Yasuhisa Oya

List of Publications by Year
in descending order

138	1,883	257450 24	361022 35
papers	citations	h-index	g-index

138	138	138	911
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An overview of tritium retention in dust particles from the JET-ILW divertor. Physica Scripta, 2022, 97, 024008.	2.5	3
2	Evaluation of hydrogen retention behavior for damaged tungsten exposed to hydrogen plasma at QUEST with high temperature wall. Fusion Engineering and Design, 2022, 176, 113020.	1.9	4
3	Effect of rhenium addition on deuterium retention in neutron-irradiated tungsten. Journal of Nuclear Materials, 2022, , 153774.	2.7	3
4	Preparation of Li2TiO3-Li4SiO4-Pb tritium breeding ceramic and its mechanical properties. Ceramics International, 2022, 48, 26742-26749.	4.8	2
5	Rate of double strand breaks of genome-sized DNA in tritiated water: Its dependence on tritium concentration and water temperature. Journal of Advanced Simulation in Science and Engineering, 2022, 9, 198-205.	0.2	1
6	Tritium recovery behavior for tritium breeder Li4SiO4-Li2TiO3 biphasic material. Journal of Nuclear Materials, 2022, 567, 153838.	2.7	3
7	Evaluation of hydrogen retention behavior in tungsten exposed to hydrogen plasma in QUEST. Nuclear Materials and Energy, 2021, 26, 100856.	1.3	2
8	Image processing method for automatic measurement of number of DNA breaks. Journal of Advanced Simulation in Science and Engineering, 2021, 8, 173-193.	0.2	2
9	Global distribution of tritium in JET with the ITER-like wall. Nuclear Materials and Energy, 2021, 26, 100930.	1.3	7
10	Neutron irradiated tungsten bulk defect characterization by positron annihilation spectroscopy. Nuclear Materials and Energy, 2021, 26, 100936.	1.3	1
11	Overview of recent progress on steady state operation of all-metal plasma facing wall device QUEST. Nuclear Materials and Energy, 2021, 27, 101013.	1.3	3
12	Investigation on tritium retention and surface properties on the first wall in the large helical Device. Nuclear Materials and Energy, 2021, 27, 100906.	1.3	3
13	Deuterium retention in tungsten irradiated by high-dose neutrons at high temperature. Nuclear Materials and Energy, 2021, 27, 100980.	1.3	3
14	Numerical analysis of deuterium migration behaviors in tungsten damaged by fast neutron by means of gas absorption method. Fusion Engineering and Design, 2021, 168, 112635.	1.9	3
15	Investigation on effects of tritium release behavior in Li4SiO4 pebbles. Nuclear Materials and Energy, 2021, 28, 101036.	1.3	2
16	Protective behavior of tea catechins against DNA double strand breaks produced by radiations with different linear energy transfer. Fusion Engineering and Design, 2021, 172, 112700.	1.9	3
17	Effects of Helium Seeding on Deuterium Retention in Neutron-Irradiated Tungsten. Fusion Science and Technology, 2021, 77, 76-79.	1.1	5
18	Tritium distribution analysis of Be limiter tiles from JET-ITER like wall campaigns using imaging plate technique and Î²-ray induced X-ray spectrometry. Fusion Engineering and Design, 2020, 160, 111959.	1.9	6

#	Article	IF	Citations
19	Investigation of remaining tritium in the LHD vacuum vessel after the first deuterium experimental campaign. Physica Scripta, 2020, T171, 014068.	2.5	10
20	Comparison of Hydrogen Isotope Retention in Divertor Tiles of JET with the ITER-Like Wall Following Campaigns in 2011â€“2012 and 2015â€“2016. Fusion Science and Technology, 2020, 76, 439-445.	1.1	3
21	Synergistic effects of high energy helium irradiation and damage introduction at high temperature on hydrogen isotope retention in plasma facing materials. Journal of Nuclear Materials, 2020, 533, 152122.	2.7	12
22	Comparison of tritium release behavior in Li2TiO3 and promising core-shell Li2TiO3â€“Li4SiO4 biphasic ceramic pebbles. Journal of Nuclear Materials, 2020, 539, 152330.	2.7	21
23	Deuterium recombination coefficient on tungsten surface determined by plasma driven permeation. Fusion Engineering and Design, 2020, 160, 111853.	1.9	2
24	Hydrogen isotope exchange at the surface of C-W mixed material layer on tungsten by gas exposure. Fusion Engineering and Design, 2020, 157, 111633.	1.9	3
25	D retention and depth profile behavior for single crystal tungsten with high temperature neutron irradiation. Journal of Nuclear Materials, 2020, 539, 152323.	2.7	11
26	Helium and hydrogen interaction in tungsten simultaneously irradiated by He+-H2+ at high temperature. International Journal of Hydrogen Energy, 2020, 45, 9959-9968.	7.1	7
27	Modeling and simulation for surface helium effect on hydrogen isotopes diffusion and trapping/detrapping behavior in plasma facing materials. Journal of Nuclear Materials, 2020, 537, 152227.	2.7	8
28	Development of Plasma Driven Permeation Measurement System for Plasma Facing Materials. Lecture Notes in Networks and Systems, 2020, , 260-268.	0.7	0
29	Deuterium Permeation Behavior in Fe Ion Damaged Tungsten Studied by Gas-Driven Permeation Method. Fusion Science and Technology, 2020, 76, 246-251.	1.1	2
30	Effect of Damage Introduction and He Existence on D Retention in Tungsten by High Flux D Plasma Exposure. Lecture Notes in Networks and Systems, 2019, , 89-96.	0.7	0
31	Effect of carbon impurity reduction on hydrogen isotope retention in QUEST high temperature wall. Fusion Engineering and Design, 2019, 146, 1480-1484.	1.9	10
32	Release kinetics of tritium generation in neutron irradiated biphasic Li2TiO3â€“Li4SiO4 ceramic breeder. Journal of Nuclear Materials, 2019, 522, 286-293.	2.7	33
33	Particle balance investigation with the combination of the hydrogen barrier model and rate equations of hydrogen state in long duration discharges on an all-metal plasma facing wall in QUEST. Nuclear Fusion, 2019, 59, 076007.	3.5	11
34	Estimation of fuel particle balance in steady state operation with hydrogen barrier model. Nuclear Materials and Energy, 2019, 19, 544-549.	1.3	5
35	Influence of dynamic annealing of irradiation defects on the deuterium retention behaviors in tungsten irradiated with neutron. Fusion Engineering and Design, 2019, 146, 1624-1627.	1.9	6
36	Dynamics evaluation of hydrogen isotope behavior in tungsten simulating damage distribution. Fusion Engineering and Design, 2019, 146, 2096-2099.	1.9	0

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37	A tritium permeation â€˜short cutâ€™ for plasma-facing components of fusion reactors. Nuclear Fusion, 2019, 59, 014003.	3.5	14
38	Kinetics of double strand breaks of DNA in tritiated water evaluated using single molecule observation method. Fusion Engineering and Design, 2019, 146, 100-102.	1.9	8
39	Deuterium Removal Efficiency in Tungsten as a Function of Hydrogen Ion Beam Fluence and Temperature. Lecture Notes in Networks and Systems, 2019, , 20-27.	0.7	1
40	Research frontier of tritium for fusion reactor â€“ toward the DEMO reactor (7). Atomos, 2019, 61, 64-69.	0.0	0
41	Plasma-wall interaction on the divertor tiles of JET ITER-like wall from the viewpoint of micro/nanoscopic observations. Fusion Engineering and Design, 2018, 136, 199-204.	1.9	5
42	Helium retention behavior in simultaneously He+-H2+ irradiated tungsten. Journal of Nuclear Materials, 2018, 502, 289-294.	2.7	15
43	Dust generation in tokamaks: Overview of beryllium and tungsten dust characterisation in JET with the ITER-like wall. Fusion Engineering and Design, 2018, 136, 579-586.	1.9	52
44	Tritium retention characteristics in dust particles in JET with ITER-like wall. Nuclear Materials and Energy, 2018, 17, 279-283.	1.3	20
45	Deuterium retention in neutron-irradiated single-crystal tungsten. Fusion Engineering and Design, 2018, 136, 1161-1167.	1.9	24
46	Effect of C-He simultaneous implantation on deuterium retention in damaged W by Fe implantation. Fusion Engineering and Design, 2018, 137, 10-14.	1.9	0
47	Deuterium permeation through monoclinic erbium oxide coating. Fusion Engineering and Design, 2018, 133, 121-124.	1.9	10
48	Deuterium retention behavior in simultaneously He+â€“D2+ implanted tungsten. Nuclear Materials and Energy, 2018, 16, 76-81.	1.3	7
49	Development of the Tritium Transport Model for Pebbles of Li₂TiO₃. Plasma and Fusion Research, 2018, 13, 3405048-3405048.	0.7	7
50	Correlation of surface chemical states with hydrogen isotope retention in divertor tiles of JET with ITER-Like Wall. Fusion Engineering and Design, 2018, 132, 24-28.	1.9	15
51	Surface or bulk He existence effect on deuterium retention in Fe ion damaged W. Nuclear Materials and Energy, 2018, 16, 217-220.	1.3	6
52	Interaction of Hydrogen Isotopes with Radiation Damaged Tungsten. Advances in Intelligent Systems and Computing, 2018, , 41-49.	0.6	5
53	Radiation exposure effect on deuterium retention in SiC. Journal of Nuclear and Radiochemical Sciences, 2018, 18, 9-12.	0.7	0
54	Effect of helium irradiation on deuterium permeation behavior in tungsten. Journal of Nuclear Materials, 2017, 490, 242-246.	2.7	23

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55	Preparation of Li 2 TiO 3 ceramic with nano-sized pores by ultrasonic-assisted solution combustion. Journal of the European Ceramic Society, 2017, 37, 3595-3602.	5.7	26
56	Micro-/nano-characterization of the surface structures on the divertor tiles from JET ITER-like wall. Fusion Engineering and Design, 2017, 116, 1-4.	1.9	14
57	Deuterium permeation behavior in iron-irradiated erbium oxide coating. Fusion Engineering and Design, 2017, 124, 915-918.	1.9	14
58	Hydrogen Isotope Retention and Permeation in Neutron-Irradiated Tungsten and Tungsten Alloys Under PHENIX Collaboration. Fusion Science and Technology, 2017, 72, 652-659.	1.1	5
59	Measurement of thickness of film deposited on the plasma-facing wall in the QUEST tokamak by colorimetry. Review of Scientific Instruments, 2017, 88, 093502.	1.3	4
60	Influence of mixed material layer formation on hydrogen isotope and He retentions in W exposed to 2014 LHD experiment campaign. Fusion Engineering and Design, 2017, 125, 458-462.	1.9	4
61	Effect of sequential Fe 2+ â^' C + implantation on deuterium retention in W. Fusion Engineering and Design, 2017, 124, 231-234.	1.9	3
62	Investigation of hydrogen recycling in long-duration discharges and its modification with a hot wall in the spherical tokamak QUEST. Nuclear Fusion, 2017, 57, 126061.	3.5	37
63	The damage depth profile effect on hydrogen isotope retention behavior in heavy ion irradiated tungsten. Fusion Engineering and Design, 2017, 125, 468-472.	1.9	13
64	Development of H, D, T Simultaneous TDS Measurement System and H, D, T Retention Behavior for DT Gas Exposed Tungsten Installed in LHD Plasma Campaign. Fusion Science and Technology, 2017, 71, 351-356.	1.1	1
65	Impact of Annealing on Deuterium Retention Behavior in Damaged W. Fusion Science and Technology, 2017, 72, 785-788.	1.1	5
66	Analyses of microstructure, composition and retention of hydrogen isotopes in divertor tiles of JET with the ITER-like wall. Physica Scripta, 2017, T170, 014031.	2.5	13
67	Effect of neutron energy and fluence on deuterium retention behaviour in neutron irradiated tungsten. Physica Scripta, 2016, T167, 014068.	2.5	31
68	Annealing effects on deuterium retention behavior in damaged tungsten. Nuclear Materials and Energy, 2016, 9, 141-144.	1.3	26
69	Deuterium retention in W and W-Re alloy irradiated with high energy Fe and W ions: Effects of irradiation temperature. Nuclear Materials and Energy, 2016, 9, 93-97.	1.3	31
70	Effect of impurity deposition layer formation on D retention in LHD plasma exposed W. Nuclear Materials and Energy, 2016, 9, 84-88.	1.3	9
71	Influence of carbon-dominated deposition layer on He retention and desorption in tungsten. Fusion Engineering and Design, 2016, 112, 117-122.	1.9	8
72	Recent progress of hydrogen isotope behavior studies for neutron or heavy ion damaged W. Fusion Engineering and Design, 2016, 113, 211-215.	1.9	19

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73	Deuterium retention in molten salt electrodeposition tungsten coatings. Fusion Engineering and Design, 2016, 113, 265-268.	1.9	11
74	Gas-driven permeation of deuterium through tungsten and tungsten alloys. Fusion Engineering and Design, 2016, 109-111, 104-108.	1.9	17
75	Impact of temperature during He+implantation on deuterium retention in tungsten, tungsten with carbon deposit and tungsten carbide. Physica Scripta, 2016, T167, 014037.	2.5	2
76	Deuterium permeation behavior for damaged tungsten by ion implantation. Journal of Nuclear Science and Technology, 2016, 53, 402-405.	1.3	11
77	A multi-technique analysis of deuterium trapping and near-surface precipitate growth in plasma-exposed tungsten. Journal of Applied Physics, 2015, 118, 073301.	2.5	18
78	Preheating Temperature Effect on Tritium Retention in VPS-W. Fusion Science and Technology, 2015, 67, 551-554.	1.1	0
79	Effect of Heating Temperature on Deuterium Retention Behavior for Helium/Carbon Implanted Tungsten. Fusion Science and Technology, 2015, 68, 531-534.	1.1	9
80	Irradiation effect on deuterium behaviour in low-dose HFIR neutron-irradiated tungsten. Nuclear Fusion, 2015, 55, 013008.	3.5	61
81	Dissolution behavior of 137Cs absorbed on the green tea leaves. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1539-1542.	1.5	2
82	Defect annealing and thermal desorption of deuterium in low dose HFIR neutron-irradiated tungsten. Journal of Nuclear Materials, 2015, 463, 1005-1008.	2.7	16
83	Thermal desorption behavior of deuterium for 6 MeV Fe ion irradiated W with various damage concentrations. Journal of Nuclear Materials, 2015, 461, 336-340.	2.7	41
84	Comparison of hydrogen isotope retention for tungsten probes in LHD vacuum vessel during the experimental campaigns in 2011 and 2012. Fusion Engineering and Design, 2014, 89, 1091-1095.	1.9	8
85	Migration of hydrogen isotopes in lithium metatitanate. Journal of Nuclear Materials, 2013, 439, 159-167.	2.7	27
86	Deuterium trapping by irradiation damage in tungsten induced by different displacement processes. Fusion Engineering and Design, 2013, 88, 1749-1752.	1.9	27
87	Tritium release kinetics in lithium orthosilicate ceramic pebbles irradiated with low thermal-neutron fluence. Journal of Nuclear Materials, 2013, 438, 46-50.	2.7	19
88	Influence of tungstenâ€“carbon mixed layer and irradiation defects on deuterium retention behavior in tungsten. Fusion Engineering and Design, 2013, 88, 1827-1830.	1.9	6
89	Behavior of deuterium retention and surface morphology for VPSâ€“W/F82H. Journal of Nuclear Materials, 2013, 442, S242-S245.	2.7	4
90	Retention and desorption behavior of tritium in Si related ceramics. Journal of Nuclear Materials, 2013, 438, 22-25.	2.7	9

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91	Enhancement of hydrogen isotope retention in tungsten exposed to LHD plasmas. Journal of Nuclear Materials, 2013, 438, S1055-S1058.	2.7	9
92	Formation of lithium-tritide by hot atom reactions of tritium produced in Pb-16Li. Fusion Engineering and Design, 2013, 88, 2328-2331.	1.9	5
93	Dynamic deuterium recycling on tungsten under carbonâ€“deuterium implantation circumstance. Journal of Nuclear Materials, 2013, 438, S1117-S1120.	2.7	3
94	Enhancement of hydrogen isotope retention capacity for the impurity deposited tungsten by long-term plasma exposure in LHD. Fusion Engineering and Design, 2013, 88, 1699-1703.	1.9	13
95	Trapping of hydrogen isotopes in radiation defects formed in tungsten by neutron and ion irradiations. Journal of Nuclear Materials, 2013, 438, S114-S119.	2.7	76
96	Deuterium trapping at defects created with neutron and ion irradiations in tungsten. Nuclear Fusion, 2013, 53, 073006.	3.5	99
97	Retention of Hydrogen Isotopes in Neutron Irradiated Tungsten. Materials Transactions, 2013, 54, 437-441.	1.2	25
98	Behaviors of Deuterium Retention and Microstructure Change of Tungsten Simultaneously Implanted with Carbon and/or Helium Ions. Materials Transactions, 2013, 54, 430-436.	1.2	11
99	Detection of radioactive materials from the Fukushima Daiichi Nuclear Power Plant accident at Shizuoka-city. Radiation Safety Management, 2013, 12, 16-21.	0.4	4
100	Effect of surface oxide layer on deuterium permeation behaviors through a type 316 stainless steel. Fusion Engineering and Design, 2012, 87, 580-583.	1.9	14
101	Measurement of deuterium and helium by glow-discharge optical emission spectroscopy for plasmaâ€“surface interaction studies. Fusion Engineering and Design, 2012, 87, 1091-1094.	1.9	25
102	Overview of the USâ€“Japan collaborative investigation on hydrogen isotope retention in neutron-irradiated and ion-damaged tungsten. Fusion Engineering and Design, 2012, 87, 1166-1170.	1.9	43
103	Comparison of hydrogen isotope retention and irradiation damage behaviors in tungsten and SS-316 with simultaneous C+â€“D2+ implantation. Fusion Engineering and Design, 2011, 86, 1776-1779.	1.9	8
104	Deuterium retention in SiC coated graphite by D2+ implantation. Fusion Engineering and Design, 2011, 86, 1689-1692.	1.9	8
105	Recent progress of tungsten R&D for fusion application in Japan. Physica Scripta, 2011, T145, 014029. Dynamics of hydrogen isotope trapping and detrapping for tungsten under simultaneous triple ion	2.5	39
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109	Temperature dependence of retention of energetic deuterium and carbon simultaneously implanted into tungsten. Journal of Nuclear Materials, 2011, 417, 555-558.	2.7	9
110	Fluence dependence of deuterium retention in oxidized SS-316. Journal of Nuclear Materials, 2011, 417, 1154-1157.	2.7	2
111	The deuterium depth profile in neutron-irradiated tungsten exposed to plasma. Physica Scripta, 2011, T145, 014051.	2.5	50
112	Comparison of deuterium retention for ion-irradiated and neutron-irradiated tungsten. Physica Scripta, 2011, T145, 014050.	2.5	42
113	Correlation between deuterium retention and microstructure change for tungsten under triple ion implantation. Physica Scripta, 2009, T138, 014051.	2.5	8
114	Behavior of hydrogen isotope retention in carbon implanted tungsten. Journal of Nuclear Materials, 2009, 390-391, 622-625.	2.7	18
115	Trapping behaviour of deuterium ions implanted into tungsten simultaneously with carbon ions. Physica Scripta, 2009, T138, 014050.	2.5	12
116	Temperature Dependence of Oxide Layer Formation on Hydrogen Isotope Retention in Type 316 Stainless Steel. Fusion Science and Technology, 2009, 56, 799-803.	1.1	5
117	Hydrogen retention and carbon deposition in plasma facing components and the shadowed area of JT-60U. Nuclear Fusion, 2007, 47, 1577-1582.	3.5	14
118	Temperature dependence of hydrogen isotope behaviors in non-He+ pre-implanted SiC and He+ pre-implanted SiC. Fusion Engineering and Design, 2007, 82, 2582-2587.	1.9	11
119	Dependence of implantation temperature on chemical behavior of energetic deuterium implanted into tungsten carbide. Journal of Nuclear Materials, 2007, 363-365, 910-914.	2.7	11
120	Effects of helium implantation on hydrogen isotope retention behavior in SiC. Journal of Nuclear Materials, 2007, 363-365, 933-937.	2.7	8
121	Hydrogen isotope behavior in the first wall of JT-60U after deuterium plasma operation. Journal of Nuclear Materials, 2007, 367-370, 1266-1270.	2.7	6
122	Hydrogen isotope behavior and its interaction with post irradiated energetic helium in SiC. Journal of Radioanalytical and Nuclear Chemistry, 2007, 272, 639-644.	1.5	3
123	Interaction between hydrogen isotopes and damaged structures produced by He+ implantation in SiC. Fusion Engineering and Design, 2006, 81, 987-992.	1.9	9
124	Chemical behavior of energetic deuterium implanted into tungsten carbide. Fusion Engineering and Design, 2006, 81, 295-299.	1.9	31
125	Hydrogen isotope retention of JT-60U W-shaped divertor tiles exposed to DD discharges. Journal of Nuclear Materials, 2006, 357, 115-125.	2.7	21
126	Hydrogen Isotope Behavior in Type 316 Stainless Steel Sorbed by Various Methods. Fusion Science and Technology, 2005, 48, 597-600.	1.1	10

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127	Trapping and Detrapping Mechanisms of Deuterium in SiC Studied by XPS and TDS Techniques. Materials Transactions, 2005, 46, 552-556.	1.2	33
128	Retention characteristics of hydrogen isotopes in JT-60U. Journal of Nuclear Materials, 2005, 337-339, 553-559.	2.7	26
129	Hydrogen isotope distributions and retentions in the inner divertor tile of JT-60U. Fusion Engineering and Design, 2005, 75-79, 945-949.	1.9	10
130	Analyses of Hydrogen Isotope Distributions in the Outer Target Tile used in the W-shaped Divertor of JT-60U. Physica Scripta, 2004, , 57.	2.5	11
131	Depth profile and retention of hydrogen isotopes in graphite tiles used in the W-shaped divertor of JT-60U. Journal of Nuclear Materials, 2004, 329-333, 785-789.	2.7	26
132	Major results of the cooperative program between JAERI and universities using plasma facing materials in JT-60U. Journal of Nuclear Materials, 2004, 329-333, 74-80.	2.7	14
133	Correlation between hydrogen isotope profiles and surface structure of divertor tiles in JT-60U. Journal of Nuclear Materials, 2004, 329-333, 894-898.	2.7	9
134	Hydrogen isotope behavior in in-vessel components used for DD plasma operation of JT-60U by SIMS and XPS technique. Journal of Nuclear Materials, 2003, 313-316, 209-213.	2.7	22
135	Hydrogen Adsorption Behavior on Stainless Steel for Cooling Pipe in Fusion Reactor. Fusion Science and Technology, 2003, 44, 359-363.	1.1	5
136	Retention and re-emission behavior of hydrogen isotopes in SiC. Physica Scripta, 2003, T103, 81.	2.5	15
137	Retention and replacement of hydrogen isotopes and isotope effect in SiC by H+ and D+ ion irradiation. Fusion Engineering and Design, 2002, 61-62, 705-710.	1.9	11
138	Progress in the U.S./Japan PHENIX Project for the Technological Assessment of Plasma Facing Components for DEMO Reactors. Fusion Science and Technology, 0, , 1-11.	1.1	2