 mol.% Zr-Added (Gd, Y)BaCuO MOCVD Coated Conductors. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	12
78	Atomic and electronic structures of superconducting BaFe <sub>2</sub> As <sub>2</sub> . Physical Review B, 2015, 91, .	1.7	12
79	Broad temperature range study of <i>J<sub>c</sub></i> and <i>H<sub>irr</sub></i> anisotropy in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> thin films containing either Y <sub>2</sub> O <sub>3</sub> nanoparticles or stacking faults. Applied Physics Letters, 2015, 106, .	3.3	28
80	Demonstration of an iron-pnictide bulk superconducting magnet capable of trapping over 1 T. Superconductor Science and Technology, 2015, 28, 112001.	3.5	46
81	Metallographic autopsies of full-scale ITER prototype cable-in-conduit conductors after full cyclic testing in SULTAN: II. Significant reduction of strand movement and strand damage in short twist pitch CICC. Superconductor Science and Technology, 2015, 28, 125003.	3.5	17
82	Engineering current density in excess of 200 A mm <sup>-2</sup> at 20 T in CORC <sup>®</sup> magnet cables containing RE-Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> tapes with 38 μm thick substrates. Superconductor Science and Technology, 2015, 28, 124001.	3.5	31
83	Evidence for composition variations and impurity segregation at grain boundaries in high current-density polycrystalline K- and Co-doped BaFe <sub>2</sub> As <sub>2</sub> superconductors. Applied Physics Letters, 2014, 105, .	3.3	21
84	Specific heat of Nb <sub>3</sub> Sn: The case for a single gap. APL Materials, 2014, 2, .	5.1	3
85	Strongly enhanced vortex pinning from 4 to 77 K in magnetic fields up to 31 T in 15 mol.% Zr-added (Gd, Y)BaCuO <sub>2</sub> round wires. Superconductor Science and Technology, 2015, 28, 032001.	5.1	121
86	Observation of the Microstructure of Grain Boundary Oxides in Superconducting RF-Quality Niobium With High-Resolution TEM (Transmission Electron Microscope). IEEE Transactions on Applied Superconductivity, 2014, 24, 68-73.	1.7	8
87	Isotropic round-wire multifilament cuprate superconductor for generation of magnetic fields above 30 T. Nature Materials, 2014, 13, 375-381.	27.5	296
88	Examination of the trade-off between intrinsic and extrinsic properties in the optimization of a modern internal tin Nb <sub>3</sub> Sn conductor. Superconductor Science and Technology, 2014, 27, 065013.	3.5	36
89	An explanation of how split melt processing can enhance the critical current density of Bi <sub>2212</sub> round wires based on examination of bubble size and density formed in the melt. Superconductor Science and Technology, 2014, 27, 055004.	3.5	17
90	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





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127	Heat treatment control of Ag <sub>2</sub> Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> multifilamentary round wire: investigation of time in the melt. Superconductor Science and Technology, 2011, 24, 115009.	3.5	26
128	High-field properties of carbon-doped MgB <sub>2</sub> thin films by hybrid physical-chemical vapor deposition using different carbon sources. Superconductor Science and Technology, 2011, 24, 125014.	3.5	21
129	Evidence for electromagnetic granularity in polycrystalline Sm1111 iron-pnictides with enhanced phase purity. Superconductor Science and Technology, 2011, 24, 045010.	3.5	41
130	Superconductivity at 100 K: Where we've been and where we're going. MRS Bulletin, 2011, 36, 590-593.	3.5	3
131	Anisotropic in-plane reversible strain effect in Y <sub>0.5</sub> Gd <sub>0.5</sub> Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> coated conductors. Superconductor Science and Technology, 2011, 24, 115010.	3.5	31
132	Relationship between Current Transport Properties and the Microstructure in a Random Polycrystalline Fe-Oxypnictide Bulk. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2010, 74, 444-452.	0.4	2
133	Template engineering of Co-doped BaFe <sub>2</sub> As <sub>2</sub> single-crystal thin films. , 2010, , 321-326.		0
134	High-T <sub>c</sub> superconducting materials for electric power applications. , 2010, , 311-320.		644
135	New Fe-based superconductors: properties relevant for applications. Superconductor Science and Technology, 2010, 23, 034003.	3.5	253
136	Magnetic characterization of Ba <sub>1-x</sub> Fe <sub>x</sub> As <sub>2</sub> superconductors. Superconductor Science and Technology, 2010, 23, 034003.	0.9	0
137	Disorder induced effects on the critical current density of iron pnictide BaFe <sub>1.8</sub> Co <sub>0.2</sub> As <sub>2</sub> single crystals. Physica C: Superconductivity and Its Applications, 2010, 470, S452-S453.	1.2	2
138	Template engineering of Co-doped BaFe <sub>2</sub> As <sub>2</sub> single-crystal thin films. Nature Materials, 2010, 9, 397-402.	27.5	185
139	Disorder effects and current percolation in FeAs-based superconductors. Superconductor Science and Technology, 2010, 23, 054006.	3.5	12
140	Filament to filament bridging and its influence on developing high critical current density in multifilamentary Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> round wires. Superconductor Science and Technology, 2010, 23, 025009.	3.5	60
141	MgO platelets and high critical field in MgB <sub>2</sub> thin films doped with carbon from methane. Superconductor Science and Technology, 2010, 23, 049801-049801.	3.5	0
142	Strong vortex pinning in Co-doped BaFe <sub>2</sub> As <sub>2</sub> single crystal thin films. Applied Physics Letters, 2010, 96, .	3.3	66
143	Pair-breaking effects and coherence peak in the terahertz conductivity of superconducting BaFe <sub>2-x</sub> Co <sub>x</sub> As <sub>2</sub> thin films. Physical Review B, 2010, 82, .	3.2	32
144	Nanoscale disorder in pure and doped MgB <sub>2</sub> thin films. Superconductor Science and Technology, 2010, 23, 095008.	3.5	13

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145	33.8 TESLA WITH A $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ SUPERCONDUCTING TEST COIL. AIP Conference Proceedings, 2010, , .	0.4	14
146	High Field Magnets With HTS Conductors. IEEE Transactions on Applied Superconductivity, 2010, 20, 576-582.	1.7	175
147	Angular dependence of $J_c$ for YBCO coated conductors at low temperature and very high magnetic fields. Superconductor Science and Technology, 2010, 23, 014003.	3.5	76
148	The effect of strain on grains and grain boundaries in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ coated conductors. Superconductor Science and Technology, 2010, 23, 014004.	3.5	33
149	Suppression of the Critical Temperature of Superconducting NdFeAs(OF) Single Crystals by Kondo-Like Defect Sites Induced by $\mu\text{m}^2$ -Particle Irradiation. Physical Review Letters, 2010, 104, 087002.	7.8	70
150	Small anisotropy, weak thermal fluctuations, and high field superconductivity in Co-doped iron pnictide $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ . Applied Physics Letters, 2009, 94, .	3.3	337
151	Flux Pinning Optimization of $\text{MgB}_2$ Bulk Samples Prepared Using High-Energy Ball Milling and Addition of $\text{TaB}_2$ . IEEE Transactions on Applied Superconductivity, 2009, 19, 2797-2801.	1.7	16
152	Intergrain current flow in a randomly oriented polycrystalline $\text{SmFeAsO}_{0.85}$ oxypnictide. Applied Physics Letters, 2009, 95, .	3.3	73
153	MgO platelets and high critical field in $\text{MgB}_2$ thin films doped with carbon from methane. Superconductor Science and Technology, 2009, 22, 125001.	3.5	11
154	Development of high critical current density in multifilamentary round-wire $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ by strong overdoping. Applied Physics Letters, 2009, 95, 152516.	3.3	34
155	High-field phase-diagram of Fe arsenide superconductors. Physica C: Superconductivity and Its Applications, 2009, 469, 566-574.	1.2	30
156	Pinning, thermally activated depinning and their importance for tuning the nanoprecipitate size and density in high $J_c$ $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ films. Physica C: Superconductivity and Its Applications, 2009, 469, 2021-2028.	1.2	16
157	Weak-link behavior of grain boundaries in superconducting $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ bicrystals. Applied Physics Letters, 2009, 95, .	3.3	163
158	Recent Developments in 2G HTS Coil Technology. IEEE Transactions on Applied Superconductivity, 2009, 19, 2218-2222.	1.7	165
159	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
160	Neutron irradiation of $\text{SmFeAsO}_{1-x}$ . Superconductor Science and Technology, 2009, 22, 065015.	3.5	16
161	Evidence for highly localized damage in internal tin and powder-in-tube $\text{Nb}_3\text{Sn}$ strands rolled before reaction obtained from coupled magneto-optical imaging and confocal laser scanning microscopy. Superconductor Science and Technology, 2009, 22, 095008.	3.5	13
162	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

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163	The Effect of Second Phase Additions on the Microstructure and Bulk Pinning Force in $\text{Nb}_3\text{Sn}$ PIT Wire. IEEE Transactions on Applied Superconductivity, 2009, 19, 2568-2572.	1.7	6
164	Progress in Nanoengineered Microstructures for Tunable High-Current, High-Temperature Superconducting Wires. Advanced Materials, 2008, 20, 391-407.	21.0	162
165	Microstructural factors important for the development of high critical current density $\text{Nb}_3\text{Sn}$ strand. Cryogenics, 2008, 48, 283-292.	1.7	73
166	A Review of the Influence of Grain Boundary Geometry on the Electromagnetic Properties of Polycrystalline $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Films. Journal of the American Ceramic Society, 2008, 91, 1869-1882.	3.8	33
167	Two-band superconductivity in $\text{LaFeAsO}_{0.89}\text{F}_{0.11}$ at very high magnetic fields. Nature, 2008, 453, 903-905.	27.8	490
168	Influence of growth temperature on the vortex pinning properties of pulsed laser deposited $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ thin films. Journal of Applied Physics, 2008, 103, 043913.	2.5	19
169	Upper critical fields and thermally-activated transport of $\text{NdFeAsO}$ crystal. Physical Review B, 2008, 78, .	3.2	303
170	Comparative high-field magnetotransport of the oxypnictide superconductors $\text{RFeAsO}_{1-x}\text{F}_x$ ( $\text{R}=\text{La}, \text{Nd}$ ) and $\text{SmFeAsO}_{1-x}\text{F}_x$ . Physical Review B, 2008, 78, .	3.2	121
171	Significant reduction of AC losses in YBCO patterned coated conductors with transposed filaments. Superconductor Science and Technology, 2008, 21, 082004.	3.5	32
172	A novel technique for synthesizing $\text{MgB}_2$ thin films with high upper critical fields. Superconductor Science and Technology, 2008, 21, 085009.	3.5	8
173	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
174	Quench studies on a layer-wound $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_x/\text{AgX}$ coil at 4.2 K. Superconductor Science and Technology, 2008, 21, 025015.	3.5	18
175	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
176	PREPARATION AND CHARACTERIZATION OF $\text{MgB}_2$ BULK SAMPLES USING HIGH-ENERGY BALL MILLING AND HOT ISOSTATIC PRESSING. AIP Conference Proceedings, 2008, .	0.4	7
177	Effect of grain refinement on enhancing critical current density and upper critical field in undoped $\text{MgB}_2$ ex situ tapes. Journal of Applied Physics, 2008, 104, .	2.5	55
178	Evidence for electromagnetic granularity in the polycrystalline iron-based superconductor $\text{LaO}_{0.89}\text{F}_{0.11}\text{FeAs}$ . Applied Physics Letters, 2008, 92, 252501.	3.3	59
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