

# Gregory De Temmerman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4393818/publications.pdf>

Version: 2024-02-01

193  
papers

5,411  
citations

87888

38  
h-index

123424

61  
g-index

194  
all docs

194  
docs citations

194  
times ranked

2809  
citing authors

#	ARTICLE	IF	CITATIONS
1	Physics basis for the first ITER tungsten divertor. Nuclear Materials and Energy, 2019, 20, 100696.	1.3	307
2	Research status and issues of tungsten plasma facing materials for ITER and beyond. Fusion Engineering and Design, 2014, 89, 901-906.	1.9	246
3	The influence of plasma-surface interaction on the performance of tungsten at the ITER divertor vertical targets. Plasma Physics and Controlled Fusion, 2018, 60, 044018.	2.1	149
4	Physics conclusions in support of ITER W divertor monoblock shaping. Nuclear Materials and Energy, 2017, 12, 60-74.	1.3	128
5	Nanostructuring of molybdenum and tungsten surfaces by low-energy helium ions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	119
6	High heat flux capabilities of the Magnum-PSI linear plasma device. Fusion Engineering and Design, 2013, 88, 483-487.	1.9	103
7	Ultrafine tungsten as a plasma-facing component in fusion devices: effect of high flux, high fluence low energy helium irradiation. Nuclear Fusion, 2014, 54, 083013.	3.5	101
8	Efficient Plasma Route to Nanostructure Materials: Case Study on the Use of m-WO <sub>3</sub> for Solar Water Splitting. ACS Applied Materials & Interfaces, 2013, 5, 7621-7625.	8.0	96
9	Helium effects on tungsten under fusion-relevant plasma loading conditions. Journal of Nuclear Materials, 2013, 438, S78-S83.	2.7	89
10	Helium effects on tungsten surface morphology and deuterium retention. Journal of Nuclear Materials, 2013, 442, S267-S272.	2.7	83
11	ELM simulation experiments on Pilot-PSI using simultaneous high flux plasma and transient heat/particle source. Nuclear Fusion, 2011, 51, 073008.	3.5	82
12	Comparison of tungsten nano-tendrils grown in Alcator C-Mod and linear plasma devices. Journal of Nuclear Materials, 2013, 438, S84-S89.	2.7	70
13	The role of beryllium deuteride in plasma-beryllium interactions. Journal of Nuclear Materials, 2009, 390-391, 681-684.	2.7	68
14	An empirical scaling for deuterium retention in co-deposited beryllium layers. Nuclear Fusion, 2008, 48, 075008.	3.5	66
15	Thermal response of nanostructured tungsten. Nuclear Fusion, 2014, 54, 033005.	3.5	66
16	Codeposition of deuterium with ITER materials. Nuclear Fusion, 2009, 49, 035002.	3.5	65
17	Surface morphology and deuterium retention in tungsten exposed to high flux D plasma at high temperatures. Journal of Nuclear Materials, 2015, 457, 213-219.	2.7	63
18	Efficiency of thermal outgassing for tritium retention measurement and removal in ITER. Nuclear Materials and Energy, 2017, 12, 267-272.	1.3	63

#	ARTICLE	IF	CITATIONS
19	Power distribution in the snowflake divertor in TCV. Plasma Physics and Controlled Fusion, 2013, 55, 124027.	2.1	59
20	Deuterium retention and release in tungsten co-deposited layers. Journal of Nuclear Materials, 2009, 389, 479-483.	2.7	55
21	Observations of orientation dependence of surface morphology in tungsten implanted by low energy and high flux D plasma. Journal of Nuclear Materials, 2013, 443, 452-457.	2.7	55
22	Design optimization of the ITER tungsten divertor vertical targets. Fusion Engineering and Design, 2018, 127, 66-72.	1.9	55
23	Analyses of metallic first mirror samples after long term plasma exposure in Tore Supra. Fusion Engineering and Design, 2006, 81, 221-225.	1.9	54
24	Rhodium coated mirrors deposited by magnetron sputtering for fusion applications. Review of Scientific Instruments, 2007, 78, 103507.	1.3	53
25	Overview of JET results for optimising ITER operation. Nuclear Fusion, 2022, 62, 042026.	3.5	52
26	Characterization of magnetron sputtered rhodium films for reflective coatings. Surface and Coatings Technology, 2008, 202, 2837-2843.	4.8	50
27	The effect of high-flux H plasma exposure with simultaneous transient heat loads on tungsten surface damage and power handling. Nuclear Fusion, 2014, 54, 123010.	3.5	49
28	Investigations of single crystal and polycrystalline metal mirrors under erosion conditions in TEXTOR. Fusion Engineering and Design, 2007, 82, 123-132.	1.9	48
29	Strike-point splitting induced by external magnetic perturbations: Observations on JET and MAST and associated modelling. Journal of Nuclear Materials, 2011, 415, S914-S917.	2.7	48
30	First tests of molybdenum mirrors for ITER diagnostics in DIII-D divertor. Review of Scientific Instruments, 2006, 77, 10F126.	1.3	46
31	Mirror test for International Thermonuclear Experimental Reactor at the JET tokamak: An overview of the program. Review of Scientific Instruments, 2006, 77, 063501.	1.3	45
32	Impact of combined transient plasma/heat loads on tungsten performance below and above recrystallization temperature. Nuclear Fusion, 2015, 55, 123004.	3.5	45
33	Dust creation and transport in MAST. Nuclear Fusion, 2010, 50, 105012.	3.5	44
34	Impact of combined hydrogen plasma and transient heat loads on the performance of tungsten as plasma facing material. Nuclear Fusion, 2015, 55, 123017.	3.5	44
35	Mechanism for orientation dependence of blisters on W surface exposed to D plasma at low temperature. Journal of Nuclear Materials, 2016, 477, 165-171.	2.7	44
36	An overview of a comprehensive First Mirror Test for ITER at JET. Journal of Nuclear Materials, 2009, 390-391, 1066-1069.	2.7	40

#	ARTICLE	IF	CITATIONS
37	Nanostructuring of Iron Surfaces by Low-Energy Helium Ions. ACS Applied Materials & Interfaces, 2014, 6, 3462-3468.	8.0	40
38	Edge localized mode control experiments on MAST using resonant magnetic perturbations from in-vessel coils. Plasma Physics and Controlled Fusion, 2009, 51, 124010.	2.1	39
39	Surface Modifications Induced by High Fluxes of Low Energy Helium Ions. Scientific Reports, 2015, 5, 9779.	3.3	39
40	Operating a full tungsten actively cooled tokamak: overview of WEST first phase of operation. Nuclear Fusion, 2022, 62, 042007.	3.5	39
41	First tests of diagnostic mirrors in a tokamak divertor: An overview of experiments in DIII-D. Fusion Engineering and Design, 2008, 83, 79-89.	1.9	37
42	Properties of BeD molecules in edge plasma relevant conditions. Plasma Physics and Controlled Fusion, 2008, 50, 125007.	2.1	37
43	Influence of tungsten microstructure and ion flux on deuterium plasma-induced surface modifications and deuterium retention. Journal of Nuclear Materials, 2015, 463, 320-324.	2.7	37
44	A growth/annealing equilibrium model for helium-induced nanostructure with application to ITER. Nuclear Materials and Energy, 2019, 19, 255-261.	1.3	37
45	Nanocrystalline diamond coating of fusion plasma facing components. Diamond and Related Materials, 2009, 18, 740-744.	3.9	36
46	New linear plasma devices in the trilateral euregio cluster for an integrated approach to plasma surface interactions in fusion reactors. Fusion Engineering and Design, 2011, 86, 1797-1800.	1.9	36
47	Thermal shock behaviour of tungsten after high flux H-plasma loading. Journal of Nuclear Materials, 2013, 443, 497-501.	2.7	36
48	Early stage damage of ultrafine-grained tungsten materials exposed to low energy helium ion irradiation. Fusion Engineering and Design, 2015, 93, 9-14.	1.9	36
49	Response of tungsten surfaces to helium and hydrogen plasma exposure under ITER relevant steady state and repetitive transient conditions. Nuclear Fusion, 2017, 57, 126009.	3.5	35
50	A high-repetition rate edge localised mode replication system for the Magnum-PSI and Pilot-PSI linear devices. Plasma Physics and Controlled Fusion, 2014, 56, 095004.	2.1	33
51	Exposure of metal mirrors in the scrape-off layer of TEXTOR. Journal of Nuclear Materials, 2005, 337-339, 1116-1120.	2.7	32
52	Revised scaling equation for the prediction of tritium retention in beryllium co-deposited layers. Nuclear Fusion, 2009, 49, 042002.	3.5	32
53	Blistering on tungsten surface exposed to high flux deuterium plasma. Journal of Nuclear Materials, 2016, 471, 51-58.	2.7	31
54	Retarded recrystallization of helium-exposed tungsten. Nuclear Fusion, 2018, 58, 106011.	3.5	31

#	ARTICLE	IF	CITATIONS
55	Plasma-assisted catalytic formation of ammonia in N <sub>2</sub> -H <sub>2</sub> plasma on a tungsten surface. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 16623-16633.	2.8	31
56	Removal of beryllium-containing films deposited in JET from mirror surfaces by laser cleaning. <i>Journal of Nuclear Materials</i> , 2011, 415, S1199-S1202.	2.7	30
57	Helium concentration in tungsten nano-tendrils surface morphology using Elastic Recoil Detection. <i>Journal of Nuclear Materials</i> , 2013, 438, S913-S916.	2.7	30
58	Characterization of sub-stoichiometric rhodium oxide deposited by magnetron sputtering. <i>Surface Science</i> , 2008, 602, 3375-3380.	1.9	29
59	Operational characteristics of the high flux plasma generator Magnum-PSI. <i>Fusion Engineering and Design</i> , 2014, 89, 2150-2154.	1.9	29
60	Insight into the co-deposition of deuterium with beryllium: Influence of the deposition conditions on the deuterium retention and release. <i>Journal of Nuclear Materials</i> , 2009, 390-391, 564-567.	2.7	28
61	Effect of rhenium addition on tungsten fuzz formation in helium plasmas. <i>Journal of Nuclear Materials</i> , 2016, 474, 99-104.	2.7	28
62	Erosion yields of deposited beryllium layers. <i>Journal of Nuclear Materials</i> , 2009, 390-391, 132-135.	2.7	27
63	Interaction of a tin-based capillary porous structure with ITER/DEMO relevant plasma conditions. <i>Journal of Nuclear Materials</i> , 2015, 463, 1256-1259.	2.7	27
64	Synergy of plastic deformation and gas retention in tungsten. <i>Nuclear Fusion</i> , 2015, 55, 013007.	3.5	27
65	The occurrence and damage of unipolar arcing on fuzzy tungsten. <i>Journal of Nuclear Materials</i> , 2015, 463, 303-307.	2.7	27
66	Interaction of adhered metallic dust with transient plasma heat loads. <i>Nuclear Fusion</i> , 2016, 56, 066010.	3.5	27
67	Mitigated blistering and deuterium retention in tungsten exposed to high-flux deuterium-neon mixed plasmas. <i>Nuclear Fusion</i> , 2017, 57, 046028.	3.5	26
68	Highly resolved measurements of dust motion in the sheath boundary of magnetized plasmas. <i>Nuclear Fusion</i> , 2015, 55, 112001.	3.5	25
69	Effect of neon plasma pre-irradiation on surface morphology and deuterium retention of tungsten. <i>Journal of Nuclear Materials</i> , 2015, 463, 1025-1028.	2.7	25
70	LIBS analysis of tungsten coatings exposed to Magnum PSI ELM-like plasma. <i>Journal of Nuclear Materials</i> , 2015, 463, 919-922.	2.7	25
71	Long-term fuel retention and release in JET ITER-Like Wall at ITER-relevant baking temperatures. <i>Nuclear Fusion</i> , 2017, 57, 086024.	3.5	25
72	Recrystallization at high temperature of two tungsten materials complying with the ITER specifications. <i>Journal of Nuclear Materials</i> , 2020, 542, 152418.	2.7	25

#	ARTICLE	IF	CITATIONS
73	Advanced divertor configurations with large flux expansion. Journal of Nuclear Materials, 2013, 438, S96-S101.	2.7	24
74	Nanostructures and pinholes on W surfaces exposed to high flux D plasma at high temperatures. Journal of Nuclear Materials, 2015, 463, 312-315.	2.7	24
75	Study of deuterium retention on lithiated tungsten exposed to high-flux deuterium plasma using laser-induced breakdown spectroscopy. Fusion Engineering and Design, 2014, 89, 949-954.	1.9	23
76	Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution <sup>a</sup>. Nuclear Fusion, 2017, 57, 102014.	3.5	23
77	Survival and in-vessel redistribution of beryllium droplets after ITER disruptions. Nuclear Fusion, 2018, 58, 076008.	3.5	23
78	Erosion of lithium coatings on TZM molybdenum and graphite during high-flux plasma bombardment. Fusion Engineering and Design, 2014, 89, 2857-2863.	1.9	22
79	Evolution of nitrogen concentration and ammonia production in N<sub>2</sub>-seeded H-mode discharges at ASDEX Upgrade. Nuclear Fusion, 2019, 59, 046010.	3.5	22
80	ITER monoblock performance under lifetime loading conditions in Magnum-PSI. Physica Scripta, 2020, T171, 014065.	2.5	22
81	Investigation of plasma wall interactions between tungsten plasma facing components and helium plasmas in the WEST tokamak. Nuclear Fusion, 2022, 62, 076028.	3.5	22
82	Overview of physics results from MAST towards ITER/DEMO and the MAST Upgrade. Nuclear Fusion, 2013, 53, 104008.	3.5	21
83	Effect of high-flux H/He plasma exposure on tungsten damage due to transient heat loads. Journal of Nuclear Materials, 2015, 463, 198-201.	2.7	21
84	Investigation of arcing on fiber-formed nanostructured tungsten by pulsed plasma during steady state plasma irradiation. Fusion Engineering and Design, 2016, 112, 156-161.	1.9	21
85	Data on erosion and hydrogen fuel retention in Beryllium plasma-facing materials. Nuclear Materials and Energy, 2021, 27, 100994.	1.3	21
86	Analyses of dust samples collected in the MAST tokamak. Journal of Nuclear Materials, 2010, 401, 130-137.	2.7	20
87	Overview of the second stage in the comprehensive mirrors test in JET. Physica Scripta, 2011, T145, 014070.	2.5	20
88	Spontaneous synthesis of carbon nanowalls, nanotubes and nanotips using high flux density plasmas. Carbon, 2014, 68, 695-707.	10.3	20
89	Tungsten dust remobilization under steady-state and transient plasma conditions. Nuclear Materials and Energy, 2017, 12, 569-574.	1.3	20
90	Characterization and origin of large size dust particles produced in the Alcator C-Mod tokamak. Nuclear Materials and Energy, 2017, 11, 12-19.	1.3	20

#	ARTICLE	IF	CITATIONS
91	Sub-surface microstructure of single and polycrystalline tungsten after high flux plasma exposure studied by TEM. <i>Applied Surface Science</i> , 2017, 393, 330-339.	6.1	20
92	Blister-dominated retention mechanism in tungsten exposed to high-fluence deuterium plasma. <i>Nuclear Fusion</i> , 2020, 60, 126034.	3.5	20
93	Dust investigations in TEXTOR: Impact of dust on plasma-wall interactions and on plasma performance. <i>Journal of Nuclear Materials</i> , 2013, 438, S126-S132.	2.7	19
94	The effect of transient temporal pulse shape on surface temperature and tungsten damage. <i>Nuclear Fusion</i> , 2015, 55, 093027.	3.5	19
95	Elastic-plastic adhesive impacts of tungsten dust with metal surfaces in plasma environments. <i>Journal of Nuclear Materials</i> , 2015, 463, 877-880.	2.7	19
96	Investigation of He-W interactions using DiMES on DIII-D. <i>Physica Scripta</i> , 2016, T167, 014054.	2.5	19
97	Observation of a helium ion energy threshold for retention in tungsten exposed to hydrogen/helium mixture plasma. <i>Nuclear Fusion</i> , 2016, 56, 104002.	3.5	19
98	Plasma expansion synthesis of tungsten nanopowder. <i>Journal of Alloys and Compounds</i> , 2017, 725, 606-615.	5.5	19
99	Similarities and differences between dust produced in laboratory plasmas and in the MAST and Tore Supra tokamaks. <i>Plasma Physics and Controlled Fusion</i> , 2010, 52, 124007.	2.1	18
100	Surface modification of He pre-exposed tungsten samples by He plasma impact in the divertor manipulator of ASDEX Upgrade. <i>Nuclear Materials and Energy</i> , 2017, 12, 575-581.	1.3	18
101	Surface modifications and deuterium retention in polycrystalline and single crystal tungsten as a function of particle flux and temperature. <i>Journal of Nuclear Materials</i> , 2017, 495, 211-219.	2.7	18
102	Suppression of deuterium-induced blistering in pre-damaged tungsten exposed to short-duration deuterium plasma. <i>Journal of Nuclear Materials</i> , 2018, 500, 295-300.	2.7	18
103	First analysis of the misaligned leading edges of ITER-like plasma facing units using a very high resolution infrared camera in WEST. <i>Nuclear Fusion</i> , 2020, 60, 106020.	3.5	18
104	Surface analysis of CVD diamond exposed to fusion plasma. <i>Diamond and Related Materials</i> , 2010, 19, 818-823.	3.9	16
105	Evolution of transiently melt damaged tungsten under ITER-relevant divertor plasma heat loading. <i>Journal of Nuclear Materials</i> , 2015, 463, 193-197.	2.7	16
106	Collective Thomson scattering system for determination of ion properties in a high flux plasma beam. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	16
107	Plasma-wall interaction studies in the full-W ASDEX upgrade during helium plasma discharges. <i>Nuclear Fusion</i> , 2017, 57, 066015.	3.5	16
108	RF discharge mirror cleaning system development for ITER diagnostics. <i>Fusion Engineering and Design</i> , 2021, 164, 112162.	1.9	16

#	ARTICLE	IF	CITATIONS
109	First Mirrors Test in JET for ITER: An overview of optical performance and surface morphology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 623, 818-822.	1.6	15
110	Deuterium blistering in tungsten and tungsten vanadium alloys. Fusion Engineering and Design, 2016, 107, 25-31.	1.9	15
111	Laser-Induced Desorption of co-deposited Deuterium in Beryllium Layers on Tungsten. Nuclear Materials and Energy, 2019, 19, 503-509.	1.3	15
112	Numerical simulation by finite element modelling of diffusion and transient hydrogen trapping processes in plasma facing components. Nuclear Materials and Energy, 2019, 19, 42-46.	1.3	15
113	The target for the new plasma/wall experiment Magnum-PSI. Fusion Engineering and Design, 2011, 86, 1745-1748.	1.9	14
114	Performances of Rh and Mo mirrors under JET exposure. Journal of Nuclear Materials, 2013, 438, S1187-S1191.	2.7	14
115	Tailoring the charged particle fluxes across the target surface of Magnum-PSI. Plasma Sources Science and Technology, 2016, 25, 025023.	3.1	14
116	Strong sub-surface plastic deformation induced by high flux plasma in tungsten. Fusion Engineering and Design, 2017, 124, 405-409.	1.9	14
117	ELM-induced arcing on tungsten fuzz in the COMPASS divertor region. Journal of Nuclear Materials, 2017, 492, 204-212.	2.7	14
118	WallDYN simulations of material migration and fuel retention in ITER low power H plasmas and high power neon-seeded DT plasmas. Nuclear Materials and Energy, 2019, 20, 100674.	1.3	14
119	Recrystallization-mediated crack initiation in tungsten under simultaneous high-flux hydrogen plasma loads and high-cycle transient heating. Nuclear Fusion, 2021, 61, 046018.	3.5	14
120	Heat load asymmetries in MAST. Journal of Nuclear Materials, 2011, 415, S383-S386.	2.7	13
121	Erosion yields of carbon under various plasma conditions in Pilot-PSI. Journal of Nuclear Materials, 2011, 415, S149-S152.	2.7	13
122	Deuterium retention in tungsten exposed to mixed D + N plasma at divertor relevant fluxes in Magnum-PSI. Journal of Nuclear Materials, 2015, 463, 974-978.	2.7	13
123	Dislocation-mediated trapping of deuterium in tungsten under high-flux high-temperature exposures. Journal of Nuclear Materials, 2016, 479, 307-315.	2.7	13
124	Power deposition on misaligned castellated tungsten blocks in the Magnum-PSI and Pilot-PSI linear devices. Nuclear Fusion, 2017, 57, 126025.	3.5	13
125	Mechanical properties of tungsten following rhenium ion and helium plasma exposure. Nuclear Materials and Energy, 2017, 12, 1336-1341.	1.3	13
126	Plasma-activated catalytic formation of ammonia from $N_2$ and $H_2$ : influence of temperature and noble gas addition. Nuclear Fusion, 2020, 60, 016026.	3.5	13



#	ARTICLE	IF	CITATIONS
127	Fracture behavior of tungsten-based composites exposed to steady-state/transient hydrogen plasma. Nuclear Fusion, 2020, 60, 046029.	3.5	13
128	First mirror erosion/deposition studies in JET using an ITER-like mirror test assembly. Nuclear Fusion, 2021, 61, 046022.	3.5	13
129	Substrate-dependent deposition efficiency on mirrors exposed in the TCV divertor. Fusion Engineering and Design, 2008, 83, 30-38.	1.9	12
130	Thermographic determination of the sheath heat transmission coefficient in a high density plasma. Journal of Nuclear Materials, 2013, 438, S431-S434.	2.7	12
131	Reduced damage threshold for tungsten using combined steady state and transient sources. Journal of Nuclear Materials, 2013, 438, S784-S787.	2.7	12
132	Modeling the reduction of gross lithium erosion observed under high-flux deuterium bombardment. Journal of Nuclear Materials, 2015, 463, 1169-1172.	2.7	12
133	Deuterium-induced nanostructure formation on tungsten exposed to high-flux plasma. Journal of Nuclear Materials, 2015, 463, 308-311.	2.7	12
134	Three mechanisms of hydrogen-induced dislocation pinning in tungsten. Nuclear Fusion, 2020, 60, 086015.	3.5	12
135	Multidimensional finite-element simulations of the diffusion and trapping of hydrogen in plasma-facing components including thermal expansion. Physica Scripta, 2020, T171, 014011.	2.5	12
136	Interpretation of Tore Supra in-vessel mirror experiments. Plasma Devices and Operations, 2008, 16, 1-10.	0.6	11
137	Characterizing the recovery of a solid surface after tungsten nano-tendrils formation. Journal of Nuclear Materials, 2015, 463, 294-298.	2.7	11
138	Surface morphology changes and deuterium retention in Toughened, Fine-grained Recrystallized Tungsten under high-flux irradiation conditions. Journal of Nuclear Materials, 2015, 463, 1037-1040.	2.7	11
139	Parametric study of hydrogenic inventory in the ITER divertor based on machine learning. Scientific Reports, 2020, 10, 17798.	3.3	11
140	Deuterium retention in Be-D co-deposits formed over an ITER relevant parameter space. Physica Scripta, 2020, T171, 014014.	2.5	11
141	Efficiency of laser-induced desorption of D from Be/D layers and surface modifications due to LID. Physica Scripta, 2020, T171, 014075.	2.5	11
142	Chemical sputtering of graphite by low temperature nitrogen plasmas at various substrate temperatures and ion flux densities. Journal of Applied Physics, 2013, 114, .	2.5	10
143	Self-shielding of a plasma-exposed surface during extreme transient heat loads. Applied Physics Letters, 2014, 104, 124102.	3.3	10
144	Quartz micro-balance and in situ XPS study of the adsorption and decomposition of ammonia on gold, tungsten, boron, beryllium and stainless steel surfaces. Nuclear Fusion, 2018, 58, 106012.	3.5	10

#	ARTICLE	IF	CITATIONS
145	Temperature dependence of retarded recrystallisation in helium plasma-exposed tungsten. Nuclear Fusion, 2019, 59, 096031.	3.5	10
146	Cross-section analysis of the Magnum-PSI plasma beam using a 2D multi-probe system. Plasma Sources Science and Technology, 2015, 24, 015014.	3.1	9
147	Experimental investigation of neon seeding in the snowflake configuration in TCV. Journal of Nuclear Materials, 2015, 463, 1196-1199.	2.7	9
148	Beryllium layer response to ITER-like ELM plasma pulses in QSPA-Be. Nuclear Materials and Energy, 2017, 12, 433-440.	1.3	9
149	Combined high fluence and high cycle number transient loading of ITER-like monoblocks in Magnum-PSI. Nuclear Fusion, 2021, 61, 116045.	3.5	9
150	Fuel retention in WEST and ITER divertors based on FESTIM monoblock simulations. Nuclear Fusion, 2021, 61, 126001.	3.5	9
151	Long discharges in a steady state with $D_{2}$ and $N_{2}$ on the actively cooled tungsten upper divertor in WEST. Nuclear Fusion, 2020, 60, 126046.	3.5	9
152	Remobilization of tungsten dust from castellated plasma-facing components. Nuclear Materials and Energy, 2017, 12, 536-540.	1.3	8
153	Scanning electron microscopy analyses of an ITER plasma-facing unit mockup exposed to extreme ion fluences in Magnum-PSI. Physica Scripta, 2020, T171, 014026.	2.5	8
154	Influence of interface conditions on hydrogen transport studies. Nuclear Fusion, 2021, 61, 036038.	3.5	8
155	Diamond coatings exposure to fusion-relevant plasma conditions. Journal of Nuclear Materials, 2011, 415, S161-S164.	2.7	7
156	Erosion of marker coatings exposed to Pilot-PSI plasma. Journal of Nuclear Materials, 2013, 438, S754-S757.	2.7	7
157	Laser-based diagnostics applications for plasma-surface interaction studies. Journal of Instrumentation, 2013, 8, C11011-C11011.	1.2	7
158	Sticking Probability of Ammonia Molecules on Tungsten and 316L Stainless Steel Surfaces. Journal of Physical Chemistry C, 2020, 124, 17566-17577.	3.1	7
159	Effect of helium ion irradiation on tungsten recrystallization. Physica Scripta, 2020, T171, 014004.	2.5	7
160	Pilot experiments for the International Thermonuclear Experimental Reactor active beam spectroscopy diagnostic. Review of Scientific Instruments, 2004, 75, 3458-3461.	1.3	6
161	Assessment of cleaning methods for first mirrors tested in JET for ITER. Journal of Nuclear Materials, 2013, 438, S1241-S1244.	2.7	6
162	Thermal shock behaviour of blisters on W surface during combined steady-state/pulsed plasma loading. Nuclear Fusion, 2015, 55, 113015.	3.5	6

#	ARTICLE	IF	CITATIONS
163	Plasma pressure and particle loss studies in the Pilot-PSI high flux linear plasma generator. Nuclear Materials and Energy, 2017, 12, 1088-1093.	1.3	6
164	Studies on synthesis of plasma fusion relevant tungsten dust particles and measurement of their hydrogen absorption properties. Fusion Engineering and Design, 2018, 127, 120-126.	1.9	6
165	Density measurements using coherence imaging spectroscopy based on Stark broadening. Review of Scientific Instruments, 2010, 81, 10E521.	1.3	5
166	Production and characterization of transient heat and particle pulses in Pilot-PSI. Journal of Nuclear Materials, 2011, 415, S70-S73.	2.7	5
167	Active control over carbon deposition on diagnostic components and in remote areas of ITER. Journal of Nuclear Materials, 2011, 417, 830-833.	2.7	5
168	Carbon transport and escape fraction in a high density plasma beam. Journal of Nuclear Materials, 2013, 438, S629-S632.	2.7	5
169	High flux irradiations of Li coatings on polycrystalline W and ATJ graphite with D, He, and He-seeded D plasmas at Magnum PSI. Journal of Nuclear Materials, 2015, 463, 1147-1151.	2.7	5
170	Engineering design and analysis of an ITER-like first mirror test assembly on JET. Fusion Engineering and Design, 2017, 123, 1054-1057.	1.9	5
171	Effects of stress-relief pre-annealing on deuterium trapping and diffusion in tungsten. Fusion Engineering and Design, 2017, 125, 526-530.	1.9	5
172	Design, development and recent experiments of the CIMPLE-PSI device. Nuclear Fusion, 2019, 59, 112008.	3.5	5
173	CRDS modelling of deuterium release from co-deposited beryllium layers in temperature programmed and laser induced desorption experiments. Physica Scripta, 2020, T171, 014053.	2.5	5
174	First plasma exposure of a pre-damaged ITER-like plasma-facing unit in the WEST tokamak: procedure for the PFU preparation and lessons learned. Nuclear Fusion, 2022, 62, 056010.	3.5	5
175	Microstructure and nano-hardness of single crystal tungsten exposed to high flux deuterium plasma. Physica Scripta, 2017, T170, 014064.	2.5	4
176	Accumulation of beryllium dust in ITER diagnostic ports after off-normal events. Nuclear Materials and Energy, 2019, 20, 100684.	1.3	4
177	Power deposition behavior of high-density transient hydrogen plasma on tungsten in Magnum-PSI. Plasma Physics and Controlled Fusion, 2021, 63, 085016.	2.1	4
178	Very high-resolution infrared imagery of misaligned tungsten monoblock edge heating in the WEST tokamak. Nuclear Materials and Energy, 2021, 27, 100910.	1.3	4
179	Impact of H-mode plasma operation on pre-damaged tungsten divertor tiles in ASDEX Upgrade. Physica Scripta, 2020, T171, 014037.	2.5	4
180	Nitrogen retention and ammonia production on tungsten. Nuclear Fusion, 2021, 61, 126067.	3.5	4

#	ARTICLE	IF	CITATIONS
181	Identifying microstructural changes responsible for retarded grain growth during tungsten recrystallization after helium plasma exposure. Journal of Nuclear Materials, 2022, 559, 153448.	2.7	4
182	Improved scaling law for the prediction of deuterium retention in beryllium co-deposits. Nuclear Fusion, 2022, 62, 036006.	3.5	4
183	Optimization of tungsten castellated structures for the ITER divertor. Journal of Nuclear Materials, 2015, 463, 174-179.	2.7	3
184	Plasma temperature rise toward the plasma-facing surface. Journal of Nuclear Materials, 2015, 463, 440-444.	2.7	3
185	Development of a plasma assisted ITER level controlled heat source and observation of novel micro/nanostructures produced upon exposure of tungsten targets. Fusion Engineering and Design, 2016, 106, 63-70.	1.9	3
186	Deuterium removal from beryllium co-deposits by simulated strike-point sweeping. Nuclear Materials and Energy, 2020, 24, 100750.	1.3	3
187	Carbon migration during methane injection experiments under ITER divertor-relevant conditions. Journal of Nuclear Materials, 2013, 438, S686-S689.	2.7	2
188	Synergistic effects of hydrogen plasma exposure, pulsed laser heating and temperature on rhodium surfaces. Journal of Nuclear Materials, 2013, 432, 388-394.	2.7	2
189	Helium irradiation effects on the surface modification and recrystallization of tungsten. Physica Scripta, 2020, T171, 014050.	2.5	2
190	Exposure of Indian RAFM under variation of He <sup>+</sup> flux and target temperature in the CIRCLE-PSI linear device. Nuclear Fusion, 2020, 60, 106026.	3.5	2
191	TMAP modeling of D release from baked multi-layer Be-D co-deposits. Physica Scripta, 2020, T171, 014043.	2.5	2
192	Materials research under ITER-like divertor conditions at FOM Rijnhuizen. Journal of Nuclear Materials, 2011, 417, 457-462.	2.7	1
193	The influence of D <sub>2</sub> pressure on D retention and release from Be co-deposits. Nuclear Materials and Energy, 2021, 28, 101023.	1.3	1