Wolfgang Jacob

List of Publications by Year
in descending order

173 papers	5,942 citations	61977 43 h-index	95259 68 g-index
175 all docs	175 docs citations	175 times ranked	2792 citing authors

#	Article	IF	Citations
1	Surface reactions during growth and erosion of hydrocarbon films. Thin Solid Films, 1998, 326, 1-42.	1.8	347
2	In-vessel tritium retention and removal in ITER. Journal of Nuclear Materials, 1999, 266-269, 14-29.	2.7	232
3	Plasma chemical vapor deposition of hydrocarbon films: The influence of hydrocarbon source gas on the film properties. Journal of Applied Physics, 1999, 86, 3988-3996.	2.5	221
4	On the structure of thin hydrocarbon films. Applied Physics Letters, 1993, 63, 1771-1773.	3.3	197
5	Growth and erosion of hydrocarbon films investigated by in situ ellipsometry. Journal of Applied Physics, 1996, 79, 1092.	2.5	129
6	Chemical sputtering of hydrocarbon films. Journal of Applied Physics, 2003, 94, 2373-2380.	2.5	109
7	Bulk, surface and thermal effects in inverse photoemission spectra from Cu(100), Cu(110) and Cu(111). European Physical Journal B, 1986, 63, 459-470.	1.5	104
8	Influence of the ion energy on the growth and structure of thin hydrocarbon films. Journal of Applied Physics, 1993, 74, 1354-1361.	2.5	102
9	Surface loss probabilities of hydrocarbon radicals on amorphous hydrogenated carbon film surfaces: Consequences for the formation of re-deposited layers in fusion experiments. Nuclear Fusion, 1999, 39, 1451-1462.	3.5	99
10	Quantification of the deuterium ion fluxes from a plasma source. Plasma Sources Science and Technology, 2011, 20, 015010.	3.1	95
11	Influence of the microstructure on the deuterium retention in tungsten. Journal of Nuclear Materials, 2011, 415, S632-S635.	2.7	92
12	Surface loss probabilities of hydrocarbon radicals on amorphous hydrogenated carbon film surfaces. Journal of Applied Physics, 2000, 87, 2719-2725.	2.5	89
13	Experimental determination of the absorption strength of Câ€“H vibrations for infrared analysis of hydrogenated carbon films. Applied Physics Letters, 1996, 68, 475-477.	3.3	87
14	Tritium retention in next step devices and the requirements for mitigation and removal techniques. Plasma Physics and Controlled Fusion, 2006, 48, B189-B199.	2.1	83
15	Atomic adsorption of oxygen on Cu(111) and Cu(110). Applied Physics A: Solids and Surfaces, 1986, 41, 145-150.	1.4	81
16	Direct identification of the synergism between methyl radicals and atomic hydrogen during growth of amorphous hydrogenated carbon films. Applied Physics Letters, 2000, 76, 676-678.	3.3	77
17	Plasmaâ€“wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification. Nuclear Fusion, 2017, 57, 116041.	3.5	75
18	Redeposition of hydrocarbon layers in fusion devices. Journal of Nuclear Materials, 2005, 337-339, 839-846.	2.7	74

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19	Erosion behavior of soft, amorphous deuterated carbon films by heat treatment in air and under vacuum. Journal of Nuclear Materials, 1999, 264, 56-70.	2.7	73
20	Elementary processes in plasmaâ€“surface interaction: H-atom and ion-induced chemisorption of methyl on hydrocarbon film surfaces. Progress in Surface Science, 2004, 76, 21-54.	8.3	73
21	Interaction of nitrogen plasmas with tungsten. Nuclear Fusion, 2010, 50, 025006.	3.5	73
22	Oxidation and hydrogen isotope exchange in amorphous, deuterated carbon films. Journal of Nuclear Materials, 1997, 245, 66-71.	2.7	71
23	Redeposition of amorphous hydrogenated carbon films during thermal decomposition. Journal of Nuclear Materials, 2008, 376, 160-168.	2.7	67
24	Simultaneous interaction of methyl radicals and atomic hydrogen with amorphous hydrogenated carbon films. Journal of Applied Physics, 2001, 89, 2979-2986.	2.5	65
25	Novel method for absolute quantification of the flux and angular distribution of a radical source for atomic hydrogen. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 995-1001.	2.1	63
26	Erosion of thin hydrogenated carbon films in oxygen, oxygen/hydrogen and water plasmas. Journal of Nuclear Materials, 1999, 264, 48-55.	2.7	60
27	Chemical sputtering of hydrocarbon films by low-energy ArÂion and H atom impact. Nuclear Fusion, 2002, 42, L27-L30.	3.5	58
28	Inverse Photoemission of Adsorbed Xenon Multilayers on Ru(001): Refutation of Final-State Screening Effects. Physical Review Letters, 1986, 57, 1643-1646.	7.8	57
29	Comparing deuterium retention in tungsten films measured by temperature programmed desorption and nuclear reaction analysis. Nuclear Instruments & Methods in Physics Research B, 2013, 300, 54-61.	1.4	55
30	Mechanisms of the Deposition of Hydrogenated Carbon Films. Japanese Journal of Applied Physics, 1995, 34, 2163-2171.	1.5	53
31	Deuterium inventory in Tore Supra: reconciling particle balance and post-mortem analysis. Nuclear Fusion, 2009, 49, 075011.	3.5	53
32	Sputtering of iron, chromium and tungsten by energetic deuterium ion bombardment. Nuclear Materials and Energy, 2016, 8, 1-7.	1.3	53
33	Surface loss probabilities of the dominant neutral precursors for film growth in methane and acetylene discharges. Applied Physics Letters, 1999, 74, 3800-3802.	3.3	52
34	Surface relaxation during plasma-enhanced chemical vapor deposition of hydrocarbon films, investigated byin situellipsometry. Journal of Applied Physics, 1997, 81, 1531-1535.	2.5	51
35	Amorphous hydrogenated carbon films as barrier for gas permeation through polymer films. Diamond and Related Materials, 2000, 9, 1971-1978.	3.9	51
36	Raman spectroscopy investigation of the H content of heated hard amorphous carbon layers. Diamond and Related Materials, 2013, 34, 100-104.	3.9	51

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37	Influence of a direct current bias on the energy of ions from an electron cyclotron resonance plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 434-438.	2.1	50
38	Potassium-induced empty electronic states on Ag(110). Physical Review B, 1987, 35, 5910-5912.	3.2	48
39	Some problems arising due to plasmaâ€"surface interaction for operation of the in-vessel mirrors in a fusion reactor. Journal of Nuclear Materials, 2001, 290-293, 336-340.	2.7	48
40	Ion-induced surface activation, chemical sputtering, and hydrogen release during plasma-assisted hydrocarbon film growth. Journal of Applied Physics, 2005, 97, 094904.	2.5	47
41	Growth precursors for a-C:H film deposition in pulsed inductively coupled methane plasmas. Journal of Applied Physics, 2005, 98, 073302.	2.5	46
42	Measurement and modeling of neutral, radical, and ion densities in H2-N2-Ar plasmas. Journal of Applied Physics, 2015, 117, .	2.5	46
43	Formation of deuteriumâ€"carbon inventories in gaps of plasma facing components. Journal of Nuclear Materials, 2007, 363-365, 870-876.	2.7	45
44	Bombardment of graphite with hydrogen isotopes: A model for the energy dependence of the chemical sputtering yield. Journal of Nuclear Materials, 2005, 342, 141-147.	2.7	44
45	Chemical sputtering of carbon by nitrogen ions. Applied Physics Letters, 2005, 86, 204103.	3.3	44
46	Ion chemistry in H2-Ar low temperature plasmas. Journal of Applied Physics, 2013, 114, .	2.5	43
47	Deuterium supersaturation in low-energy plasma-loaded tungsten surfaces. Nuclear Fusion, 2017, 57, 016026.	3.5	42
48	Chemical Sputtering. , 2007, , 329-400.		41
49	Chemical sputtering of carbon materials due to combined bombardment by ions and atomic hydrogen. Physica Scripta, 2006, T124, 32-36.	2.5	40
50	Release of deuterium from carbon-deuterium films on beryllium during carbide formation and oxidation. Journal of Nuclear Materials, 1997, 250, 23-28.	2.7	39
51	Oxidative erosion of graphite in air between 600 and 1000K. Journal of Nuclear Materials, 2005, 341, 31-44.	2.7	39
52	Deuterium retention in different tungsten grades. Physica Scripta, 2009, T138, 014053.	2.5	39
53	Role of hydrogen ions in plasmaâ€enhanced chemical vapor deposition of hydrocarbon films, investigated by in situ ellipsometry. Applied Physics Letters, 1995, 66, 1322-1324.	3.3	38
54	Determination of the absolute CH3 radical flux emanating from a methane electron cyclotron resonance plasma. Applied Physics Letters, 1998, 73, 31-33.	3.3	38

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55	Deuterium inventory in Tore Supra: Coupled carbonâ€“deuterium balance. Journal of Nuclear Materials, 2013, 438, S120-S125.	2.7	38
56	Quantification of a radical beam source for methyl radicals. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 101-107.	2.1	37
57	Erosion study of Feâ€"W binary mixed layer prepared as model system for RAFM steel. Journal of Nuclear Materials, 2015, 463, 272-275.	2.7	35
58	Deuterium implantation into tungsten nitride: Negligible diffusion at 300K. Journal of Nuclear Materials, 2014, 451, 352-355.	2.7	33
59	Structure of plasma-deposited amorphous hydrogenated boron-carbon thin films. Thin Solid Films, 1998, 312, 147-155.	1.8	32
60	Hydrogen plasma treatment of poly(ethylene terephthalate) surfaces. Surface and Coatings Technology, 2001, 138, 256-263.	4.8	32
61	Deuterium retention in tungsten irradiated by different ions. Nuclear Fusion, 2020, 60, 096002.	3.5	32
62	Direct verification of the ion-neutral synergism during hydrocarbon film growth. Journal of Applied Physics, 2003, 93, 3352-3358.	2.5	31
63	Chemical sputtering of carbon films by simultaneous irradiation with argon ions and molecular oxygen. New Journal of Physics, 2008, 10, 093022.	2.9	31
64	Hydrogen bonding in plasma-deposited amorphous hydrogenated boron films. Journal of Applied Physics, 1997, 82, 1905-1908.	2.5	30
65	Removal of codeposited layers by ECR discharge cleaning. Journal of Nuclear Materials, 1999, 266-269, 552-556.	2.7	30
66	Growth and erosion of amorphous carbon (a-C:H) films by low-temperature laboratory plasmas containing H and N mixtures. Journal of Nuclear Materials, 2007, 363-365, 174-178.	2.7	30
67	Oxygen glow discharge cleaning in ASDEX Upgrade. Journal of Nuclear Materials, 2007, 363-365, 882-887.	2.7	30
68	Surface reactions of hydrocarbon radicals: suppression of the re-deposition in fusion experiments via a divertor liner. Journal of Nuclear Materials, 2001, 290-293, 231-237.	2.7	29
69	The influence of hydrogen ion bombardment on plasma-assisted hydrocarbon film growth. Diamond and Related Materials, 2003, 12, 85-89.	3.9	29
70	Temperature dependence of the chemical sputtering of amorphous hydrogenated carbon films by hydrogen. Journal of Nuclear Materials, 2008, 376, 33-37.	2.7	29
71	Absolute density determination of CH radicals in a methane plasma. Applied Physics Letters, 1994, 64, 971-973.	3.3	28
72	Quantitative determination of mass-resolved ion densities in H2-Ar inductively coupled radio frequency plasmas. Journal of Applied Physics, 2013, 113, .	2.5	28

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73	Erosion and deuterium retention of CLF-1 steel exposed to deuterium plasma. Physica Scripta, 2017, T170, 014025.	2.5	28
74	Interaction of hydrogen plasmas with hydrocarbon films, investigated by infrared spectroscopy using an optical cavity substrate. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 402-407.	2.1	27
75	Chemical sputtering of carbon by combined exposure to nitrogen ions and atomic hydrogen. New Journal of Physics, 2008, 10, 053037.	2.9	27
76	Depth profiling of the modification induced by high-flux deuterium plasma in tungsten and tungstenâ€"tantalum alloys. Nuclear Fusion, 2014, 54, 123013.	3.5	27
77	Oxygen glow discharge cleaning in nuclear fusion devices. Journal of Nuclear Materials, 2008, 374, 413-421.	2.7	26
78	Inverse photoemission studies of oxygen on Ni(110) and Ni(100). Surface Science, 1985, 154, 695-703.	1.9	25
79	Statistical analysis of blister bursts during temperature-programmed desorption of deuterium-implanted polycrystalline tungsten. Physica Scripta, 2011, T145, 014038.	2.5	25
80	The effect of ion flux on plasma-induced modification and deuterium retention in tungsten and tungstenâ€"tantalum alloys. Journal of Nuclear Materials, 2015, 464, 69-72.	2.7	25
81	Chemical erosion of amorphous hydrogenated boron films. Applied Physics Letters, 1997, 71, 1326-1328.	3.3	24
82	Particle-beam experiment to study heterogeneous surface reactions relevant to plasma-assisted thin film growth and etching. Review of Scientific Instruments, 2003, 74, 5123-5136.	1.3	24
83	Recent progress in the understanding of H transport and trapping in W. Physica Scripta, 2017, T170, 014037.	2.5	24
84	Transport and structural modification during nitrogen implantation of hard amorphous carbon films. Journal of Applied Physics, 1998, 83, 5185-5194.	2.5	23
85	Deuterium retention in tungsten films deposited by magnetron sputtering. Physica Scripta, 2014, T159, 014046.	2.5	23
86	Suppression of hydrogen-induced blistering of tungsten by pre-irradiation at low temperature. Nuclear Fusion, 2014, 54, 122003.	3.5	22
87	Influence of nitrogen pre-implantation on deuterium retention in tungsten. Physica Scripta, 2014, T159, 014023.	2.5	22
88	Interaction of deuterium plasma with sputter-deposited tungsten nitride films. Nuclear Fusion, 2016, 56, 016004.	3.5	22
89	Effects of surface modifications on deuterium retention in F82H and EUROFER exposed to low-energy deuterium plasmas. Fusion Engineering and Design, 2016, 112, 236-239.	1.9	21
90	Overview of the recent DiMES and MiMES experiments in DIII-D. Physica Scripta, 2009, T138, 014007.	2.5	20

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91	Quantitative analysis of deuterium in a-C:D layers, a Round Robin experiment. Journal of Nuclear Materials, 2000, 281, 42-56.	2.7	19
92	The implications of high-Z first-wall materials on noble gas wall recycling. Nuclear Fusion, 2007, 47, 984-989.	3.5	19
93	Characterization of temperature-induced changes in amorphous hydrogenated carbon thin films. Diamond and Related Materials, 2013, 37, 97-103.	3.9	19
94	Alkali-metal oxides. II. Unoccupied and excited states. Physical Review B, 1989, 39, 6087-6095.	3.2	18
95	On the presence of molecular nitrogen in nitrogen-implanted amorphous carbon. Applied Physics Letters, 1997, 70, 1387-1389.	3.3	18
96	Progress of the European R&D on plasmaâ€“wall interactions, neutron effects and tritium removal in ITER plasma facing materials. Fusion Engineering and Design, 2001, 56-57, 179-187.	1.9	18
97	Deposition and characterization of dense and stable amorphous hydrogenated boron films at low substrate temperatures. Journal of Non-Crystalline Solids, 1997, 209, 240-246.	3.1	17
98	DiMES studies of temperature dependence of carbon erosion and re-deposition in the lower divertor of DIII-D under detachment. Physica Scripta, 2007, T128, 29-34.	2.5	17
99	Surface loss probability of atomic hydrogen for different electrode cover materials investigated in H2-Ar low-pressure plasmas. Journal of Applied Physics, 2014, 116, .	2.5	17
100	High-flux hydrogen irradiation-induced cracking of tungsten reproduced by low-flux plasma exposure. Nuclear Fusion, 2019, 59, 056023.	3.5	17
101	Stability of plasma-deposited amorphous hydrogenated boron films. Thin Solid Films, 1997, 300, 101-106.	1.8	16
102	Infrared analysis of thin films: amorphous, hydrogenated carbon on silicon. Brazilian Journal of Physics, 2000, 30, 508-516.	1.4	16
103	The energy influx during plasma deposition of amorphous hydrogenated carbon films. Surface and Coatings Technology, 2002, 149, 206-216.	4.8	16
104	Modeling of hydrocarbon species in ECR methane plasmas. Journal of Nuclear Materials, 2003, 313-316, 434-438.	2.7	16
105	Chemical sputtering of carbon films by argon ions and molecular oxygen at cryogenic temperatures. Applied Physics Letters, 2007, 90, 224106.	3.3	16
106	Raman study of CFC tiles extracted from the toroidal pump limiter of Tore Supra. Journal of Nuclear Materials, 2011, 415, S254-S257.	2.7	16
107	Study of deuterium retention in/release from ITER-relevant Be-containing mixed material layers implanted at elevated temperatures. Journal of Nuclear Materials, 2013, 438, S1113-S1116.	2.7	16
108	Deuterium implantation into Y 2 O 3 -doped and pure tungsten: Deuterium retention and blistering behavior. Journal of Nuclear Materials, 2017, 487, 75-83.	2.7	16

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109	Hydrogen atom-ion synergy in surface lattice modification at sub-threshold energy. Acta Materialia, 2020, 201, 55-62.	7.9	16
110	New calibration method for the determination of the absolute density of CH radicals through laser-induced fluorescence. Applied Optics, 1995, 34, 4542.	2.1	15
111	Raman micro-spectroscopy as a tool to measure the absorption coefficient and the erosion rate of hydrogenated amorphous carbon films heat-treated under hydrogen bombardment. Diamond and Related Materials, 2012, 22, 92-95.	3.9	15
112	Determination of the sticking coefficient of energetic hydrocarbon molecules by molecular dynamics. Journal of Nuclear Materials, 2012, 420, 291-296.	2.7	15
113	Deuterium retention in tungsten films after different heat treatments. Journal of Nuclear Materials, 2015, 456, 192-199.	2.7	15
114	Investigation of deuterium retention in/desorption from beryllium-containing mixed layers. Nuclear Materials and Energy, 2016, 6, 1-9.	1.3	15
115	Erosion of EUROFER steel by mass-selected deuterium ion bombardment. Nuclear Materials and Energy, 2018, 16, 114-122.	1.3	15
116	Laser-induced coalescence of gold clusters in fluorocarbon composite thin films. Applied Surface Science, 1994, 79-80, 196-202.	6.1	14
117	Consequences of the temperature and flux dependent sticking coefficient of methyl radicals for nuclear fusion experiments. Nuclear Fusion, 2003, 43, 25-29.	3.5	14
118	Xe and K coadsorption on Ag (110): Observation of a wetting-to-nonwetting phase transition. Physical Review B, 1987, 36, 2421-2424.	3.2	13
119	The bandstructure of Pd(110) above the fermi level. Applied Physics A: Solids and Surfaces, 1990, 50, 207-214.	1.4	13
120	Deuterium diffusion and retention in a tungstenâ€“carbon multilayer system. Nuclear Instruments & Methods in Physics Research B, 2014, 329, 6-13.	1.4	13
121	An SEM compatible plasma cell for <i>in situ</i> studies of hydrogen-material interaction. Review of Scientific Instruments, 2020, 91, 043705.	1.3	13
122	Ion energy distributions from electron cyclotron resonance methane plasmas. Diamond and Related Materials, 1993, 2, 378-382.	3.9	12
123	Long-term H-release of hard and intermediate between hard and soft amorphous carbon evidenced by in situ Raman microscopy under isothermal heating. Diamond and Related Materials, 2013, 37, 92-96.	3.9	12
124	Dislocation structure of tungsten irradiated by medium to high-mass ions. Nuclear Fusion, 2022, 62, 096003.	3.5	12
125	The adsorption of Xenon on both low and high work-function metals. Applied Physics A: Materials Science and Processing, 1987, 44, 93-95.	2.3	11
126	Erosion of amorphous hydrogenated boron-carbon thin films. Journal of Nuclear Materials, 1996, 231, 151-154.	2.7	11

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127	Can plasma experiments unravel microscopic surface processes in thin film growth and erosion? Implications of particleâ€“beam experiments on the understanding of a-C:H growth. Vacuum, 2003, 71, 361-376.	3.5	11
128	Deuterium retention behavior of pure and Y2O3-doped tungsten investigated by nuclear reaction analysis and thermal desorption spectroscopy. Nuclear Materials and Energy, 2018, 15, 32-42.	1.3	11
129	Formation of Hard Amorphous Hydrogenated Carbon Films with Low Hydrogen Concentration and Their Erosion in Air. Japanese Journal of Applied Physics, 2001, 40, 788-793.	1.5	10
130	Divertor and midplane materials evaluation system in DIII-D. Journal of Nuclear Materials, 2007, 363-365, 276-281.	2.7	10
131	Deposition of thermally stable tungsten nitride thin films by reactive magnetron sputtering. Surface and Coatings Technology, 2019, 375, 701-707.	4.8	10
132	Pyrolysis and laser ablation of plasmaâ€polymerized fluorocarbon films: Effects of gold particles. Journal of Applied Physics, 1992, 72, 2462-2471.	2.5	9
133	Carbon removal from tile gap structures with oxygen glow discharges. Journal of Nuclear Materials, 2009, 390-391, 602-605.	2.7	9
134	Stages in the interaction of deuterium atoms with amorphous hydrogenated carbon films: Isotope exchange, soft-layer formation, and steady-state erosion. Journal of Applied Physics, 2010, 108, 043307.	2.5	9
135	<i>In situ</i> study of erosion and deposition of amorphous hydrogenated carbon films by exposure to a hydrogen atom beam. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	9
136	Impact of surface enrichment and morphology on sputtering of EUROFER by deuterium. Nuclear Materials and Energy, 2020, 23, 100749.	1.3	9
137	Alkali metal oxides: Occupied, unoccupied and excited states. Applied Physics A: Solids and Surfaces, 1988, 47, 87-89.	1.4	7
138	Critical Review of Complex Plasma (Dusty Plasma) Diagnostics and Manipulation Techniques for the Fusion Community and Others. IEEE Transactions on Plasma Science, 2009, 37, 270-280.	1.3	7
139	Fuel removal from tile gaps with oxygen discharges: reactivity of neutrals. Physica Scripta, 2009, T138, 014009.	2.5	7
140	Particle growth in hydrogenâ€“methane plasmas. Thin Solid Films, 2006, 506-507, 652-655.	1.8	6
141	Synthesis of diamond fine particles on levitated seed particles in a rf CH4/H2 plasma chamber equipped with a hot filament. Journal of Applied Physics, 2012, 112, 073303.	2.5	6
142	SIESTA: A high current ion source for erosion and retention studies. Review of Scientific Instruments, 2018, 89, 103501.	1.3	6
143	Effect of exposure temperature on deuterium retention and surface blistering of tungsten exposed to sequential nitrogen and deuterium plasma. Nuclear Fusion, 2018, 58, 106027.	3.5	6
144	Reactivity of soft amorphous hydrogenated carbon films in ambient atmosphere. Journal of Nuclear Materials, 2007, 363-365, 944-948.	2.7	5

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145	Determination of the sticking probability of hydrocarbons on an amorphous hydrocarbon surface. Physica Scripta, 2009, T138, 014015.	2.5	5
146	13th International Workshop on Plasma-Facing Materials and Components for Fusion Applications/1st International Conference on Fusion Energy Materials Science. Physica Scripta, 2011, T145, 011001.	2.5	5
147	Fit formulas for the angular dependence of the sticking coefficient of energetic hydrocarbon molecules. Journal of Nuclear Materials, 2011, 415, S196-S199.	2.7	5
148	Erosion of tungsten-doped amorphous carbon films in oxygen plasma. Journal of Nuclear Materials, 2012, 420, 101-109.	2.7	5
149	What makes a dangling bond a binding site for thermal CH3 radicals? â€” A combined molecular dynamics and potential energy analysis study on amorphous hydrocarbon films. Diamond and Related Materials, 2013, 40, 41-50.	3.9	5
150	Study of the temperature-dependent nitrogen retention in tungsten surfaces using X-ray photoelectron spectroscopy. Nuclear Materials and Energy, 2018, 17, 48-55.	1.3	5
151	Influence of thin tungsten oxide films on hydrogen isotope uptake and retention in tungsten â€" Evidence for permeation barrier effect. Nuclear Materials and Energy, 2021, 27, 100991.	1.3	5
152	Comparison experiment on the sputtering of EUROFER, RUSFER and CLAM steels by deuterium ions. Nuclear Materials and Energy, 2022, 30, 101118.	1.3	5
153	Influence of thin surface oxide films on hydrogen isotope release from ion-irradiated tungsten. Nuclear Materials and Energy, 2022, 30, 101137.	1.3	5
154	Erosion of tungsten-doped amorphous carbon films exposed to deuterium plasmas. Journal of Nuclear Materials, 2012, 426, 277-286.	2.7	4
155	Bonding States of Hydrogen in Plasma-Deposited Hydrocarbon Films. Journal of Carbon Research, 2020, 6, 3.	2.7	4
156	Interaction of Low-Energy Ions and Hydrocarbon Radicals with Carbon Surfaces. Springer Series in Chemical Physics, 2005, , 249-285.	0.2	4
157	Secondary electron emission coefficient of C:H and Si:C thin films and some relations to their morphology and composition. Diamond and Related Materials, 1996, 5, 1087-1095.	3.9	3
158	Surface relaxation during plasma chemical vapor deposition of diamond-like carbon films, investigated by in-situ ellipsometry. Thin Solid Films, 1997, 308-309, 195-198.	1.8	3
159	Erosion of a-C:D thin films by low energy D+, <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>D</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mn and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>D</mml:mtext></mml:mrow><mml:mrow><mml:mn>3</mn Journal of Nuclear Materials, 2011, 415, S125-S128.	2.7	3
160	Molecular size effect in the chemical sputtering of a-C:H thin films by low energy H+, , and ions. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1276-1279.	1.4	3
161	Wall loss of atomic nitrogen determined by ionization threshold mass spectrometry. Journal of Applied Physics, 2014, 116, 193302.	2.5	3
162	The approach to diamond growth on levitating seed particles. Applied Surface Science, 2007, 254, 177-180.	6.1	2

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163	Chemical sputtering of a-C:H films by simultaneous exposure to energetic Ar⁺ions and water vapor. Journal of Physics: Conference Series, 2008, 100, 062012.	0.4	2
164	Levitation and collection of diamond fine particles in the rf plasma chamber equipped with a hot filament. Physics of Plasmas, 2011, 18, .	1.9	2
165	Deuterium retention in tungsten-doped amorphous carbon films exposed to deuterium plasma. Journal of Nuclear Materials, 2013, 438, S1134-S1137.	2.7	2
166	Environment with reduced ion bombardment energy for levitated particles in an rf plasma. Plasma Sources Science and Technology, 2008, 17, 035014.	3.1	1
167	Surface blistering and deuterium retention in tungsten exposed to low-energy deuterium plasma at different temperatures. Nuclear Instruments & Methods in Physics Research B, 2019, 450, 210-214.	1.4	1
168	Cross section of 15N-2D nuclear reactions from 3.3 to 7.0ÂMeV for simultaneous hydrogen and deuterium quantitation in surface layers with 15N ion beams. Nuclear Instruments & Methods in Physics Research B, 2020, 478, 56-61.	1.4	1
169	The 11th International Workshop on Plasma-Facing Materials and Components for Fusion Applications. Physica Scripta, 2007, T128, .	2.5	0
170	Hydrogen interaction with Al2O3-coated tungsten under plasma irradiation. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 263-267.	0.6	0
171	Deuterium absorption in reduced activation ferritic/martensitic steel F82H under exposure to D2O vapor/water at room temperature. Journal of Nuclear Materials, 2018, 507, 54-58.	2.7	0
172	Technical Developments for Harnessing Controlled Fusion. , 2011, , 2759-2795.		0
173	The Schottky Contact in a Xe/Metal Interface Probed by Inverse Photoemission. Perspectives in Condensed Matter Physics, 1990, , 238-243.	0.1	0