

David

List of Publications by Year in descending order

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79
papers

1,405
citations

361413

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395702

33
g-index

80
all docs

80
docs citations

80
times ranked

822
citing authors

#	ARTICLE	IF	CITATIONS
1	Objectives and status of EUROfusion DEMO blanket studies. Fusion Engineering and Design, 2016, 109-111, 1199-1206.	1.9	168
2	Confinement transitions in TJ-II under Li-coated wall conditions. Nuclear Fusion, 2009, 49, 104018.	3.5	75
3	The accomplishment of the Engineering Design Activities of IFMIF/EVEDA: The Europeanâ€“Japanese project towards a Li(d,xn) fusion relevant neutron source. Nuclear Fusion, 2015, 55, 086003.	3.5	63
4	The role of a fast ion component on the heating of the plasma bulk. Plasma Physics and Controlled Fusion, 2007, 49, 309-324.	2.1	53
5	Progress in EU Breeding Blanket design and integration. Fusion Engineering and Design, 2018, 136, 782-792.	1.9	50
6	Progress of the conceptual design of the European DEMO breeding blanket, tritium extraction and coolant purification systems. Fusion Engineering and Design, 2020, 157, 111640.	1.9	46
7	Status of maturation of critical technologies and systems design: Breeding blanket. Fusion Engineering and Design, 2022, 179, 113116.	1.9	44
8	Conceptual Design of the EU-DEMO Dual Coolant Lithium Lead Equatorial Module. IEEE Transactions on Plasma Science, 2016, 44, 1603-1612.	1.3	43
9	Status of the engineering activities carried out on the European DCLL. Fusion Engineering and Design, 2017, 124, 876-881.	1.9	39
10	Overview of TJ-II experiments. Nuclear Fusion, 2005, 45, S266-S275.	3.5	37
11	Magnetohydrodynamic and thermal analysis of PbLi flows in poloidal channels with flow channel insert for the EU-DCLL blanket. Nuclear Fusion, 2018, 58, 106001.	3.5	33
12	Design of a permeator against vacuum for tritium extraction from eutectic lithium-lead in a DCLL DEMO. Fusion Engineering and Design, 2017, 117, 226-231.	1.9	30
13	Tritium extraction technologies and DEMO requirements. Fusion Engineering and Design, 2016, 109-111, 912-916.	1.9	28
14	Tritium modelling in HCPB breeder blanket at a system level. Fusion Engineering and Design, 2017, 124, 687-691.	1.9	27
15	Design and fabrication of a Permeator Against Vacuum prototype for small scale testing at Lead-Lithium facility. Fusion Engineering and Design, 2017, 124, 871-875.	1.9	26
16	The tritium extraction and removal system for the DCLL-DEMO fusion reactor. Nuclear Fusion, 2018, 58, 095002.	3.5	24
17	Development of Sandwich Flow Channel Inserts for an EU DEMO Dual Coolant Blanket Concept. Fusion Science and Technology, 2015, 68, 501-506.	1.1	23
18	Integrated design of breeding blanket and ancillary systems related to the use of helium or water as a coolant and impact on the overall plant design. Fusion Engineering and Design, 2021, 173, 112933.	1.9	23

#	ARTICLE	IF	CITATIONS
19	Analysis of displacement damage in materials in nuclear fusion facilities (DEMO, IFMIF and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5	1.9	21
20	The CIEMAT LiPb Loop Permeation Experiment. Fusion Engineering and Design, 2019, 146, 1228-1232.	1.9	21
21	Neutronic analyses of the preliminary design of a DCLL blanket for the EUROfusion DEMO power plant. Fusion Engineering and Design, 2016, 109-111, 13-19.	1.9	20
22	Progress in EU-DEMO in-vessel components integration. Fusion Engineering and Design, 2017, 124, 562-566.	1.9	20
23	Studying the impurity charge and main ion mass dependence of impurity confinement in ECR-heated TJ-II stellarator. Plasma Physics and Controlled Fusion, 2014, 56, 124007.	2.1	19
24	Large-scale behavior of sandwich-like FCI components within the EU-DCLL operational conditions. Fusion Engineering and Design, 2018, 136, 633-638.	1.9	19
25	Experimental refutation of the deuterium permeability in vanadium, niobium and tantalum. Fusion Engineering and Design, 2019, 146, 224-227.	1.9	19
26	Integration issues on tritium management of the European DEMO Breeding Blanket and ancillary systems. Fusion Engineering and Design, 2021, 171, 112573.	1.9	19
27	Assessment of fissionable material behaviour in fission chambers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 618, 248-259.	1.6	17
28	Comparison of Impurity Poloidal Rotation in ECRH and NBI Discharges of the TJ-II HELIAC. Fusion Science and Technology, 2006, 50, 419-427.	1.1	16
29	The European Dual Coolant Lithium Lead breeding blanket for DEMO: status and perspectives. Nuclear Fusion, 2021, 61, 115001.	3.5	16
30	The IFMIF-EVEDA accelerator beam dump design. Journal of Nuclear Materials, 2011, 417, 1275-1279.	2.7	15
31	Novel passive spectroscopy system for absolutely referenced plasma rotation measurements in clean plasmas. Review of Scientific Instruments, 2006, 77, 033506.	1.3	14
32	Current status of the engineering design of the test modules for the IFMIF. Fusion Engineering and Design, 2013, 88, 746-750.	1.9	14
33	Thermal-hydraulic design of a DCLL breeding blanket for the EU DEMO. Fusion Engineering and Design, 2017, 124, 822-826.	1.9	14
34	Optimization process for the design of the DCLL blanket for the European DEMONstration fusion reactor according to its nuclear performances. Nuclear Fusion, 2017, 57, 076011.	3.5	14
35	The LIPAc beam dump. Fusion Engineering and Design, 2018, 127, 127-138.	1.9	14
36	Effect of suprathreshold electrons on the impurity ionization state. Plasma Physics and Controlled Fusion, 2006, 48, 1573-1583.	2.1	13

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37	Tritium Behavior in HCPB Breeder Blanket Unit: Modeling and Experiments. Fusion Science and Technology, 2017, 71, 357-362.	1.1	13
38	Tritium transport modeling at system level for the EUROfusion dual coolant lithium-lead breeding blanket. Nuclear Fusion, 2017, 57, 116045.	3.5	13
39	Alternatives for upgrading the EU DCLL breeding blanket from MMS to SMS. Fusion Engineering and Design, 2021, 167, 112380.	1.9	12
40	IFMIF suitability for evaluation of fusion functional materials. Journal of Nuclear Materials, 2011, 417, 1316-1320.	2.7	11
41	Design of a System for Hydrogen isotopes Injection into Lead-Lithium. Fusion Engineering and Design, 2018, 137, 427-434.	1.9	11
42	Systems engineering activities supporting the heating & current drive and fuelling lines systems integration in the European DEMO breeding blanket. Fusion Engineering and Design, 2019, 147, 111265.	1.9	11
43	Remarks on the performance of the EU DCLL breeding blanket adapted to DEMO 2017. Fusion Engineering and Design, 2020, 155, 111559.	1.9	11
44	Physics design point of high-field stellarator reactors. Nuclear Fusion, 2022, 62, 036024.	3.5	11
45	Overview of TJ-II experiments. Nuclear Fusion, 2007, 47, S677-S685.	3.5	9
46	Feasibility of fission chambers as a neutron diagnostic in the IFMIF Test Cell. Fusion Engineering and Design, 2009, 84, 1570-1574.	1.9	9
47	The accomplishments of lithium target and test facility validation activities in the IFMIF/EVEDA phase. Nuclear Fusion, 2018, 58, 015001.	3.5	9
48	Neutronic assessments towards a comprehensive design of DEMO with DCLL breeding blanket. Fusion Engineering and Design, 2019, 138, 217-225.	1.9	9
49	The influence of MHD boundary layers on tritium permeation in PbLi flows for fusion breeding blankets. International Journal of Heat and Mass Transfer, 2021, 181, 121906.	4.8	9
50	Study on the response of IFMIF fission chambers to mixed neutron-gamma fields: PH-2 experimental tests. Fusion Engineering and Design, 2011, 86, 1232-1235.	1.9	8
51	Tritium production assessment for the DCLL EUROfusion DEMO. Nuclear Fusion, 2016, 56, 104001.	3.5	8
52	Overview of the Tritium Technologies for the EU DEMO Breeding Blanket. Fusion Science and Technology, 2020, 76, 446-457.	1.1	8
53	Establishing technical specifications for PbLi eutectic alloy analysis and its relevance in fusion applications. Nuclear Materials and Energy, 2022, 30, 101146.	1.3	8
54	Probing the edge ion temperature by passive Doppler spectroscopy in the TJ-II stellarator. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 144016.	1.5	7

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55	Method to deduce local impurity transport quantities from the evolution of tomographically reconstructed bolometer signals during tracer injection at TJ-II. Review of Scientific Instruments, 2004, 75, 4231-4233.	1.3	6
56	Present status of the Liquid Breeder Validation Module for IFMIF. Fusion Engineering and Design, 2013, 88, 863-867.	1.9	6
57	Manufacturing prototypes for LIPAC beam dump. Fusion Engineering and Design, 2014, 89, 2199-2203.	1.9	6
58	Magneto-Convective Analyses of the PbLi Flow for the EU-WCLL Fusion Breeding Blanket. Energies, 2021, 14, 6192.	3.1	6
59	Tritium permeation experiment at IFMIF Medium Flux Test Module. Fusion Engineering and Design, 2009, 84, 559-564.	1.9	5
60	Proposal of an improved design of IFMIF Test Cell components for enhanced handling and reliability. Fusion Engineering and Design, 2009, 84, 1548-1552.	1.9	5
61	Conceptual design of the IFMIF Start-Up monitoring module. Fusion Engineering and Design, 2013, 88, 729-732.	1.9	5
62	Boiling bubbles monitoring for the protection of the LIPAc beam-dump. Fusion Engineering and Design, 2015, 96-97, 917-921.	1.9	5
63	Fission chambers designer based on Monte Carlo techniques working in current mode and operated in saturation regime. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 825, 6-16.	1.6	5
64	Numerical investigation of the tritium permeation phenomenon through cooling plates in breeding blankets. Nuclear Fusion, 2021, 61, 036039.	3.5	5
65	Preliminary definition of the remote handling system for the current IFMIF Test Facilities. Fusion Engineering and Design, 2011, 86, 1941-1945.	1.9	4
66	Preliminary design of the Neutron Spectral Shifter that is dedicated to the IFMIF Liquid Breeder Validation Module. Fusion Engineering and Design, 2014, 89, 1728-1733.	1.9	4
67	Material analyses of foam-based SiC FCI after dynamic testing in PbLi in MaPLE loop at UCLA. Fusion Engineering and Design, 2016, 109-111, 93-98.	1.9	4
68	Optimization of the first wall helium cooling system of the European DCLL using CFD approach. Fusion Engineering and Design, 2017, 124, 426-431.	1.9	4
69	Development of an on-line sensor for hydrogen isotopes monitoring in flowing lithium at DONES. Fusion Engineering and Design, 2020, 161, 112010.	1.9	4
70	Experimental Determination of Hydrogen Isotope Transport Parameters in Vanadium. Membranes, 2022, 12, 579.	3.0	4
71	A Numerical Procedure to Simulate Cord-Integrated Passive Spectroscopy Measurements in TJ-II Plasmas. Fusion Science and Technology, 2006, 50, 320-325.	1.1	3
72	Stability of the LIPAC beam dump to vibrations induced by the cooling flow. Fusion Engineering and Design, 2014, 89, 2210-2213.	1.9	3

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73	Integration of the Neutral Beam Injector System Into the DCLL Breeding Blanket for the EU DEMO. IEEE Transactions on Plasma Science, 2018, 46, 2708-2716.	1.3	3
74	The TechnoFusion Consortium of Spanish institutions and facilities towards the development of fusion materials and related technologies in Europe. Journal of Nuclear Materials, 2022, 568, 153854.	2.7	2
75	Overview of DCLL research activities in the EU/Spain. , 2015, , .		1
76	Design of the CIEMAT Corrosion Loop for Liquid Metal Experiments. Applied Sciences (Switzerland), 2022, 12, 3104.	2.5	1
77	New technique to observe the emission of fast protons from the plasma bulk with improved sensitivity. Review of Scientific Instruments, 2006, 77, 10F519.	1.3	0
78	Requirements and ideas for the neutron instrumentation of the IFMIF test facilities. , 2008, , .		0
79	Radiological characterization of ceramic materials considered for the HT-DCLL DEMO reactor. Nuclear Materials and Energy, 2022, 30, 101136.	1.3	0