

# Masatoshi Saito

## List of Publications by Year in descending order

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65  
papers

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471509

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501196

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all docs

65  
docs citations

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times ranked

658  
citing authors

#	ARTICLE	IF	CITATIONS
1	Potential of dual-energy subtraction for converting CT numbers to electron density based on a single linear relationship. <i>Medical Physics</i> , 2012, 39, 2021-2030.	3.0	115
2	Structural Study of Pd-Based Amorphous Alloys with Wide Supercooled Liquid Region by Anomalous X-ray Scattering. <i>Materials Transactions, JIM</i> , 1999, 40, 491-497.	0.9	72
3	Partial Structural Functions of Molten CuBr Estimated from the Anomalous X-Ray Scattering Measurements. <i>Journal of the Physical Society of Japan</i> , 1997, 66, 633-640.	1.6	49
4	Structures of Molten CuCl, CuBr and CuI. <i>Journal of the Physical Society of Japan</i> , 1991, 60, 2678-2683.	1.6	43
5	A simple formulation for deriving effective atomic numbers via electron density calibration from dual-energy CT data in the human body. <i>Medical Physics</i> , 2017, 44, 2293-2303.	3.0	41
6	Influence of silicate ions on the formation of goethite from green rust in aqueous solution. <i>Corrosion Science</i> , 2007, 49, 2946-2961.	6.6	35
7	Glass-transition behavior of Ni: Calculation, prediction, and experiment. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	32
8	A New Method for Describing the Atomic-scale Structure of Rusts Formed on the Iron Based Alloy Surfaces.. <i>ISIJ International</i> , 2003, 43, 366-372.	1.4	31
9	Initial implementation of the conversion from the energy-subtracted CT number to electron density in tissue inhomogeneity corrections: An anthropomorphic phantom study of radiotherapy treatment planning. <i>Medical Physics</i> , 2015, 42, 1378-1388.	3.0	30
10	Partial Structural Functions of Molten AgBr Estimated from the Anomalous X-Ray Scattering Data Coupled with Neutron Diffraction. <i>Journal of the Physical Society of Japan</i> , 1999, 68, 1932-1938.	1.6	29
11	Dual-energy approach to contrast-enhanced mammography using the balanced filter method: Spectral optimization and preliminary phantom measurement. <i>Medical Physics</i> , 2007, 34, 4236-4246.	3.0	28
12	Simplified derivation of stopping power ratio in the human body from dual-energy CT data. <i>Medical Physics</i> , 2017, 44, 4179-4187.	3.0	26
13	Conversion of the energy-subtracted CT number to electron density based on a single linear relationship: an experimental verification using a clinical dual-source CT scanner. <i>Physics in Medicine and Biology</i> , 2013, 58, N135-N144.	3.0	24
14	Partial Structural Functions of Liquid Bi <sub>30</sub> Ga <sub>70</sub> Alloy Estimated from the Anomalous X-Ray Scattering Measurement in Asymmetrical Reflection Geometry with Synchrotron Radiation. <i>Journal of the Physical Society of Japan</i> , 1997, 66, 3120-3126.	1.6	21
15	Characterization of Oxide Film Grown on Stainless Steel by a New In-House Grazing Incidence X-ray Scattering (GIXS) Apparatus. <i>Materials Transactions, JIM</i> , 1995, 36, 1-5.	0.9	20
16	Structural Study of Amorphous Ge <sub>50</sub> Al <sub>40</sub> Cr <sub>10</sub> Alloy. <i>Journal of the Physical Society of Japan</i> , 1999, 68, 2298-2303.	1.6	20
17	Influence of foreign ions on the atomic scale structure of ferric oxyhydroxides. <i>Corrosion Science</i> , 2005, 47, 2543-2549.	6.6	19
18	Reverse Monte Carlo Simulation for Determining the Partial Structural Functions of GeO <sub>2</sub> Glass from the Anomalous X-ray Scattering and Neutron Diffraction Data. <i>Materials Transactions, JIM</i> , 1999, 40, 552-555.	0.9	16

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19	Preparation of neodymium sulphides by the reaction of Nd <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> with carbon disulphide. Journal of Alloys and Compounds, 1994, 210, 291-297.	5.5	15
20	Anomalous Grazing X-ray Reflectometry for Determining the Number Density of Atoms in the Near-Surface Region. Materials Transactions, JIM, 1996, 37, 39-44.	0.9	15
21	Quasimonochromatic x-ray computed tomography by the balanced filter method using a conventional x-ray source. Medical Physics, 2004, 31, 3436-3443.	3.0	14
22	Atomic-scale structure and morphology of ferric oxyhydroxides formed by corrosion of iron in various aqueous media. Corrosion Science, 2006, 48, 3675-3691.	6.6	14
23	Atomic-Scale Structure and Morphology of Ferric Oxyhydroxides Formed by Corrosion of an Iron-Silicon Alloy. Materials Transactions, 2006, 47, 243-246.	1.2	12
24	Anomalous X-ray Scattering Study of Local Structures in the Superionic Conducting Glass (Cu <sub>0.3</sub> )(Cu <sub>2</sub> O) <sub>0.35</sub> (MoO <sub>3</sub> ) <sub>0.35</sub> . Materials Transactions, JIM, 1995, 36, 1434-1439.		
25	Partial Structural Functions of Molten RbBr Estimated from the Anomalous X-ray Scattering Data. Japanese Journal of Applied Physics, 1999, 38, 596.	1.5	11
26	Optimized low-kV spectrum of dual-energy CT equipped with high-kV tin filtration for electron density measurements. Medical Physics, 2011, 38, 2850-2858.	3.0	11
27	Technical Note: Exploring the limit for the conversion of energy-subtracted CT number to electron density for high-atomic-number materials. Medical Physics, 2014, 41, 071701.	3.0	10
28	Structural Study of Poly-Molybdate Ions in Acid Mo-Ni Aqueous Solutions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1997, 52, 855-862.	1.5	9
29	Influence of Sulfate Ions on the Atomic-Scale Structure of $\beta$ -FeOOH. Materials Transactions, 2005, 46, 2030-2035.	1.2	9
30	Spectral optimization for measuring electron density by the dual-energy computed tomography coupled with balanced filter method. Medical Physics, 2009, 36, 3631-3642.	3.0	9
31	Technical Note: Relation between dual-energy subtraction of CT images for electron density calibration and virtual monochromatic imaging. Medical Physics, 2015, 42, 4088-4093.	3.0	8
32	Anomalous X-ray scattering for determining the partial structural functions of binary liquids. Journal of Synchrotron Radiation, 2000, 7, 152-159.	2.4	7
33	Cation Disorder in (Ag <sub>x</sub> Cu <sub>1-x</sub> )Br. Journal of the Physical Society of Japan, 1989, 58, 527-532.	1.6	7
34	Thermodynamic Investigations on the AgBr-CuBr System. Journal of the Physical Society of Japan, 1989, 58, 4041-4047.	1.6	6
35	Structural Properties of Liquid Ag-In System. Physics and Chemistry of Liquids, 1998, 35, 253-268.	1.2	6
36	Anomalous X-ray Scattering (AXS) Study on the Local Ordering Structure around Ni and Cu in Amorphous Pd <sub>40</sub> Ni <sub>10</sub> Cu <sub>30</sub> P <sub>20</sub> Alloy. Japanese Journal of Applied Physics, 1999, 38, 448.	1.5	6

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37	Contribution of Cu <sup>+</sup> Ions Dissolved in AgBr to the Transport Properties. Journal of the Physical Society of Japan, 1991, 60, 3415-3425.	1.6	5
38	Application of Energy Dispersive Grazing Incidence X-ray Reflectometry Method to Structural Analysis of Liquid/Liquid and Liquid/Solid Interfaces. Materials Transactions, JIM, 2000, 41, 1651-1656.	0.9	5
39	Thermogravimetric study of carbon reduction of Nd <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> . Thermochemica Acta, 1994, 244, 117-129.	2.7	4
40	Development of New In-House Grazing X-ray Reflection System for Analyzing Liquid Surface and Interface. Materials Transactions, JIM, 1996, 37, 1409-1412.	0.9	4
41	Effective Pair Potentials of Liquid CuBr Estimated from the Anomalous X-Ray Scattering Data. Journal of the Physical Society of Japan, 1997, 66, 3097-3101.	1.6	4
42	XPS Study of the Effect of Ar-Ion Bombardment and Aging on Surface Properties of Superionic Conducting Glass (Cu) <sub>0.3</sub> (Cu) <sub>2</sub> O) <sub>0.35</sub> (MoO <sub>3</sub> ) <sub>0.35</sub> . Materials Transactions, JIM, 1998, 39, 1024-1028.	0.9	4
43	Atomic-scale Structure of Ferric Oxyhydroxide Formed from Fe-Si Alloy in Aqueous Solutions Containing Different Salts. ISIJ International, 2006, 46, 1210-1217.	1.4	4
44	Quadratic relation for mass density calibration in human body using dual-energy CT data. Medical Physics, 2021, 48, 3065-3073.	3.0	4
45	Proton dose calculation based on converting dual-energy CT data to stopping power ratio (DEEDZ-SPR): a beam-hardening assessment. Physics in Medicine and Biology, 2020, 65, 235046.	3.0	4
46	Partial structural functions of binary liquids estimated from anomalous X-ray scattering measurements. Journal of Synchrotron Radiation, 1998, 5, 923-925.	2.4	3
47	Thermal Expansion of the AgBr-CuBr System. Journal of the Physical Society of Japan, 1991, 60, 573-579.	1.6	2
48	The Structure of Amorphous Platinum Disulfide as Studied by Anomalous X-ray Scattering. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1994, 49, 1031-1036.	1.5	2
49	New Anomalous Grazing X-ray Reflection Method for Determining the Atomic Number Density in Multi-layered Thin Film. Materials Transactions, JIM, 1999, 40, 1044-1049.	0.9	2
50	Effective Pair Potentials of Molten AgBr Estimated from Experimental Partial Structure Factors. Materials Transactions, 2001, 42, 829-832.	1.2	2
51	Dielectric screening properties in molten noble-metal halides. Journal of Alloys and Compounds, 2008, 452, 182-187.	5.5	2
52	Simulation of photon-counting detectors for conversion of dual-energy-subtracted computed tomography number to electron density. Radiological Physics and Technology, 2019, 12, 105-117.	1.9	2
53	Anomalous X-ray Scattering Method for Determining Electron Density Distribution in Amorphous Selenium. Materials Transactions, JIM, 1996, 37, 1026-1029.	0.9	1
54	Separation of the Partial Structure Factors in Molten Copper Halides and Derivation of Dielectric Constants. Physics and Chemistry of Liquids, 1998, 36, 1-16.	1.2	1

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55	Electron Density Distribution in Amorphous Se Determined by Reverse Monte Carlo Simulation Coupled with Anomalous X-ray Scattering Data. <i>Materials Transactions</i> , 2001, 42, 2071-2074.	1.2	1
56	Effective pair potentials of Molten AgBr, CuBr, Cul and RbBr estimated from the experimental partial structure factors. <i>Science and Technology of Advanced Materials</i> , 2002, 3, 59-65.	6.1	1
57	Atomic-scale structure in $\gamma$ -FeOOH particles estimated from the anomalous X-ray scattering data with reverse Monte Carlo simulation. <i>Journal of Alloys and Compounds</i> , 2005, 401, 24-28.	5.5	1
58	Dielectric screening properties in molten salts. <i>Physics and Chemistry of Liquids</i> , 2007, 45, 181-196.	1.2	1
59	Technical note: Optimization for improved tube loading efficiency in the dual-energy computed tomography coupled with balanced filter method. <i>Medical Physics</i> , 2010, 37, 4182-4185.	3.0	1
60	Comment on: Dual-energy CT quantitative imaging: A comparison study between twin-beam and dual-source CT scanners [ <i>Med. Phys.</i> 44(1), 171-179 (2017)]. <i>Medical Physics</i> , 2018, 45, 3996-3996.	3.0	1
61	Atomic-scale Structure and Morphology of $\gamma$ -FeOOH Particles Formed during Corrosion of Fe-based Alloys in Aqueous Solution. <i>E-Journal of Surface Science and Nanotechnology</i> , 2008, 6, 49-53.	0.4	1
62	Frontiers in Crystallography with Synchrotron Radiation. X-ray Studies near Absorption Edges of Elements. Atom-Selective Experiments. Structure Analysis of Disordered Materials by the Anomalous X-ray Scattering (AXS) Method.. <i>Nihon Kessho Gakkaishi</i> , 1997, 39, 20-25.	0.0	1
63	Transport Properties of Superionic Conducting Glasses (Ag <sub>0.4</sub> (Ag <sub>2</sub> O) <sub>0.3</sub> (GeO <sub>2</sub> ) <sub>0.3</sub> (X) <sub>0.1</sub> ) (X=l, Br, Cl). <i>Materials Transactions, JIM</i> , 2000, 41, 1670-1674.		
64	Comment on: Methodological accuracy of image-based electron density assessment using dual-energy computed tomography [ <i>Med. Phys.</i> 44(6), 2429-2437 (2017)]. <i>Medical Physics</i> , 2019, 46, 1075-1076.	3.0	0
65	The Structural Analysis of Non-crystalline Materials by the Anomalous X-ray Scattering Coupled with Reverse Monte Carlo Simulation. <i>Nihon Kessho Gakkaishi</i> , 2006, 48, 81-85.	0.0	0