Isao Murata

List of Publications by Citations

118 papers	504 citations	11 h-index	17 g-index
122 ext. papers	584 ext. citations	1.3 avg, IF	3.3 L-index

#	Paper	IF	Citations
118	Effectiveness of boron neutron capture therapy for recurrent head and neck malignancies. *Applied Radiation and Isotopes*, **2009**, 67, S37-42	1.7	64
117	New Sampling Method in Continuous Energy Monte Carlo Calculation for Pebble Bed Reactors. *Journal of Nuclear Science and Technology*, **1997**, 34, 734-744	1	26
116	Light output response of KamLAND liquid scintillator for protons and 12C nuclei. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2010**, 622, 574-582	1.2	22
115	Measurements of Double-Differential Cross Sections of Charged-Particle Emission Reactions for Several Structural Elements of Fusion Power Reactors by 14.1-MeV Incident Neutrons. *Nuclear Science and Engineering*, **1999**, 132, 16-29	1.2	22
114	Neutron and gamma-ray source-term characterization of AmBe sources in Osaka University. *Progress in Nuclear Science and Technology*, **2014**, 4, 345-348	0.3	17
113	Characterization measurement of a thick CdTe detector for BNCT-SPECT - detection efficiency and energy resolution. *Applied Radiation and Isotopes*, **2014**, 88, 129-33	1.7	16
112	Development of a thick CdTe detector for BNCT-SPECT. *Applied Radiation and Isotopes*, **2011**, 69, 1706-9	1.7	16
111	Visualization of high radiation field by radiophotoluminescence photography. *Radiation Measurements*, **2014**, 68, 23-30	1.5	14
110	Burnup calculation of fusion–fission hybrid energy system with thorium cycle. *Fusion Engineering and Design*, **2007**, 82, 2779-2785	1.7	13
109	Liquid Li based neutron source for BNCT and science application. *Applied Radiation and Isotopes*, **2015**, 106, 92-4	1.7	12
108	Measurement and Analysis of Neutron-Induced Alpha Particle Emission Double-Differential Cross Section of Carbon at 14.2 MeV. *Journal of Nuclear Science and Technology*, **2008**, 45, 103-115	1	11
107	Fusion Neutronics Benchmark Experiment on Structural and Advanced Blanket Materials - Leakage Gamma-ray Spectrum Measurement -. *Journal of Nuclear Science and Technology*, **2002**, 39, 955-958	1	10
106	Experimental study on the performance of an epithermal neutron flux monitor for BNCT. *Applied Radiation and Isotopes*, **2016**, 113, 28-32	1.7	10
105	Design study of neutron flux intensity monitor between ten and several hundred keV for BNCT. *Journal of Nuclear Science and Technology*, **2016**, 53, 1112-1119	1	9
104	New integral experiments for large angle scattering cross section data benchmarking with DT neutron beam at JAEA/FNS. *Fusion Engineering and Design*, **2012**, 87, 695-699	1.7	9
103	Investigation of irradiation effects on highly integrated leading-edge electronic components of diagnostics and control systems for LHD deuterium operation. *Nuclear Fusion*, **2017**, 57, 086012	3.3	8
102	High detection efficiency scintillating fiber detector for time-resolved measurement of triton burnup 14 MeV neutron in deuterium plasma experiment. *Review of Scientific Instruments*, **2018**, 89, 10I101	1.7	7

101	New burnup calculation system for fusion–fission hybrid reactor. *Fusion Engineering and Design*, **2007**, 82, 2772-2778	1.7	7
100	Low-energy neutron spectrometer using position sensitive proportional counter—Feasibility study based on numerical analysis. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2008**, 589, 445-454	1.2	7
99	Benchmark Experiment on Vanadium with D-T Neutrons and Validation of Evaluated Nuclear Data Libraries by Analysis of the Experiment. *Journal of Nuclear Science and Technology*, **1999**, 36, 242-249	1	7
98	Feasibility study on BNCT-SPECT using a CdTe detector. *Progress in Nuclear Science and Technology*, **2011**, 1, 267-270	0.3	7
97	Study on measuring device arrangement of array-type CdTe detector for BNCT-SPECT. *Reports of Practical Oncology and Radiotherapy*, **2016**, 21, 102-7	1.5	6
96	Performance testing of the neutron flux monitors from 10keV to 1MeV developed for BNCT: A preliminary study. *Applied Radiation and Isotopes*, **2017**, 125, 119-123	1.7	6
95	Fabrication of radiophotoluminescence dosimeter with 3D-printing technology. *Radiation Measurements*, **2019**, 124, 141-145	1.5	6
94	A feasibility design study on a neutron spectrometer for BNCT with liquid moderator. *Applied Radiation and Isotopes*, **2015**, 106, 41-4	1.7	6
93	Basic detection property of an array-type CdTe detector for BNCT-SPECT - Measurement and analysis of anti-coincidence events. *Applied Radiation and Isotopes*, **2016**, 118, 389-394	1.7	6
92	Tritium burning in inertial electrostatic confinement fusion facility. *Fusion Engineering and Design*, **2016**, 109-111, 1709-1713	1.7	6
91	Monte Carlo optimization of an epithermal neutron flux monitor for BNCT. *Journal of Nuclear Science and Technology*, **2017**, 54, 1118-1122	1	6
90	Development of neutron-sensitive glass dosimeter containing isotopically enriched boron. *Radiation Measurements*, **2011**, 46, 1484-1487	1.5	6
89	Measurements of Double Differential Cross Sections for Charged Particle Emission Reactions by 14.1MeV Incident Neutrons. *Journal of Nuclear Science and Technology*, **2002**, 39, 413-416	1	6
88	Neutron and Gamma-ray Dose Evaluation on Accelerator Neutron Source using p-Li Reaction for BNCT. *Progress in Nuclear Science and Technology*, **2011**, 1, 533-536	0.3	6
87	Mock-up experiment at Birmingham University for BNCT project of Osaka University--Neutron flux measurement with gold foil. *Applied Radiation and Isotopes*, **2015**, 106, 72-4	1.7	5
86	Development of human hand phantom containing radiophotoluminescence material. *Radiation Measurements*, **2016**, 85, 18-25	1.5	5
85	Verification of KERMA factor for beryllium at neutron energy of 14.2MeV based on charged-particle measurement. *Fusion Engineering and Design*, **2008**, 83, 1674-1677	1.7	5
84	New Sampling Method in Continuous Energy Monte Carlo Calculation for Pebble Bed Reactors		5

83	Design optimization of a fast-neutron detector with scintillating fibers for triton burnup experiments at fusion experimental devices. *Review of Scientific Instruments*, **2019**, 90, 043503	1.7	4
82	Development of string-shaped radiophotoluminescence dosimeter for high-radiation field. *Radiation Measurements*, **2018**, 111, 1-5	1.5	4
81	Techniques to Measure Absolute Neutron Spectrum and Intensity for Accelerator Based Neutron Source for BNCT. *Plasma and Fusion Research*, **2018**, 13, 2501007-2501007	0.5	4
80	Study on a liquid-moderator-based neutron spectrometer for BNCT□Development and experimental test of the prototype spectrometer. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2017**, 870, 90-96	1.2	4
79	A New Approach to Estimate Importance for Weight Window in Forward Monte Carlo Calculations. *Nuclear Science and Engineering*, **2008**, 159, 273-283	1.2	4
78	Blanket mock-up experiment with a LiAlPb assembly irradiated with 14MeV neutrons in preparation of the HCLL-TBM neutronics experiment. *Fusion Engineering and Design*, **2008**, 83, 1813-1817	1.7	4
77	Initial operation results of NE213 scintillation detector for time-resolved measurements on triton burnup in KSTAR. *Review of Scientific Instruments*, **2018**, 89, 10I118	1.7	4
76	Development of An Epi-thermal Neutron Field for Fundamental Researches for BNCT with A DT Neutron Source. *EPJ Web of Conferences*, **2017**, 153, 04008	0.3	3
75	Synthesis and characterization of spherical radiophotoluminescence glass detectors by melting method. *Radiation Measurements*, **2018**, 113, 1-6	1.5	3
74	Development of thermal neutron-sensitive glass dosemeter containing lithium. *Radiation Protection Dosimetry*, **2011**, 144, 226-30	0.9	3
73	Analysis of the propagation of neutrons and gamma-rays from the fast neutron source reactor YAYOI. *Journal of Nuclear Materials*, **2011**, 417, 1345-1347	3.3	3
72	New Radiophotoluminescence Glass Dosimeter with Specialized Radiation-Sensitive Surface Layer. *Japanese Journal of Applied Physics*, **2010**, 49, 116401	1.4	3
71	Preliminary spectrum shifter design for intermediate energy nuclear data benchmark experiments with DT neutrons. *Fusion Engineering and Design*, **2009**, 84, 1446-1449	1.7	3
70	Problems of lead nuclear data in fusion blanket design. *Fusion Engineering and Design*, **2009**, 84, 1076-1080	1.7	3
69	Measurement of Charged-Particle Emission Double-Differential Cross Section of Fluorine for 14.2MeV Neutrons. *Journal of Nuclear Science and Technology*, **2011**, 48, 1146-1157	1	3
68	Verification of nuclear data for DT neutron induced charged-particle emission reaction of light nuclei. *Fusion Engineering and Design*, **2007**, 82, 2786-2793	1.7	3
67	Measurement of Secondary Gamma-ray Skyshine and Groundshine from Intense 14 MeV Neutron Source Facility. *Journal of Nuclear Science and Technology*, **2000**, 37, 650-654	1	3
66	Development of epi-thermal neutron beam intensity detector with Ga(n,□Ga reaction for boron neutron capture therapy. *Applied Radiation and Isotopes*, **2019**, 151, 145-149	1.7	2

65	Cross sections of (n,x) reactions on cerium isotopes induced by D-T neutrons. *Applied Radiation and Isotopes*, **2019**, 147, 144-151	1.7	2
64	Neutron intensity monitor with activation foil for p-Li neutron source for BNCT--Feasibility test of the concept. *Applied Radiation and Isotopes*, **2015**, 106, 75-7	1.7	2
63	Tritium release from molten salt FLiNaK under low flux neutron irradiation with an AmBe neutron source. *Fusion Engineering and Design*, **2018**, 136, 1269-1272	1.7	2
62	Design of an epi-thermal neutron flux intensity monitor with GaN wafer for boron neutron capture therapy. *Journal of Nuclear Science and Technology*, **2014**, 1-6	1	2
61	Performance analysis of fusion nuclear-data benchmark experiments for light to heavy materials in MeV energy region with a neutron spectrum shifter. *Journal of Nuclear Materials*, **2011**, 417, 1127-1130	3.3	2
60	A twin-type airflow pulse ionization chamber for continuous alpha-radioactivity monitoring in atmosphere. *Radiation Measurements*, **2010**, 45, 1044-1048	1.5	2
59	Neutron Emission Profile of d-Be Reaction with Low-energy Deuteron Beam for Accelerator Neutron Source. *Journal of Nuclear Science and Technology*, **2008**, 45, 58-61	1	2
58	Angle-correlated spectrum measurement for two neutrons emitted from (n,2n) reaction with the coincidence detection technique using a pencil-beam DT neutron source. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2008**, 595, 439-446	1.2	2
57	Fusion Neutronics Benchmark Experiment on Structural and Advanced Blanket Materials - Leakage Neutron Spectrum Measurement -. *Journal of Nuclear Science and Technology*, **2002**, 39, 978-981	1	2
56	Effect of Heterogeneities in Heavy Concrete on Shielding of Fusion Neutrons. *Fusion Science and Technology*, **1999**, 36, 181-193		2
55	Tritium Release from Molten FLiNaBe under Low Flux Neutron Irradiation. *Plasma and Fusion Research*, **2019**, 14, 1405044-1405044	0.5	2
54	Precise Numerical Simulation of Gamma-ray Pulse Height Spectrum Measured with a CdTe Detector Designed for BNCT-SPECT. *Progress in Nuclear Science and Technology*, **2012**, 3, 52-55	0.3	2
53	Development of precise energy spectrum measurement technique for high-power pulsed X-ray sources for industrial use. *Journal of Nuclear Science and Technology*, **2016**, 53, 766-773	1	2
52	Time-resolved secondary triton burnup 14 MeV neutron measurement by a new scintillating fiber detector in middle total neutron emission ranges in deuterium large helical device plasma experiments. *AAPPS Bulletin*, **2021**, 31, 1		2
51	Feasibility study on real-time □ray spectrum / dose measurement system. *EPJ Web of Conferences*, **2017**, 153, 07014	0.3	1
50	DESIGN IMPROVEMENT OF A LIQUID-MODERATOR-BASED NEUTRON SPECTROMETER FOR BNCT. *Radiation Protection Dosimetry*, **2018**, 180, 300-303	0.9	1
49	Performance test of liquid-moderator-based neutron spectrometer for BNCT: Mono-energetic and spontaneous fission spectrum neutron measurements. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2019**, 940, 435-440	1.2	1
48	The new design and validation of an epithermal neutron flux detector using 71Ga(n,□)72Ga reaction for BNCT. *Journal of Instrumentation*, **2019**, 14, P06016-P06016	1	1

47	DEVELOPMENT OF ISOTOPICALLY ENRICHED BORON-DOPED ALUMINA DOSIMETER FOR THERMAL NEUTRONS. *Radiation Protection Dosimetry*, **2017**, 177, 475-480	0.9	1
46	Measurement of Spatial Dose Distribution of High Radiation Field by Radiophotoluminescence Photography. *Radiation Safety Management*, **2017**, 16, 13-19	0.9	1
45	Radiophotoluminescence light scope for high-dose dosimetry. *Radiation Measurements*, **2015**, 82, 88-92	1.5	1
44	Boron Neutron Capture Therapy (BNCT) - Low-Energy Neutron Spectrometer for Neutron Field Characterization -. *Plasma and Fusion Research*, **2014**, 9, 4401107-4401107	0.5	1
43	Measurement of Reaction Rates in Li/V-Alloy Assembly with 14 MeV Neutron Irradiation. *Fusion Science and Technology*, **2011**, 60, 681-686	1.1	1
42	Speed-up of cross-section collapsing with weight-window for subcritical burnup calculation. *Fusion Engineering and Design*, **2009**, 84, 1281-1284	1.7	1
41	Advanced Burnup Calculation Code System in a Subcritical State with Continuous-Energy Monte Carlo Code for Fusion-Fission Hybrid Reactor. *Journal of Nuclear Science and Technology*, **2009**, 46, 776-786	1	1
40	A New Approach to Make Collapsed Cross Section for Burnup Calculation of Subcritical System. *Journal of Nuclear Science and Technology*, **2008**, 45, 86-88	1	1
39	(n, 2n) Reaction Cross Section Measurement with A Beam DT Neutron Source. *Journal of Nuclear Science and Technology*, **2002**, 39, 433-436	1	1
38	Assessment of Tritium Behavior in Man Using a Modified Three-Compartment Model. *Journal of Nuclear Science and Technology*, **2002**, 39, 316-322	1	1
37	Measurement of Biological Half-Life of Tritium in Handling Worker at Fusion Research Facility. *Fusion Science and Technology*, **1998**, 34, 656-660		1
36	Thermal neutron field with D-T neutron source for BNCT. *Progress in Nuclear Science and Technology*, **2011**, 1, 513-516	0.3	1
35	Gamma-ray transmission evaluation using imaging plate designed for X-ray radiography. *Progress in Nuclear Science and Technology*, **2014**, 4, 699-703	0.3	1
34	Design of SPECT for BNCT to measure local boron dose with GAGG scintillator.. *Applied Radiation and Isotopes*, **2021**, 181, 110056	1.7	1
33	Benchmark Experiment on Vanadium with D-T Neutrons and Validation of Evaluated Nuclear Data Libraries by Analysis of the Experiment		1
32	Measurement and Analysis of Neutron-Induced Alpha Particle Emission Double-Differential Cross Section of Carbon at 14.2 MeV		1
31	Control of Chemical Forms of Tritium in FLiNaK under Low Flux Neutron Irradiation. *Plasma and Fusion Research*, **2018**, 13, 3404071-3404071	0.5	1
30	One-dimensional dose measurement with string-shaped photo-stimulated luminescence detector. *Radiation Measurements*, **2019**, 124, 137-140	1.5	0

29	Design and performance of an epithermal neutron flux detector using Mn(n,[illegible])Mn reaction for BNCT. *Applied Radiation and Isotopes*, **2021**, 176, 109880	1.7	0
28	Cerebrospinal fluid-based boron delivery system may help increase the uptake boron for boron neutron capture therapy in veterinary medicine: A preliminary study with normal rat brain cells.. *Research in Veterinary Science*, **2022**, 148, 1-6	2.5	0
27	Development of beta ray scanner for imaging foliar uptake of radiocesium. *Radiation Detection Technology and Methods*, **2017**, 1, 1	0.7	
26	Gamma-Ray Dose Measurement with Radio-Photoluminescence Glass Dosimeter in Mixed Radiation Field for BNCT. *EPJ Web of Conferences*, **2017**, 153, 04009	0.3	
25	Thought Experiment to Examine Benchmark Performance for Fusion Nuclear Data. *EPJ Web of Conferences*, **2017**, 153, 07015	0.3	
24	Single floating cell irradiation technique with an X-ray microbeamPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications.View all notes. *Journal of Radiation Research and Applied Sciences*, **2018**, 11, 83-88	1.5	
23	Optimization of Experimental System Design for Benchmarking of Large Angle Scattering Reaction Cross Section at 14 MeV Using Two Shadow Bars. *Plasma and Fusion Research*, **2018**, 13, 2405002-2405002	0.5	
22	Simplified Neutron Detector for Angular Distribution Measurement of p-Li Neutron Source. *Plasma and Fusion Research*, **2014**, 9, 4405111-4405111	0.5	
21	Performance analysis for neutronics benchmark experiments with partial adjoint contribution estimated by forward Monte Carlo calculation. *Fusion Engineering and Design*, **2013**, 88, 2302-2305	1.7	
20	Basic investigation of boron neutron capture therapy (BNCT) using novel boron agents and accelerator based neutron source. *IFMBE Proceedings*, **2009**, 638-641	0.2	
19	Direct neutron spectrum measurement to validate natZr(n,2n) reaction cross-section at 14MeV. *Fusion Engineering and Design*, **2009**, 84, 1376-1379	1.7	
18	On accelerator-based neutron sources and neutron field characterization with low energy neutron spectrometer based on position sensitive 3He counter. *Applied Radiation and Isotopes*, **2009**, 67, S288-91	1.7	
17	Nuclear Data Benchmarking for Lead by LiAl/Pb Fusion Blanket Mock-Up Experiment. *Nuclear Technology*, **2009**, 168, 591-595	1.4	
16	A New Low-Energy Neutron Spectrometer Based on Position-Sensitive Proportional Counter for Accelerator-Based Neutron Source. *Nuclear Technology*, **2009**, 168, 373-377	1.4	
15	Development of Cell Chip Based on Track Detector for Examination of Biological Damage by Alpha Particles. *Journal of Nuclear Science and Technology*, **2010**, 47, 1206-1210	1	
14	Recent Measurements of Nuclear Data and Integral Tests for Fusion Reactor Application. *Journal of Nuclear Science and Technology*, **2002**, 39, 1112-1117	1	
13	Measurements of Secondary Gamma-Ray Production Cross Sections for natFe, 51V, natMo, natZr, natNi and 181Ta with Hp-Ge Detector Induced by DT Neutrons. *Journal of Nuclear Science and Technology*, **2002**, 39, 437-440	1	
12	Effect of Aggregate Specification in Heavy Concrete for Fusion Reactor Shield on Neutron Dose Evaluation. *Journal of Nuclear Science and Technology*, **2000**, 37, 798-802	1	

11	Radioactivation Analysis of Concrete Wall in OKTAVIAN Facility. *Plasma and Fusion Research*, **2022**, 17, 1405001-1405001	0.5
10	Boron neutron capture therapy in patients with recurrent head and neck cancers who have no other treatment options.. *Journal of Clinical Oncology*, **2014**, 32, 6046-6046	2.2
9	Boron neutron capture therapy in non-SCC patients with intractable head and neck malignancies who have no other treatment options.. *Journal of Clinical Oncology*, **2016**, 34, e17507-e17507	2.2
8	Cross Talk Experiment with Two-element CdTe Detector and Collimator for BNCT-SPECT. *Journal of Radiation Protection and Research*, **2016**, 41, 328-332	0.7
7	Performance of Convenient Film Scanner System for Automatic Counting of Track Etched Pits on PADC Detectors. *Radiation Safety Management*, **2010**, 9, 1-6	0.9
6	Development of a Grab-sampling Type Multitubular Proportional Counter for Measurement of Radon Concentration in Atmosphere. *Progress in Nuclear Science and Technology*, **2011**, 1, 396-399	0.3
5	Validation of large-angle scattering data via shadow-bar experiment. *Fusion Engineering and Design*, **2016**, 112, 360-366	1.7
4	Development of capillary plate neutron detector filed with liquid scintillator by using recoiled-particle trajectory analyses. *Journal of Instrumentation*, **2019**, 14, C10026-C10026	1
3	Feasibility study on image reconstruction for single-photon emission computed tomography with limited projections by neural networks. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2021**, 986, 164700	1.2
2	Benchmark experiment of large-angle scattering reaction cross section of iron at 14 MeV using two shadow bars Comparison of experimental results with ENDF/B-VIII *Journal of Nuclear Science and Technology*, **2021**, 58, 80-86	1
1	Experimental verification of real-time gamma-ray energy spectrum and dose monitor.. *Applied Radiation and Isotopes*, **2022**, 185, 110226	1.7