

# Najib Cheggour

## List of Publications by Year in descending order

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44  
papers

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430874

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491  
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#	ARTICLE	IF	CITATIONS
1	Implications of the strain irreversibility cliff on the fabrication of particle-accelerator magnets made of restacked-rod-process Nb <sub>3</sub> Sn wires. Scientific Reports, 2019, 9, 5466.	3.3	10
2	Precipitous change of the irreversible strain limit with heat-treatment temperature in Nb <sub>3</sub> Sn wires made by the restacked-rod process. Scientific Reports, 2018, 8, 13048.	3.3	13
3	Unified Scaling Law for flux pinning in practical superconductors: III. Minimum datasets, core parameters, and application of the Extrapolative Scaling Expression. Superconductor Science and Technology, 2017, 30, 033005.	3.5	9
4	Extrapolative Scaling Expression: A Fitting Equation for Extrapolating Full $I_c(B, T, \mu)$ Data Matrixes From Limited Data. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-7.	1.7	12
5	Unified Scaling Law for flux pinning in practical superconductors: II. Parameter testing, scaling constants, and the Extrapolative Scaling Expression. Superconductor Science and Technology, 2016, 29, 123002.	3.5	17
6	Dispersion-Strengthened Silver Alumina for Sheathing $\text{Bi}_{2}\text{Sr}_{2}\text{CaCuO}_{8+x}$ Multifilamentary Wire. IEEE Transactions on Applied Superconductivity, 2012, 22, 8400210-8400210.	1.7	14
7	Strain and Magnetic-Field Characterization of a Bronze-Route $\text{Nb}_{3}\text{Sn}$ ITER Wire: Benchmarking of Strain Measurement Facilities at NIST and University of Twente. IEEE Transactions on Applied Superconductivity, 2012, 22, 4805104-4805104.	1.7	11
8	Correlation Between Pressure Dependence of Critical Temperature and the Reversible Strain Effect on the Critical Current and Pinning Force in $\text{Bi}_{2}\text{Sr}_{2}\text{CaCuO}_{8+x}$ Wires. IEEE Transactions on Applied Superconductivity, 2012, 22, 8400307-8400307.	1.7	12
9	Reversible effect of strain on transport critical current in $\text{Bi}_{2}\text{Sr}_{2}\text{CaCuO}_{8+x}$ superconducting wires: a modified descriptive strain model. Superconductor Science and Technology, 2012, 25, 015001.	3.5	50
10	Electromechanical Characterization of Bi-2212 Strands. IEEE Transactions on Applied Superconductivity, 2011, 21, 3086-3089.	1.7	23
11	Strain and Magnetization Properties of High Subelement Count Tube-Type $\text{Nb}_{3}\text{Sn}$ Strands. IEEE Transactions on Applied Superconductivity, 2011, 21, 2559-2562.	1.7	14
12	Development of a Multifilament PIT $\text{Nb}_{3}\text{Ga}$ Conductor for Fusion Applications. IEEE Transactions on Applied Superconductivity, 2011, 21, 2529-2532.	1.7	2
13	Method for determining the irreversible strain limit of Nb <sub>3</sub> Sn wires. Superconductor Science and Technology, 2011, 24, 075022.	3.5	19
14	Influence of Ti and Ta doping on the irreversible strain limit of ternary Nb <sub>3</sub> Sn superconducting wires made by the restacked-rod process. Superconductor Science and Technology, 2010, 23, 052002.	3.5	30
15	Test Results of the First US ITER TF Conductor in SULTAN. IEEE Transactions on Applied Superconductivity, 2009, 19, 1478-1482.	1.7	22
16	An Octagonal Architecture for High Strength PIT $\text{Nb}_{3}\text{Sn}$ Conductors. IEEE Transactions on Applied Superconductivity, 2009, 19, 2598-2601.	1.7	9
17	Internal Tin $\text{Nb}_{3}\text{Sn}$ Conductors Engineered for Fusion and Particle Accelerator Applications. IEEE Transactions on Applied Superconductivity, 2009, 19, 2573-2579.	1.7	47
18	Interlaboratory Comparisons of NbTi Critical Current Measurements. IEEE Transactions on Applied Superconductivity, 2009, 19, 2633-2636.	1.7	9

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19	Effect of Fatigue Under Transverse Compressive Stress on Slit Y-Ba-Cu-O Coated Conductors. IEEE Transactions on Applied Superconductivity, 2007, 17, 3063-3066.	1.7	18
20	Critical-Current Measurements on an ITER Nb <sub>3</sub> Sn Strand: Effect of Axial Tensile Strain. IEEE Transactions on Applied Superconductivity, 2007, 17, 1366-1369.	1.7	7
21	Critical-Current Measurements on ITER Nb <sub>3</sub> Sn Strands: Effect of Temperature. IEEE Transactions on Applied Superconductivity, 2007, 17, 1398-1401.	1.7	8
22	Mechanical properties of pure Ni and Ni-alloy substrate materials for Y-Ba-Cu-O coated superconductors. Cryogenics, 2006, 46, 432-438.	1.7	80
23	Progress in scale-up of second-generation high-temperature superconductors at SuperPower Inc. Physica C: Superconductivity and Its Applications, 2005, 426-431, 849-857.	1.2	39
24	Compressive Pre-Strain in High-Niobium-Fraction Nb <sub>3</sub> Sn Superconductors. IEEE Transactions on Applied Superconductivity, 2005, 15, 3560-3563.	1.7	15
25	Magnetic-Field Dependence of the Reversible Axial-Strain Effect in Y-Ba-Cu-O Coated Conductors. IEEE Transactions on Applied Superconductivity, 2005, 15, 3577-3580.	1.7	33
26	Enhancement of the irreversible axial-strain limit of Y-Ba-Cu-O-coated conductors with the addition of a Cu layer. Applied Physics Letters, 2005, 87, 212505.	3.3	36
27	Reversible axial-strain effect in Y-Ba-Cu-O coated conductors. Superconductor Science and Technology, 2005, 18, S319-S324.	3.5	88
28	Transverse compressive stress effect in Y-Ba-Cu-O coatings on biaxially textured Ni and Ni-W substrates. IEEE Transactions on Applied Superconductivity, 2003, 13, 3530-3533.	1.7	30
29	Reversible axial-strain effect and extended strain limits in Y-Ba-Cu-O coatings on deformation-textured substrates. Applied Physics Letters, 2003, 83, 4223-4225.	3.3	126
30	The unified strain and temperature scaling law for the pinning force density of bronze-route Nb <sub>3</sub> Sn wires in high magnetic fields. Cryogenics, 2002, 42, 299-309.	1.7	31
31	Transverse stress and fatigue effects in Y-Ba-Cu-O coated IBAD tapes. IEEE Transactions on Applied Superconductivity, 2001, 11, 3389-3392.	1.7	28
32	A probe for investigating the effects of temperature, strain, and magnetic field on transport critical currents in superconducting wires and tapes. Review of Scientific Instruments, 2000, 71, 4521.	1.3	65
33	Variable-temperature transport critical currents of niobium-tin wires under strain in high magnetic fields. IEEE Transactions on Applied Superconductivity, 1999, 9, 2517-2520.	1.7	5
34	Unifying the strain and temperature scaling laws for the pinning force density in superconducting niobium-tin multifilamentary wires. Journal of Applied Physics, 1999, 86, 552-555.	2.5	32
35	The effect of hot isostatic pressing on the strain tolerance of the critical current density found in modified jelly roll Nb <sub>3</sub> Sn wires. IEEE Transactions on Applied Superconductivity, 1999, 9, 1447-1450.	1.7	4
36	Irreversibility line and granularity in Chevrel phase superconducting wires. Journal of Applied Physics, 1998, 84, 2181-2183.	2.5	14

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37	Overall critical current density of Chevrel wires at high magnetic field. IEEE Transactions on Applied Superconductivity, 1997, 7, 1759-1762.	1.7	3
38	Enhancement of the critical current density in Chevrel phase superconducting wires. Journal of Applied Physics, 1997, 81, 6277-6284.	2.5	18
39	Overall critical current density of chevrel wires in magnetic fields up to 24 tesla. European Physical Journal D, 1996, 46, 2757-2758.	0.4	0
40	Promising critical current density in the Chevrel phase superconducting wires. Physica C: Superconductivity and Its Applications, 1996, 258, 21-29.	1.2	12
41	Dependence of critical current densities in Chevrel phase superconducting wires on magnetic fields up to 25 T. Physica B: Condensed Matter, 1995, 211, 272-274.	2.7	3
42	Critical current distribution of hot isostatically pressed PbMo6S8 wires. Physica C: Superconductivity and Its Applications, 1994, 234, 343-354.	1.2	7
43	Upper critical field measurements in high-Tc superconducting oxides. Physica B: Condensed Matter, 1989, 155, 186-188.	2.7	1
44	A procedural solution for determining the temperature dependence of transport critical current in Nb3Sn superconducting wires using magnetization measurements. Superconductor Science and Technology, 0, , .	3.5	0