

# Ryo Masuda

## List of Publications by Year in descending order

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Synchrotron-Radiation-Based MÃ¶ssbauer Spectroscopy. Physical Review Letters, 2009, 102, 217602.	7.8	83
2	Development of an energy-domain <sup>57</sup> Fe-MÃ¶ssbauer spectrometer using synchrotron radiation and its application to ultrahigh-pressure studies with a diamond anvil cell. Journal of Synchrotron Radiation, 2009, 16, 723-729.	2.4	76
3	Generation and Application of Ultrahigh Monochromatic X-ray Using High-Quality <sup>57</sup> FeBO <sub>3</sub> Single Crystal. Japanese Journal of Applied Physics, 2007, 46, 821-825.	1.5	37
4	Structural and Valence Changes of Europium Hydride Induced by Application of High-Pressure $\text{H}_{\frac{2}{mml:mi}} \times \frac{2}{mml:mn} \text{Fe}_{mml:msub}$ . Physical Review Letters, 2011, 107, 025501.	7.8	34
5	Iron-specific phonon density of states in the superconductors La <sub>1-x</sub> Ca <sub>x</sub> FePO. Physical Review B, 2008, 78, .	3.2	27
6	Synchrotron radiation-based MÃ¶ssbauer spectra of <sup>174</sup> Yb measured with internal conversion electrons. Applied Physics Letters, 2014, 104, .	3.3	24
7	Synchrotron radiation-based quasi-elastic scattering using time-domain interferometry with multi-line gamma rays. Scientific Reports, 2017, 7, 12558.	3.3	24
8	Nuclear excitation by electron transition on Au <sup>197</sup> by photoionization around the K <sup>+</sup> absorption edge. Physical Review C, 2006, 74, .	2.9	23
9	Magnetic Friedel Oscillation at the Fe(001) Surface: Direct Observation by Atomic-Layer-Resolved Synchrotron Radiation Fe <sup>57</sup> MÃ¶ssbauer Spectroscopy. Physical Review Letters, 2020, 125, 236806.	7.8	22
10	Grazing-incidence synchrotron-radiation <sup>57</sup> Fe-MÃ¶ssbauer spectroscopy using a nuclear BraggAmonochromator and its application to theÅstudy of magnetic thin films. Journal of Synchrotron Radiation, 2012, 19, 198-204.	2.4	20
11	High-pressure radiative conductivity of dense silicate glasses with potential implications for dark magmas. Nature Communications, 2014, 5, 5428.	12.8	19
12	Studies on spintronics-related thin films using synchrotron-radiation-based MÃ¶ssbauer spectroscopy. Hyperfine Interactions, 2013, 217, 127-135.	0.5	18
13	Development of neV-Resolution Spectroscopy Using Synchrotron-Based <sup>57</sup> Fe MÃ¶ssbauer Radiation. Japanese Journal of Applied Physics, 2008, 47, 8087.	1.5	17
14	MÃ¶ssbauer spectroscopy in the energy domain using synchrotron radiation. Journal of Physics: Conference Series, 2010, 217, 012002.	0.4	17
15	Variable-Frequency Nuclear Monochromator Using Single-Line Pure Nuclear Bragg Reflection of Oscillating <sup>57</sup> FeBO <sub>3</sub> Single Crystal. Japanese Journal of Applied Physics, 2007, 46, L930-L932.	1.5	16
16	Magnetic and spin transitions in wÅ <sup>1/4</sup> stite: A synchrotron MÃ¶ssbauer spectroscopic study. Physical Review B, 2016, 93, .	3.2	15
17	Synchrotron Radiation MÃ¶ssbauer Spectroscopy Using Doppler-shifted 14.4 keV Single-line <sup>57</sup> Fe-MÃ¶ssbauer Radiation. Japanese Journal of Applied Physics, 2007, 46, L703.	1.5	14
18	Synchrotron-based Nickel MÃ¶ssbauer Spectroscopy. Inorganic Chemistry, 2016, 55, 6866-6872.	4.0	14

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19	Synchrotron Radiation Mössbauer Spectroscopy Using $^{149}$ Sm Nuclei. Journal of the Physical Society of Japan, 2016, 85, 083704.	1.6	14
20	Ultrahigh-Pressure Measurement in the Multimegabar Range by Energy-Domain Synchrotron Radiation 57Fe-Mössbauer Spectroscopy Using Focused X-rays. Japanese Journal of Applied Physics, 2007, 46, L382-L384.	1.5	11
21	Synchrotron-radiation-based Mössbauer spectroscopy of $\text{K}_{\langle \text{mml:mi} \rangle \langle \text{mml:mprescripts} / \rangle \langle \text{mml:none} / \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 40 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{in antiferromagnetic potassium nanoclusters in sodalite}$ . Physical Review B, 2015, 91, <math>57</math>Fe polarization-dependent synchrotron Mössbauer Spectroscopy using a diamond phase Aplate and an iron borate nuclear Bragg Monochromator. Journal of Synchrotron Radiation, 2015, 22, 427-435.	3.2	11
22	Observation of Flux-Grown $\hat{\pm}\text{-Fe}_{2\langle \text{sub} \rangle 0\langle \text{sub} \rangle 3\langle \text{sub} \rangle}$ Single Crystal at the Morin Transition by $^{57}$ Fe Synchrotron Radiation Mössbauer Diffraction. Journal of the Physical Society of Japan, 2016, 85, 054705.	1.6	10
24	Nuclear resonant scattering experiment with fast time response: Photonuclear excitation of Hg201. Physical Review C, 2018, 97, .	2.9	10
25	A Spectrometer for Rayleigh Scattering of Mössbauer Radiation Using Synchrotron Radiation. Japanese Journal of Applied Physics, 2009, 48, 120221.	1.5	9
26	Anisotropic phonon density of states in FePt nanoparticles with L10 structure. Physical Review B, 2010, 81, .	3.2	9
27	61Ni synchrotron radiation-based Mössbauer spectroscopy of nickel-based nanoparticles with hexagonal structure. Scientific Reports, 2016, 6, 20861.	3.3	9
28	Variable-bandwidth 57Fe Synchrotron Mössbauer Source. Journal of the Physical Society of Japan, 2018, 87, 093001.	1.6	9
29	In situ synchrotron 57Fe Mössbauer spectroscopy of RFe2 (R=Y,Gd) hydrides synthesized under ultra-high-pressure hydrogen. Journal of Alloys and Compounds, 2013, 580, S264-S267.	5.5	8
30	Thickness dependence of Morin transition temperature in iridium-doped hematite layers studied through nuclear resonant scattering. Hyperfine Interactions, 2017, 238, 1.	0.5	8
31	High-energy-resolution monochromator for nuclear resonant scattering of synchrotron radiation by Te-125 at 35.49 keV. , 2007, ..		7
32	The spin state of iron in Fe3+-bearing Mg-perovskite and its crystal chemistry at high pressure. American Mineralogist, 2014, 99, 1555-1561.	1.9	7
33	Precise determination of hyperfine interactions and second-order doppler shift in $^{149}\text{Sm}$ Mössbauer transition. Hyperfine Interactions, 2018, 239, 1.	0.5	7
34	Synchrotron Mössbauer spectroscopic and x-ray diffraction study of ferropericlase in the high-pressure range of the lower mantle region. Physical Review B, 2021, 103, .	3.2	7
35	Spin state and electronic environment of iron in basaltic glass in the lower mantle. American Mineralogist, 2017, 102, 2106-2112.	1.9	7
36	Slow dynamics in glycerol: collective de gennes narrowing and independent angstrom motion. Hyperfine Interactions, 2016, 237, 1.	0.5	6

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37	Synchrotron radiation-based $^{61}\text{Ni}$ Mössbauer spectroscopic study of $\text{Li}(\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3})\text{O}_2$ cathode materials of lithium ion rechargeable battery. <i>Hyperfine Interactions</i> , 2016, 237, 1.	0.5	6
38	Conversion Electron and X-ray Mössbauer Spectroscopies Using Synchrotron Radiation. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 7136-7139.	1.5	5
39	Mössbauer Study of the $\text{SmFe}_{2}$ Hydride through $^{149}\text{Sm}$ and $^{57}\text{Fe}$ . <i>Journal of the Physical Society of Japan</i> , 2012, 81, 034714.	1.6	5
40	Synchrotron radiation $^{57}\text{Fe}$ -Mössbauer spectroscopy using nuclear monochromator. <i>Hyperfine Interactions</i> , 2012, 204, 97-100.	0.5	5
41	Evolution of synchrotron-radiation-based Mössbauer absorption spectroscopy for various isotopes. <i>Hyperfine Interactions</i> , 2017, 238, 1.	0.5	5
42	Simultaneous Measurement of $\gamma$ -ray and Conversion Electron Mössbauer Spectra of Fe Films under Total Reflection Conditions Using Synchrotron Mössbauer Source. <i>Journal of the Physical Society of Japan</i> , 2020, 89, 054707.	1.6	5
43	Nuclear Resonant Scattering of Synchrotron Radiation by $^{158}\text{Gd}$ . <i>Journal of the Physical Society of Japan</i> , 2005, 74, 3122-3123.	1.6	4
44	Development of $^{125}\text{Te}$ synchrotron-radiation-based Mössbauer spectroscopy. <i>Hyperfine Interactions</i> , 2014, 226, 687-691.	0.5	4
45	Synchrotron radiation based Mössbauer absorption spectroscopy of various nuclides. <i>Hyperfine Interactions</i> , 2016, 237, 1.	0.5	4
46	The study of the magnetization process of fe film by magnetic Compton scattering and Mössbauer spectroscopy. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 408, 41-45.	2.3	4
47	Effect of silica nanoparticle filler on microscopic polymer $\tilde{\tau}$ -relaxation dynamics. <i>Hyperfine Interactions</i> , 2017, 238, 1.	0.5	4
48	Electronic properties and compressional behavior of $\text{Fe-Si}$ alloys at high pressure. <i>American Mineralogist</i> , 2018, 103, 1959-1965.	1.9	4
49	Direct observation of interlayer molecular translational motion in a smectic phase and determination of the layer order parameter. <i>Physical Review Research</i> , 2019, 1, .	3.6	4
50	$^{125}\text{Te}$ Synchrotron-Radiation-Based Mössbauer Spectroscopy of $\text{Fe}_{1.1}\text{Te}$ and $\text{FeTe}_{0.5}\text{Se}_{0.5}$ . <i>Journal of the Physical Society of Japan</i> , 2014, 83, 044708.	1.6	3
51	Valence fluctuating compound $\text{YbAlB}_4$ studied by $^{174}\text{Yb}$ Mössbauer spectroscopy and X-ray diffraction using synchrotron radiation. <i>Physica B: Condensed Matter</i> , 2018, 536, 162-164.	2.7	3
52	Nuclear Resonant Scattering of Synchrotron Radiation by Yb Nuclides. <i>Journal of the Physical Society of Japan</i> , 2006, 75, 094716.	1.6	2
53	An in situ Mössbauer study using synchrotron radiation. <i>Hyperfine Interactions</i> , 2012, 204, 139-142.	0.5	2
54	High-Pressure-Hydrogen-Induced Spin Reconfiguration in $\text{GdFe}_2$ Observed by $^{57}\text{Fe}$ -Polarized Synchrotron Radiation Mössbauer Spectroscopy with Nuclear Bragg Monochromator. <i>Journal of the Physical Society of Japan</i> , 2016, 85, 123707.	1.6	2

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55	Synchrotron-radiation-based Mössbauer absorption spectroscopy with high resonant energy nuclides. <i>Hyperfine Interactions</i> , 2019, 240, 1.	0.5	2
56	Microscopic molecular translational dynamics in cholesteric and cholesteric blue phases. <i>Hyperfine Interactions</i> , 2020, 241, 1.	0.5	2
57	Valence Transition of EuRh <sub>2</sub> Si <sub>2</sub> Studied by Synchrotron Mössbauer Spectroscopy. <i>Journal of the Physical Society of Japan</i> , 2020, 89, 104703.	1.6	2
58	Mixed-valence state and structure changes of EuH ( $x = 2$ and $2 < x < 3$ ) under high-pressure H <sub>2</sub> atmosphere. <i>Journal of Alloys and Compounds</i> , 2021, 865, 158637.	5.5	2
59	Application of synchrotron-radiation-based Mössbauer spectroscopy to 193Ir 73 keV transition. <i>Hyperfine Interactions</i> , 2021, 242, 1.	0.5	2
60	161Dy synchrotron-radiation-based Mössbauer absorption spectroscopy. <i>Hyperfine Interactions</i> , 2022, 243, 1.	0.5	2
61	Rayleigh Scattering of Synchrotron Mössbauer Radiation Using a Variable Bandwidth Nuclear Bragg Monochromator. <i>Journal of the Physical Society of Japan</i> , 2022, 91, .	1.6	2
62	Attempt to measure magnetic hyperfine fields in metallic thin wires under spin Hall conditions using synchrotron-radiation Mössbauer spectroscopy. <i>Journal of Applied Physics</i> , 2015, 117, 17E126.	2.5	1
63	Dynamics of iodine anions in KI and LiI aqueous solutions studied by <sup>127</sup> I nuclear resonant quasi-elastic scattering. <i>Hyperfine Interactions</i> , 2016, 237, 1.	0.5	1
64	Ferrimagnetic Cage Framework in Ca <sub>12</sub> Fe <sub>10</sub> Si <sub>4</sub> O <sub>32</sub> Cl <sub>6</sub> . <i>Inorganic Chemistry</i> , 2017, 56, 566-572.	4.0	1
65	<sup>57</sup> Fe nuclear resonant inelastic scattering of Fe1.1Te. <i>Hyperfine Interactions</i> , 2018, 239, 1.	0.5	1
66	61Ni synchrotron-radiation-based Mössbauer absorption spectroscopy of Ni nanoparticle composites. <i>Hyperfine Interactions</i> , 2018, 239, 1.	0.5	1
67	Development of <sup>166</sup> Er Mössbauer spectroscopy in KURNS. <i>Hyperfine Interactions</i> , 2019, 240, 1.	0.5	1
68	Direct observation of magnetic Friedel oscillation at Fe(001) surface. <i>Hyperfine Interactions</i> , 2021, 242, 1.	0.5	1
69	Dependence of Incoherent Nuclear Resonant Scattering of Synchrotron Radiation on the Number of Resonant Nuclei. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 023710.	1.6	0
70	Development of a measurement system enabling the reconstruction of $\beta^+$ -ray time spectra by simultaneous recording of energy and time information. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 108001.	1.5	0
71	Nuclear Bragg reflection of <sup>57</sup> FeBO <sub>3</sub> in radio-frequency magnetic field observed with Si-APD linear array detector. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 016501.	1.5	0
72	Synchrotron-Radiation-Based Energy-Domain Mössbauer Spectroscopy, Nuclear Resonant Inelastic Scattering, and Quasielastic Scattering Using Mössbauer Gamma Rays. <i>Topics in Applied Physics</i> , 2021, , 57-104.	0.8	0

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73	Studies on spintronics-related thin films using synchrotron-radiation-based Mössbauer spectroscopy. , 2012, , 127-135.	0	0
74	An in situ Mössbauer study using synchrotron radiation. , 2013, , 139-142.	0	0
75	Synchrotron radiation $^{57}\text{Fe}$ -Mössbauer spectroscopy using nuclear monochromator. , 2013, , 97-100.	0	0