

# Simonetta TurtA<sup>1</sup>

## List of Publications by Year in descending order

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91  
papers

1,393  
citations

331670

21  
h-index

395702

33  
g-index

91  
all docs

91  
docs citations

91  
times ranked

871  
citing authors

#	ARTICLE	IF	CITATIONS
1	H <sub>2</sub> and H <sub>2</sub> /CO oxidation mechanism on Pt/C, Ru/C and Pt@Ru/C electrocatalysts. Journal of Applied Electrochemistry, 2001, 31, 325-334.	2.9	125
2	The ITER toroidal field model coil project. Fusion Engineering and Design, 2005, 73, 189-327.	1.9	114
3	Progress in the design of the superconducting magnets for the EU DEMO. Fusion Engineering and Design, 2018, 136, 1597-1604.	1.9	67
4	Test Results of Two European ITER TF Conductor Samples in SULTAN. IEEE Transactions on Applied Superconductivity, 2008, 18, 1088-1091.	1.7	56
5	Laser-driven synthesis of nanocrystalline alumina powders from gas-phase precursors. Applied Physics Letters, 1993, 63, 1345-1347.	3.3	49
6	Synthesis of TiC and SiC/TiC nanocrystalline powders by gas-phase laser-induced reaction. Journal of Materials Science, 1997, 32, 5629-5635.	3.7	47
7	Overview of Progress on the EU DEMO Reactor Magnet System Design. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	46
8	Design, Manufacture, and Test of an 80 kA-Class Nb <sub>3</sub> Sn Cable-In-Conduit Conductor With Rectangular Geometry and Distributed Pressure Relief Channels. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-6.	1.7	39
9	Test Results of Two ITER TF Conductor Short Samples Using High Current Density Nb <sub>3</sub> Sn Strands. IEEE Transactions on Applied Superconductivity, 2007, 17, 1370-1373.	1.7	38
10	Advance in the conceptual design of the European DEMO magnet system. Superconductor Science and Technology, 2020, 33, 044013.	3.5	38
11	The DEMO magnet system – Status and future challenges. Fusion Engineering and Design, 2022, 174, 112971.	1.9	37
12	CuK-edge polarized x-ray-absorption near-edge structure of Bi <sub>2</sub> CaSr <sub>2</sub> Cu <sub>2</sub> O <sub>8</sub> . Physical Review B, 1991, 44, 4560-4569.	3.2	30
13	Design of Large Size, Force Flow Superconductors for DEMO TF Coils. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.7	29
14	Conceptual Design of Superconducting Magnet System for JT-60SA. IEEE Transactions on Applied Superconductivity, 2008, 18, 441-446.	1.7	27
15	Conductor Design of CS and EF Coils for JT-60SA. IEEE Transactions on Applied Superconductivity, 2008, 18, 212-215.	1.7	23
16	Development of a Thermal-Hydraulic Model for the European DEMO TF Coil. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-6.	1.7	23
17	Status of JT-60SA tokamak under the EU-JA Broader Approach Agreement. Fusion Engineering and Design, 2008, 83, 795-803.	1.9	22
18	LTS and HTS high current conductor development for DEMO. Fusion Engineering and Design, 2015, 96-97, 77-82.	1.9	22

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19	JT-60SA Toroidal Field Magnet System. IEEE Transactions on Applied Superconductivity, 2008, 18, 505-508.	1.7	21
20	Successful performances of the EU-AltTF sample, a large size Nb <sub>3</sub> Sn cable-in-conduit conductor with rectangular geometry. Superconductor Science and Technology, 2010, 23, 045028.	3.5	21
21	The JT-60SA Toroidal Field Conductor Reference Sample: Manufacturing and Test Results. IEEE Transactions on Applied Superconductivity, 2010, 20, 442-446.	1.7	21
22	DTT device: Conceptual design of the superconducting magnet system. Fusion Engineering and Design, 2017, 122, 299-312.	1.9	21
23	Neutronic analysis of the JT-60SA toroidal magnets. Fusion Engineering and Design, 2009, 84, 1947-1952.	1.9	19
24	Nanosized metal catalysts in electrodes for solid polymeric electrolyte fuel cells: an XPS and XRD study. Applied Surface Science, 2001, 178, 149-155.	6.1	18
25	Detailed design of the large-bore 8 T superconducting magnet for the NAFASSY test facility. Superconductor Science and Technology, 2015, 28, 034005.	3.5	18
26	FAST: A European ITER satellite experiment in the view of DEMO. Fusion Engineering and Design, 2011, 86, 497-503.	1.9	17
27	The DRYSMES4GRID Project: Development of a 500 kJ/200 kW Cryogen-Free Cooled SMES Demonstrator Based on MgB <sub>2</sub> . IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	16
28	Magnetic and Transport Characterization of NbTi Strands as a Basis for the Design of Fusion Magnets. IEEE Transactions on Applied Superconductivity, 2009, 19, 2544-2547.	1.7	15
29	Performance analysis of a graded winding pack design for the EU DEMO TF coil in normal and off-normal conditions. Fusion Engineering and Design, 2017, 124, 45-48.	1.9	15
30	Current Distribution Measurement on the ITER-Type NbTi Bus Bar III. IEEE Transactions on Applied Superconductivity, 2005, 15, 1407-1410.	1.7	14
31	Pure Bending Strain Experiments on Jacketed $\{m \text{ Nb} \}_3 \{m \text{ Sn} \}$ Strands for ITER. IEEE Transactions on Applied Superconductivity, 2007, 17, 2591-2594.	1.7	14
32	Manufacturing of the ITER TF Full Size Prototype Conductor. IEEE Transactions on Applied Superconductivity, 2008, 18, 1105-1108.	1.7	13
33	Joint Design for the EDIPO. IEEE Transactions on Applied Superconductivity, 2008, 18, 192-195.	1.7	13
34	ITER and JT-60SA Conductor Production at ICAS. IEEE Transactions on Applied Superconductivity, 2013, 23, 4200904-4200904.	1.7	13
35	Influence of cable layout on the performance of ITER-type Nb <sub>3</sub> Sn conductors. Journal of Physics: Conference Series, 2008, 97, 012027.	0.4	12
36	Synthesis of aluminum oxide-based ceramics by laser photoinduced reactions from gaseous precursors. Journal of Materials Research, 1997, 12, 774-782.	2.6	11

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37	Design of JT-60SA Magnets and Associated Experimental Validations. IEEE Transactions on Applied Superconductivity, 2011, 21, 1938-1943.	1.7	11
38	A new meshless approach to map electromagnetic loads for FEM analysis on DEMO TF coil system. Fusion Engineering and Design, 2015, 100, 226-238.	1.9	11
39	Coupling between the charge carriers and lattice distortions via modulation of the orbital angular momentum of the 3d holes by polarized xas spectroscopy. Physica C: Superconductivity and Its Applications, 1991, 185-189, 1061-1062.	1.2	10
40	Conductor Manufacturing of the ITER TF Full-Size Performance Samples. IEEE Transactions on Applied Superconductivity, 2010, 20, 1412-1415.	1.7	10
41	Test Results of Three Poloidal Field Superconducting Samples in SULTAN. IEEE Transactions on Applied Superconductivity, 2012, 22, 4803504-4803504.	1.7	10
42	Microstructural properties of laser synthesized Si/C/N nanoparticles. Applied Surface Science, 1996, 93, 101-108.	6.1	9
43	Stability in a long length NbTi CICC. IEEE Transactions on Applied Superconductivity, 2001, 11, 1542-1545.	1.7	9
44	2D thermal analysis for heat transfer from casing to winding pack in JT-60SA TF coils. Fusion Engineering and Design, 2009, 84, 1531-1538.	1.9	9
45	Magnetostructural Calculations and Design Study of the DTT Central Solenoid. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	9
46	Nanoscale Si-C and Al-O-(N,C) ceramic powders by laser synthesis from gaseous precursors. Scripta Materialia, 1995, 6, 341-344.	0.5	8
47	FAST: Feasibility Analysis for a Completely Superconducting Magnet System. IEEE Transactions on Applied Superconductivity, 2011, 21, 1934-1937.	1.7	8
48	Thermal-Hydraulic Analysis of the DTT Toroidal Field Magnets in DC Operation. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	8
49	Analysis of the Thermal-Hydraulic Effects of a Plasma Disruption on the DTT TF Magnets. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-7.	1.7	8
50	Comparison between the predictions of the thermo-hydraulic code Gandalf and the results of a long length instrumented CICC module experiment. Cryogenics, 2000, 40, 555-559.	1.7	7
51	On the surface acid-base properties of titanium sheets. Applied Surface Science, 2000, 156, 1-8.	6.1	7
52	Variable-temperature characterization of NbTi strands in the low critical-current density range. Journal of Physics: Conference Series, 2008, 97, 012306.	0.4	7
53	Preparation of PF1/6 and PF2 Conductor Performance Qualification Sample. IEEE Transactions on Applied Superconductivity, 2011, 21, 1930-1933.	1.7	7
54	The Effect of Strand Bending on the Voltage-Current Characteristic of $\text{Nb}_3\text{Sn}$ Cable-In-Conduit Conductors. IEEE Transactions on Applied Superconductivity, 2011, 21, 2050-2054.	1.7	7

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55	Assessment Studies and Manufacturing Trials for the Conductors of DEMO TF Coils. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	7
56	Loss calculations in a CICC solenoid exposed to rapidly changing magnetic fields. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1750-1753.	1.2	6
57	A New Design for JT-60SA Toroidal Field Coils Conductor and Joints. IEEE Transactions on Applied Superconductivity, 2008, 18, 216-219.	1.7	6
58	Performance Analysis of the NbTi PF Coils for the EU DEMO Fusion Reactor. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	6
59	Structural Assessment Procedure of the Toroidal Field Magnet System for the Divertor Tokamak Test. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	6
60	Characterization of nanophase powders prepared by laser synthesis. Surface and Interface Analysis, 1994, 22, 248-253.	1.8	5
61	ENFASI: Conceptual Design of a 15 T Large Bore Superconducting Test Facility. IEEE Transactions on Applied Superconductivity, 2009, 19, 1548-1551.	1.7	5
62	Overview of Conductor Production for ITER Toroidal Field Magnet in Korea. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	5
63	Structural Assessment of the DTT Poloidal Field Coil System. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	5
64	Design Studies, Magnetic Calculations and Structural Assessment For the DTT Central Solenoid. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	5
65	Cryogenic Test of High Temperature Superconducting Current Leads at ENEA. AIP Conference Proceedings, 2006, , .	0.4	4
66	Analysis of Various Dopants on the $\text{MgB}_2$ Superconducting Properties. IEEE Transactions on Applied Superconductivity, 2009, 19, 2802-2806.	1.7	4
67	A coil test facility for the cryogenic tests of the JT-60SA TF coils. Fusion Engineering and Design, 2011, 86, 561-564.	1.9	4
68	A New European Production Line for CIC Conductors. IEEE Transactions on Applied Superconductivity, 2012, 22, 4804504-4804504.	1.7	4
69	Mechanical Analysis of the ENEA TF Coil Proposal for the EU DEMO Fusion Reactor. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	4
70	Study of a Universal Power SMES Compensator for LV Distribution Grid. , 2018, , .		4
71	DTT: A Challenging Framework for a Sound Superconducting Magnets Design. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	4
72	Influence of Oxygen Contamination on the Pd-Si Solid-State Reactions Activated by Mechanical Alloying. Chemistry of Materials, 1994, 6, 983-989.	6.7	3

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73	A thermo-hydraulic analysis of the superconducting proposal for the TF magnet system of FAST. Fusion Engineering and Design, 2011, 86, 1454-1457.	1.9	3
74	Role of the Cross Section Geometry in Rectangular $\{m Nb\}_{3}\{m Sn\}$ CICC Performances. IEEE Transactions on Applied Superconductivity, 2011, 21, 2032-2035.	1.7	3
75	Design and Characterization of the Interlayer Joint Between Low-Field Nb <sub>3</sub> Sn Conductors of a Layer Wound DEMO TF Coil. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-7.	1.7	3
76	Dual ion beam sputtering deposition of silicon oxynitride thin films. , 1996, 2776, 373.		2
77	Application of the ENEA Joint Concept to NbTi CIC Conductors. IEEE Transactions on Applied Superconductivity, 2009, 19, 1544-1547.	1.7	2
78	Structural assessment of TF superconducting magnet of the DTT device. Procedia Structural Integrity, 2019, 24, 898-905.	0.8	2
79	Thermal-hydraulic analysis of the DTT CS and PF pulsed coil performance during AC operation. Fusion Engineering and Design, 2021, 173, 112836.	1.9	2
80	Updated Structural Assessment of the DTT Poloidal Field Coils. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	2
81	Laser synthesis and microstructural characterization of ceramic nanosized powders. , 1994, 2207, 490.		1
82	Inductive heating on a NbTi CICC magnet: energy calibration and stability analysis. Cryogenics, 2003, 43, 699-704.	1.7	1
83	Current (re-)Distribution inside an ITER Full-Size Conductor: a Qualitative Analysis. Journal of Physics: Conference Series, 2006, 43, 1055-1058.	0.4	1
84	Current Redistribution Inside ITER Full-Size Conductors Well Before Any Transition Voltage Detection. IEEE Transactions on Applied Superconductivity, 2007, 17, 1485-1488.	1.7	1
85	PRELIMINARY DESIGN OF 30 KA CURRENT LEADS FOR THE ENEA CICC UPGRADED TEST FACILITY. , 2010, , .		1
86	1-D Electromagnetic and Thermal-Hydraulic Analysis of the Superconducting Proposal for the CS Magnets of FAST. IEEE Transactions on Applied Superconductivity, 2012, 22, 4902704-4902704.	1.7	1
87	Electromagnetic Analysis of DTT Poloidal Field Coils During an Electrical Transient. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	1
88	Engineering and Structural Assessment for the Design of the DTT Central Solenoid. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	1
89	Production of ceramic powders from laser-driven reactions. , 1995, 2461, 124.		0
90	The Influence of Bending Strain on the Critical Current of $\{m Nb\}_{3}\{m Sn\}$ Strands With Different Filament Twist Pitch. IEEE Transactions on Applied Superconductivity, 2009, 19, 2624-2627.	1.7	0

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91	Test of the ENEA Joint With a NbTi Large CiC Conductor. IEEE Transactions on Applied Superconductivity, 2013, 23, 4200705-4200705.	1.7	0