

Kamil Sedlak

List of Publications by Year in descending order

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126
all docs

126
docs citations

126
times ranked

4809
citing authors

#	ARTICLE	IF	CITATIONS
1	Technical and economic feasibility study of high-current HTS bus bars for fusion reactors. Physica C: Superconductivity and Its Applications, 2022, 592, 1353996.	0.6	9
2	Diffusion-Bonding Between Strands and Modeling of Splices of Nb ₃ Sn Rutherford Cables. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	0
3	The DEMO magnet system – Status and future challenges. Fusion Engineering and Design, 2022, 174, 112971.	1.0	37
4	Co-Wound Superconducting Wire for Quench Detection in Fusion Magnets. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	7
5	Experimental Assessment of the Thermal Strain Distribution in Nb ₃ Sn React & Wind Conductor Prototype for European DEMO. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	0
6	Preliminary Design of a High Current R&W TF Coil Conductor for the EU DEMO. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-4.	1.1	3
7	Assessment of the Thermal-Hydraulic Performance of the European DEMO NbTi Bus Bars. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	3
8	DC Characterization of a Low-Field Nb ₃ Sn Prototype Conductor for a DEMO TF Coil. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	0
9	Progress on the Design of the 15 T Magnet of the EDIPO Test Facility. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	2
10	Measurements of AC Loss Evolution in ITER TF Conductors. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-3.	1.1	0
11	Strategy for Developing the EU-DEMO Magnet System in the Concept Design Phase. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-7.	1.1	11
12	Parametric study and optimization of the cryo-magnetic system for EU DEMO at the pre-conceptual design phase. Cryogenics, 2022, , 103475.	0.9	1
13	Preliminary design of the pressure relief system of the EDIPO 2 helium vessel. Cryogenics, 2022, 124, 103470.	0.9	2
14	Updates on CEA Design and Experimental Activities on EU DEMO TF System. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	2
15	Upgrade and Commissioning of the SULTAN Facility to Host Quench Experiments on HTS High Current Conductors. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	8
16	Parametric study of the TF coil design for the European DEMO. Fusion Engineering and Design, 2021, 164, 112217.	1.0	11
17	Impact of mechanical and thermal cycles at different operating conditions on the ITER toroidal field coil conductor performance. Superconductor Science and Technology, 2021, 34, 085021.	1.8	3
18	Alternative PF Coil Winding Pack Design for the EU DEMO. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	7

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19	A New Cabled Stabilizer for the Nb ₃ Sn React&Wind DEMO Conductor Prototype. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	5
20	Updates on Magnet Design For EU-DEMO Reactor: Optimization Studies on TF and CS Systems. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-6.	1.1	5
21	Analysis of the effects of thermal anchors on the reduction of the parasitic load to the EU-DEMO TF coils. Fusion Engineering and Design, 2021, 169, 112485.	1.0	2
22	Progress on the Upgrade of EDIPO, a 15 T Large Aperture Dipole. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	5
23	A design proposal for the European DEMO superconducting bus bars and current leads. Fusion Engineering and Design, 2021, 169, 112430.	1.0	10
24	Design and Characterization of the Interlayer Joint Between Low-Field Nb ₃ Sn Conductors of a Layer Wound DEMO TF Coil. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-7.	1.1	3
25	Superconductors for fusion: a roadmap. Superconductor Science and Technology, 2021, 34, 103001.	1.8	81
26	T _{cs} degradation of ITER TF samples due to fast current discharges. Superconductor Science and Technology, 2021, 34, 025004.	1.8	3
27	Quench Simulation of REBCO Cable-in-Conduit Conductor With Twisted Stacked-Tape Cable. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-7.	1.1	29
28	Quench analysis of the DEMO CS1 coil. Cryogenics, 2020, 112, 103194.	0.9	6
29	Preliminary Design of DEMO PF Coils Based on EU DEMO 2018 Baseline. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	7
30	AC Loss Measurement of the DEMO TF React&Wind Conductor Prototype No. 2. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-4.	1.1	7
31	CEA Broad Studies on EU DEMO CS and PF Magnet Systems. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-6.	1.1	8
32	Progress in the Design of a Hybrid HTS-Nb ₃ Sn-NbTi Central Solenoid for the EU DEMO. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	27
33	Inter-Layer Joint of Nb ₃ Sn React&Wind Cables for Fusion Magnets. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	4
34	Advance in the conceptual design of the European DEMO magnet system. Superconductor Science and Technology, 2020, 33, 044013.	1.8	38
35	Parametric Optimization of the CEA TF Magnet Design of the EU DEMO Updated Configuration. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	12
36	DC Test Results of the DEMO TF React&Wind Conductor Prototype No. 2. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	15

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37	A new test method of AC loss assessment for fusion conductors. Fusion Engineering and Design, 2019, 146, 928-931.	1.0	8
38	Strain distribution in the Nb ₃ Sn rectangular wind and react conductor of the European DEMO project, determined by inductive measurements. Fusion Engineering and Design, 2019, 146, 1539-1542.	1.0	3
39	Design of DEMO PF Coils Based on Cable-in-Conduit Conductor. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.1	5
40	Hybrid HTS-Nb ₃ Sn-NbTi DEMO CS coil design optimized for maximum magnetic flux generation. Fusion Engineering and Design, 2019, 146, 10-13.	1.0	19
41	Status of CEA Magnet Design Tools and Applications to EU DEMO PF and CS Magnets. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	5
42	Progressing in cable-in-conduit for fusion magnets: from ITER to low cost, high performance DEMO. Superconductor Science and Technology, 2018, 31, 055004.	1.8	14
43	DEMO Central Solenoid Design Based on the Use of HTS Sections at Highest Magnetic Field. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	27
44	Performance Analysis of the NbTi PF Coils for the EU DEMO Fusion Reactor. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	6
45	Inter-Layer Joint for the TF Coils of DEMO – Design and Test Results. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.1	6
46	Study of the Hot-Spot Temperature During Quench in the Nonplanar Coils of W7-X. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	2
47	A Prototype Conductor by React&WIND Method for the EUROfusion DEMO TF Coils. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	16
48	Progress in the design of the superconducting magnets for the EU DEMO. Fusion Engineering and Design, 2018, 136, 1597-1604.	1.0	67
49	Thermal-hydraulic and quench analysis of the DEMO toroidal field winding pack WP1. Fusion Engineering and Design, 2017, 124, 110-113.	1.0	15
50	The new versatile general purpose surface-muon instrument (GPS) based on silicon photomultipliers for μ SR measurements on a continuous-wave beam. Review of Scientific Instruments, 2017, 88, 093301.	0.6	64
51	Central solenoid winding pack design for DEMO. Fusion Engineering and Design, 2017, 124, 82-85.	1.0	22
52	Design and R&D for the DEMO Toroidal Field Coils Based on Nb ₃ Sn React and Wind Method. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	26
53	Design, Manufacture, and Test of an 80 kA-Class Nb ₃ Sn Cable-In-Conduit Conductor With Rectangular Geometry and Distributed Pressure Relief Channels. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-6.	1.1	39
54	Thermal-hydraulic analysis of different design concepts of the LTS TF coil winding pack for EU-DEMO. , 2017, , .		2

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55	Performance evolution of 60 kA HTS cable prototypes in the EDIPO test facility. Superconductor Science and Technology, 2016, 29, 084002.	1.8	19
56	Thermal-Hydraulic Analysis of the Low- T_c Superconductor (LTS) Winding Pack Design Concepts for the DEMO Toroidal Field (TF) Coil. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	18
57	Statistics of Test Results for the ITER Nb ₃ Sn and NbTi Conductors in the SULTAN Facility. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	3
58	Completion of the Commissioning of the EDIPO Test Facility. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	1
59	Design, Manufacture and Test of a 82 kA React&Wind TF Conductor for DEMO. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	20
60	Conductor Performance of CCCN3, CCCN4 and CCCN5 Samples for ITER CC Coils. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.1	1
61	Performance of ITER Correction Busbar Conductor Samples CBCN2 and CBCN3. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	0
62	Test of the MF-CICC Conductor Designed for the 12-T Outsert Coil of the HFML 45-T Hybrid Magnet. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	5
63	Approaches to Analyze Structural Issues of the European DEMO Toroidal Field Coil System at an Early Design Stage. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	15
64	Performance Analysis of Mass-Produced Nb ₃ Sn Conductor for Central Solenoid in ITER. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	4
65	Commissioning of HTS Adapter and Heat Exchanger for Testing of High-Current HTS Conductors. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	10
66	Overview of Progress on the EU DEMO Reactor Magnet System Design. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	46
67	Winding Pack Proposal for the TF and CS Coils of European DEMO. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-6.	1.1	16
68	EDIPO: The Test Facility for High-Current High-Field HTS Superconductors. IEEE Transactions on Applied Superconductivity, 2016, 26, 35-40.	1.1	15
69	Assessment Studies and Manufacturing Trials for the Conductors of DEMO TF Coils. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	7
70	Analysis of Internal-Tin T_c Conductors for ITER Central Solenoid. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.1	8
71	LTS and HTS high current conductor development for DEMO. Fusion Engineering and Design, 2015, 96-97, 77-82.	1.0	22
72	Results and analysis of the hot-spot temperature experiment for a cable-in-conduit conductor with thick conduit. Cryogenics, 2015, 72, 9-13.	0.9	7

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73	Collective Flux Jumps Observed During Operation of the EDIPO Magnets. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.1	1
74	Twin-box ITER joints under electromagnetic transient loads. Fusion Engineering and Design, 2015, 98-99, 1158-1162.	1.0	15
75	Test of 60 kA coated conductor cable prototypes for fusion magnets. Superconductor Science and Technology, 2015, 28, 124005.	1.8	71
76	Conductor Performance of TFCN4 and TFCN5 Samples for ITER TF Coils. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	6
77	DC Performance Results Versus Assessment of ITER Main Busbar NbTi Conductors. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.1	3
78	Direct Spectroscopic Observation of a Shallow Hydrogenlike Donor State in Insulating SrTiO_3 . Physical Review Letters, 2014, 113, 156801.	2.9	23
79	Muon Cooling: Longitudinal Compression. Physical Review Letters, 2014, 112, 224801.	2.9	22
80	Impact of Cable Twist Pitch on Degradation and AC Loss in Nb_3Sn Conductors for ITER Central Solenoids. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	33
81	Optimization of Heat Treatment of Japanese Nb_3Sn Conductors for Toroidal Field Coils in ITER. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	7
82	Thermal-Hydraulic Analysis of LTS Cables for the DEMO TF Coil. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	22
83	Design of Large Size, Force Flow Superconductors for DEMO TF Coils. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.1	29
84	Recent Tests of the ITER Conductors and Highlights in Nb_3Sn Conductors Behavior. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	10
85	A $\frac{1}{4}$ SR study of the ruthenium perovskites $\text{ACu}_3\text{Ru}_4\text{O}_{12}$ with A = Ca, Pr, Nd. Journal of Physics: Conference Series, 2014, 551, 012015.	0.3	4
86	Muonic atom as an acceptor centre in diamond. Journal of Physics: Conference Series, 2014, 551, 012046.	0.3	3
87	Realization of an antiferromagnetic Griffiths phase in $\text{Ba}(\text{Fe}_x\text{Tl}_{1-x})\text{ETQq}$. 10.784314 rgBT /Overlock 10 TF 50 207 Td (x	1.1	40
88	Examination of Nb_3Sn Conductors for ITER Central Solenoids. IEEE Transactions on Applied Superconductivity, 2013, 23, 4801604-4801604.	1.1	11
89	Microscopic and macro spin relaxation spectroscopy for the iron-based RbFe_2Se_2 . 10.784314 rgBT /Overlock 10 TF 50 207 Td (x	1.1	20
90	Importance of Spin-Orbit Interaction for the Electron Spin Relaxation in Organic Semiconductors. Physical Review Letters, 2013, 110, 216602.	2.9	62

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91	SULTAN test facility: Summary of recent results. Fusion Engineering and Design, 2013, 88, 282-285.	1.0	13
92	High current superconductors for DEMO. Fusion Engineering and Design, 2013, 88, 1564-1568.	1.0	29
93	How Do Strain and Steric Interactions Affect the Reactions of Aromatic Compounds with Free Radicals? Characterization of the Radicals Formed by Muonium Addition to <i>p</i> -Xylene and [2.2]Paracyclophane by DFT Calculations and Muon Spin Spectroscopy. Journal of Physical Chemistry A, 2012, 116, 7765-7772.	1.1	11
94	High-Field μ SR Instrument at PSI: Detector Solutions. Physics Procedia, 2012, 30, 7-11.	1.2	13
95	Design and Simulation of a Spin Rotator for Longitudinal Field Measurements in the Low Energy Muons Spectrometer. Physics Procedia, 2012, 30, 55-60.	1.2	14
96	MusrSim and MusrSimAna - Simulation Tools for μ SR Instruments. Physics Procedia, 2012, 30, 61-64.	1.2	22
97	Molecular Dynamics in the Rod-like Liquid Crystal 4-(trans-4-Pentylcyclohexyl) Benzonitrile (PCH5) Probed by Muon Spin Resonance Spectroscopy. Physics Procedia, 2012, 30, 91-96.	1.2	2
98	Muon Sites Estimation in La ₂ CuO ₄ and A New Vanadium Cluster Compound, V ₄ S ₉ Br ₄ , using Electronic and Nuclear Dipole Field Calculations. Physics Procedia, 2012, 30, 109-112.	1.2	12
99	Design of a Magnet for the Spin-Rotator Device for the High Magnetic Field μ SR Instrument at Paul Scherrer Institute. IEEE Transactions on Applied Superconductivity, 2012, 22, 4101204-4101204.	1.1	2
100	A time resolution study with a plastic scintillator read out by a Geiger-mode Avalanche Photodiode. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 202-205.	0.7	32
101	A GEANT4 study on the time resolution of a fast plastic scintillator read out by a G-APD. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 696, 40-45.	0.7	5
102	Molecular Dynamics in Rod-Like Liquid Crystals Probed by Muon Spin Resonance Spectroscopy. Journal of Physical Chemistry B, 2011, 115, 9360-9368.	1.2	9
103	A lens-coupled scintillation counter in cryogenic environment. Journal of Instrumentation, 2011, 6, P02003-P02003.	0.5	2
104	Geant4 Simulation of the New ALC μ SR Spectrometer. IEEE Transactions on Nuclear Science, 2010, 57, 2187-2195.	1.2	2
105	Fast timing detectors for high field spectrometers. Physica B: Condensed Matter, 2009, 404, 990-992.	1.3	6
106	Geant4 simulation of the upgraded ALC spectrometer. Physica B: Condensed Matter, 2009, 404, 974-977.	1.3	7
107	First experience with G-APDs in instrumentation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 374-377.	0.7	6
108	A new detector system for the ALC spectrometer – First experience with G-APDs in instrumentation. Physica B: Condensed Matter, 2009, 404, 986-989.	1.3	10

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109	geant4 simulation and optimisation of the high-field SR spectrometer. Physica B: Condensed Matter, 2009, 404, 970-973.	1.3	12
110	GEANT4 as a simulation framework in. Physica B: Condensed Matter, 2009, 404, 966-969.	1.3	6
111	Macroassembly and performance of the ATLAS SCT barrels. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 573, 280-282.	0.7	0
112	A determination of electroweak parameters at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 632, 35-42.	1.5	23
113	First measurement of charged current cross sections at HERA with longitudinally polarised positrons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 634, 173-179.	1.5	25
114	Photoproduction of dijets with high transverse momenta at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 639, 21-31.	1.5	19
115	The barrel modules of the ATLAS semiconductor tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 642-671.	0.7	79
116	Jets in Photoproduction and at Low Q ² at HERA. AIP Conference Proceedings, 2006, , .	0.3	0
117	Search for light gravitinos in events with photons and missing transverse momentum at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 616, 31-42.	1.5	7
118	Search for leptoquark bosons in ep collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 629, 9-19.	1.5	30
119	QCD analysis of dijet production at low Q ² at HERA. European Physical Journal C, 2005, 40, 469.	1.4	4
120	Muon pair production in ep collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 583, 28-40.	1.5	19
121	Evidence for a narrow anti-charmed baryon state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 588, 17-28.	1.5	120
122	Measurement of the proton structure function  overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tbl="http://www.elsevier.com/xml/common/table/dtd" symmetry in  overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:ce="http://www.. Physics	1.5	4
123	Measurement of the proton structure function  overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:ce="http://www.. Physics	1.5	5
124	Diffractional photoproduction of J/ψ mesons with large momentum transfer at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 568, 205-218.	1.5	48
125	Isolated electrons and muons in events with missing transverse momentum at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 561, 241-257.	1.5	37
126	STRUCTURE OF VIRTUAL PHOTONS AT HERA. , 2002, , .		1