

Hirofumi Matsuda

List of Publications by Year in descending order

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2,330
citations

304743

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80
all docs

80
docs citations

80
times ranked

2792
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructure-resolved degradation simulation of lithium-ion batteries in space applications. Journal of Power Sources Advances, 2022, 14, 100083.	5.1	4
2	<i>Operando</i> resonant soft X-ray emission spectroscopy of the LiMn_2O_4 cathode using an aqueous electrolyte solution. Physical Chemistry Chemical Physics, 2022, 24, 19177-19183.	2.8	2
3	Chemical bath deposition of transparent ZnO films incorporated with erythrosine B molecules and their synergetic electro/photochromic properties. CrystEngComm, 2020, 22, 2447-2453.	2.6	6
4	Effect of the Charge Process on the Performance of Li-ion Cells during Charge-Discharge Cycling at 0°C . Electrochemistry, 2020, 88, 230-235.	1.4	6
5	Effect of the Charge Process and Discharge Rate on the Lithium Stripping Process Visibility in LiFePO_4 -Graphite Li-ion Cells during Charge-Discharge Cycling at 0°C . Electrochemistry, 2020, 88, 340-342.	1.4	3
6	Durability Analysis of the REIMEI Satellite Li-ion Batteries after more than 14 Years of Operation in Space. Electrochemistry, 2020, 88, 300-304.	1.4	4
7	Large Charge Transfer Energy in LiFePO_4 Revealed by Full-Multiplet Calculation for the Fe $L_{2,3}$ Soft X-ray Emission Spectra. ChemPhysChem, 2018, 19, 988-992.	2.1	13
8	Sr and Zr transport in PLD-grown Gd-doped ceria interlayers. Solid State Ionics, 2018, 314, 165-171.	2.7	22
9	Synthesis of core-sheath structured fibers of SnO_2 /carbon composites by electrospinning. Journal of the Ceramic Society of Japan, 2018, 126, 662-666.	1.1	2
10	Investigation of the relationship between the cycle performance and the electronic structure in $\text{LiAl}_x\text{Mn}_2\text{O}_4$ ($x = 0$ and 0.2) using soft X-ray spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 16507-16511.	2.8	10
11	Correction to Fabrication of Transparent ZnO Thick Film with Unusual Orientation by the Chemical Bath Deposition. Crystal Growth and Design, 2016, 16, 2460-2460.	3.0	0
12	Operando soft x-ray emission spectroscopy of LiMn_2O_4 thin film involving Li^+ ion extraction/insertion reaction. Electrochemistry Communications, 2015, 50, 93-96.	4.7	29
13	Fabrication of Transparent ZnO Thick Film with Unusual Orientation by the Chemical Bath Deposition. Crystal Growth and Design, 2015, 15, 3150-3156.	3.0	12
14	Gel-Derived Cationic Stacking Films of Carbon Nanotube-Graphene Complexes as Oxygen Cathodes. ChemSusChem, 2014, 7, 2845-2852.	6.8	22
15	Synthesis and Electrical Properties of Garnet-type Solid Oxide Electrolyte Thin Films from Solution Route. Materials Research Society Symposia Proceedings, 2013, 1496, 1.	0.1	1
16	Synthesis of single crystalline $\text{Li}_0.44\text{MnO}_2$ nanowires with large specific capacity and good high current density property for a positive electrode of Li ion battery. Journal of Power Sources, 2010, 195, 7098-7101.	7.8	19
17	Development of Positive Electrode Materials for the High Rate Lithium Ion Battery by Nanostructure Control. Key Engineering Materials, 2010, 445, 109-112.	0.4	0
18	Synthesis of Triaxial LiFePO_4 Nanowire with a VGCF Core Column and a Carbon Shell through the Electrospinning Method. ACS Applied Materials & Interfaces, 2010, 2, 212-218.	8.0	121

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19	Synthesis of Single Crystalline Spinel LiMn_2O_4 Nanowires for a Lithium Ion Battery with High Power Density. <i>Nano Letters</i> , 2009, 9, 1045-1051.	9.1	493
20	Synthesis of single crystalline electro-conductive $\text{Na}_{0.44}\text{MnO}_2$ nanowires with high aspect ratio for the fast charge/discharge Li ion battery. <i>Journal of Power Sources</i> , 2008, 182, 349-352.	7.8	78
21	High-Rate Lithium Ion Batteries with Flat Plateau Based on Self-Nanoporous Structure of Tin Electrode. <i>Journal of the Electrochemical Society</i> , 2007, 154, A146.	2.9	27
22	Broadband surface plasmon resonance spectroscopy for determination of refractive-index dispersion of dielectric thin films. <i>Applied Physics Letters</i> , 2007, 90, 1811-12.	3.3	16
23	Systematic characterization of spectral surface plasmon resonance sensors with absorbance measurement. <i>Applied Optics</i> , 2007, 46, 7963.	2.1	6
24	Synthesis of a Perpendicular TiO_2 Nanosheet Film with the Superhydrophilic Property without UV Irradiation. <i>Langmuir</i> , 2007, 23, 7447-7450.	3.5	118
25	Remote voltage generation through sono-electrochemical process on platinum surface. <i>Electrochemistry Communications</i> , 2006, 8, 801-806.	4.7	0
26	Ultrasound-Triggered Smart Drug Release from a Poly(dimethylsiloxane) Mesoporous Silica Composite. <i>Advanced Materials</i> , 2006, 18, 3083-3088.	21.0	223
27	Development of Lead-Free Piezoelectric Thick Films with a/b-Axis-Oriented $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$. <i>Key Engineering Materials</i> , 2006, 301, 61-64.	0.4	2
28	Synthesis and Properties of Nd-Substituted Bismuth Titanate Polycrystalline Thin Films with a/b-Axes Orientation. <i>Key Engineering Materials</i> , 2006, 301, 57-60.	0.4	2
29	Structural and Electrical Properties of Polycrystalline $\text{Bi}_{4-x}\text{Nd}_x\text{Ti}_3\text{O}_{12}$ Ferroelectric Thin Films with in-Plane c-Axis Orientations. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L292-L294.	1.5	4
30	PbTiO_3 content dependence of crystal structure and electrical properties of (100)/(001)-oriented epitaxial $\text{Pb}(\text{Mg}_{1-x}\text{Nb}_x)_3\text{O}_9\text{-PbTiO}_3$ films grown by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2005, 98, 086112.	2.5	10
31	Dependence of electrical properties of epitaxial $\text{Pb}(\text{Zr,Ti})\text{O}_3$ thick films on crystal orientation and $\text{Zr}^{4+}/(\text{Zr}+\text{Ti})$ ratio. <i>Journal of Applied Physics</i> , 2005, 98, 094106.	2.5	114
32	Charge-Compensative Ion Substitution of La^{3+} -Substituted Bismuth Titanate Thin Films for Enhancement of Remanent Polarization. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 2636-2639.	1.5	17
33	Piezoelectric Properties of Polar-Axis-Oriented Ferroelectric $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$ Thick Films. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 6689-6691.	1.5	6
34	Giant Ferroelectric Polarization in Polar-Axis-Oriented $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$ Polycrystalline Thin Films. <i>Key Engineering Materials</i> , 2004, 269, 45-48.	0.4	0
35	Synthesis and Properties of Nd-Substituted Bismuth Titanate Polycrystalline Thin Films with Polar-Axis Orientation. <i>Key Engineering Materials</i> , 2004, 269, 53-56.	0.4	3
36	Comparison Study of (001)/(100)-Oriented Epitaxial and Fiber-Textured $\text{Pb}(\text{Zr,Ti})\text{O}_3$ Thick Films Prepared by MOCVD. <i>Integrated Ferroelectrics</i> , 2004, 64, 217-225.	0.7	6

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37	Uniform field-induced strain in $a\hat{a}\cdot b$ -axes-oriented $\text{Bi}_{3.9}\text{Pr}_{0.1}\text{Ti}_3\text{O}_{12}$ thick films on IrO_2/Si substrates for lead-free piezoelectric microdevice applications. <i>Applied Physics Letters</i> , 2004, 85, 1220-1222.	3.3	23
38	Ferroelectric and Piezoelectric Properties of Disk Shape Lead Zirconate Titanate Thick Films. <i>Materials Transactions</i> , 2004, 45, 233-235.	1.2	10
39	Ti-site Substitution Using the Higher-valent Cation for Enhancing the Ferroelectric Properties of Nd^{3+} -substituted Bismuth Titanate Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2003, 784, 1181.	0.1	0
40	Ferro- and piezoelectric properties of $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$ polycrystalline thick films with Ps-vector orientation. <i>Materials Research Society Symposia Proceedings</i> , 2003, 784, 1011.	0.1	0
41	Fabrication of Lead Zirconate Titanate Thick Film Disks for Micro Transducer Devices. <i>Materials Research Society Symposia Proceedings</i> , 2003, 785, 451.	0.1	1
42	Sample Geometry Effects on Electric-Field-Induced Displacements in Piezoelectric Thin Films Measured by Atomic Force Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2003, 784, 11291.	0.1	4
43	Design and ferroelectric properties of polar-axis-oriented polycrystalline $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$ thick films on Ir/Si substrates. <i>Applied Physics Letters</i> , 2003, 83, 5023-5025.	3.3	40
44	Large piezoelectric response in (111)-oriented epitaxial $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ films consisting of mixed phases with rhombohedral and tetragonal symmetry. <i>Applied Physics Letters</i> , 2003, 83, 2408-2410.	3.3	39
45	Fabrication of Ion-Cosubstituted Bismuth Titanate Thin Films by Chemical Solution Deposition Method. <i>Integrated Ferroelectrics</i> , 2003, 52, 41-54.	0.7	11
46	Synthesis and Electrical Properties of Sr- and Nb-Cosubstituted $\text{Bi}_{4-x}\text{Sr}_x\text{Ti}_3-x\text{Nb}_x\text{O}_{12}$ Polycrystalline Thin Films. <i>Japanese Journal of Applied Physics</i> , 2003, 42, L949-L952.	1.5	3
47	Electrical Properties of $(\text{Ca},\text{Sr})\text{Bi}_4\text{Ti}_4\text{O}_{15}$ Thin Films Fabricated Using a Chemical Solution Deposition Method. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 5990-5993.	1.5	15
48	Compositional Dependence of Electrical Properties of Highly (100)-/(001)-Oriented $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ Thick Films Prepared on Si Substrates by Metalorganic Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 5922-5926.	1.5	20
49	Orientation Behavior and Ferro- and Piezoelectric Properties of $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$ Polycrystalline Films. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 5977-5980.	1.5	36
50	Texture-control of lead zirconate titanate films for actuator applications. , 2003, , .		2
51	Second-Order Nonlinear Optical Properties of Solution-Derived C-Axis Oriented $\text{Pb}(\text{Ba},\text{Sr})_{1-x}\text{Ti}_3\text{O}_{12}$ Thin Films. <i>Key Engineering Materials</i> , 2002, 216, 97-100.	0.4	1
52	Approach for enhanced polarization of polycrystalline bismuth titanate films by $\text{Nd}^{3+}/\text{V}^{5+}$ cosubstitution. <i>Applied Physics Letters</i> , 2002, 81, 2229-2231.	3.3	157
53	Fabrication of M^{3+} -Substituted and $\text{M}^{3+}/\text{V}^{5+}$ -Cosubstituted Bismuth Titanate Thin Films [M=lanthanoid] by Chemical Solution Deposition Technique. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 6820-6824.	1.5	61
54	Evaluation of Longitudinal Displacement for Lead Zirconate Titanate Films. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 6735-6738.	1.5	34

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55	Enhancement of Remanent Polarization of BIT-based Thin Films by Ti-site Substitution using Ions with Higher Charge Valences. Materials Research Society Symposia Proceedings, 2002, 748, 1.	0.1	1
56	Piezoelectric property investigation for sol-gel derived Bi ₄ Ti ₃ O ₁₂ thick films. Materials Research Society Symposia Proceedings, 2002, 748, 1.	0.1	0
57	Top Electrode Area Dependence on Displacement Property of Lead Zirconate Titanate Films Prepared by Chemical Solution Deposition Process. Materials Research Society Symposia Proceedings, 2002, 748, 1.	0.1	0
58	Spectroscopic Studies of Rare-Earth-Doped BaTiO ₃ Luminescent Gels. Key Engineering Materials, 2001, 216, 57-60.	0.4	1
59	Modulated Photocurrent Measurements on Pure and V-Doped β -Rhombohedral Boron. Journal of Solid State Chemistry, 2000, 154, 307-311.	2.9	3
60	Synthesis of Crystalline Barium Titanate Thin Films by Gel-Aging Process on Substrate at Room Temperature. Key Engineering Materials, 2000, 181-182, 81-84.	0.4	0
61	Room-temperature synthesis of crystalline barium titanate thin films by high-concentration sol-gel method. Journal of Non-Crystalline Solids, 2000, 271, 162-166.	3.1	45
62	Structural Effects on Optical Properties of Sol-Gel Derived Transparent Monolithic BaTiO ₃ Gel. Key Engineering Materials, 1999, 157-158, 3-8.	0.4	0
63	Varistor characteristics in PTCR-type (Ba,Sr)TiO ₃ ceramics prepared by single-step firing in air. Journal of Materials Science, 1999, 34, 2635-2639.	3.7	14
64	Giant Piezoresistive Effects in Single Grain Boundaries of Semiconducting Barium Titanate Ceramics*. , 1999, 4, 99-103.		7
65	Shift of Optical Absorption Edge in Sol-Gel Derived Transparent BaTiO ₃ Gels During Aging. Journal of Sol-Gel Science and Technology, 1999, 16, 165-171.	2.4	9
66	Low-Temperature Preparation of (Ba,Sr)TiO ₃ Perovskite Phase by Sol-Gel Method. Journal of Sol-Gel Science and Technology, 1999, 16, 129-134.	2.4	17
67	Low-Temperature Synthesis and Electrical Properties of Semiconducting BaTiO ₃ Ceramics by the Sol-Gel Method with High Concentration Alkoxide Solutions.. Journal of the Ceramic Society of Japan, 1999, 107, 290-292.	1.3	5
68	Stress-Induced Resistivity Anomaly in Semiconducting Barium Titanate Ceramic Wire. Journal of the American Ceramic Society, 1998, 81, 229-232.	3.8	4
69	Optical Absorption in Sol-Gel-Derived Crystalline Barium Titanium Fine Particles. Journal of the American Ceramic Society, 1998, 81, 3010-3012.	3.8	25
70	Helical nanotubes of hexagonal boron nitride. Journal of Electron Microscopy, 1997, 46, 75-78.	0.9	50
71	Electron Energy-Loss Spectroscopy Study of the Electronic Structure of Li- and V-Doped β -Rhombohedral Boron. Journal of Solid State Chemistry, 1997, 133, 152-155.	2.9	10
72	A Unified Picture for Icosahedral Cluster Solids in Boron-Based and Aluminum-Based Compounds. Journal of Solid State Chemistry, 1997, 133, 302-309.	2.9	47

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73	Mössbauer Spectroscopy and Electrical Conductivity of Fe-Doped $\hat{\Gamma}^2$ -Rhombohedral Boron. Journal of Solid State Chemistry, 1997, 133, 342-346.	2.9	17
74	Differential Negative Resistance and Piezoresistivity in Thin Semiconducting BaTiO_3 Ceramic Bars. Journal of the American Ceramic Society, 1997, 80, 1881-1884.	3.8	10
75	Shift of the Curie Point of Barium Titanate Ceramics with Sintering Temperature. Journal of the American Ceramic Society, 1997, 80, 2590-2596.	3.8	58
76	Structures and Properties of Semiconductor Microclusters. Production and Properties of B12 Cluster Solids.. Hyomen Kagaku, 1997, 18, 156-164.	0.0	2
77	Structural- and electronic-property investigations on metal-doped $\hat{\Gamma}^2$ -rhombohedral boron. Journal of Physics and Chemistry of Solids, 1996, 57, 1167-1174.	4.0	34
78	Structural and electronic properties of Li- and Cu-doped $\hat{\Gamma}^2$ -rhombohedral boron constructed from icosahedral and truncated icosahedral clusters. Physical Review B, 1995, 52, 6102-6110.	3.2	71
79	Rietveld analysis of LiB_{13} with $\hat{\Gamma}^2$ -rhombohedral boron structure. Journal of Alloys and Compounds, 1995, 221, 120-124.	5.5	42