Arjan P Verweij

List of Publications by Year
in descending order

50 papers	1,107 citations	567281 15 h-index	395702 33 g-index
50 all docs	50 docs citations	50 times ranked	1036 citing authors

#	Article	IF	Citations
1	FCC-hh: The Hadron Collider. European Physical Journal: Special Topics, 2019, 228, 755-1107.	2.6	367
2	HE-LHC: The High-Energy Large Hadron Collider. European Physical Journal: Special Topics, 2019, 228, 1109-1382.	2.6	108
3	The 16 T Dipole Development Program for FCC. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	77
4	New, Coupling Loss Induced, Quench Protection System for Superconducting Accelerator Magnets. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	52
5	A Coupled Aâ€“H Formulation for Magneto-Thermal Transients in High-Temperature Superconducting Magnets. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-11.	1.7	38
6	Status of the 16 T Dipole Development Program for a Future Hadron Collider. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	36
7	STEAM: A Hierarchical Cosimulation Framework for Superconducting Accelerator Magnet Circuits. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	32
8	Protecting a Full-Scale <inline-formula> <tex-math notation="TeX">$hbox{Nb}_{3}hbox{Sn}$</tex-math></inline-formula> Magnet With CLIQ, the New Coupling-Loss-Induced Quench System. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	27
9	A new hybrid protection system for high-field superconducting magnets. Superconductor Science and Technology, 2014, 27, 044023.	3.5	26
10	Feasibility Study of ${m Nb}_{3}{m Al}$ Rutherford Cable for High Field Accelerator Magnet Application. IEEE Transactions on Applied Superconductivity, 2007, 17, 1461-1464.	1.7	25
11	Quench protection analysis integrated in the design of dipoles for the Future Circular Collider. Physical Review Accelerators and Beams, 2017, 20, .	1.6	25
12	First Implementation of the CLIQ Quench Protection System on a Full-Scale Accelerator Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	22
13	Optimized Field/Circuit Coupling for the Simulation of Quenches in Superconducting Magnets. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2017, 2, 97-104.	2.2	18
14	A 2-D Finite-Element Model for Electrothermal Transients in Accelerator Magnets. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	17
15	Towards an Optimized Coupling-loss Induced Quench Protection System (CLIQ) for Quadrupole Magnets. Physics Procedia, 2015, 67, 215-220.	1.2	15
16	Modeling of Interfilament Coupling Currents and Their Effect on Magnet Quench Protection. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-8.	1.7	15
17	A Consistent Simulation of Electrothermal Transients in Accelerator Circuits. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	14
18	Quench Protection System Optimization for the High Luminosity LHC Nb $_3$Sn Quadrupoles. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-7.	1.7	14

#	Article	IF	Citations
19	Numerical analysis of the screening current-induced magnetic field in the HTS insert dipole magnet Feather-M2.1-2. Superconductor Science and Technology, 2020, 33, 125008.	3.5	14
20	First Implementation of the CLIQ Quench Protection System on a 14-m-Long Full-Scale LHC Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	12
21	Quench Protection Studies for the High Luminosity LHC Nb$_3$Sn Quadrupole Magnets. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	12
22	Predicting the Quench Behavior of the LHC Dipoles During Commissioning. IEEE Transactions on Applied Superconductivity, 2010, 20, 135-139.	1.7	11
23	Automated lumped-element simulation framework for modelling of transient effects in superconducting magnets. , 2015, , .		11
24	Thermal Runaways in LHC Interconnections: Experiments. IEEE Transactions on Applied Superconductivity, 2011, 21, 1781-1785.	1.7	10
25	Suitability of Different Quench Protection Methods for a 16 T Block-Type Nb3Sn Accelerator Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	10
26	Quench Protection of the 16 T Nb₃Sn Dipole Magnets Designed for the Future Circular Collider. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	10
27	Critical Current Measurements of the Main LHC Superconducting Cables. IEEE Transactions on Applied Superconductivity, 2007, 17, 1454-1460.	1.7	9
28	Advanced Quench Protection for the Nb3Sn Quadrupoles for the High Luminosity LHC. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-6.	1.7	9
29	Consolidation of the 13 kA Interconnects in the LHC for Operation at 7 TeV. IEEE Transactions on Applied Superconductivity, 2011, 21, 2376-2379.	1.7	8
30	Training Behavior of the Main Dipoles in the Large Hadron Collider. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-7.	1.7	8
31	Quench Protection Performance Measurements in the First MQXF Magnet Models. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-6.	1.7	8
32	The CLIQ Quench Protection System Applied to the 16 T FCC-hh Dipole Magnets. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-9.	1.7	7
33	Coupling of Magnetothermal and Mechanical Superconducting Magnet Models by Means of Mesh-Based Interpolation. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	6
34	Thermal Runaway of the 13 kA Busbar Joints in the LHC. IEEE Transactions on Applied Superconductivity, 2010, 20, 2155-2159.	1.7	5
35	Finite Element Modeling in 3D of the Impact of Superfluid Helium Filled Micro-Channels on the Heat Transfer through LHC Type Cable Insulation. IEEE Transactions on Applied Superconductivity, 2012, 22, 4701205-4701205.	1.7	4
36	Conceptual Design of the FCC-hh Dipole Circuits With Integrated CLIQ Protection System. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-9.	1.7	4

#	Article	IF	Citations
37	Quench Behavior of Prototype Nb-Ti HL-LHC Dipole Canted Cos-Theta Orbit Corrector Magnets. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	4
38	Effect of superfluid helium at the inner coil face on cooling and stability in superconducting accelerator magnets. , 2012, , .		3
39	First Experimental Results on Damage Limits of Superconducting Accelerator Magnet Components Due to Instantaneous Beam Impact. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-10.	1.7	3
40	Quench Protection of the First 4-m-Long Prototype of the HL-LHC Nb<inline-formula> <tex-math notation="LaTeX">$_3$</tex-math> </inline-formula>Sn Quadrupole Magnet. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	3
41	Resistance of Splices in the LHC Main Superconducting Magnet Circuits at 1.9 K. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	2
42	Fast failures in the LHC and the future high luminosity LHC. Physical Review Accelerators and Beams, 2020, 23, .	1.6	2
43	Quench Protection of the HL-LHC Hollow Electron Lens Superconducting Solenoid Magnets. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	2
44	Training of the Main Dipoles Magnets in the Large Hadron Collider Toward 7 TeV Operation. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	1
45	A Simplified Approach to Simulate Quench Development in a Superconducting Magnet. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	1
46	Novel Ways of Heat Removal from Highly Irradiated Superconducting Windings in Accelerator Magnets. Physics Procedia, 2012, 36, 818-823.	1.2	0
47	Simulation of a Quench Event in the Upgraded High-Luminosity LHC Main Dipole Circuit Including the 11 T Nb3Sn Dipole Magnets. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	0
48	Performance of the Large Hadron Collider's Cryogenic Bypass Diodes Over the First Two Physics Runs, Future Projects, and Perspectives. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-4.	1.7	0
49	Characterization of the radiation tolerance of cryogenic diodes for the High Luminosity LHC inner triplet circuit. Physical Review Accelerators and Beams, 2020, 23, .	1.6	0
50	Rutherford-type cables: interstrand coupling currents. , 0, , .		0