Louis Zani

List of Publications by Year
in descending order

48	646	643344 15	685536 24
papers	citations	h-index	g-index

48	48	48	339
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The DEMO magnet system â€“ Status and future challenges. Fusion Engineering and Design, 2022, 174, 112971.	1.0	37
2	JT-60SA TF coil quench model and Analysis: Joule energy estimation with SuperMagnet and STREAM. Cryogenics, 2022, 124, 103454.	0.9	2
3	Analytical Modeling of Coupling Losses in CICCs, Extensive Study of the COLISEUM Model. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	2
4	AC Losses in JT-60SA TF Magnet During Commissioning: Experimental Analysis and Modeling. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	1
5	Updates on CEA Design and Experimental Activities on EU DEMO TF System. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	2
6	Thermal Hydraulic Analysis of JT-60SA TFC02 Complementary Quench Tests in CTF. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	1
7	Development of a multi-physic platform OLYMPE for magnet fusion design: Progresses update and applications. Cryogenics, 2022, 125, 103479.	0.9	4
8	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
9	Modeling of AC Losses and Simulation of Their Impact on JT-60SA TF Magnets During Commissioning. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	7
10	Analytical Coupling Losses Modelling With COLISEUM: Generalized Approach Upgrade to All Stages. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	0
11	Extensive Analyses of Superconducting Cables 3D Geometry With Advanced Tomographic Examinations. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	4
12	Thermal-hydraulic analysis of the DEMO CS coil designed by CEA. Fusion Engineering and Design, 2021, 171, 112557.	1.0	3
13	An analytical model for coupling losses in large conductors for magnetic fusion. Cryogenics, 2021, 120, 103374.	0.9	9
14	Optimization of the overall Toroidal Field Coil cryomagnetic system at the pre-conceptual design phase of the European DEMO fusion reactor. Fusion Engineering and Design, 2021, 172, 112883.	1.0	3
15	Sensitivity analysis of fusion power plant designs using the SYCOMORE system code. Nuclear Fusion, 2020, 60, 016015.	1.6	4
16	OLYMPE, a multi-physic platform for fusion magnet design: Development status and first applications. Cryogenics, 2020, 108, 103086.	0.9	9
17	Void Fraction Influence on CICCs Coupling Losses: Analysis of Experimental Results With MPAS Model. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	12
18	CEA Broad Studies on EU DEMO CS and PF Magnet Systems. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-6.	1.1	8

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19	Advance in the conceptual design of the European DEMO magnet system. Superconductor Science and Technology, 2020, 33, 044013.	1.8	38
20	Analytical Modelling of CICCs Coupling Losses: Broad Investigation of Two-Stage Model. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	7
21	Progresses at CEA on EU demo reactor cryomagnetic system design activities and associated R&D. Nuclear Fusion, 2019, 59, 086033.	1.6	8
22	Optimization of the cooling capacity of the cryo-magnetic system for EU DEMO at the pre-conceptual design phase. Fusion Engineering and Design, 2019, 146, 2504-2508.	1.0	7
23	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
24	Mechanical analysis of the European DEMO central solenoid pre-load structure and coils. Fusion Engineering and Design, 2019, 146, 168-172.	1.0	12
25	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
26	Development of a New Generic Analytical Modeling of AC Coupling Losses in Cable-in-Conduit Conductors. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	2
27	Parametric Analyses of JT-60SA TF Coils in the Cold Test Facility With SuperMagnet Code. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	11
28	DEMO design using the SYCOMORE system code: Influence of technological constraints on the reactor performances. Fusion Engineering and Design, 2018, 136, 1572-1576.	1.0	11
29	Development and Applications of Magnet Module for SYCOMORE CEA System Code. IEEE Transactions on Plasma Science, 2018, 46, 3109-3114.	0.6	5
30	Progress in the design of the superconducting magnets for the EU DEMO. Fusion Engineering and Design, 2018, 136, 1597-1604.	1.0	67
31	EU-DEMO TF and CS Magnet Systems Design and Analyses Performed at CEA. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	26
32	Towards a multi-physic platform for fusion magnet designâ€"Application to DEMO TF coil. Fusion Engineering and Design, 2017, 124, 104-109.	1.0	16
33	Mechanical pre-dimensioning and pre-optimization of the tokamaksâ€™ toroidal coils featuring the winding pack layout. Fusion Engineering and Design, 2017, 124, 77-81.	1.0	8
34	Thermo-hydraulic analyses associated with a CEA design proposal for a DEMO TF conductor. Cryogenics, 2016, 80, 317-324.	0.9	24
35	Coupling between a multi-physics workflow engine and an optimization framework. Computer Physics Communications, 2016, 200, 76-86.	3.0	6
36	Influence of Strands Trajectories of JT-60SA TF Conductors on their Hydraulic and Electromagnetic Properties. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.1	1

#	Article	IF	Citations
37	Tools Used at CEA for Designing the DEMO Toroidal Field Coils Winding Pack. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	16
38	Overview of Progress on the EU DEMO Reactor Magnet System Design. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	46
39	JT-60SA TF Coils: Experimental Check of Hydraulic Operating Conditions. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	18
40	JT-60SA superconducting magnet system. Nuclear Fusion, 2015, 55, 086001.	1.6	30
41	DEMO reactor design using the new modular system code SYCOMORE. Nuclear Fusion, 2015, 55, 073011.	1.6	45
42	Accurate 3D modeling of Cable in Conduit Conductor type superconductors by X-ray microtomography. Fusion Engineering and Design, 2015, 98-99, 1176-1180.	1.0	6
43	Conceptual integrated approach for the magnet system of a tokamak reactor. Fusion Engineering and Design, 2014, 89, 2606-2620.	1.0	19
44	Experimental and Analytical Approaches on JTâ€"60SA TF Strand and TF Conductor Quality Control During Qualification and Production Manufacture Stages. IEEE Transactions on Applied Superconductivity, 2013, 23, 4200504-4200504.	1.1	9
45	Characterization of superconducting wires and cables by X-ray micro-tomography. Fusion Engineering and Design, 2013, 88, 1613-1618.	1.0	16
46	Starting EU Production of Strand and Conductor for JT-60SA Toroidal Field Coils. IEEE Transactions on Applied Superconductivity, 2012, 22, 4801804-4801804.	1.1	18
47	A macroscopic model for coupling current losses in cables made of multistages of superconducting strands and its experimental validation. Cryogenics, 2010, 50, 443-449.	0.9	31
48	Tests and Analyses of Two TF Conductor Prototypes for JT-60SA. IEEE Transactions on Applied Superconductivity, 2010, 20, 451-454.	1.1	13