

# Masabumi Miyabe

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

382  
citations

687363

13  
h-index

794594

19  
g-index

46  
all docs

46  
docs citations

46  
times ranked

231  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancement of intensity in microwave-assisted laser-induced breakdown spectroscopy for remote analysis of nuclear fuel recycling. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 886-892.	3.0	47
2	Double-pulse LIBS of gadolinium oxide ablated by femto- and nano-second laser pulses. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 101, 545-549.	2.3	31
3	Absorption spectroscopy of uranium plasma for remote isotope analysis of next-generation nuclear fuel. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 112, 87-92.	2.3	28
4	Laser ablation absorption spectroscopy for isotopic analysis of plutonium: Spectroscopic properties and analytical performance. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 134, 42-51.	2.9	27
5	Ablation plume structure and dynamics in ambient gas observed by laser-induced fluorescence imaging spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 110, 101-117.	2.9	25
6	The role of microwaves in the enhancement of laser-induced plasma emission. <i>Frontiers of Physics</i> , 2016, 11, 1.	5.0	25
7	Highly excited odd-parity levels of atomic uranium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, 4957-4972.	1.5	21
8	The effect of ambient gas on measurements with microwave-assisted laser-induced plasmas in MA-LIBS with relevance for the analysis of nuclear fuel. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 311, 77-84.	1.5	21
9	Spectroscopy of laser-produced cerium plasma for remote isotope analysis of nuclear fuel. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 101, 65-70.	2.3	20
10	Determination of Ionization Potential of Calcium by High-Resolution Resonance Ionization Spectroscopy. <i>Journal of the Physical Society of Japan</i> , 2006, 75, 034302.	1.6	18
11	Development of RIMS Apparatus for Isotope Analysis of Calcium in Nuclear Waste Materials. <i>Journal of Nuclear Science and Technology</i> , 2006, 43, 305-310.	1.3	15
12	Total angular momenta of even-parity autoionizing levels and odd-parity high-lying levels of atomic uranium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2002, 35, 3865-3877.	1.5	13
13	Laser ablation absorption spectroscopy for remote analysis of uranium. <i>Hyperfine Interactions</i> , 2013, 216, 71-77.	0.5	13
14	Development of microwave-assisted, laser-induced breakdown spectroscopy without a microwave cavity or waveguide. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 062001.	1.5	9
15	Laser cooling and imaging of individual radioactive $\text{Sr}^+$ ions. <i>Physical Review A</i> , 2017, 96, ...	2.5	7
16	Development of laser ablation absorption spectroscopy for nuclear fuel materials: plume expansion behavior for refractory metals observed by laser-induced fluorescence imaging spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	2.3	7
17	All-diode-laser cooling of $\text{Sr}^+$ isotope ions for analytical applications. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 062401.	1.5	6
18	Ultra Trace Isotope Determination in Environmental, Bio-Medical and Fundamental Research by High Resolution Laser-Mass Spectrometry.. <i>Journal of Nuclear Science and Technology</i> , 2002, 39, 303-307.	1.3	6

#	ARTICLE	IF	CITATIONS
19	Investigation of Optical Ionization of Strontium via $5s^2 \text{ } ^3\text{P}_1 \text{ } ^3\text{S}_1 \text{ } ^3\text{S}_0$ transitions. <i>Journal of Spectroscopy</i> , 2018, 2018, 1-6.	1.3	5
20	Development of an interference-filter-type external-cavity diode laser for resonance ionization spectroscopy of strontium. <i>Review of Scientific Instruments</i> , 2019, 90, 123002.	1.3	5
21	Isotope shift and hyperfine structure measurements on triple resonance excitation to the autoionizing Rydberg state of atomic strontium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021, 275, 107882.	2.3	4
22	Development of Frequency Stabilized Diode Laser Based on a Spectroscopic Study of Magnetically Induced Circular Dichroism of Atomic Rubidium. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 4120-4122.	1.5	3
23	Effect of defocusing on laser ablation plume observed by laser-induced fluorescence imaging spectroscopy. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 022401.	1.5	3
24	Development of two-color resonant ionization sputtered neutral mass spectrometry and microarea imaging for Sr. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020, 38, 044001.	1.2	3
25	Spectroscopic analysis of radioactive strontium with low isotopic abundance using laser resonance ionization. <i>Hyperfine Interactions</i> , 2020, 241, 1.	0.5	3
26	Generation of particles and fragments by quasicontinuous wave fiber laser irradiation of stainless steel, alumina, and concrete materials. <i>Journal of Laser Applications</i> , 2021, 33, .	1.7	3
27	Laser-Induced Breakdown Spectroscopy for Nuclear Fuel Material. <i>The Review of Laser Engineering</i> , 2014, 42, 918.	0.0	3
28	Production of $^{186}\text{mRe}$ by Proton Bombardment of Enriched $^{186}\text{W}$ . <i>Journal of the Physical Society of Japan</i> , 2008, 77, 025004.	1.6	2
29	Design, construction and characterization of a single unit external cavity diode laser coupled tapered amplifier system for atomic physics. <i>Optics and Laser Technology</i> , 2020, 126, 106118.	4.6	2
30	Effect of Defocusing on Ablated Volume of Gadolinium Oxide. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 042403.	1.5	1
31	Time-resolved plasma imaging in microwave-assisted laser-induced breakdown spectroscopy. <i>Journal of Physics: Conference Series</i> , 2017, 820, 012004.	0.4	1
32	Development of Bandpass Filtered External Cavity Diode Laser System for RIMS of Radioactive Strontium Isotopes. , 2019, , .		1
33	Resonance ionisation spectrometry measurement of atomic calcium Rydberg isotope shifts. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 045002.	1.5	1
34	Investigation on the DC Stark shifts of strontium autoionization states for isotope-selective resonance ionization. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021, 265, 107549.	2.3	1
35	Development of RIMS Apparatus for Isotope Analysis of Calcium in Nuclear Waste Materials. <i>Journal of Nuclear Science and Technology</i> , 2006, 43, 305-310.	1.3	1
36	Laser Cooling and Spectroscopy of Trapped Sr Ions. , 2019, , .		1

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37	Laser-induced plasma emission enhanced by microwaves in argon gas for potential application of nuclear fuel material analysis. <i>Journal of Physics: Conference Series</i> , 2017, 820, 012003.	0.4	0
38	Resonant sputtered neutral mass spectrometry using multiple reflections of laser to counterbalance Doppler broadening. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020, 38, 034001.	1.2	0
39	Odd-parity autoionizing levels of uranium observed by two-color two-step photoionization optogalvanic spectroscopy. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 145003.	1.5	0
40	Improvement of mapping quality by reflection of a laser beam in Resonance-SNMS. <i>Journal of Surface Analysis (Online)</i> , 2019, 26, 204-205.	0.1	0