

# Hhj Ten Kate

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11897967/publications.pdf>

Version: 2024-02-01

112  
papers

2,027  
citations

201674

27  
h-index

302126

39  
g-index

112  
all docs

112  
docs citations

112  
times ranked

958  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fully superconducting rectifiers and fluxpumps Part 1: Realized methods for pumping flux. Cryogenics, 1981, 21, 195-206.	1.7	137
2	Small and repetitive axial strain reducing the critical current in BSCCO/Ag superconductors. IEEE Transactions on Applied Superconductivity, 1997, 7, 2034-2037.	1.7	70
3	Compressive and tensile axial strain reduced critical currents in Bi-2212 conductors. IEEE Transactions on Applied Superconductivity, 1995, 5, 1298-1301.	1.7	65
4	Descriptive model for the critical current as a function of axial strain in Bi-2212/Ag wires. IEEE Transactions on Magnetics, 1996, 32, 2720-2723.	2.1	56
5	On fully superconducting rectifiers and fluxpumps. A review. Part 2: Commutation modes, characteristics and switches. Cryogenics, 1981, 21, 267-277.	1.7	54
6	State of the art powder-in-tube niobium-tin superconductors. Cryogenics, 2008, 48, 308-316.	1.7	54
7	Lumped-Element Dynamic Electro-Thermal model of a superconducting magnet. Cryogenics, 2016, 80, 346-356.	1.7	54
8	Magnetisation and transport current loss of a BSCCO/Ag tape in an external AC magnetic field carrying an AC transport current. IEEE Transactions on Applied Superconductivity, 1999, 9, 1185-1188.	1.7	53
9	Powder-in-tube (PIT) Nb/sub 3/Sn conductors for high-field magnets. IEEE Transactions on Applied Superconductivity, 2000, 10, 975-978.	1.7	51
10	Change of interstrand contact resistance and coupling loss in various prototype ITER NbTi conductors with transverse loading in the Twente Cryogenic Cable Press up to 40,000 cycles. Cryogenics, 2004, 44, 319-339.	1.7	49
11	Numerical calculation of current density distributions in high temperature superconducting tapes with finite thickness in self field and external field. Physica C: Superconductivity and Its Applications, 1998, 310, 36-41.	1.2	45
12	Parametric study on coupling loss in subsize ITER Nb/sub 3/Sn cabled specimen. IEEE Transactions on Magnetics, 1996, 32, 2743-2746.	2.1	42
13	Performance of an ITER CS1 Model Coil Conductor Under Transverse Cyclic Loading up to 40,000 Cycles. IEEE Transactions on Applied Superconductivity, 2004, 14, 1489-1494.	1.7	39
14	Temperature and magnetic field dependence of the critical current of Bi/sub 2/Sr/sub 2/Ca/sub 2/Cu/sub 3/O/sub x/ tape conductors. IEEE Transactions on Applied Superconductivity, 2001, 11, 3345-3348.	1.7	37
15	Core-suppressed AC loss and strand-moderated contact resistance in a Nb <sub>3</sub> Sn Rutherford cable. Cryogenics, 1999, 39, 1-12.	1.7	36
16	Scaling of the critical current in ITER type niobium-tin superconductors in relation to the applied field, temperature and uni-axial applied strain. IEEE Transactions on Applied Superconductivity, 1999, 9, 161-164.	1.7	36
17	An engineering formula to describe the AC loss of BSCCO/Ag tape. IEEE Transactions on Applied Superconductivity, 2001, 11, 2623-2626.	1.7	36
18	Electromagnetic and mechanical characterisation of ITER CS-MC conductors affected by transverse cyclic loading. I. Coupling current loss. IEEE Transactions on Applied Superconductivity, 1999, 9, 1069-1072.	1.7	34

#	ARTICLE	IF	CITATIONS
19	Electromagnetic and mechanical characterisation of ITER CS-MC conductors affected by transverse cyclic loading. III. Mechanical properties. IEEE Transactions on Applied Superconductivity, 1999, 9, 165-168.	1.7	34
20	The deviatoric strain description of the critical properties of Nb <sub>3</sub> Sn conductors. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1295-1298.	1.2	34
21	Critical current degradation in Nb <sub>3</sub> /Sn cables under transverse pressure. IEEE Transactions on Applied Superconductivity, 1993, 3, 1334-1337.	1.7	31
22	Effect of self-field and current non-uniformity on the voltage-temperature characteristic of the ITER central solenoid insert coil by numerical calculations. Cryogenics, 2002, 42, 469-483.	1.7	30
23	Coupling currents in Rutherford cables under time varying conditions. IEEE Transactions on Applied Superconductivity, 1993, 3, 146-149.	1.7	29
24	Experimental verification of the temperature and strain dependence of the critical properties in Nb <sub>3</sub> /Sn wires. IEEE Transactions on Applied Superconductivity, 2001, 11, 1526-1529.	1.7	29
25	Strain effects in high temperature superconductors investigated with magneto-optical imaging. IEEE Transactions on Applied Superconductivity, 2003, 13, 3534-3539.	1.7	28
26	Interpretation of conduit voltage measurements on the poloidal field insert sample using the CUDI-CICC numerical code. Cryogenics, 2006, 46, 517-529.	1.7	28
27	Super coupling currents in Rutherford type of cables due to longitudinal nonhomogeneities of dB/dt. IEEE Transactions on Applied Superconductivity, 1995, 5, 404-407.	1.7	27
28	Self-field loss of BSCCO/Ag tape in external AC magnetic field. Physica C: Superconductivity and Its Applications, 1998, 300, 1-5.	1.2	27
29	Measuring transport current loss of BSCCO/Ag tapes exposed to external AC magnetic field. Physica C: Superconductivity and Its Applications, 1998, 310, 101-105.	1.2	25
30	Rutherford cables with anisotropic transverse resistance. IEEE Transactions on Applied Superconductivity, 1997, 7, 958-961.	1.7	24
31	Progress in the development of Nb <sub>3</sub> /Sn conductors based on the "Powder in tube" method with finer filaments. IEEE Transactions on Applied Superconductivity, 1999, 9, 1451-1454.	1.7	24
32	An experimental 11.5 T Nb <sub>3</sub> /Sn LHC type of dipole magnet. IEEE Transactions on Magnetics, 1994, 30, 2320-2323.	2.1	22
33	Contact resistance and cable loss measurements of coated strands and cables wound from them. IEEE Transactions on Applied Superconductivity, 1995, 5, 692-696.	1.7	22
34	A model to describe the angular dependence of the critical current in a Bi-2223/Ag superconducting tape. Physica C: Superconductivity and Its Applications, 2001, 357-360, 1174-1177.	1.2	22
35	The ATLAS superconducting magnet system at the Large Hadron Collider. Physica C: Superconductivity and Its Applications, 2008, 468, 2137-2142.	1.2	22
36	Effect of Periodic Cyclic Deformation on the Voltage Current Transition of Nb <sub>3</sub> Sn Strands Tested in the Novel TARSIS™ Setup. IEEE Transactions on Applied Superconductivity, 2004, 14, 1464-1467.	1.7	21

#	ARTICLE	IF	CITATIONS
37	First experience with the new Coupling Loss Induced Quench system. Cryogenics, 2014, 60, 33-43.	1.7	21
38	Influence of strand surface condition on interstrand contact resistance and coupling loss in NbTi-wound Rutherford cables. Cryogenics, 1999, 39, 197-208.	1.7	20
39	Suppression and control of coupling currents in stabrite-coated Rutherford cable with cores of various materials and thicknesses. IEEE Transactions on Applied Superconductivity, 1997, 7, 962-966.	1.7	19
40	The effect of transverse loads up to 300 MPa on the critical currents of Nb/sub 3/Sn cables (for LHC). IEEE Transactions on Magnetics, 1991, 27, 1831-1834.	2.1	18
41	AC loss in a high-temperature superconducting coil. Physica C: Superconductivity and Its Applications, 1998, 310, 106-110.	1.2	16
42	Strain and grain connectivity in Bi2223/Ag superconducting tapes. IEEE Transactions on Applied Superconductivity, 1999, 9, 2702-2705.	1.7	15
43	Lattice deformation in an axially strained BiSrCaCuO / Ag tape conductor investigated by X-ray diffraction. Physica C: Superconductivity and Its Applications, 1996, 270, 21-24.	1.2	14
44	The influence of Lorentz force on the AC loss in sub-size cable-in-conduit conductors for ITER. IEEE Transactions on Applied Superconductivity, 1997, 7, 262-265.	1.7	14
45	Quench propagation and protection analysis of the ATLAS Toroids. IEEE Transactions on Applied Superconductivity, 2000, 10, 365-368.	1.7	14
46	AC loss in cored, stabrite-coated, superconducting cables in response to external compaction and variation of core thickness and width. Cryogenics, 2001, 41, 733-744.	1.7	14
47	Development of a thermally switched superconducting rectifier for 100 kA. IEEE Transactions on Magnetics, 1991, 27, 2333-2336.	2.1	13
48	Construction and test of a 1 MVA-class BSCCO resonator coil. IEEE Transactions on Applied Superconductivity, 2001, 11, 1570-1573.	1.7	13
49	Analysis of the current distribution in the ITER CS-insert model coil conductor by self field measurements. IEEE Transactions on Applied Superconductivity, 2002, 12, 1675-1679.	1.7	13
50	Toward an accurate scaling relation for the critical current in niobium-tin conductors. IEEE Transactions on Applied Superconductivity, 2002, 12, 1029-1032.	1.7	13
51	On-Surface Test of the ATLAS Barrel Toroid Coils: Overview. IEEE Transactions on Applied Superconductivity, 2006, 16, 508-511.	1.7	13
52	High current and high power superconducting rectifiers. Cryogenics, 1981, 21, 291-296.	1.7	12
53	The reduction of the critical current in Nb/sub 3/Sn cables under transverse loads. IEEE Transactions on Applied Superconductivity, 1993, 3, 559-562.	1.7	12
54	Ramp rate induced quenches in the one-metre dipole model magnets for the CERN LHC. IEEE Transactions on Applied Superconductivity, 1995, 5, 1020-1023.	1.7	12

#	ARTICLE	IF	CITATIONS
55	Experimental results of thermally controlled superconducting switches for high frequency operation. IEEE Transactions on Magnetics, 1988, 24, 907-910.	2.1	11
56	Development of an experimental 10 T Nb/sub 3/Sn dipole magnet for the CERN LHC. IEEE Transactions on Magnetics, 1991, 27, 1996-1999.	2.1	11
57	Critical current of high Tc superconducting Bi2223/Ag tapes. Physica C: Superconductivity and Its Applications, 1998, 309, 197-202.	1.2	11
58	Modeling the current distribution in HTS tapes with transport current and applied magnetic field. IEEE Transactions on Applied Superconductivity, 1999, 9, 797-800.	1.7	11
59	Electromagnetic and mechanical AC loss of an ITER TF model coil conductor (DP4) under transverse cyclic loading. IEEE Transactions on Applied Superconductivity, 2000, 10, 588-591.	1.7	11
60	Interaction between current imbalance and magnetization in LHC cables. IEEE Transactions on Applied Superconductivity, 2001, 11, 1609-1612.	1.7	11
61	Theoretical and Experimental Investigation of the Ramp Losses in Conductor and Coil Casing of the ATLAS Barrel Toroid Coils. IEEE Transactions on Applied Superconductivity, 2006, 16, 549-552.	1.7	11
62	Thermally and magnetically controlled superconducting rectifiers. IEEE Transactions on Magnetics, 1989, 25, 1819-1822.	2.1	10
63	20.5 kA current leads for ATLAS Barrel Toroid superconducting magnets. IEEE Transactions on Applied Superconductivity, 2002, 12, 1289-1292.	1.7	9
64	ATLAS End Cap Toroid Cold Mass and Cryostat Integration. IEEE Transactions on Applied Superconductivity, 2006, 16, 537-540.	1.7	9
65	Assembly Concept and Technology of the ATLAS Barrel Toroid. IEEE Transactions on Applied Superconductivity, 2006, 16, 565-569.	1.7	9
66	Magnetisation loss of BSCCO/Ag tape in uni-directional and rotating magnetic field. Physica C: Superconductivity and Its Applications, 1999, 325, 1-7.	1.2	8
67	Interstrand contact resistance and AC loss of a 48-strands Nb/sub 3/Sn CIC conductor with a Cr/Cr-oxide coating. IEEE Transactions on Applied Superconductivity, 2000, 10, 1090-1093.	1.7	8
68	Interpretation of the critical current in Bi2Sr2Ca2Cu3Ox tape conductors as parallel weak-link and strong-link paths. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1024-1027.	1.2	8
69	Evolution of contact resistance and coupling loss in prototype ITER PF NbTi conductors under transverse cyclic load. IEEE Transactions on Applied Superconductivity, 2003, 13, 2388-2391.	1.7	8
70	Analysis of AC loss in superconducting power devices calculated from short sample data. IEEE Transactions on Applied Superconductivity, 2003, 13, 1731-1734.	1.7	8
71	Electromagnetic Performance of Sub-Size NbTi CICC's Subjected to Transverse Cyclic Loading. IEEE Transactions on Applied Superconductivity, 2004, 14, 1503-1506.	1.7	8
72	The ATLAS Superconducting Magnet System: Status of Construction & Installation. IEEE Transactions on Applied Superconductivity, 2006, 16, 499-503.	1.7	8

#	ARTICLE	IF	CITATIONS
73	On-Surface Tests of the ATLAS Barrel Toroid Coils: Acceptance Criteria and Results. IEEE Transactions on Applied Superconductivity, 2006, 16, 557-560.	1.7	8
74	Field decay and snapback measurements using a fast Hall plate detector. IEEE Transactions on Applied Superconductivity, 2002, 12, 86-89.	1.7	7
75	Magnetisation loss of BSCCO/Ag superconducting tape exposed to applied field with arbitrary angle. Cryogenics, 2002, 42, 771-778.	1.7	7
76	Self field measurements by hall sensors on the SeCRETS short sample CICC's subjected to cyclic load. IEEE Transactions on Applied Superconductivity, 2003, 13, 1752-1755.	1.7	7
77	Conductor related design considerations for a 1 meter 10 T Nb/sub 3/Sn dipole magnet. IEEE Transactions on Applied Superconductivity, 2003, 13, 1288-1291.	1.7	7
78	Critical current transition study on multifilamentary NbTi superconductors having a Cu, a CuNi, or a mixed matrix. IEEE Transactions on Magnetics, 1988, 24, 1141-1144.	2.1	6
79	Analysis of the mechanical behaviour of an 11.5 T Nb/sub 3/Sn LHC dipole magnet according to the ring collar concept. IEEE Transactions on Magnetics, 1992, 28, 331-334.	2.1	6
80	Coupling currents losses bench mark test of ITER subsize conductor. IEEE Transactions on Magnetics, 1996, 32, 2826-2829.	2.1	6
81	An optimized BSCCO/Ag resonator coil for utility use. IEEE Transactions on Applied Superconductivity, 2000, 10, 849-852.	1.7	6
82	Self field measurements by Hall sensors on the SeCRETS long sample CICC's in SULTAN. IEEE Transactions on Applied Superconductivity, 2002, 12, 1667-1671.	1.7	6
83	ATLAS Magnet Common Cryogenic, Vacuum, Electrical and Control Systems. IEEE Transactions on Applied Superconductivity, 2004, 14, 504-508.	1.7	6
84	The Effect of Inter-bundle Resistive Barriers on Coupling Loss, Current Distribution and DC Performance in ITER Conductors. IEEE Transactions on Applied Superconductivity, 2006, 16, 868-871.	1.7	6
85	The Effect of Ta and Ti Additions on the Strain Sensitivity of Bulk Niobium-Tin. Physics Procedia, 2012, 36, 491-496.	1.2	6
86	A full scale superconducting rectifier for powering an MRI-magnet. IEEE Transactions on Magnetics, 1989, 25, 1771-1774.	2.1	5
87	NbTi thermally controlled switches for superconducting converters with operation frequency up to 50 Hz. Part 2: Theory and analysis. Cryogenics, 1992, 32, 451-454.	1.7	5
88	Analysis of the AC loss measurements on the one-metre dipole model magnets for the CERN LHC. IEEE Transactions on Magnetics, 1994, 30, 1758-1761.	2.1	5
89	Quench modeling of the ATLAS superconducting toroids. IEEE Transactions on Applied Superconductivity, 2001, 11, 1693-1696.	1.7	5
90	The B00 model coil in the ATLAS Magnet Test Facility. IEEE Transactions on Applied Superconductivity, 2001, 11, 1582-1585.	1.7	5

#	ARTICLE	IF	CITATIONS
91	The normal zone propagation in ATLAS B00 model coil. IEEE Transactions on Applied Superconductivity, 2002, 12, 1549-1552.	1.7	5
92	Current diffusion and normal zone propagation inside the aluminum stabilized superconductor of ATLAS model coil. IEEE Transactions on Applied Superconductivity, 2003, 13, 1684-1687.	1.7	5
93	Quench Evolution and Hot Spot Temperature in the ATLAS B0 Model Coil. IEEE Transactions on Applied Superconductivity, 2004, 14, 518-521.	1.7	5
94	Optimizing the conductor dimensions for a 10-13 T superconducting dipole magnet (for accelerators). IEEE Transactions on Magnetics, 1991, 27, 2000-2003.	2.1	4
95	NbTi foil thermally controlled switches for superconducting converters with operation frequency up to 50 Hz. Part 1: Experiment. Cryogenics, 1992, 32, 447-450.	1.7	4
96	Development of a 50-60 Hz thermally switched superconducting rectifier. IEEE Transactions on Applied Superconductivity, 1993, 3, 590-593.	1.7	4
97	Performance test results of a low-loss 1 MVA BSCCO resonator coil system. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1719-1722.	1.2	4
98	ATLAS End Cap Toroid Final Integration, Test and Installation. IEEE Transactions on Applied Superconductivity, 2008, 18, 391-394.	1.7	4
99	New 50 Hz superconducting power supply for a 2 kA DC magnet. IEEE Transactions on Magnetics, 1994, 30, 1831-1834.	2.1	3
100	A novel miniature superconducting converter for 1 kA magnets. IEEE Transactions on Magnetics, 1996, 32, 2590-2593.	2.1	3
101	Characterisation of superconducting components using PSPICE. IEEE Transactions on Applied Superconductivity, 1997, 7, 404-407.	1.7	2
102	Comparing powder magnetization and transport critical current of Bi,Pb(2223) tapes. IEEE Transactions on Applied Superconductivity, 2003, 13, 3702-3705.	1.7	2
103	Mechanical characteristics of the ATLAS B0 model coil. IEEE Transactions on Applied Superconductivity, 2003, 13, 1246-1249.	1.7	2
104	The Influence of the Al Stabilizer Layer Thickness on the Normal Zone Propagation Velocity in High Current Superconductors. Physics Procedia, 2015, 67, 896-902.	1.2	2
105	Development of a 1 kA, 50 Hz superconducting converter. IEEE Transactions on Applied Superconductivity, 1995, 5, 270-273.	1.7	1
106	V-I curves of a 100-kVA class high-T/sub c/ resonator coil. IEEE Transactions on Applied Superconductivity, 2001, 11, 2204-2207.	1.7	1
107	Total AC loss of BSCCO/Ag tapes in power applications, an engineering approach to describe the AC loss in tapes and coils. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1781-1783.	1.2	1
108	Mechanical Commissioning of the ATLAS Barrel Toroid Magnet. IEEE Transactions on Applied Superconductivity, 2008, 18, 367-370.	1.7	1

#	ARTICLE	IF	CITATIONS
109	Effects of Unequal Inter and Intra-Toroid Response Times on the Quench Performance of the System of Three ATLAS Toroids. IEEE Transactions on Applied Superconductivity, 2009, 19, 1290-1293.	1.7	1
110	DESIGN OF A THREE PHASE THERMALLY SWITCHED 25 kA, 1.5 kW SUPERCONDUCTING RECTIFIER-FLUXPUMP. , 1982, , 753-756.		1
111	Commissioning Test of ATLAS End-Cap Toroidal Magnets. IEEE Transactions on Applied Superconductivity, 2009, 19, 1307-1310.	1.7	0
112	THE EFFECT OF SELF-FIELD AND GEOMETRY ON THE VOLTAGE-CURRENT CHARACTERISTICS OF MULTIFILAMENTARY WIRES. , 1988, , 888-892.		0