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List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2806354/publications.pdf

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44	869	567281	526287
papers	citations	15 h-index	27 g-index

45	45	45	957
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Overview of the JET results in support to ITER. Nuclear Fusion, 2017, 57, 102001.	3.5	150
2	The impact of the ITER-like wall at JET on disruptions. Plasma Physics and Controlled Fusion, 2012, 54, 124032.	2.1	70
3	Macroscopic rate equation modeling of trapping/detrapping of hydrogen isotopes in tungsten materials. Journal of Nuclear Materials, 2015, 467, 424-431.	2.7	59
4	Characterising dust in JET with the new ITER-like wall. Plasma Physics and Controlled Fusion, 2015, 57, 014037.	2.1	37
5	Retention and release of hydrogen isotopes in tungsten plasma-facing components: the role of grain boundaries and the native oxide layer from a joint experiment-simulation integrated approach. Nuclear Fusion, 2017, 57, 076019.	3.5	33
6	Simulations of atomic deuterium exposure in self-damaged tungsten. Nuclear Fusion, 2017, 57, 056002.	3.5	33
7	Tritium absorption and desorption in ITER relevant materials: comparative study of tungsten dust and massive samples. Journal of Nuclear Materials, 2015, 463, 885-888.	2.7	32
8	Deuterium retention in tungsten simultaneously damaged by high energy W ions and loaded by D atoms. Nuclear Materials and Energy, 2017, 12, 169-174.	1.3	28
9	Study of hydrogen isotopes behavior in tungsten by a multi trapping macroscopic rate equation model. Physica Scripta, 2016, T167, 014011.	2.5	27
10	Surface coverage dependent mechanisms for the absorption and desorption of hydrogen from the W(1â€‰1â€‰0) and W(1â€‰0â€‰0) surfaces: a density functional theory investigation. Nuclear Fusion, 2019, 59, 106022.	3.5	25
11	Hydrogen supersaturated layers in H/D plasma-loaded tungsten: A global model based on thermodynamics, kinetics and density functional theory data. Physical Review Materials, 2018, 2, .	2.4	22
12	Identification of BeO and BeOxDy in melted zones of the JET Be limiter tiles: Raman study using comparison with laboratory samples. Nuclear Materials and Energy, 2018, 17, 295-301.	1.3	20
13	Impact of W events and dust on JET-ILW operation. Journal of Nuclear Materials, 2015, 463, 837-841.	2.7	19
14	Hydrogen trapping in carbon film: From laboratories studies to tokamak applications. International Journal of Hydrogen Energy, 2014, 39, 20054-20061.	7.1	17
15	Tritium retention in W plasma-facing materials: Impact of the material structure and helium irradiation. Nuclear Materials and Energy, 2019, 19, 403-410.	1.3	17
16	New rate equation model to describe the stabilization of displacement damage by hydrogen atoms during ion irradiation in tungsten. Nuclear Fusion, 2020, 60, 036024.	3.5	16
17	Estimation of the tritium retention in ITER tungsten divertor target using macroscopic rate equations simulations. Physica Scripta, 2017, T170, 014033.	2.5	15
18	Analytical bond order potential for simulations of BeO 1D and 2D nanostructures and plasma-surface interactions. Journal of Physics Condensed Matter, 2018, 30, 135001.	1.8	15

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19	Finite element analysis of hydrogen retention in ITER plasma facing components using FESTIM. Nuclear Materials and Energy, 2019, 21, 100709.	1.3	15
20	Sputtering of beryllium oxide by deuterium at various temperatures simulated with molecular dynamics. Physica Scripta, 2020, T171, 014024.	2.5	15
21	Stabilization of defects by the presence of hydrogen in tungsten: simultaneous W-ion damaging and D-atom exposure. Nuclear Fusion, 2019, 59, 016011.	3.5	14
22	Transient impurity events in JET with the new ITER-like wall. Physica Scripta, 2014, T159, 014014.	2.5	13
23	Hydrogen trapping in tungsten: impact of helium irradiation and thermal cycling. Physica Scripta, 2020, T171, 014066.	2.5	13
24	Dynamic modelling of local fuel inventory and desorption in the whole tokamak vacuum vessel for auto-consistent plasma-wall interaction simulations. Nuclear Materials and Energy, 2019, 19, 550-557.	1.3	12
25	Modelling tritium adsorption and desorption from tungsten dust particles with a surface kinetic model. Nuclear Fusion, 2021, 61, 086030.	3.5	12
26	Kinetic model for hydrogen absorption in tungsten with coverage dependent surface mechanisms. Nuclear Fusion, 2020, 60, 106011.	3.5	11
27	Parametric study of hydrogenic inventory in the ITER divertor based on machine learning. Scientific Reports, 2020, 10, 17798.	3.3	11
28	H-mode WEST tungsten divertor operation: deuterium and nitrogen seeded simulations with SOLEDGE2D-EIRENE. Nuclear Materials and Energy, 2017, 12, 187-192.	1.3	9
29	Comparison of dynamic deuterium retention in single-crystal and poly-crystals of tungsten: The role of natural defects. Nuclear Instruments & Methods in Physics Research B, 2019, 461, 159-165.	1.4	9
30	Molecular dynamics simulation of beryllium oxide irradiated by deuterium ions: sputtering and reflection. Journal of Physics Condensed Matter, 2019, 31, 185001.	1.8	9
31	Modelling of hydrogen isotopes trapping, diffusion and permeation in divertor monoblocks under ITER-like conditions. Nuclear Fusion, 2021, 61, 126003.	3.5	9
32	Fuel retention in WEST and ITER divertors based on FESTIM monoblock simulations. Nuclear Fusion, 2021, 61, 126001.	3.5	9
33	Hydrogen in beryllium oxide investigated by DFT: on the relative stability of charged-state atomic versus molecular hydrogen. Journal of Physics Condensed Matter, 2018, 30, 305201.	1.8	8
34	Influence of interface conditions on hydrogen transport studies. Nuclear Fusion, 2021, 61, 036038.	3.5	8
35	Predictive Atomistic Model for Hydrogen Adsorption on Metal Surfaces: Comparison with Low-Energy Ion Beam Analysis on Tungsten. Journal of Physical Chemistry C, 2021, 125, 16086-16096.	3.1	8
36	Rate equations modeling for hydrogen inventory studies during a real tokamak material thermal cycle. Journal of Nuclear Materials, 2015, 463, 970-973.	2.7	7

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37	Design of model tokamak particles for future toxicity studies: Morphology and physical characterization. Fusion Engineering and Design, 2019, 145, 60-65.	1.9	6
38	Parametric optimisation based on TDS experiments for rapid and efficient identification of hydrogen transport materials properties. Nuclear Materials and Energy, 2021, 27, 100984.	1.3	6
39	Influence of exposure conditions on helium transport and bubble growth in tungsten. Scientific Reports, 2021, 11, 14681.	3.3	6
40	Permeation and trapping of hydrogen in Eurofer97. Nuclear Materials and Energy, 2021, 29, 101062.	1.3	6
41	Deuterium and helium outgassing following plasma discharges in WEST: Delayed D outgassing during D-to-He changeover experiments studied with threshold ionization mass spectrometry. Nuclear Materials and Energy, 2021, 26, 100885.	1.3	5
42	Influence of hydrogen trapping on WCLL breeding blanket performances. Nuclear Fusion, 0, , .	3.5	5
43	Influence of traps reversibility on hydrogen permeation and retention in Eurofer97. Nuclear Fusion, 2022, 62, 086011.	3.5	3
44	Wall surface temperature calculation in the SolEdge2D-EIRENE transport code. Physica Scripta, 2016, T167, 014073.	2.5	2