David

List of Publications by Year
in descending order

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79 papers	1,405 citations	361413 20 h-index	395702 33 g-index
80 all docs	80 docs citations	80 times ranked	822 citing authors

#	Article	IF	Citations
1	Physics design point of high-field stellarator reactors. Nuclear Fusion, 2022, 62, 036024.	3.5	11
2	Radiological characterization of ceramic materials considered for the HT-DCLL DEMO reactor. Nuclear Materials and Energy, 2022, 30, 101136.	1.3	0
3	Design of the CIEMAT Corrosion Loop for Liquid Metal Experiments. Applied Sciences (Switzerland), 2022, 12, 3104.	2.5	1
4	Establishing technical specifications for PbLi eutectic alloy analysis and its relevance in fusion applications. Nuclear Materials and Energy, 2022, 30, 101146.	1.3	8
5	Status of maturation of critical technologies and systems design: Breeding blanket. Fusion Engineering and Design, 2022, 179, 113116.	1.9	44
6	Experimental Determination of Hydrogen Isotope Transport Parameters in Vanadium. Membranes, 2022, 12, 579.	3.0	4
7	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
8	Numerical investigation of the tritium permeation phenomenon through cooling plates in breeding blankets. Nuclear Fusion, 2021, 61, 036039.	3.5	5
9	Alternatives for upgrading the EU DCLL breeding blanket from MMS to SMS. Fusion Engineering and Design, 2021, 167, 112380.	1.9	12
10	Magneto-Convective Analyses of the PbLi Flow for the EU-WCLL Fusion Breeding Blanket. Energies, 2021, 14, 6192.	3.1	6
11	The European Dual Coolant Lithium Lead breeding blanket for DEMO: status and perspectives. Nuclear Fusion, 2021, 61, 115001.	3.5	16
12	Integration issues on tritium management of the European DEMO Breeding Blanket and ancillary systems. Fusion Engineering and Design, 2021, 171, 112573.	1.9	19
13	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
14	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
15	Remarks on the performance of the EU DCLL breeding blanket adapted to DEMO 2017. Fusion Engineering and Design, 2020, 155, 111559.	1.9	11
16	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
17	Overview of the Tritium Technologies for the EU DEMO Breeding Blanket. Fusion Science and Technology, 2020, 76, 446-457.	1.1	8
18	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

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19	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
20	Neutronic assessments towards a comprehensive design of DEMO with DCLL breeding blanket. Fusion Engineering and Design, 2019, 138, 217-225.	1.9	9
21	Experimental refutation of the deuterium permeability in vanadium, niobium and tantalum. Fusion Engineering and Design, 2019, 146, 224-227.	1.9	19
22	The CIEMAT LiPb Loop Permeation Experiment. Fusion Engineering and Design, 2019, 146, 1228-1232.	1.9	21
23	The LIPAc beam dump. Fusion Engineering and Design, 2018, 127, 127-138.	1.9	14
24	The accomplishments of lithium target and test facility validation activities in the IFMIF/EVEDA phase. Nuclear Fusion, 2018, 58, 015001.	3.5	9
25	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
26	Design of a System for Hydrogen isotopes Injection into Lead-Lithium. Fusion Engineering and Design, 2018, 137, 427-434.	1.9	11
27	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
28	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
29	The tritium extraction and removal system for the DCLL-DEMO fusion reactor. Nuclear Fusion, 2018, 58, 095002.	3.5	24
30	Progress in EU Breeding Blanket design and integration. Fusion Engineering and Design, 2018, 136, 782-792.	1.9	50
31	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
32	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
33	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
34	Status of the engineering activities carried out on the European DCLL. Fusion Engineering and Design, 2017, 124, 876-881.	1.9	39
35	Tritium modelling in HCPB breeder blanket at a system level. Fusion Engineering and Design, 2017, 124, 687-691.	1.9	27
36	Tritium Behavior in HCPB Breeder Blanket Unit: Modeling and Experiments. Fusion Science and Technology, 2017, 71, 357-362.	1.1	13

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37	Thermal-hydraulic design of a DCLL breeding blanket for the EU DEMO. Fusion Engineering and Design, 2017, 124, 822-826.	1.9	14
38	Progress in EU-DEMO in-vessel components integration. Fusion Engineering and Design, 2017, 124, 562-566.	1.9	20
39	Tritium transport modeling at system level for the EUROfusion dual coolant lithium-lead breeding blanket. Nuclear Fusion, 2017, 57, 116045.	3.5	13
40	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
41	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
42	Tritium extraction technologies and DEMO requirements. Fusion Engineering and Design, 2016, 109-111, 912-916.	1.9	28
43	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
44	Conceptual Design of the EU-DEMO Dual Coolant Lithium Lead Equatorial Module. IEEE Transactions on Plasma Science, 2016, 44, 1603-1612.	1.3	43
45	Tritium production assessment for the DCLL EUROfusion DEMO. Nuclear Fusion, 2016, 56, 104001.	3.5	8
46	Objectives and status of EUROfusion DEMO blanket studies. Fusion Engineering and Design, 2016, 109-111, 1199-1206.	1.9	168
47	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
48	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
49	Overview of DCLL research activities in the EU/Spain. , 2015, , .		1
50	Boiling bubbles monitoring for the protection of the LIPAc beam-dump. Fusion Engineering and Design, 2015, 96-97, 917-921.	1.9	5
51	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
52	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
53	Stability of the LIPAc beam dump to vibrations induced by the cooling flow. Fusion Engineering and Design, 2014, 89, 2210-2213.	1.9	3
54	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

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55	Manufacturing prototypes for LIPAC beam dump. Fusion Engineering and Design, 2014, 89, 2199-2203.	1.9	6
56	Conceptual design of the IFMIF Start-Up monitoring module. Fusion Engineering and Design, 2013, 88, 729-732.	1.9	5
57	Present status of the Liquid Breeder Validation Module for IFMIF. Fusion Engineering and Design, 2013, 88, 863-867.	1.9	6
58	Current status of the engineering design of the test modules for the IFMIF. Fusion Engineering and Design, 2013, 88, 746-750.	1.9	14
59	Preliminary definition of the remote handling system for the current IFMIF Test Facilities. Fusion Engineering and Design, 2011, 86, 1941-1945.	1.9	4
60	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
61	Analysis of displacement damage in materials in nuclear fusion facilities (DEMO, IFMIF and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.9	21
62	The IFMIF-EVEDA accelerator beam dump design. Journal of Nuclear Materials, 2011, 417, 1275-1279.	2.7	15
63	IFMIF suitability for evaluation of fusion functional materials. Journal of Nuclear Materials, 2011, 417, 1316-1320.	2.7	11
64	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
65	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
66	Confinement transitions in TJ-II under Li-coated wall conditions. Nuclear Fusion, 2009, 49, 104018.	3.5	75
67	Tritium permeation experiment at IFMIF Medium Flux Test Module. Fusion Engineering and Design, 2009, 84, 559-564.	1.9	5
68	Feasibility of fission chambers as a neutron diagnostic in the IFMIFâ€"Test Cell. Fusion Engineering and Design, 2009, 84, 1570-1574.	1.9	9
69	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
70	Requirements and ideas for the neutron instrumentation of the IFMIF test facilities. , 2008, , .		0
71	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
72	Overview of TJ-II experiments. Nuclear Fusion, 2007, 47, S677-S685.	3.5	9

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73	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
74	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
75	Effect of suprathermal electrons on the impurity ionization state. Plasma Physics and Controlled Fusion, 2006, 48, 1573-1583.	2.1	13
76	Novel passive spectroscopy system for absolutely referenced plasma rotation measurements in clean plasmas. Review of Scientific Instruments, 2006, 77, 033506.	1.3	14
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	Overview of TJ-II experiments. Nuclear Fusion, 2005, 45, S266-S275.	3.5	37
79	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