Niklas Magnusson

List of Publications by Year
in descending order

50 papers	654 citations	567144 15 h-index	610775 24 g-index
50 all docs	50 docs citations	50 times ranked	393 citing authors

#	Article	IF	Citations
1	Modelling of Internal Pressure Dynamics in Mass-Impregnated Non-Draining HVDC Cables. IEEE Transactions on Dielectrics and Electrical Insulation, 2022, , 1-1.	1.8	0
2	Eddy Current Loss in Grain-Oriented Steel Laminations Due to Normal Leakage Flux. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	8
3	Power losses in the threeâ€phase threeâ€limb transformer due to common and differential mode of dcâ€bias. IET Electric Power Applications, 2021, 15, 1488-1498.	1.1	1
4	Testing of an MgB2 coil for a wind turbine generator pole. Physica C: Superconductivity and Its Applications, 2021, 587, 1353901.	0.6	4
5	The influence of multidirectional leakage flux on transformer core losses. Journal of Magnetism and Magnetic Materials, 2021, 539, 168370.	1.0	2
6	Apparatus for loss measurements under multidirectional and dc-bias flux in electrical steel laminations. Review of Scientific Instruments, 2020, 91, 084705.	0.6	7
7	Internal pressures and pressure gradients in mass-impregnated HVDC cables during current cycling. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 915-923.	1.8	3
8	Fourierâ€based effective permeability for transformer iron losses computation under saturation. IET Electric Power Applications, 2020, 14, 2609-2615.	1.1	2
9	Cavities in mass-impregnated HVDC subsea cables studied by AC partial discharge measurements. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 913-921.	1.8	5
10	Cavities in mass-impregnated HVDC subsea cables studied by AC partial discharge measurements. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 913-921.	1.8	2
11	Computation of transformer iron losses under saturation using the Fourier method Part 2: Stray loss. , 2019, , .		2
12	Comparison of Levelized Cost of Energy of Superconducting Direct Drive Generators for a 10-MW Offshore Wind Turbine. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	23
13	Fabrication of a Scaled MgB2 Racetrack Demonstrator Pole for a 10-MW Direct-Drive Wind Turbine Generator. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	10
14	Optimization and comparison of superconducting generator topologies for a 10 MW wind turbine application. International Journal of Applied Electromagnetics and Mechanics, 2017, 53, S191-S202.	0.3	7
15	Ripple Field AC Losses in 10-MW Wind Turbine Generators With a MgB₂Superconducting Field Winding. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	12
16	Design Aspects on Winding of an MgB2 Superconducting Generator Coil. Energy Procedia, 2015, 80, 56-62.	1.8	9
17	Design of an MgB2race track coil for a wind generator pole demonstration. Journal of Physics: Conference Series, 2014, 507, 032001.	0.3	19
18	Hysteresis losses in MgB 2 superconductors exposed to combinations of low AC and high DC magnetic fields and transport currents. Physica C: Superconductivity and Its Applications, 2014, 506, 133-137.	0.6	15

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19	Cavity formation in mass-impregnated HVDC subsea cables-mechanisms and critical parameters. IEEE Electrical Insulation Magazine, 2014, 30, 22-33.	1.1	14
20	Coupling currents and hysteresis losses in MgB₂superconductors. Superconductor Science and Technology, 2014, 27, 105003.	1.8	11
21	A Method to Estimate the Necessary Twist Pitch in Multi-filamentary Superconductors. Journal of Physics: Conference Series, 2014, 507, 022016.	0.3	1
22	AC Loss Measurements on Multi-Filamentary $ hbox{MgB}_{2}$ Wires With Non-Magnetic Sheath Materials. IEEE Transactions on Applied Superconductivity, 2013, 23, 8200204-8200204.	1.1	10
23	Apparatus for calorimetric measurements of losses in MgB2 superconductors exposed to alternating currents and external magnetic fields. Cryogenics, 2013, 54, 44-49.	0.9	5
24	Large Superconducting Wind Turbine Generators. Energy Procedia, 2012, 24, 60-67.	1.8	42
25	Winding, cooling and initial testing of a 10 H superconducting MgB2coil for an induction heater. Superconductor Science and Technology, 2011, 24, 035010.	1.8	12
26	Commercial Induction Heaters With High-Temperature Superconductor Coils. IEEE Transactions on Applied Superconductivity, 2011, 21, 1379-1383.	1.1	55
27	Laboratory performance tests on aluminum splices for power conductors. European Transactions on Electrical Power, 2010, 20, 450-460.	1.0	3
28	Electromagnetic viewpoints on a 200kW MgB2 induction heater. Physica C: Superconductivity and Its Applications, 2008, 468, 487-491.	0.6	16
29	Bolted Connectors for Stranded Aluminum Power Conductors. IEEE Transactions on Power Delivery, 2008, 23, 523-530.	2.9	11
30	MgB₂coils for a DC superconducting induction heater. Journal of Physics: Conference Series, 2008, 97, 012159.	0.3	13
31	CRYOGENIC DESIGN OF THE ALUHEAT PROJECT. AIP Conference Proceedings, 2008, , .	0.3	3
32	Comparative tests of tape dielectrics impregnated with liquid nitrogen [Errata]. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 529-529.	1.8	1
33	Comparative tests of tape dielectrics impregnated with liquid nitrogen. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1371-1376.	1.8	13
34	A 200 kW MgB2 Induction Heater Project. Journal of Physics: Conference Series, 2006, 43, 1019-1022.	0.3	23
35	Efficiency analysis of a high-temperature superconducting induction heater. IEEE Transactions on Applied Superconductivity, 2003, 13, 1616-1619.	1.1	29
36	Design, building and testing of a 10 kW superconducting induction heater. IEEE Transactions on Applied Superconductivity, 2003, 13, 1612-1615.	1.1	32

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37	AC losses in high-temperature superconducting tapes exposed to perpendicular magnetic fields combined with transport currents. Superconductor Science and Technology, 2002, 15, 572-576.	1.8	12
38	The influence of thermal gradients on AC losses in high-temperature superconducting coils. Superconductor Science and Technology, 2002, 15, 1113-1118.	1.8	2
39	Induction heating of aluminium billets using superconducting coils. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1339-1341.	0.6	31
40	Set-up for calorimetric measurements of the AC losses in HTS tapes due to longitudinal magnetic fields and transport currents. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1762-1765.	0.6	5
41	Temperature dependence of AC losses in a BSCCO/Ag tape exposed to AC magnetic fields applied in different orientations. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1818-1822.	0.6	1
42	Losses in a BSCCO/Ag tape carrying AC transport currents in AC magnetic fields applied in different orientations. IEEE Transactions on Applied Superconductivity, 2001, 11, 4123-4127.	1.1	29
43	Semi-empirical model of the losses in HTS tapes carrying AC currents in AC magnetic fields applied parallel to the tape face. Physica C: Superconductivity and Its Applications, 2001, 349, 225-234.	0.6	41
44	Improved experimental set-up for calorimetric AC loss measurements on HTSs carrying transport currents in applied magnetic fields at variable temperatures. Physica C: Superconductivity and Its Applications, 2001, 354, 197-201.	0.6	21
45	AC losses in high-temperature superconducting tapes exposed to longitudinal magnetic fields. Cryogenics, 2001, 41, 721-724.	0.9	17
46	Comparison between calorimetric and electromagnetic total ac loss measurement results on a BSCCO/Ag tape. Superconductor Science and Technology, 2000, 13, 291-294.	1.8	15
47	Losses in HTS carrying AC transport currents in AC external magnetic fields. IEEE Transactions on Applied Superconductivity, 1999, 9, 785-788.	1.1	18
48	Critical Currents of High-Temperature Superconductors in Homogeneous Magnetic Fields. Journal of Low Temperature Physics, 1999, 117, 1519-1523.	0.6	6
49	Calorimetric apparatus for alternating current loss measurements on high-temperature superconductors. Review of Scientific Instruments, 1998, 69, 3320-3325.	0.6	31
50	Common and differential mode of dc-bias in three-phase power transformers. Electrical Engineering, 0, , .	1.2	0