

# O S Melnychuk

## List of Publications by Year in descending order

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Version: 2024-02-01

14  
papers

732  
citations

758635

12  
h-index

1058022

14  
g-index

15  
all docs

15  
docs citations

15  
times ranked

333  
citing authors

#	ARTICLE	IF	CITATIONS
1	Field emission mitigation studies in the SLAC Linac Coherent Light Source II superconducting rf cavities via <i>in-situ</i> plasma processing. <i>Physical Review Accelerators and Beams</i> , 2021, 24, .	0.6	4
2	Q-factor optimization for high-beta 650-MHz cavities for PIP-II. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	11
3	Ultralow Surface Resistance via Vacuum Heat Treatment of Superconducting Radio-Frequency Cavities. <i>Physical Review Applied</i> , 2020, 13, .	1.5	43
4	Industrialization of the nitrogen-doping preparation for SRF cavities for LCLS-II. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 883, 143-150.	0.7	29
5	Field-Enhanced Superconductivity in High-Frequency Niobium Accelerating Cavities. <i>Physical Review Letters</i> , 2018, 121, 224801.	2.9	20
6	Frequency dependence of trapped flux sensitivity in SRF cavities. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	16
7	Unprecedented quality factors at accelerating gradients up to $45 \text{ MVm}^{-1}$ in niobium superconducting resonators via low temperature nitrogen infusion. <i>Superconductor Science and Technology</i> , 2017, 30, 094004.	1.8	109
8	Effect of interstitial impurities on the field dependent microwave surface resistance of niobium. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	38
9	Efficient expulsion of magnetic flux in superconducting radiofrequency cavities for high <i>Q</i> applications. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	57
10	Magnetic flux studies in horizontally cooled elliptical superconducting cavities. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	19
11	Error analysis for intrinsic quality factor measurement in superconducting radio frequency resonators. <i>Review of Scientific Instruments</i> , 2014, 85, 124705.	0.6	22
12	Ultra-high quality factors in superconducting niobium cavities in ambient magnetic fields up to 190 mG. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	88
13	Dependence of the residual surface resistance of superconducting radio frequency cavities on the cooling dynamics around $T_c$ . <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	69
14	Nitrogen and argon doping of niobium for superconducting radio frequency cavities: a pathway to highly efficient accelerating structures. <i>Superconductor Science and Technology</i> , 2013, 26, 102001.	1.8	201