

# Gian Luca Sabbi

## List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	A First Baseline for the Magnets in the High Luminosity LHC Insertion Regions. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	117
2	Magnet R&D for the US LHC Accelerator Research Program (LARP). IEEE Transactions on Applied Superconductivity, 2006, 16, 324-327.	1.7	86
3	Development of MQXF: The Nb <sub>3</sub> Sn Low- $\beta$ Quadrupole for the HiLumi LHC. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-7.	1.7	84
4	Magnet Design of the 150 mm Aperture Low- $\beta$ Quadrupoles for the High Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-6.	1.7	75
5	Development of Wind-and-React Bi-2212 Accelerator Magnet Technology. IEEE Transactions on Applied Superconductivity, 2008, 18, 516-519.	1.7	60
6	Limits of NbTi and $\text{Nb}_3\text{Sn}$ , and Development of W&R Bi-2212 High Field Accelerator Magnets. IEEE Transactions on Applied Superconductivity, 2007, 17, 1149-1152.	1.7	56
7	Wind-and-react Bi-2212 coil development for accelerator magnets. Superconductor Science and Technology, 2010, 23, 034022.	3.5	55
8	Design Studies for the Low-Beta Quadrupoles for the LHC Luminosity Upgrade. IEEE Transactions on Applied Superconductivity, 2013, 23, 4002405-4002405.	1.7	53
9	Design of HQA High Field Large Bore $\text{Nb}_3\text{Sn}$ Quadrupole Magnet for LARP. IEEE Transactions on Applied Superconductivity, 2009, 19, 1235-1239.	1.7	51
10	Test Results for HD1, a 16 Tesla $\text{Nb}_3\text{Sn}$ Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2004, 14, 345-348.	1.7	49
11	The High Luminosity LHC interaction region magnets towards series production. Superconductor Science and Technology, 2021, 34, 053001.	3.5	49
12	The HL-LHC Low- $\beta$ Quadrupole Magnet MQXF: From Short Models to Long Prototypes. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-9.	1.7	47
13	A new support structure for high field magnets. IEEE Transactions on Applied Superconductivity, 2002, 12, 47-50.	1.7	46
14	Test Results of LARP $\text{Nb}_3\text{Sn}$ Quadrupole Magnets Using a Shell-Based Support Structure (TQS). IEEE Transactions on Applied Superconductivity, 2009, 19, 1221-1225.	1.7	36
15	Recent Test Results of the High Field $\text{Nb}_3\text{Sn}$ Dipole Magnet HD2. IEEE Transactions on Applied Superconductivity, 2010, 20, 292-295.	1.7	36
16	Design of HD2: A 15 Tesla $\text{Nb}_3\text{Sn}$ Dipole With a 35 mm Bore. IEEE Transactions on Applied Superconductivity, 2005, 15, 1128-1131.	1.7	35
17	An approach for faster high field magnet technology development. IEEE Transactions on Applied Superconductivity, 2003, 13, 1258-1261.	1.7	33
18	Correlation Between Strand Stability and Magnet Performance. IEEE Transactions on Applied Superconductivity, 2005, 15, 1524-1528.	1.7	33

#	ARTICLE	IF	CITATIONS
19	Test results of TQS03: A LARP shell-based Nb <sub>3</sub> Sn quadrupole using 108/127 conductor. Journal of Physics: Conference Series, 2010, 234, 032010.	0.4	32
20	Design of a 120 mm Bore 15 T Quadrupole for the LHC Upgrade Phase II. IEEE Transactions on Applied Superconductivity, 2010, 20, 144-147.	1.7	31
21	Test Results of the First 3.7 m Long Nb <sub>3</sub> Sn Quadrupole by LARP and Future Plans. IEEE Transactions on Applied Superconductivity, 2011, 21, 1858-1862.	1.7	31
22	Development of a high gradient quadrupole for the LHC interaction regions. IEEE Transactions on Applied Superconductivity, 1997, 7, 751-754.	1.7	29
23	Progress in Wind-and-React Bi-2212 Accelerator Magnet Technology. IEEE Transactions on Applied Superconductivity, 2009, 19, 2228-2231.	1.7	29
24	Impact of Coil Compaction on Nb <sub>3</sub> Sn LARP HQ Magnet. IEEE Transactions on Applied Superconductivity, 2012, 22, 4001904-4001904.	1.7	29
25	A review of conductor performance for the LARP high-gradient quadrupole magnets. Superconductor Science and Technology, 2013, 26, 095015.	3.5	29
26	Performance of the First Short Model 150-mm-Aperture Nb <sub>3</sub> Sn Quadrupole MQXFS for the High-Luminosity LHC Upgrade. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	29
27	Performance of a Nb <sub>3</sub> Sn Quadrupole Under High Stress. IEEE Transactions on Applied Superconductivity, 2011, 21, 1849-1853.	1.7	28
28	Design and Analysis of TQS01, a 90 mm Nb <sub>3</sub> Sn Model Quadrupole for LHC Luminosity Upgrade Based on a Key and Bladder Assembly. IEEE Transactions on Applied Superconductivity, 2006, 16, 358-361.	1.7	27
29	Protecting a Full-Scale Nb <sub>3</sub> Sn Magnet With CLIQ, the New Coupling-Loss-Induced Quench System. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	27
30	Strain Distribution in REBCO-Coated Conductors Bent With the Constant-Perimeter Geometry. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-10.	1.7	27
31	Summary of Test Results of MQXFS1 – The First Short Model 150 mm Aperture Nb <sub>3</sub> Sn Quadrupole for the High-Luminosity LHC Upgrade. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	27
32	HD1: Design and Fabrication of a 16 Tesla Nb <sub>3</sub> Sn Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2004, 14, 283-286.	1.7	26
33	Mechanical Design of HD2, a 15 T Nb <sub>3</sub> Sn Dipole Magnet with a 35 mm Bore. IEEE Transactions on Applied Superconductivity, 2006, 16, 378-381.	1.7	25
34	Assembly and Test of HD2, a 36 mm Bore High Field Nb <sub>3</sub> Sn Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2009, 19, 1240-1243.	1.7	25
35	Instrumentation and Quench Protection for LARP Nb <sub>3</sub> Sn Magnets. IEEE Transactions on Applied Superconductivity, 2009, 19, 2458-2462.	1.7	25
36	Cold Test Results of the LARP HQ Nb <sub>3</sub> Sn Quadrupole Magnet at 1.9 K. IEEE Transactions on Applied Superconductivity, 2013, 23, 4002606-4002606.	1.7	25

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37	Development and Coil Fabrication for the LARP 3.7-m Long Nb <sub>3</sub> Sn Quadrupole. IEEE Transactions on Applied Superconductivity, 2009, 19, 1231-1234.	1.7	24
38	Mechanical Design of a Nb <sub>3</sub> Sn Superconducting Magnet System for a 45 GHz ECR Ion Source. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	24
39	Status of the LHC inner triplet quadrupole program at Fermilab. IEEE Transactions on Applied Superconductivity, 2001, 11, 1558-1561.	1.7	23
40	Development of TQC01, a 90 mm $\text{Nb}_3\text{Sn}$ Model Quadrupole for LHC Upgrade Based on SS Collar. IEEE Transactions on Applied Superconductivity, 2006, 16, 370-373.	1.7	23
41	Development and Test of LARP Technological Quadrupole (TQC) Magnet. IEEE Transactions on Applied Superconductivity, 2007, 17, 1126-1129.	1.7	23
42	Fabrication and Test of LARP Technological Quadrupole Models of TQC Series. IEEE Transactions on Applied Superconductivity, 2009, 19, 1226-1230.	1.7	23
43	Superconducting ECR ion source: From 24-28 GHz SECRAL to 45 GHz fourth generation ECR. Review of Scientific Instruments, 2018, 89, 052301.	1.3	23
44	Test results of RD3c, a Nb <sub>3</sub> /Sn common-coil racetrack dipole magnet. IEEE Transactions on Applied Superconductivity, 2003, 13, 1292-1296.	1.7	22
45	Acoustic emission during quench training of superconducting accelerator magnets. Cryogenics, 2015, 69, 50-57.	1.7	22
46	Performance comparison of Nb <sub>3</sub> /Sn magnets at LBNL. IEEE Transactions on Applied Superconductivity, 2003, 13, 1254-1257.	1.7	21
47	Fabrication and Test of TQS01 "A 90 mm $\text{Nb}_3\text{Sn}$ Quadrupole Magnet for LARP. IEEE Transactions on Applied Superconductivity, 2007, 17, 1122-1125.	1.7	21
48	Test Results of 15 T $\text{Nb}_3\text{Sn}$ Quadrupole Magnet HQ01 with a 120 mm Bore for the LHC Luminosity Upgrade. IEEE Transactions on Applied Superconductivity, 2011, 21, 1854-1857.	1.7	21
49	Test Results of HD1b, an Upgraded 16 Tesla $\text{Nb}_3\text{Sn}$ Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2005, 15, 1123-1127.	1.7	20
50	Fabrication and Test of a 3.7 m Long Support Structure for the LARP $\text{Nb}_3\text{Sn}$ Quadrupole Magnet LQS01. IEEE Transactions on Applied Superconductivity, 2009, 19, 1106-1111.	1.7	20
51	Performance Characteristics of $\text{Nb}_3\text{Sn}$ Block-Coil Dipoles for a 100 TeV Hadron Collider. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-7.	1.7	20
52	Test Result of the Short Models MQXFS3 and MQXFS5 for the HL-LHC Upgrade. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	20
53	Development of the 15 T $\text{Nb}_3\text{Sn}$ Dipole HD2. IEEE Transactions on Applied Superconductivity, 2008, 18, 277-280.	1.7	19
54	Fourth generation electron cyclotron resonance ion sources (invited). Review of Scientific Instruments, 2008, 79, 02A321.	1.3	19

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55	Concept for a fourth generation electron cyclotron resonance ion source. Review of Scientific Instruments, 2012, 83, 02A301.	1.3	19
56	Progress on HL-LHC Nb <sub>3</sub> Sn Magnets. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-9.	1.7	19
57	Performance of HQ02, an Optimized Version of the 120 mm $\text{Nb}_3\text{Sn}$ LARP Quadrupole. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	18
58	Development of a Large Aperture $\text{Nb}_3\text{Sn}$ Racetrack Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2005, 15, 1132-1135.	1.7	17
59	Magnetic and Mechanical Analysis of the HQ Model Quadrupole Designs for LARP. IEEE Transactions on Applied Superconductivity, 2008, 18, 281-284.	1.7	17
60	Design and Fabrication Experience With $\text{Nb}_3\text{Sn}$ Block-Type Coils for High Field Accelerator Dipoles. IEEE Transactions on Applied Superconductivity, 2013, 23, 4002504-4002504.	1.7	17
61	Study of the react and wind technique for a Nb <sub>3</sub> Sn common coil dipole. IEEE Transactions on Applied Superconductivity, 2000, 10, 338-341.	1.7	16
62	Fabrication and test of Nb <sub>3</sub> Sn racetrack coils at high field. IEEE Transactions on Applied Superconductivity, 2001, 11, 2164-2167.	1.7	16
63	LARP Long $\text{Nb}_3\text{Sn}$ Quadrupole Design. IEEE Transactions on Applied Superconductivity, 2008, 18, 268-272.	1.7	16
64	Mechanical Performance of the LARP $\text{Nb}_3\text{Sn}$ Quadrupole Magnet LQS01. IEEE Transactions on Applied Superconductivity, 2011, 21, 1683-1687.	1.7	16
65	$\text{Nb}_3\text{Sn}$ IR Quadrupoles for the High Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2013, 23, 4000707-4000707.	1.7	16
66	Multipoles Induced by Inter-Strand Coupling Currents in LARP $\text{Nb}_3\text{Sn}$ Quadrupoles. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-7.	1.7	16
67	A new quench detection method for HTS magnets: stray-capacitance change monitoring. Physica Scripta, 2020, 95, 015002.	2.5	16
68	Conceptual design of a common coil dipole for VLHC. IEEE Transactions on Applied Superconductivity, 2000, 10, 330-333.	1.7	15
69	Nb <sub>3</sub> Sn quadrupole magnets for the IHC IR. IEEE Transactions on Applied Superconductivity, 2003, 13, 1262-1265.	1.7	15
70	Superconducting magnets and their applications. Proceedings of the IEEE, 2004, 92, 1675-1687.	21.3	15
71	Mechanical Analysis of the $\text{Nb}_3\text{Sn}$ Dipole Magnet HD1. IEEE Transactions on Applied Superconductivity, 2005, 15, 1119-1122.	1.7	15
72	Design and Test of a $\text{Nb}_3\text{Sn}$ Subscale Dipole Magnet for Training Studies. IEEE Transactions on Applied Superconductivity, 2007, 17, 1144-1148.	1.7	15

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73	Quench Performance of HQ01, a 120 mm Bore LARP Quadrupole for the LHC Upgrade. IEEE Transactions on Applied Superconductivity, 2012, 22, 4702005-4702005.	1.7	15
74	Modeling of Interfilament Coupling Currents and Their Effect on Magnet Quench Protection. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-8.	1.7	15
75	Conceptual Design of a Large Aperture Dipole for Testing of Cables and Insert Coils at High Field. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	15
76	Geometric Field Errors of Short Models for MQXF, the Nb <sub>3</sub> Sn Low- $\hat{I}^2$ Quadrupole for the High Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	15
77	Status of Nb <sub>3</sub> /Sn accelerator magnet R&D. IEEE Transactions on Applied Superconductivity, 2002, 12, 236-241.	1.7	14
78	Structure for an LHC 90 mm $\times$ 90 mm Nb <sub>3</sub> Sn Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2005, 15, 1444-1447.	1.7	14
79	Test and Analysis of Technology Quadrupole Shell (TQS) Magnet Models for LARP. IEEE Transactions on Applied Superconductivity, 2008, 18, 179-183.	1.7	14
80	Construction and Test of 3.6 m Nb <sub>3</sub> Sn Racetrack Coils for LARP. IEEE Transactions on Applied Superconductivity, 2008, 18, 171-174.	1.7	14
81	Assembly and Test of a Support Structure for 3.6 m Long Nb <sub>3</sub> Sn Racetrack Coils. IEEE Transactions on Applied Superconductivity, 2008, 18, 167-170.	1.7	14
82	Test Results of LARP 3.6 m Nb <sub>3</sub> Sn Racetrack Coils Supported by Full-Length and Segmented Shell Structures. IEEE Transactions on Applied Superconductivity, 2009, 19, 1212-1216.	1.7	14
83	Cable deformation simulation and a hierarchical framework for Nb <sub>3</sub> Sn Rutherford cables. Journal of Physics: Conference Series, 2010, 234, 022002.	0.4	14
84	Measurements on Subscale Y-Ba-Cu-O Racetrack Coils at 77 K and Self-Field. IEEE Transactions on Applied Superconductivity, 2010, 20, 368-372.	1.7	14
85	Test Results and Analysis of LQS03 Third Long Nb <sub>3</sub> Sn Quadrupole by LARP. IEEE Transactions on Applied Superconductivity, 2013, 23, 4002204-4002204.	1.7	14
86	Challenges in the Support Structure Design and Assembly of HD3, a Nb <sub>3</sub> Sn Block-Type Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2013, 23, 4001705-4001705.	1.7	14
87	Test of the High-Field Nb <sub>3</sub> Sn Dipole Magnet HD3b. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-6.	1.7	14
88	Validation of Finite-Element Models of Persistent-Current Effects in Nb <sub>3</sub> Sn Accelerator Magnets. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-6.	1.7	14
89	Quench Protection System Optimization for the High Luminosity LHC Nb <sub>3</sub> Sn Quadrupoles. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-7.	1.7	14
90	Lessons Learned From the Prototypes of the MQXFA Low-Beta Quadrupoles for HL-LHC and Status of Production in the US. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	14

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91	Assembly and Tests of SQ02, a Nb <sub>3</sub> Sn Racetrack Quadrupole Magnet for LARP. IEEE Transactions on Applied Superconductivity, 2007, 17, 1019-1022.	1.7	13
92	Development and Test of LARP Technological Quadrupole Models of TQC Series. IEEE Transactions on Applied Superconductivity, 2008, 18, 175-178.	1.7	13
93	Final Development and Test Preparation of the First 3.7 m Long Nb <sub>3</sub> Sn Quadrupole by LARP. IEEE Transactions on Applied Superconductivity, 2010, 20, 283-287.	1.7	13
94	Design of a High Field $\{m \text{ Nb} \}_3 \{m \text{ Al} \}$ Common Coil Magnet. IEEE Transactions on Applied Superconductivity, 2010, 20, 176-179.	1.7	13
95	Mechanical Behavior of HQ01, a $\{hbox\{Nb\}\}_3 \{hbox\{Sn\}\}$ Accelerator-Quality Quadrupole Magnet for the LHC Luminosity Upgrade. IEEE Transactions on Applied Superconductivity, 2012, 22, 4901804-4901804.	1.7	13
96	Field Quality Measurements of LARP $\{hbox\{Nb\}\}_3 \{hbox\{Sn\}\}$ Magnet HQ02. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	13
97	Test Results of the LARP HQ02b Magnet at 1.9 K. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-6.	1.7	13
98	Quench Detection Utilizing Stray Capacitances. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	13
99	Analysis of Nb <sub>3</sub> Sn Accelerator Magnet Training. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-6.	1.7	13
100	Correction of high gradient quadrupole harmonics with magnetic shims. IEEE Transactions on Applied Superconductivity, 2000, 10, 123-126.	1.7	12
101	Field quality in Fermilab-built models of quadrupole magnets for the LHC interaction region. IEEE Transactions on Applied Superconductivity, 2001, 11, 1566-1569.	1.7	12
102	Mechanical Design of a Second Generation LHC IR Quadrupole. IEEE Transactions on Applied Superconductivity, 2004, 14, 235-238.	1.7	12
103	Design, development and test of 2 m quadrupole model magnets for the LHC inner triplet. IEEE Transactions on Applied Superconductivity, 1999, 9, 689-692.	1.7	11
104	Development of react and wind common coil dipoles for VLHC. IEEE Transactions on Applied Superconductivity, 2001, 11, 2172-2175.	1.7	11
105	Design of $\{hbox\{Nb\}\}_3 \{hbox\{Sn\}\}$ Coils for LARP Long Magnets. IEEE Transactions on Applied Superconductivity, 2007, 17, 1035-1038.	1.7	11
106	Reproducibility of the Coil Positioning in $\{m \text{ Nb} \}_3 \{m \text{ Sn} \}$ Magnet Models Through Magnetic Measurements. IEEE Transactions on Applied Superconductivity, 2009, 19, 1100-1105.	1.7	11
107	Fabrication of a Second-Generation of $\{hbox\{Nb\}\}_3 \{hbox\{Sn\}\}$ Coils for the LARP HQ02 Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	11
108	Axial-Field Magnetic Quench Antenna for the Superconducting Accelerator Magnets. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	11

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109	Test Results of the First Two Full-Length Prototype Quadrupole Magnets for the LHC Hi-Lumi Upgrade. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	11
110	Quench performance of Fermilab high gradient quadrupole short models for the LHC Interaction Regions. , 0, , .		10
111	Field quality in Fermilab-built models of high gradient quadrupole magnets for the LHC interaction regions. IEEE Transactions on Applied Superconductivity, 2000, 10, 107-110.	1.7	10
112	Magneto-Thermal Stability in LARP $\text{Nb}_3\text{Sn}$ TQS Magnets. IEEE Transactions on Applied Superconductivity, 2010, 20, 274-278.	1.7	10
113	Fabrication of a Third Generation of $\text{Nb}_3\text{Sn}$ Coils for the LARP HQ03 Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	10
114	Test Results of the LARP $\text{Nb}_3\text{Sn}$ Quadrupole HQ03a. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.7	10
115	Design Study of a 16-T Block Dipole for FCC. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	10
116	Magnetic Measurements of the First $\text{Nb}_3\text{Sn}$ Model Quadrupole (MQXFS) for the High-Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	10
117	Superconducting Magnets for High Performance ECR Ion Sources. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	10
118	Overview of the Quench Heater Performance for MQXF, the $\text{Nb}_3\text{Sn}$ Low- $J^2$ Quadrupole for the High Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	10
119	Magnetic and Mechanical Analysis of a Large Aperture 15 $\hat{\text{A}}$ Cable Test Facility Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-6.	1.7	10
120	Thermal, Electrical and Mechanical Response in $\text{Nb}_3\text{Sn}$ Superconducting Coils. IEEE Transactions on Applied Superconductivity, 2004, 14, 361-364.	1.7	9
121	Measured Strain in $\text{Nb}_3\text{Sn}$ Coils During Excitation and Quench. IEEE Transactions on Applied Superconductivity, 2005, 15, 1461-1464.	1.7	9
122	Differentiation of Performance-Limiting Voltage Transients during $\text{Nb}_3\text{Sn}$ Magnet Testing. AIP Conference Proceedings, 2006, , .	0.4	9
123	Design Studies of $\text{Nb}_3\text{Sn}$ High-Gradient Quadrupole Models for LARP. IEEE Transactions on Applied Superconductivity, 2007, 17, 1051-1054.	1.7	9
124	Test of a $\text{NbTi}$ Superconducting Quadrupole Magnet Based on Alternating Helical Windings. IEEE Transactions on Applied Superconductivity, 2009, 19, 1195-1198.	1.7	9
125	Design of a $\text{Nb}_3\text{Sn}$ Magnet for a 4th Generation ECR Ion Source. IEEE Transactions on Applied Superconductivity, 2009, 19, 1336-1339.	1.7	9
126	Progress in the Long $\text{Nb}_3\text{Sn}$ Quadrupole R&D by LARP. IEEE Transactions on Applied Superconductivity, 2012, 22, 4003804-4003804.	1.7	9



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127	Design of LD1, a Large-Aperture High-Field $\text{Nb}_3\text{Sn}$ Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2012, 22, 4901604-4901604.	1.7	9
128	Magnetic Design Optimization of a 150 mm Aperture $\text{Nb}_3\text{Sn}$ Low-Beta Quadrupole for the HiLumi LHC. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	9
129	Test Results of a $\text{Nb}_3\text{Al}/\text{Nb}_3\text{Sn}$ Subscale Magnet for Accelerator Application. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	9
130	3D Mechanical Design and Stress Analysis of 20 T Common-Coil Dipole Magnet for SppC. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	9
131	Magnetic and Mechanical Design of a 15-T Large Aperture Dipole Magnet for Cable Testing. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	9
132	Development of high performance Nb-Ti(Fe) multifilamentary superconductor for the LHC insertion quadrupoles. IEEE Transactions on Applied Superconductivity, 1999, 9, 1559-1562.	1.7	8
133	Development of superconducting quadrupoles for heavy ion fusion. , 0, , .		8
134	Fabrication and test results of a high field, $\text{Nb}_3\text{Sn}$ superconducting racetrack dipole magnet. , 0, , .		8
135	Assembly and Test of SQ01b, a $\text{Nb}_3\text{Sn}$ Quadrupole Magnet for the LHC Accelerator Research Program. IEEE Transactions on Applied Superconductivity, 2006, 16, 382-385.	1.7	8
136	Field Quality Measurements and Analysis of the LARP Technology Quadrupole Models. IEEE Transactions on Applied Superconductivity, 2008, 18, 184-187.	1.7	8
137	Assembly and Loading of LQS01, a Shell-Based 3.7 m Long $\text{Nb}_3\text{Sn}$ Quadrupole Magnet for LARP. IEEE Transactions on Applied Superconductivity, 2010, 20, 279-282.	1.7	8
138	$\text{Nb}_3\text{Sn}$ superconducting magnets for electron cyclotron resonance ion sources. Review of Scientific Instruments, 2010, 81, 02A309.	1.3	8
139	Quench Protection of a 16-T Block-Coil Dipole Magnet for a 100-TeV Hadron Collider Using CLIQ. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-7.	1.7	8
140	Magnetic Quench Antenna for MQXF Quadrupoles. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	8
141	Fabrication of First 4-m Coils for the LARP MQXFA Quadrupole and Assembly in Mirror Structure. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	8
142	Quench Protection Performance Measurements in the First MQXF Magnet Models. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	8
143	Design of racetrack coils for high-field dipole magnets. IEEE Transactions on Applied Superconductivity, 2001, 11, 2280-2283.	1.7	7
144	Optimization and Test of 120 mm LARP $\text{Nb}_3\text{Sn}$ Quadrupole Coils Using Magnetic Mirror Structure. IEEE Transactions on Applied Superconductivity, 2012, 22, 4003404-4003404.	1.7	7

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145	Test of Optimized 120-mm LARP $\text{Nb}_3\text{Sn}$ Quadrupole Coil Using Magnetic Mirror Structure. IEEE Transactions on Applied Superconductivity, 2013, 23, 4001605-4001605.	1.7	7
146	Vertical Magnetic Measurements of the First Full-Length Prototype MQXFAP2 Quadrupole for the LHC Hi-Lumi Accelerator Upgrade Project. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-7.	1.7	7
147	Field measurement of a Fermilab-built full scale prototype quadrupole magnet for the LHC interaction regions. IEEE Transactions on Applied Superconductivity, 2002, 12, 254-257.	1.7	6
148	Fabrication and Performance of $\text{Nb}_3\text{Sn}$ Rutherford-Type Cable With Cu Added as a Separate Component. IEEE Transactions on Applied Superconductivity, 2004, 14, 971-974.	1.7	6
149	Performance Analysis of HD1: A 16 Tesla $\text{Nb}_3\text{Sn}$ Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2005, 15, 1156-1159.	1.7	6
150	Design and Fabrication of a Supporting Structure for 3.6 m Long $\text{Nb}_3\text{Sn}$ Racetrack Coils. IEEE Transactions on Applied Superconductivity, 2007, 17, 1023-1026.	1.7	6
151	Performance correlation between $\text{YBaCuO}$ coils and short samples for coil technology development. Superconductor Science and Technology, 2016, 29, 065007.	3.5	6
152	Magnetic Analysis of the $\text{Nb}_3\text{Sn}$ Low-Beta Quadrupole for the High-Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	6
153	Magnetic and Mechanical 3-D Modelling of a 15 T Large Aperture Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	6
154	Magnetic measurements of the Fermilab high gradient quadrupoles for the LHC interaction regions. IEEE Transactions on Applied Superconductivity, 1999, 9, 374-377.	1.7	5
155	Progress in the development of superconducting quadrupoles for heavy ion fusion. Laser and Particle Beams, 2002, 20, 617-620.	1.0	5
156	Parameters and requirements of superconducting focusing quadrupoles for heavy ion fusion. IEEE Transactions on Applied Superconductivity, 2003, 13, 1530-1535.	1.7	5
157	Development and Testing of the Improved Focusing Quadrupole for Heavy Ion Fusion Accelerators. IEEE Transactions on Applied Superconductivity, 2004, 14, 316-320.	1.7	5
158	Heat Treatment Optimizations for Wind-and-React Bi-2212 Racetrack Coils. Physics Procedia, 2012, 36, 812-817.	1.2	5
159	Quench Location in the LARP MQXFS1 Prototype. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.7	5
160	Progress on the Upgrade of EDIPO, a 15 T Large Aperture Dipole. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	5
161	Design and Construction of a High Field Cable Test Facility at Fermilab. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-4.	1.7	5
162	Phase space approach to charged beam analysis. IEEE Transactions on Magnetics, 1994, 30, 2928-2931.	2.1	4

#	ARTICLE	IF	CITATIONS
163	Field quality of quadrupole R&D models for the LHC IR. , 0, , .		4
164	Quenching behaviour of quadrupole model magnets for the LHC inner triplets at Fermilab. IEEE Transactions on Applied Superconductivity, 2000, 10, 103-106.	1.7	4
165	Recent results from the LHC inner triplet quadrupole development program at Fermilab. IEEE Transactions on Applied Superconductivity, 2000, 10, 57-60.	1.7	4
166	A superconducting undulator for 3rd-generation light sources. IEEE Transactions on Applied Superconductivity, 2002, 12, 682-685.	1.7	4
167	Field measurement of fermilab-built quadrupole magnets for the LHC interaction regions. IEEE Transactions on Applied Superconductivity, 2003, 13, 1243-1245.	1.7	4
168	Construction and Tests of HCX Quadrupole Doublet for Heavy Ion Beam Transport Experiments. IEEE Transactions on Applied Superconductivity, 2005, 15, 1171-1174.	1.7	4
169	Use of High Resolution DAQ System to Aid Diagnosis of HD2b, a High Performance $\{m\text{ Nb}\}_{3}\{m\text{ Sn}\}$ Dipole. IEEE Transactions on Applied Superconductivity, 2009, 19, 2345-2349.	1.7	4
170	Quench protection challenges in long nb3sn accelerator magnets. AIP Conference Proceedings, 2012, , .	0.4	4
171	Fabrication and Analysis of 150 mm Aperture Nb&lt;sub>3</sub>&lt;sub>Sn LARP MQXF Coils. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.7	4
172	Quench Protection of a Nb $_3$ Sn Superconducting Magnet System for a 45-GHz ECR Ion Source. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	4
173	Field Quality Measurement of a 4.2-m-Long Prototype Low- $\eta$ Nb $_3$ Sn Quadrupole Magnet During the Assembly Stage for the High-Luminosity LHC Accelerator Upgrade Project. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-6.	1.7	4
174	A gauged A, V-A/ $\Psi$ formulation without A/ $\nabla n=0$ on conductor boundaries. IEEE Transactions on Magnetics, 1994, 30, 2976-2979.	2.1	3
175	Induction Accelerator Technology Choices for the Integrated Beam Experiment (IBX). Fusion Science and Technology, 2003, 44, 261-265.	1.1	3
176	An R&D Approach to the Development of Long Nb $_3$ Sn Accelerator Magnets Using the Key and Bladder Technology. IEEE Transactions on Applied Superconductivity, 2005, 15, 1136-1139.	1.7	3
177	Technical challenges for head-on collisions and extraction at the ILC. , 2007, , .		3
178	Effect of Axial Loading on Quench Performance in $\text{Nb}_3\text{Sn}$ Magnets. IEEE Transactions on Applied Superconductivity, 2008, 18, 285-288.	1.7	3
179	Characterization of insulating coatings for wind-and-react coil fabrication. AIP Conference Proceedings, 2014, , .	0.4	3
180	Measurements and Analysis of Dynamic Effects in the LARP Model Quadrupole HQ02b During Rapid Discharge. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	3

#	ARTICLE	IF	CITATIONS
181	Analysis of Field Errors for LARP Nb <sub>3</sub> Sn HQ03 Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	3
182	Design of a Compact 16 T Common-Coil Dipole for Future Colliders. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	3
183	Magnetic Analysis of the MQXF Quadrupole for the High-Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	3
184	Quench Protection of the First 4-m-Long Prototype of the HL-LHC Nb <sub>3</sub> Sn Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	3
185	Field Quality of HD3A Nb <sub>3</sub> Sn Dipole Magnet Based on Block Design. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-7.	1.7	3
186	Cable Design and Development for the High-Temperature Superconductor Cable Test Facility Magnet. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	3
187	Engineering Design of a Large Aperture 15 T Cable Test Facility Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	3
188	A symmetric undifferentiated fully gauged T <sub>1</sub> -A <sub>1</sub> formulation. IEEE Transactions on Magnetics, 1995, 31, 1352-1355.	2.1	2
189	Measurement of Fast Voltage Transients in High-Performance Nb <sub>3</sub> Sn Magnets. IEEE Transactions on Applied Superconductivity, 2008, 18, 1581-1584.	1.7	2
190	Alternative Mechanical Structure for LARP Nb <sub>3</sub> Sn Quadrupoles. IEEE Transactions on Applied Superconductivity, 2011, 21, 1773-1776.	1.7	2
191	Novel methods for the measurement of the critical current of superconducting wires. , 2012, , .		2
192	Mechanical Design, Assembly and Testing of a Support Structure for LARP Nb <sub>3</sub> Sn Quadrupole Magnets for LHC. IEEE Transactions on Applied Superconductivity, 2012, 22, 4003503-4003503.	1.7	2
193	Field Quality and Fabrication Analysis of HQ02 Reconstructed Nb <sub>3</sub> Sn Coil Cross Sections. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	2
194	Magnetic Field Measurements of First Pre-series Full-Length 4.2 m Quadrupole MQXFA03 Using PCB Rotating Coils for the Hi-Lumi LHC Project. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-7.	1.7	2
195	Field Quality of the 4.5-m-Long MQXFA Pre-Series Magnets for the HL-LHC Upgrade as Observed During Magnet Assembly. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	2
196	Power losses and magnetic forces analysis in large dipole magnets cryostat. IEEE Transactions on Magnetics, 1994, 30, 2632-2635.	2.1	1
197	Magnetic field measurements of quadrupoles in the High-Current Experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 486-491.	1.6	1
198	Development of superconducting magnet systems for HIF experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 285-293.	1.6	1

#	ARTICLE	IF	CITATIONS
199	Energy deposition studies of block-coil quadrupoles for the LHC luminosity upgrade. , 2007, , .		1
200	Analysis of voltage signals from superconducting accelerator magnets. Cryogenics, 2010, 50, 204-214.	1.7	1
201	Field Quality of the First LARP $\text{Nb}_3\text{Sn}$ 3.7 m-Long Quadrupole Model of LQ Series. IEEE Transactions on Applied Superconductivity, 2011, 21, 1688-1691.	1.7	1
202	Steady State Heat Deposits Modeling in the $\text{Nb}_3\text{Sn}$ Quadrupole Magnets for the Upgrade of the LHC Inner Triplet. IEEE Transactions on Applied Superconductivity, 2012, 22, 4003704-4003704.	1.7	1
203	Field Quality Study of the LARP $\text{Nb}_3\text{Sn}$ 3.7 m-Long Quadrupole Models of LQ series. IEEE Transactions on Applied Superconductivity, 2012, 22, 9002804-9002804.	1.7	1
204	Development of a $\text{Nb}_3\text{Al}$ and $\text{Nb}_3\text{Sn}$ Subscale Magnet. IEEE Transactions on Applied Superconductivity, 2013, 23, 4300605-4300605.	1.7	1
205	ASC 2012 Introduction. IEEE Transactions on Applied Superconductivity, 2013, 23, 0001301-0001301.	1.7	1
206	Design of a 150-mm Coil Support Structure With Accelerator Integration Features for LARP &lt;math display="block">\text{Nb}_3\text{Sn} Notation="TeX"&gt; $\text{Nb}_3\text{Sn}$ &lt;/math>&lt;/math> Quadrupole Magnets. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.7	1
207	The HD Block-Coil Dipole Program at LBNL. Particle Acceleration and Detection, 2019, , 285-310.	0.5	1
208	Tests of prototype quadrupole magnets for heavy ion fusion beam transport. IEEE Transactions on Applied Superconductivity, 2003, 13, 1508-1511.	1.7	0
209	Superconducting Magnets and Their Applications. ChemInform, 2005, 36, no.	0.0	0
210	Optimization of Superconducting Focusing Quadrupoles for the High Current Experiment. IEEE Transactions on Applied Superconductivity, 2006, 16, 301-304.	1.7	0
211	Cryostat with Low-Emissivity Foil and Multilayer Insulation. AIP Conference Proceedings, 2006, , .	0.4	0
212	Protection Heater Design Validation for the LARP Magnets Using Thermal Imaging. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	0
213	Optimization of an Interaction Region Quadrupole Magnet for a Future Electron-Ion Collider at JLab. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	0
214	3D Mechanical Analysis of a Compact $\text{Nb}_3\text{Sn}$ IR Quadrupole for EIC. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	0
215	Erratum to "The HL-LHC Low- $\beta^2$ Quadrupole Magnet MQXF: From Short Models to Long Prototypes" [Aug 19 Art. no. 4001309]. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-1.	1.7	0