

Matthias Liepe

List of Publications by Year in descending order

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Version: 2024-02-01

19
papers

825
citations

623699

14
h-index

839512

18
g-index

21
all docs

21
docs citations

21
times ranked

681
citing authors

#	ARTICLE	IF	CITATIONS
1	Superconducting TESLA cavities. Physical Review Special Topics: Accelerators and Beams, 2000, 3, .	1.8	291
2	Record high-average current from a high-brightness photoinjector. Applied Physics Letters, 2013, 102, .	3.3	118
3	Proof-of-principle demonstration of Nb ₃ Sn superconducting radiofrequency cavities for high Q applications. Applied Physics Letters, 2015, 106, .	3.3	41
4	Theoretical estimates of maximum fields in superconducting resonant radio frequency cavities: stability theory, disorder, and laminates. Superconductor Science and Technology, 2017, 30, 033002.	3.5	39
5	Advances in development of Nb ₃ Sn superconducting radio-frequency cavities. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	3.3	37
6	Analysis of Nb ₃ Sn surface layers for superconducting radio frequency cavity applications. Applied Physics Letters, 2015, 106, .	3.3	35
7	Impact of nitrogen doping of niobium superconducting cavities on the sensitivity of surface resistance to trapped magnetic flux. Journal of Applied Physics, 2016, 119, .	2.5	35
8	Nitrogen-doped 9-cell cavity performance in a test cryomodule for LCLS-II. Journal of Applied Physics, 2015, 117, .	2.5	34
9	Radio Frequency Magnetic Field Limits of Nb and Nb ₃ Sn. Physical Review Letters, 2015, 115, 047001.	7.8	33
10	The importance of the electron mean free path for superconducting radio-frequency cavities. Journal of Applied Physics, 2017, 121, .	2.5	28
11	Atomic-scale analyses of Nb ₃ Sn on Nb prepared by vapor diffusion for superconducting radiofrequency cavity applications: a correlative study. Superconductor Science and Technology, 2019, 32, 024001.	3.5	25
12	Grain-boundary structure and segregation in Nb ₃ Sn coatings on Nb for high-performance superconducting radiofrequency cavity applications. Acta Materialia, 2020, 188, 155-165.	7.9	24
13	Vortex Dynamics and Losses Due to Pinning: Dissipation from Trapped Magnetic Flux in Resonant Superconducting Radio-Frequency Cavities. Physical Review Applied, 2018, 10, .	3.8	23
14	Performance-defining properties of Nb ₃ Sn coating in SRF cavities. Superconductor Science and Technology, 2018, 31, 015004.	3.5	16
15	Critical fields of Nb ₃ Sn prepared for superconducting cavities. Superconductor Science and Technology, 2019, 32, 075004.	3.5	16
16	Effect of the density of states at the Fermi level on defect free energies and superconductivity: A case study of Nb ₃ Sn. Physical Review B, 2021, 103, .	3.2	10
17	The main linac cavity for Cornell's energy recovery linac: Cavity design through horizontal cryomodule prototype test. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 734, 23-31.	1.6	9
18	Thermocurrents and their role in high Q cavity performance. Physical Review Accelerators and Beams, 2016, 19, .	1.6	5

#	ARTICLE	IF	CITATIONS
19	Design and construction of the main linac module for the superconducting energy recovery linac project at Cornell. , 2014, , .		1