Kazuhiro Kajikawa

List of Publications by Year
in descending order

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119 papers	1,316 citations	430442 18 h-index	414034 32 g-index
120 all docs	120 docs citations	120 times ranked	625 citing authors

#	Article	IF	Citations
1	A High-Resolution 1.3-GHz/54-mm LTS/HTS NMR Magnet. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	138
2	AC loss properties of a 1 MVA single-phase HTS power transformer. IEEE Transactions on Applied Superconductivity, 2001, 11, 1482-1485.	1.1	78
3	Development of a 22 kV/6.9 kV single-phase model for a 3 MVA HTS power transformer. IEEE Transactions on Applied Superconductivity, 2001, 11, 1578-1581.	1.1	73
4	Numerical evaluation of AC losses in HTS wires with 2D FEM formulated by self magnetic field. IEEE Transactions on Applied Superconductivity, 2003, 13, 3630-3633.	1.1	71
5	Proposal of a Fully Superconducting Motor for Liquid Hydrogen Pump With MgB<formula formulatype="inline"><tex Notation="TeX">$_{2}$</tex> </formula> Wire. IEEE Transactions on Applied Superconductivity, 2009, 19, 1669-1673.	1.1	51
6	Development of a 1 T cryocooler-cooled pulse coil with a Bi2223 superconducting parallel conductor for SMES. IEEE Transactions on Applied Superconductivity, 1999, 9, 928-931.	1.1	44
7	Theoretical investigation on the detection ratio of the magnetization in superconducting wires by a saddle-shaped pick-up coil. Superconductor Science and Technology, 2003, 16, 545-556.	1.8	44
8	A simple method to eliminate shielding currents for magnetization perpendicular to superconducting tapes wound into coils. Superconductor Science and Technology, 2011, 24, 125005.	1.8	33
9	AC loss evaluation of thin superconducting wires with critical current distribution along width. Superconductor Science and Technology, 2004, 17, 555-563.	1.8	32
10	Designs and Tests of Shaking Coils to Reduce Screening Currents Induced in HTS Insert Coils for NMR Magnet. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	32
11	Hysteretic ac loss of polygonally arranged superconducting strips carrying ac transport current. Applied Physics Letters, 2008, 92, .	1.5	30
12	Current distribution in superconducting parallel conductors wound into pancake coils. IEEE Transactions on Applied Superconductivity, 2000, 10, 861-864.	1.1	27
13	Reduction of Magnetization in Windings Composed of HTS Tapes. IEEE Transactions on Applied Superconductivity, 2012, 22, 4400404-4400404.	1.1	24
14	Robust REBCO Insert Coil for Upgrade of 25 T Cryogen-Free Superconducting Magnet. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	24
15	Alternating current loss in radially arranged superconducting strips. Applied Physics Letters, 2006, 88, 092503.	1.5	19
16	Hysteretic ac loss of superconducting strips simultaneously exposed to ac transport current and phase-different ac magnetic field. Applied Physics Letters, 2007, 90, 022506.	1.5	19
17	Development of Stator Windings for Fully Superconducting Motor With $hbox{MgB}_{2}$ Wires. IEEE Transactions on Applied Superconductivity, 2013, 23, 5201604-5201604.	1.1	19
18	Usable Ranges of Some Expressions for Calculation of the Self-Inductance of a Circular Coil of Rectangular Cross Section.. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.1	18

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19	Influences of geometrical configuration on AC loss measurement with pickup-coil method. IEEE Transactions on Applied Superconductivity, 1999, 9, 746-749.	1.1	18
20	Design and Test of Filter of High Gradient Magnetic Separation System for Trapping Immunoglobulin in Serum. IEEE Transactions on Applied Superconductivity, 2009, 19, 2157-2161.	1.1	18
21	AC Losses of an HTS Insert in a 25-T Cryogen-Free Superconducting Magnet. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	18
22	AC losses in monofilamentary MgB₂round wire carrying alternating transport currents. Superconductor Science and Technology, 2010, 23, 045026.	1.8	17
23	Development and fundamental study on a superconducting induction/synchronous motor incorporated with MgB₂cage windings. Superconductor Science and Technology, 2012, 25, 014004.	1.8	17
24	Design and current-limiting simulation of magnetic-shield type superconducting fault current limiter with high Tc superconductors. IEEE Transactions on Magnetics, 1996, 32, 2667-2670.	1.2	16
25	Numerical simulation for AC losses of HTS tapes in combined alternating transport current and external AC magnetic field with phase shift. IEEE Transactions on Applied Superconductivity, 2001, 11, 2240-2243.	1.1	15
26	Field angle dependence of AC losses in stacked Bi-2223 Ag-sheathed tapes. IEEE Transactions on Applied Superconductivity, 2003, 13, 3610-3613.	1.1	15
27	A uniform description of irreversibility lines for various high-Tc superconductors. Physica C: Superconductivity and Its Applications, 2001, 355, 299-306.	0.6	14
28	Theoretical expressions for AC losses of superconducting coils in external magnetic field and transport current with phase difference. Physica C: Superconductivity and Its Applications, 2001, 357-360, 1205-1208.	0.6	14
29	Fundamental investigation of a superconducting level sensor for liquid hydrogen with MgB2wire. Journal of Physics: Conference Series, 2008, 97, 012140.	0.3	14
30	Improvement of a High-Gradient Magnetic Separation System for Trapping Immunoglobulin in Serum. IEEE Transactions on Applied Superconductivity, 2010, 20, 949-952.	1.1	14
31	Ac loss properties of a 4 kJ conduction-cooled pulse coil wound with a Bi2223 6-strand parallel conductor for SMES. IEEE Transactions on Applied Superconductivity, 2003, 13, 1882-1885.	1.1	13
32	AC Loss Evaluation of MgB2 Superconducting Windings Located in a Stator Core Slot with a Finite-Element Method. Journal of Superconductivity and Novel Magnetism, 2011, 24, 987-991.	0.8	12
33	Performance of Induction/Synchronous Motor Having ${m MgB}_{2}$ Cage Windings for Liquid Hydrogen Circulation Pump. IEEE Transactions on Applied Superconductivity, 2012, 22, 5200404-5200404.	1.1	12
34	Development of a liquid hydrogen transfer pump system with MgB2 wires. Cryogenics, 2012, 52, 615-619.	0.9	12
35	AC loss evaluation of an HTS insert for high field magnet cooled by cryocoolers. Cryogenics, 2016, 80, 215-220.	0.9	12
36	AC loss properties of MgB₂multifilament wires. Superconductor Science and Technology, 2008, 21, 095007.	1.8	11

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37	Reduction of Screening-Current-Induced Fields in an HTS Tape Winding Using Toroidal Arrangement of Shaking Coil. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.1	11
38	Numerical evaluation of AC loss properties in assembled superconductor strips exposed to perpendicular magnetic field. Physica C: Superconductivity and Its Applications, 2009, 469, 1436-1438.	0.6	10
39	Development of Superconducting High Gradient Magnetic Separation System for Medical Protein Separation. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.1	10
40	Dependence of AC losses on aspect ratio in superconducting wires with rectangular cross section. Physica C: Superconductivity and Its Applications, 2004, 412-414, 1045-1049.	0.6	9
41	Dependence of Transport-Current Losses in ${m MgB}_{2}$ Superconducting Wire on Temperature and Frequency. IEEE Transactions on Applied Superconductivity, 2010, 20, 2111-2114.	1.1	9
42	MgB₂ Wire Optimization Guidelines for a Liquid Hydrogen Level Sensor. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2009, 44, 366-372.	0.1	9
43	Magneticâ€shield type superconducting fault current limiter with high T_c superconductors. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 1995, 115, 104-111.	0.2	8
44	Feasibility study on a new three-phase power transmission cable with radial arrangement of superconducting tapes. Physica C: Superconductivity and Its Applications, 2006, 445-448, 1058-1061.	0.6	8
45	Finite element analysis of pulsed field magnetization process in a cylindrical bulk superconductor. Physica C: Superconductivity and Its Applications, 2008, 468, 1494-1497.	0.6	8
46	Experimental results of the model coil for cooling design of a 1 T cryocooler-cooled pulse coil for SMES. IEEE Transactions on Applied Superconductivity, 1999, 9, 932-935.	1.1	7
47	Magnetization loss properties of thin superconducting tapes with field-dependent critical current. Physica C: Superconductivity and Its Applications, 2005, 426-431, 1295-1301.	0.6	7
48	Numerical Evaluation of Pulsed Field Magnetization in a Bulk Superconductor Using Energy Minimization Technique. IEEE Transactions on Applied Superconductivity, 2008, 18, 1557-1560.	1.1	7
49	Frequency dependence of AC magnetization in stacked Bi-2223 Ag-sheathed tapes. Physica C: Superconductivity and Its Applications, 2002, 382, 122-126.	0.6	6
50	Numerical calculation of magnetization losses in single Bi-2223 tape with anisotropic transport properties by 2D-FEM directly analyzing the field distribution. Physica C: Superconductivity and Its Applications, 2004, 412-414, 1129-1133.	0.6	6
51	Numerical calculations of AC losses in parallel tape conductors with fixed share of transport current in external magnetic field. Physica C: Superconductivity and Its Applications, 2005, 426-431, 1328-1332.	0.6	6
52	Proposal of a New Type of Superconducting Level Sensor for Liquidhydrogen with MgB2 Wires. Physics Procedia, 2012, 36, 1396-1401.	1.2	6
53	Performance of Filters in Medical Protein Separation System Using Superconducting Magnet. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	6
54	Theoretical Evaluation of Geometrical Errors in AC Loss Measurements Using Pickup-coil Methods. , 1998, , 1413-1416.		6

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55	Feasibility study of oxide superconducting transformers for Shinkansen rolling stock. IEEE Transactions on Applied Superconductivity, 2002, 12, 828-832.	1.1	5
56	Quantitative evaluation of perpendicular-field losses in stacked high-Tc superconducting tapes. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2002, 141, 50-57.	0.2	5
57	Influence of vacuum region on AC losses in superconducting wires with 2D FEM formulated by self-magnetic field. Physica C: Superconductivity and Its Applications, 2003, 392-396, 1113-1117.	0.6	5
58	Fabrication transport properties of QMG current limiting elements. Physica C: Superconductivity and Its Applications, 2004, 412-414, 750-755.	0.6	5
59	AC loss properties of elliptic superconducting wires exposed to a transverse magnetic field with an arbitrary angle. Cryogenics, 2005, 45, 289-294.	0.9	5
60	Numerical Evaluation of Anisotropy of Magnetization Losses in Superconducting Wires With Elliptic Cross Section. IEEE Transactions on Applied Superconductivity, 2005, 15, 1570-1573.	1.1	5
61	Proposal of new structure of MgB2 wires with low AC loss for stator windings of fully superconducting motors located in iron core slots. Physica C: Superconductivity and Its Applications, 2011, 471, 1470-1473.	0.6	5
62	PIT Processed ${m MgB}_{2}$ Thin Wires Sheathed With Stainless Steel. IEEE Transactions on Applied Superconductivity, 2012, 22, 6200304-6200304.	1.1	5
63	Magnetic field angular dependence of AC losses in Bi-2223 superconducting wires. Physica C: Superconductivity and Its Applications, 2003, 392-396, 1096-1101.	0.6	4
64	Numerical Study on Fundamental Properties of a Resistive Type Fault Current Limiter With QMG Bulk Superconductor Reinforced by Metal Bypass. IEEE Transactions on Applied Superconductivity, 2004, 14, 847-850.	1.1	4
65	Numerical Calculation of Ac Losses in Stacked Bi-2223 Tapes Exposed to Oblique Magnetic Field. IEEE Transactions on Applied Superconductivity, 2005, 15, 2863-2866.	1.1	4
66	Numerical Evaluation of AC Loss Property in Bi-2223 Tapes Affected by Multifilament Structure. IEEE Transactions on Applied Superconductivity, 2007, 17, 2410-2413.	1.1	4
67	Numerical and theoretical evaluations of AC losses for single and infinite numbers of superconductor strips with direct and alternating transport currents in external AC magnetic field. Physica C: Superconductivity and Its Applications, 2010, 470, 1321-1324.	0.6	4
68	Numerical reproduction of screening-current-induced fields in HTS tape windings using finite element method. Journal of Physics: Conference Series, 2017, 871, 012047.	0.3	4
69	Development of a Liquid Hydrogen Transfer Pump System with MgB2 Wires*1. TEION KOGAKU (Journal) Tj ETQq1 1 0.784314 rgBT /O	0.1	4
70	Magnetic-shield type Superconducting Fault Current Limiter with High Tc Superconductors.. IEEJ Transactions on Industry Applications, 1994, 114, 1026-1031.	0.1	3
71	Conductor configuration and its characteristics of superconducting cable for 50 Hz AC use. IEEE Transactions on Magnetics, 1996, 32, 2898-2901.	1.2	3
72	AC loss properties of Cu-sheathed MgB2composites with Nb barriers. Journal of Physics: Conference Series, 2008, 97, 012316.	0.3	3

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73	Automatic development of normal zone in composite MgB₂/CuNi wires with different diameters. Journal of Physics: Conference Series, 2010, 234, 012021.	0.3	3
74	Transport AC Loss Properties of a Bi-2223 Superconducting Coil From 0.1 Hz to 10 Hz. IEEE Transactions on Applied Superconductivity, 2013, 23, 4700804-4700804.	1.1	3
75	Development of Degaussing System of Magnetic Filters for High Gradient Magnetic Separation to Improve Recovery Ratio of Trapped Magnetic Nanobeads. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	3
76	A 1.5-T Magic-Angle Spinning NMR Magnet: 4.2-K Performance and Field Mapping Test Results. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	3
77	Development of a 500kVA-class Oxide-superconducting Power Transformer Operated at Liquid-nitrogen Temperature.. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	3
78	The Basics of AC Losses in Superconductors. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (S	0.1	3
79	AC Loss Measurements in an HTS Coil Wound Using Two-Ply Bundle Conductor. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	3
80	Development of kAâ€class alternating current superconducting conductors and fabrication of a prototype coreless superconducting autotransformer. Electrical Engineering in Japan (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 457	0.2	2
81	A new experimental technique to evaluate perpendicular-field losses of superconducting tape wires with meter-class length. Physica C: Superconductivity and Its Applications, 2001, 357-360, 1201-1204.	0.6	2
82	Experimental study on the dependence of ac losses in superconducting parallel conductors on the distance between strands. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1810-1813.	0.6	2
83	Superconducting Properties and Workability of Stainless Steel/Iron Sheathed MgB2 Thin Wires. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2010, 74, 434-438.	0.2	2
84	Demonstration of Transfer of Liquid Helium Using a Pump System with MgB2 Wires. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1537-1541.	0.8	2
85	Numerical optimization of monofilamentary MgB2 wires with different metal sheath materials for liquid hydrogen level sensor. , 2014, , .		2
86	Quantitative Evaluation of Perpendicular-field Losses in Stacked Oxide Superconducting Tape-shaped Wires. IEEJ Transactions on Power and Energy, 2001, 121, 1283-1289.	0.1	2
87	Theoretical Evaluation on the Response of Superconducting Transformers to Lightning Surge. I. The Response of Various Types of Windings.. TEION KOGAKU (Journal of Cryogenics and Superconductivity) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	2
88	Ramp rate instability of multifilamentary superconductors due to longitudinal magnetic field. IEEE Transactions on Applied Superconductivity, 1997, 7, 235-238.	1.1	1
89	Possible solution of the "single strand stability" problem-special cable design. IEEE Transactions on Applied Superconductivity, 1999, 9, 1121-1124.	1.1	1
90	AC loss properties of Bi-2212 Rutherford-type cables. Physica C: Superconductivity and Its Applications, 2001, 357-360, 1263-1266.	0.6	1

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91	A heuristic description of AC losses in superconducting slab with smooth voltageâ€“current characteristics represented by power law. Physica C: Superconductivity and Its Applications, 2002, 378-381, 1097-1101.	0.6	1
92	Numerical Evaluation of Total AC Loss in Parallel Tape Conductor With Transport Current in Oblique Magnetic Field. IEEE Transactions on Applied Superconductivity, 2006, 16, 97-100.	1.1	1
93	Current sharing among filaments for Bi-2223 Ag-sheathed tapes with inter-filament barrier. Physica C: Superconductivity and Its Applications, 2007, 463-465, 852-856.	0.6	1
94	Suppression of Flux Creep in HTS Coil by Applying Low AC Magnetic Field. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	1
95	Development of monitor system for parallel-type superconducting level sensor for liquid hydrogen. Journal of Physics: Conference Series, 2019, 1293, 012041.	0.3	1
96	Theoretical Evaluation on the Response of Superconducting Transformers to Lightning Surge. II. Current Oscillation Characteristics and Ac Loss in Superconducting Windings.. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 1992, 27, 485-496.	0.1	1
97	Theoretical Evaluation on the Response of Superconducting Transformers to Lightning Surge. III. Quench Due to the Monotonically Increasing Current Induced by Lightning Surge.. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 1992, 27, 497-501.	0.1	1
98	Theoretical Expressions for Measurement Errors in Superconducting Level Sensors for Liquid Hydrogen Using MgB₂ Wires. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.1	1
99	AC Loss Properties of Elliptic Superconducting Wires Exposed to a Transverse Magnetic Field with an Arbitrary Angle. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2004, 39, 328-333.	0.1	1
100	Quantitative Analysis of Normal Zone Propagation in MgB2 Superconducting Wires. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2008, 43, 423-429.	0.1	1
101	Effects of the Heater Winding on the Stability Tests of the Superconductor.. TEION KOGAKU (Journal) Tj ETQq1 1 0.784314 rgBT /Ove	0.1	1
102	Research and Development of Fully Superconducting Motors for Liquid-hydrogen Transfer Pumps. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2016, 51, 155-163.	0.1	1
103	A study on stability of rotating magnets. IEEE Transactions on Magnetics, 1996, 32, 2385-2388.	1.2	0
104	Influences of winding pitch on transverse-field loss of multifilamentary wire measured by a simple electromagnetic method with configuration of a double-layer non-inductive sample coil. Cryogenics, 1999, 39, 871-885.	0.9	0
105	Theoretical evaluation of perpendicular-field losses in stacked high-Tc superconducting tapes. Physica C: Superconductivity and Its Applications, 2002, 378-381, 1122-1127.	0.6	0
106	Finite Element Analysis of Thermal and Mechanical Behaviors in Fault Current Limiter Model With QMG Bulk Superconductors. IEEE Transactions on Applied Superconductivity, 2006, 16, 666-669.	1.1	0
107	Evaluation of Electromagnetic Properties in HTS Wires and Coils Utilizing Two Finite Element Methods. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2019, 54, 111-118.	0.1	0
108	Experimental Study on Frequency Dependence of Ac Loss in Superconducting Parallel Conductors. , 2000, , 763-765.		0

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109	Ac Losses in Bi2212 ROSATwires Exposed to an Ac Magnetic Field. , 2000, , 766-768.		0
110	Thermal Stability of Small Coil using Ta Barrier MgB2 Wire. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.1	0
111	Evaluation of Transport Current Loss in 5T-class Bi-2223 Superconducting Coils. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2012, 47, 109-116.	0.1	0
112	Development of Medical Protein Screening System using High Gradient Magnetic Separation by Cryocooler-cooled LTS Magnet. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.1	0
113	Development of kA Class AC Superconducting Conductors and Fabrication of a Coreless Superconducting Autotransformer. IEEJ Transactions on Power and Energy, 1995, 115, 1471-1479.	0.1	0
114	Discussion of Thermal Equilibrium Current of the Superconductor. IEEJ Transactions on Power and Energy, 1997, 117, 424-430.	0.1	0
115	Loss in QMG Processed Y-123 Superconductor due to Ac Current. , 1998, , 589-592.		0
116	Effects of Winding Pitch on Transverse-Field Losses Measured by a Simple Electromagnetic Method. , 1999, , 967-970.		0
117	Paper "100 kG Superconducting Magnet" by Fujio IRIE, et al.. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	0
118	Experimental Verification of Screening Current-Induced Field Reduction Using a New HTS Coil Structure. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2017, 52, 253-259.	0.1	0
119	Finite Element Analysis of AC Losses in Pancake Coils Wound Using Two-Ply Bundle Conductor. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	0