Daniel Alegre Castro

List of Publications by Year
in descending order

44 papers	888 citations	567281 15 h-index	477307 29 g-index
44 all docs	44 docs citations	44 times ranked	1364 citing authors

#	Article	IF	Citations
1	Overview of the JET results in support to ITER. Nuclear Fusion, 2017, 57, 102001.	3.5	150
2	Overview of the JET preparation for deuteriumâ€“tritium operation with the ITER like-wall. Nuclear Fusion, 2019, 59, 112021.	3.5	87
3	Plasmaâ€“wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification. Nuclear Fusion, 2017, 57, 116041.	3.5	75
4	Synthesis and luminescence properties of electrodeposited ZnO films. Journal of Applied Physics, 2011, 110, 043538.	2.5	71
5	Overview of the JET results. Nuclear Fusion, 2015, 55, 104001.	3.5	50
6	Enhanced performance in fusion plasmas through turbulence suppression by megaelectronvolt ions. Nature Physics, 2022, 18, 776-782.	16.7	36
7	Plasmaâ€“wall interactions with nitrogen seeding in all-metal fusion devices: Formation of nitrides and ammonia. Fusion Engineering and Design, 2015, 98-99, 1371-1374.	1.9	33
8	First liquid lithium limiter biasing experiments in the TJ-II stellarator. Journal of Nuclear Materials, 2015, 463, 1142-1146.	2.7	30
9	Reactor plasma facing component designs based on liquid metal concepts supported in porous systems. Nuclear Fusion, 2017, 57, 016029.	3.5	30
10	Experimental tests of LiSn alloys as potential liquid metal for the divertor target in a fusion reactor. Nuclear Materials and Energy, 2017, 12, 1368-1373.	1.3	26
11	Overview of TJ-II experiments. Nuclear Fusion, 2011, 51, 094022.	3.5	24
12	Lithium, a path to make fusion energy affordable. Physics of Plasmas, 2021, 28, 050901.	1.9	24
13	Ammonia formation in N2/H2 plasmas on ITER-relevant plasma facing materials: Surface temperature and N2 plasma content effects. Journal of Nuclear Materials, 2015, 463, 676-679.	2.7	22
14	Nitrogen retention mechanisms in tokamaks with beryllium and tungsten plasma-facing surfaces. Physica Scripta, 2016, T167, 014077.	2.5	18
15	Detection of ammonia by residual gas analysis in AUG and JET. Fusion Engineering and Design, 2017, 124, 239-243.	1.9	16
16	3D effects on transport and plasma control in the TJ-II stellarator. Nuclear Fusion, 2017, 57, 102022.	3.5	16
17	Mass spectrometry analysis of the impurity content in N2 seeded discharges in JET-ILW. Journal of Nuclear Materials, 2015, 463, 684-687.	2.7	13
18	Temperature dependence of liquid lithium film formation and deuterium retention on hot W samples studied by LID-QMS. Implications for future fusion reactors. Nuclear Fusion, 2018, 58, 046003.	3.5	13

#	Article	IF	Citations
19	Oxidative removal of tokamak codeposits using NO2 and O2. Journal of Nuclear Materials, 2013, 438, S1104-S1108.	2.7	12
20	Influence of residence time and helium addition in the ammonia formation on tungsten walls in N2H2 glow discharge plasmas. Nuclear Materials and Energy, 2017, 12, 399-404.	1.3	12
21	Overview of recent TJ-II stellarator results. Nuclear Fusion, 2019, 59, 112019.	3.5	12
22	Physisorption of ammonia on AISI 304 L stainless steel at different surface temperature under high vacuum conditions. Nuclear Materials and Energy, 2016, 9, 1-5.	1.3	10
23	Design and Testing of Advanced Liquid Metal Targets for DEMO Divertor: The OLMAT Project. Journal of Fusion Energy, 2020, 39, 411-420.	1.2	10
24	Transport, stability and plasma control studies in the TJ-II stellarator. Nuclear Fusion, 2015, 55, 104014.	3.5	9
25	Overview of the TJ-II stellarator research programme towards model validation in fusion plasmas. Nuclear Fusion, 2022, 62, 042025.	3.5	9
26	Cleaning of carbon materials from flat surfaces and castellation gaps by an atmospheric pressure plasma jet. Fusion Engineering and Design, 2016, 103, 38-44.	1.9	8
27	Role of nitrogen inventory and ion enhanced N-H recombination in the ammonia formation on tungsten walls. A DC glow discharge study. Vacuum, 2018, 151, 66-72.	3.5	8
28	Impact of divertor configuration on recycling neutral fluxes for ITER-like wall in JET H-mode plasmas. Plasma Physics and Controlled Fusion, 2020, 62, 035006.	2.1	8
29	Thermo-chemical fuel removal from porous materials by oxygen and nitrogen dioxide. Physica Scripta, 2014, T159, 014065.	2.5	6
30	Evaluation of the plasma hydrogen isotope content by residual gas analysis at JET and AUG. Physica Scripta, 2017, T170, 014021.	2.5	6
31	A parametric study of helium retention in beryllium and its effect on deuterium retention. Physica Scripta, 2017, T170, 014028.	2.5	6
32	Tritium control techniques in ITER by ammonia injection. Journal of Nuclear Materials, 2011, 415, S793-S796.	2.7	5
33	Dynamics of flows and confinement in the TJ-II stellarator. Nuclear Fusion, 2013, 53, 104016.	3.5	5
34	Surface effects on the diagnostic of carbon/nitrogen lowâ€pressure plasmas studied by differentially pumped mass spectrometry. Journal of Mass Spectrometry, 2014, 49, 342-352.	1.6	5
35	Erosion of a-C:H in the afterglow of ammonia plasma. Journal of Nuclear Materials, 2016, 475, 237-242.	2.7	5
36	Destruction of methane in low-pressure, electrodeless radio frequency plasma on quartz walls. Journal of Applied Physics, 2011, 110, .	2.5	4

#	Article	IF	Citations
37	Studies of lithium deposition and D retention on tungsten samples exposed to Li-seeded plasmas in PISCES-A. Plasma Physics and Controlled Fusion, 2017, 59, 044006.	2.1	4
38	Study of correlation of deuterium content in a-C:D dust induced by laser irradiation from the co-deposited surface with the grain size and velocity. Physica Scripta, 2014, T161, 014010.	2.5	3
39	Thermo-oxidation of carbon codeposits and particles release during laser ablation in an oxygen atmosphere and its extrapolation to ITER codeposits. Fusion Engineering and Design, 2015, 100, 646-651.	1.9	2
40	Hydrogen retention studies on lithiated tungsten exposed to glow discharge plasmas under varying lithiation environments using Thermal Desorption Spectroscopy and mass spectrometry. Fusion Engineering and Design, 2017, 117, 212-216.	1.9	2
41	CIEMAT experimental proposal on lithium ignition in support of DONES licensing (LiFIRE facility). Nuclear Materials and Energy, 2022, 31, 101177.	1.3	2
42	Measurement of sputtered beryllium yield and angular distribution during nanostructure growth in a helium plasma. Journal of Applied Physics, 2017, 122, .	2.5	1
43	Product analysis during the thermo-oxidation of amorphous deuterated hydrocarbon films with NO2. Nuclear Materials and Energy, 2015, 5, 1-6.	1.3	0
44	Spectroscopic Characterization of Ablation Plasmas in the Olmat HHF Facility. , 2022, , .		0