

# Kenzo Ibano

## List of Publications by Year in descending order

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840776

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docs citations

55  
times ranked

294  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison between helium plasma induced surface structures in group 5 (Nb, Ta) and group 6 elements (Mo, W). Journal of Applied Physics, 2017, 121, .	2.5	21
2	Systematic study of He induced nano-fiber formation of W and other period 6 transition metals. Journal of Nuclear Materials, 2018, 511, 605-609.	2.7	21
3	Design studies of innovatively small fusion reactor based on biomass-fusion hybrid concept: GNOME. Fusion Engineering and Design, 2011, 86, 2779-2782.	1.9	16
4	Laser energy absorption coefficient and in-situ temperature measurement of laser-melted tungsten. Fusion Engineering and Design, 2017, 124, 287-291.	1.9	16
5	Improved hydrogen gas sensing performance of WO <sub>3</sub> films with fibrous nanostructured surface. Applied Surface Science, 2020, 532, 147274.	6.1	16
6	LIBS measurement of trace tantalum and rhenium in tungsten for in-situ diagnostic of nuclear transmutation. Journal of Nuclear Materials, 2019, 522, 324-328.	2.7	14
7	Cost analysis and energy return on investment of fuel cell and gas turbine integrated fusion-biomass hybrid system; application of a small scale conceptual fusion reactor GNOME. Energy, 2020, 203, 117825.	8.8	14
8	Energy deposition and melt deformation on the ITER first wall due to disruptions and vertical displacement events. Nuclear Fusion, 2022, 62, 016001.	3.5	14
9	Self-consistent treatment of the sheath boundary conditions by introducing anisotropic ion temperatures and virtual divertor model. Journal of Computational Physics, 2016, 310, 109-126.	3.8	13
10	Estimation of suppressed erosion by vapor shielding at Be and W walls under transient loads. Nuclear Fusion, 2019, 59, 076001.	3.5	13
11	Lithium research as a plasma facing component material at the University of Illinois. Thin Solid Films, 2010, 518, 6663-6666.	1.8	12
12	Fabrication and Characterization of Ultra-Lightweight, Compact, and Flexible Thermoelectric Device Based on Highly Refined Chip Mounting. Advanced Materials Technologies, 2020, 5, 1901128.	5.8	12
13	Ethanol gas sensing performance of high-dimensional fuzz metal oxide nanostructure. Japanese Journal of Applied Physics, 2018, 57, 040316.	1.5	10
14	Influence of helium on deuterium retention in reduced activation ferritic martensitic steel (F82H) under simultaneous deuterium and helium irradiation. Physica Scripta, 2016, T167, 014067.	2.5	9
15	Molten layer characteristics of W materials and film coated W by pulsed laser irradiation. Fusion Engineering and Design, 2017, 124, 316-320.	1.9	9
16	Reassessing energy deposition for the ITER 5 MA vertical displacement event with an improved DINA model. Nuclear Materials and Energy, 2021, 28, 101016.	1.3	9
17	Generation of excess Si species at Si <sup>*</sup> -SiO <sub>2</sub> interface and their diffusion into SiO <sub>2</sub> during Si thermal oxidation. Journal of Applied Physics, 2008, 103, 026101.	2.5	8
18	Physical erosion studies of plain and lithiated graphite. Journal of Nuclear Materials, 2009, 390-391, 1043-1047.	2.7	8

#	ARTICLE	IF	CITATIONS
19	Simulations of Tungsten Re-deposition Using a Particle-In-Cell Code with Non-uniform Super Particle Sizes. Contributions To Plasma Physics, 2016, 56, 705-710.	1.1	8
20	Study on melting and solidification behaviors of tungsten loaded by high heat flux for divertor in tokamak fusion reactor. Fusion Engineering and Design, 2018, 136, 350-356.	1.9	8
21	Self-consistent simulation of supersonic plasma flows in advanced divertors. Nuclear Fusion, 2019, 59, 076041.	3.5	8
22	Simulation Study of Detached Plasmas by Using One-dimensional SOL Divertor Fluid Code with Virtual Divertor Model. Contributions To Plasma Physics, 2016, 56, 729-735.	1.1	7
23	Damage and deuterium retention of re-solidified tungsten following vertical displacement event-like heat load. Nuclear Materials and Energy, 2017, 12, 1303-1307.	1.3	7
24	Study of mirror effect on scrape-off layer divertor plasma based on a generalized fluid model incorporating ion temperature anisotropy. Contributions To Plasma Physics, 2018, 58, 556-562.	1.1	6
25	Characteristics of plasma flow profiles in a super-X-divertor-like configuration. Nuclear Materials and Energy, 2019, 19, 149-154.	1.3	6
26	Observation and particle simulation of vaporized W, Mo, and Be in PISCES-B plasma for vapor-shielding studies. Nuclear Materials and Energy, 2017, 12, 278-282.	1.3	5
27	Erosion and morphology changes of F82H steel under simultaneous hydrogen and helium irradiation. Fusion Engineering and Design, 2017, 124, 356-359.	1.9	5
28	Laser-induced breakdown spectroscopy measurement of a small fraction of rhenium in bulk tungsten. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 141, 94-98.	2.9	5
29	Simulation study on the vapour shielding at solid walls under transient heat loads using weighted particle model. Contributions To Plasma Physics, 2018, 58, 594-601.	1.1	5
30	First principle calculations of energy of agglomerated helium in the period 6 elements. Nuclear Materials and Energy, 2018, 16, 226-229.	1.3	5
31	Sputtering and Thermal Evaporation Studies of Lithiated ATJ Graphite. IEEE Transactions on Plasma Science, 2010, 38, 341-345.	1.3	4
32	Neutronics and pumping power analyses on the Tokamak reactor for the fusion-biomass hybrid concept. Fusion Engineering and Design, 2013, 88, 2881-2884.	1.9	4
33	Effect of periodic deuterium ion irradiation on deuterium retention and blistering in Tungsten. Nuclear Materials and Energy, 2017, 12, 674-677.	1.3	4
34	In-situ measurement of surface modifications of tungsten exposed to pulsed high heat flux for divertor design in tokamak-type fusion nuclear reactors. Fusion Engineering and Design, 2020, 161, 112042.	1.9	4
35	Design, Fabrication, and Persistent Current Operation of the REBCO Floating Coil for the Plasma Experimental Device Mini-RT. Plasma and Fusion Research, 2014, 9, 1405014-1405014.	0.7	4
36	Longitudinal and shear wave velocities in pure tungsten and tungsten fiber-reinforced tungsten composites. Physica Scripta, 2017, T170, 014024.	2.5	3

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37	Development of a simulation method for evaluating Marangoni convection with free surface for tungsten divertor. Fusion Engineering and Design, 2018, 136, 270-275.	1.9	3
38	A Coulomb collision model for weighted particle simulations with energy and momentum conservation. Contributions To Plasma Physics, 2018, 58, 451-456.	1.1	3
39	An Ingenious Plasma Simulation Model for Large-Scale System with Self-Consistent Electron Dynamics. Plasma and Fusion Research, 2018, 13, 1203088-1203088.	0.7	3
40	Surface morphology of Tungsten-F82H after high-heat flux testing using plasma-arc lamps. Nuclear Materials and Energy, 2018, 16, 128-132.	1.3	3
41	Evaluation of Marangoni convection and free surface velocity of molten tungsten for tungsten divertor. Fusion Engineering and Design, 2019, 140, 117-122.	1.9	3
42	Effects of impurity transport and melt layer motion to the tungsten wall erosion during anomaly events. Journal of Nuclear Materials, 2015, 463, 185-188.	2.7	2
43	Effect of the SiO <sub>2</sub> /Si Interface on Self-Diffusion in SiO <sub>2</sub> Upon Oxidation. Defect and Diffusion Forum, 2008, 273-276, 685-692.	0.4	1
44	High temperature plasma facing components designs for biomass hybrid reactor: GNOME. , 2011, , .		1
45	Parametric Analysis of Low-Q Gnome Reactor Under Peak Heat Load Constraint at the Divertor. Fusion Science and Technology, 2011, 60, 243-246.	1.1	1
46	Possibility on the Thermal Quench of the Superconducting Coil at the Loss-of-Coolant Accident. Plasma and Fusion Research, 2014, 9, 1205006-1205006.	0.7	1
47	Spontaneous Ion Temperature Gradient in Inhomogeneous Magnetic Fields and Its Effect on the Parallel Heat Transport. Plasma and Fusion Research, 2019, 14, 2403010-2403010.	0.7	1
48	Study on pulse shape dependence of tungsten mass erosion under disruption-like heat load. Fusion Engineering and Design, 2021, 165, 112209.	1.9	1
49	Pulse Shape Dependence of Vapor Shielding Efficiencies During Transient Heat Loads. Plasma and Fusion Research, 2021, 16, 1405092-1405092.	0.7	1
50	Observation of surface deformation of tungsten exposed to single pulsed high heat flux and magnetic field for divertor design. Fusion Engineering and Design, 2021, 171, 112547.	1.9	1
51	Extension of the Ingenious Electrostatic Model to Electromagnetic Model for Large-Scale Plasma Simulation with Self-Consistent Electron Dynamics. Plasma and Fusion Research, 2019, 14, 1203091-1203091.	0.7	1
52	Sputtering studies of lithiated ATJ graphite by lithium ion bombardment. , 2009, , .		0
53	Surface morphology changes of silicon carbide by helium plasma irradiation. Nuclear Materials and Energy, 2018, 16, 145-148.	1.3	0
54	Double Leap-Frog Method for Large-Time-Step Particle Simulation to Keep Larmor Radius Small. Plasma and Fusion Research, 2021, 16, 1203100-1203100.	0.7	0

#	ARTICLE	IF	CITATIONS
55	Fluid simulation of plasmas with anisotropic ion pressure in an inhomogeneous magnetic field of a tandem mirror device GAMMA 10/PDX. Journal of Advanced Simulation in Science and Engineering, 2022, 9, 185-197.	0.2	0