

Hiroki Taniguchi

List of Publications by Year in descending order

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122
papers

2,449
citations

257450

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128
all docs

128
docs citations

128
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	<p> http://www.w3.org/1998/Math/MathML $\text{Pb}(\text{Mg}_{1-x}\text{Nb}_x)_3\text{O}_{12}$ $\text{Pb}(\text{Mg}_{1-x}\text{Nb}_x)_3\text{O}_{12}$ </p> <p>stretchy="false">(</mml:mo><mml:msub><mml:mi>Mg</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>3</mml:mn></mml:msub></mml:math>): A Ferroelectric with Mu. Physical Review Letters, 2009, 103, 207601.</p>	7.8	256
2	<p>AgNbO₃: A lead-free material with large polarization and electromechanical response. Applied Physics Letters, 2007, 90, 252907.</p>	3.3	229
3	<p>Tuning the orthorhombic–rhombohedral phase transition temperature in sodium potassium niobate by incorporating barium zirconate. Physica Status Solidi - Rapid Research Letters, 2009, 3, 142-144.</p>	2.4	133
4	<p>Plastic/Ferroelectric Crystals with Easily Switchable Polarization: Low-Voltage Operation, Unprecedentedly High Pyroelectric Performance, and Large Piezoelectric Effect in Polycrystalline Forms. Journal of the American Chemical Society, 2019, 141, 9349-9357.</p>	13.7	132
5	<p>Origin of Giant Dielectric Response in Nonferroelectric CaCu₃Ti₄O₁₂: Inhomogeneous Conduction Nature Probed by Atomic Force Microscopy. Chemistry of Materials, 2008, 20, 1694-1698.</p>	6.7	77
6	<p>Preparation of Cu₂ZnSnS₄ single crystals from Sn solutions. Journal of Crystal Growth, 2012, 341, 38-41.</p>	1.5	69
7	<p>Comprehensive Structural Study of Glassy and Metastable Crystalline BaTi₂O₅. Chemistry of Materials, 2009, 21, 259-263.</p>	6.7	66
8	<p>Ferroelectricity Driven by Twisting of Silicate Tetrahedral Chains. Angewandte Chemie - International Edition, 2013, 52, 8088-8092.</p> <p>First-principles calculations of lattice dynamics in CaTiO₃</p>	13.8	62
9	<p> http://www.w3.org/1998/Math/MathML CaTiO_3 and CaTiO_3 </p> <p> http://www.w3.org/1998/Math/MathML CaTiO_3 </p> <p>Phase stability and ferroelectricity. Physical Review B, 2011, 84.</p>	3.2	58
10	<p>Raman scattering study of the soft mode in Pb(Mg_{1/3}Nb_{2/3})O₃. Journal of Raman Spectroscopy, 2011, 42, 706-714.</p>	2.5	58
11	<p>Molecular Beam Deposition of Nanoscale Ionic Liquids in Ultrahigh Vacuum. ACS Nano, 2010, 4, 5946-5952.</p>	14.6	49
12	<p>Ideal Soft Mode-Type Quantum Phase Transition and Phase Coexistence at Quantum Critical Point in O₁₈-Exchanged SrTiO₃. Physical Review Letters, 2007, 99, 017602.</p>	7.8	46
13	<p>Piezoelectric properties of lithium modified silver niobate perovskite single crystals. Applied Physics Letters, 2008, 92, .</p>	3.3	44
14	<p>Epitaxial growth of metastable multiferroic AlFeO₃ film on SrTiO₃ (111) substrate. Applied Physics Letters, 2014, 104, 082906.</p>	3.3	44
15	<p>Growth of Cu₂ZnSnSe₄ single crystals from Sn solutions. Journal of Crystal Growth, 2012, 354, 147-151.</p>	1.5	41
16	<p>Mechanism for suppression of ferroelectricity in Cd_{1-x}CaxTiO₃. Physical Review B, 2011, 84, .</p>	3.2	40
17	<p>Ferroelectricity and electromechanical coupling in (1-x)AgNbO₃-xNaNbO₃ solid solutions. Applied Physics Letters, 2011, 99, .</p>	3.3	40
18	<p>Fractal Dynamics in a Single Crystal of a Relaxor Ferroelectric. Physical Review Letters, 2012, 109, 197601.</p>	7.8	38

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19	Intrinsic Enhancement of Dielectric Permittivity in (Nb + In) co-doped TiO ₂ single crystals. Scientific Reports, 2017, 7, 5351.	3.3	36
20	High photodegradation efficiency of Rhodamine B catalyzed by bismuth silicate nanoparticles. Catalysis Communications, 2013, 39, 65-69.	3.3	33
21	Hierarchical dielectric orders in layered ferroelectrics Bi ₂ SiO ₅ . IUCrJ, 2014, 1, 160-164.	2.2	30
22	Growth and characterization of Cu ₂ ZnSnS ₄ single crystals. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1328-1331.	1.8	26
23	Strong anisotropy of ferroelectricity in lead-free bismuth silicate. Nanoscale, 2015, 7, 11561-11565.	5.6	26
24	Ferroelectricity of Li-doped silver niobate (Ag, Li)NbO ₃ . Journal of Physics Condensed Matter, 2011, 23, 075901.	1.8	25
25	Ionic liquid-mediated epitaxy of high-quality C60 crystallites in a vacuum. CrystEngComm, 2012, 14, 4939.	2.6	24
26	Spontaneous polarization estimation from the soft mode in strain-free epitaxial polar axis-oriented Pb(Zr,Ti)O ₃ thick films with tetragonal symmetry. Applied Physics Letters, 2011, 98, .	3.3	23
27	Comparative study of phase transitions in BaTiO ₃ thin films grown on (001)- and (110)-oriented SrTiO ₃ substrate. Journal of Physics Condensed Matter, 2013, 25, 132001.	1.8	23
28	Improper Ferroelectricity in Stuffed Aluminate Sodalites for Pyroelectric Energy Harvesting. Physical Review Applied, 2017, 7, .	3.8	22
29	Growth and characterization of Cu ₂ ZnSn(S Se _{1-x}) ₄ alloys grown by the melting method. Journal of Crystal Growth, 2014, 386, 204-207.	1.5	20
30	Neutron Diffraction Study of Crystal Structures of Glycinium Phosphite H ₃ NCH ₂ COOH·H ₂ PO ₃ in Paraelectric and Ferroelectric Phases. Journal of the Physical Society of Japan, 2003, 72, 1111-1117.	1.6	19
31	Critical soft-mode dynamics and unusual anticrossing in CdTiO ₃ studied by Raman scattering. Physical Review B, 2007, 76, .	3.2	19
32	Photo-induced change of dielectric response in BaCoSiO ₄ stuffed tridymite. Journal of Applied Physics, 2014, 115, .	2.5	19
33	Weak Ferroelectricity in <i>n</i> = 2 Pseudo Ruddlesden-Popper-Type Niobate Li ₂ SrNb ₂ O ₇ . Chemistry of Materials, 2019, 31, 6257-6261.	6.7	19
34	Ferroelectricity in NaNbO ₃ : Revisited. Ferroelectrics, 2010, 401, 51-55.	0.6	18
35	Growth of Cu ₂ ZnSnS ₄ Single Crystal by Traveling Heater Method. Japanese Journal of Applied Physics, 2011, 50, 128001.	1.5	17
36	Photo-Seebeck effect in ZnS. Japanese Journal of Applied Physics, 2015, 54, 031203.	1.5	17

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37	Phase Transition from Weak Ferroelectricity to Incipient Ferroelectricity in $\text{Li}_{2-x}\text{Sr}(\text{Nb}_{1-x}\text{Ta}_x)_2\text{O}_7$. Chemistry of Materials, 2020, 32, 744-750.	6.7	16
38	Direct observation of the soft mode in the paraelectric phase of PbTiO_3 by confocal micro-Raman scattering. Physical Review B, 2008, 78, .	3.2	15
39	Heterovalent Pb-substitution in ferroelectric bismuth silicate Bi_2Si_5 . Journal of Materials Chemistry C, 2016, 4, 3168-3174.	5.5	15
40	Absence of Magnetic Long Range Order in $\text{Ba}_3\text{ZnRu}_2\text{O}_9$: A Spin-Liquid Candidate in the $S = 3/2$ Dimer Lattice. Journal of the Physical Society of Japan, 2017, 86, 033702.	1.6	15
41	Photo-induced persistent enhancement of dielectric permittivity in $\text{Zn:BaAl}_2\text{O}_4$. Applied Physics Letters, 2017, 111, .	3.3	15
42	Origin of the dielectric response in $\text{Ba}_{0.767}\text{Ca}_{0.233}\text{TiO}_3$. Applied Physics Letters, 2012, 100, .	3.3	14
43	Structural changes and microstructures in stuffed tridymite-type compounds $\text{Ba}_{1-x}\text{Sr}_x\text{Al}_2\text{O}_4$. Japanese Journal of Applied Physics, 2014, 53, 09PB01.	1.5	14
44	Effect of Oxygen Isotope Exchange on Ferroelectric Microregion in SrTiO_3 Studied by Raman Scattering. Journal of the Physical Society of Japan, 2004, 73, 3262-3265.	1.6	13
45	Successive crystallization of ferroelectric-based BaTi_2O_5 bulk glass studied by Raman scattering. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 148, 48-52.	3.5	13
46	Optical control of dielectric permittivity in $\text{LaAl}_{0.99}\text{Zn}_{0.01}\text{O}_3$. Applied Physics Letters, 2017, 110, .	3.3	13
47	Permittivity boosting in $\text{Nb} + \text{In}$ co-doped TiO_2 . Journal of Materials Chemistry C, 2020, 8, 13627-13631.	5.5	13
48	Current-induced Giant Lattice Deformation in the Mott Insulator Ca_2RuO_4 . Journal of the Physical Society of Japan, 2020, 89, 044710.	1.6	12
49	Coexisting Mechanisms for the Ferroelectric Phase Transition in $\text{Li}_2\text{SrNb}_2\text{O}_7$. Chemistry of Materials, 2021, 33, 1257-1264.	6.7	12
50	Structural variations and dielectric properties of PbTiO_3 .	2.4	12
51	Ferroelectricity in Perovskite-Type Oxides. Ferroelectrics, 2008, 369, 127-132.	0.6	11
52	Ferroelectricity triggered in the quantum paraelectric AgTaO_3 by Li-substitution. Applied Physics Letters, 2009, 95, 242904.	3.3	11
53	Dielectric and soft-mode behaviors of AgTaO_3 . Physical Review B, 2010, 81, .	3.3	11
54	Structural Modification and Domain Structure in a BaTiO_3 Film on (110) SrTiO_3 . Applied Physics Express, 2013, 6, 015803.	2.4	11

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55	High temperature stability of the dielectric and insulating properties of Ca(Ti, Zr)SiO ₅ ceramics. Applied Physics Letters, 2016, 108, .	3.3	11
56	Enhancement of the dielectric permittivity of (Nb _{1/2} In _{1/2}) _{0.02} Ti _{0.98} O ₂ single crystals at low temperatures due to (Nb + In) codoping. Japanese Journal of Applied Physics, 2017, 56, 10PC02.	1.5	11
57	Ferroelectric phase transition of $\text{Cd}_{2-x}\text{Mn}_x\text{Te}$ by Raman scattering. Physical Review B, 2008, 77, .	1.6	10
58	X-ray Crystal Structure Analysis and Ru Valence of Ba ₄ Ru ₃ O ₁₀ Single Crystals. Journal of the Physical Society of Japan, 2013, 82, 104603.	1.6	10
59	Pseudogap Observed in the Charge Transport in the Thermoelectric Oxide Ca _{3-x} Bi _x Co ₄ O ₉ Single Crystals. Journal of the Physical Society of Japan, 2014, 83, 054710.	1.6	10
60	Novel Charge Ordering in the Trimer Iridium Oxide BaIrO ₃ . Crystals, 2016, 6, 27.	2.2	10
61	Neutron Diffraction Study of Crystal Structures of Deuterated Glycinium Phosphite in Paraelectric and Ferroelectric Phases. Journal of the Physical Society of Japan, 2004, 73, 107-115.	1.6	9
62	Ultrafast Real Space Dynamics of Photoexcited State in a Layered Perovskite-Type Spin Crossover Oxide La _{1.5} Sr _{0.5} CoO ₄ . Journal of the Physical Society of Japan, 2013, 82, 074721.	1.6	9
63	Indium-Free Amorphous Ca-Al-O Thin Film as a Transparent Conducting Oxide. Chemistry of Materials, 2019, 31, 8019-8025.	6.7	9
64	Exciton Transport in the Electron-Hole System Ta ₂ NiSe ₅ . Journal of the Physical Society of Japan, 2019, 88, 113706.	1.6	9
65	Room Temperature Thermoelectric Properties of Isostructural Selenides Ta ₂ PdS ₆ and Ta ₂ PdSe ₆ . Journal of the Physical Society of Japan, 2021, 90, 033702.	1.6	9
66	Phonon Dynamics in BiFeO ₃ Studied by Raman Scattering. Ferroelectrics, 2010, 403, 187-190.	0.6	8
67	Effects of element substitution on the pyroelectric phase transition of stuffed-tridymite-type BaZnGeO ₄ . Solid State Communications, 2015, 219, 12-15.	1.9	8
68	Giant inductance in non-ohmic conductor. Applied Physics Express, 2017, 10, 081801.	2.4	8
69	Antiferroelectric to Antiferroelectric-Relaxor Phase Transition in Calcium Strontium Sulfoaluminate. Inorganic Chemistry, 2019, 58, 15410-15416.	4.0	8
70	Fabrication of bismuth silicate Bi ₂ SiO ₅ ceramics as a potential high-temperature dielectric material. Journal of Materials Science, 2021, 56, 8415-8426.	3.7	8
71	Conductive Boundary Layer in CaCu ₃ Ti ₄ O ₁₂ with Giant-Dielectric-Response. Ferroelectrics, 2007, 347, 140-144.	0.6	7
72	Effect of Ca-Substitution on CdTiO ₃ Studied by Raman Scattering and First Principles Calculations. Ferroelectrics, 2012, 426, 268-273.	0.6	7

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73	Ferromagnetic Cluster Glass Phase Embedded in a Paramagnetic and Metallic Host in Non-Uniform Magnetic System $\text{CaRu}_2\text{ScO}_3$. Journal of the Physical Society of Japan, 2016, 85, 034711.	1.6	7
74	Magneto-thermopower in the Weak Ferromagnetic Oxide $\text{CaRu}_0.8\text{Sc}_0.2\text{O}_3$: An Experimental Test for the Kelvin Formula in a Magnetic Material. Journal of the Physical Society of Japan, 2017, 86, 104707.	1.6	7
75	Lamellar-like nanostructure in a relaxor ferroelectrics $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$. Journal of Materials Science, 2021, 56, 1231-1241.	3.7	7
76	Power-Law Quasielastic Light Scattering Observed in Relaxor $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$. Ferroelectrics, 2011, 415, 24-28.	0.6	6
77	Ruthenium oxide as a thermoelectric material: unconventional thermoelectric properties of Li_2RuO_3 . Journal of Materials Chemistry C, 2015, 3, 10430-10435.	5.5	6
78	Optical conductivity of layered calcium cobaltate $\text{Ca}_3\text{Co}_4\text{O}_9$. Journal of Physics Condensed Matter, 2016, 28, 085601.	1.8	6
79	Systematic tuning of the photo-dielectric effect in $\text{Ba}(\text{Al}_{1-x}\text{Zn}_x)_2\text{O}_4$. Applied Physics Letters, 2018, 113, .	3.3	6
80	Structural Phase Transitions and Possibility of the Relaxor-like State in Improper Ferroelectric Strontium-Substituted Calcium Sulfoaluminates. Journal of the Physical Society of Japan, 2019, 88, 034718.	1.6	6
81	Giant Peltier conductivity in an uncompensated semimetal Ta_2PdSe_6 . JPhys Energy, 2021, 3, 044004.	5.3	6
82	Soft-mode Dynamics in the Ferroelectric Phase Transition of Quantum Paraelectric SrTiO_3 . Ferroelectrics, 2009, 379, 168-176.	0.6	5
83	Improper ferroelectrics as high-efficiency energy conversion materials. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700009.	2.4	5
84	Dynamical coupling of dilute magnetic impurities with quantum spin liquid state in the dimer compound $\text{Ba}_3\text{ZnRu}_2\text{O}_9$. Journal of Physics Condensed Matter, 2018, 30, 355801.	1.8	5
85	Non-equilibrium Steady State in the Mott Insulator Ca_2RuO_4 . Journal of the Physical Society of Japan, 2020, 89, 093707.	1.6	5
86	Reply to Comment on "Origin of Giant Dielectric Response in Nonferroelectric $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$: Inhomogeneous Conduction Nature Probed by Atomic Force Microscopy". Chemistry of Materials, 2008, 20, 6286-6287.	6.7	4
87	Temperature Evolution of the Optical Phonons in $\text{Pb}(\text{Ni}_{1/3}\text{Nb}_{2/3})\text{O}_3$ Single Crystals Studied by Raman Scattering. Ferroelectrics, 2008, 367, 67-72.	0.6	4
88	Interplay between quantum paraelectricity and thermoelectricity in the photo-Seebeck effect in a SrTiO_3 single crystal. Journal of Applied Physics, 2019, 126, 045111.	2.5	4
89	Ferroelectric and dielectric properties of improper ferroelectric $\text{Ca}_{8-x}\text{Sr}_x[\text{Al}_{12}\text{O}_{24}](\text{MoO}_4)_2$ multilayer capacitors. Journal of Applied Physics, 2020, 128, 094101.	2.5	4
90	Recent Topics on the Light Scattering Study of Ferroelectrics. Ferroelectrics, 2007, 355, 3-12.	0.6	3

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91	Enhancement of Quantum Ferroelectricity in SrTi ¹⁸ O ₃ Thin Film. Applied Physics Express, 2011, 4, 091501.	2.4	3
92	Effects of the Ir Impurity on the Thermodynamic and Transport Properties of Ba ₄ Ru ₃ O ₁₀ . Journal of the Physical Society of Japan, 2015, 84, 094601.	1.6	3
93	Non-uniform Magnetic System Driven by Non-magnetic Ion Substitution in CaRu _{1-x} Sc _x O ₃ : Two-Component Analysis. Journal of the Physical Society of Japan, 2015, 84, 014708.	1.6	3
94	Optical evidence for the spin-state disorder in LaCo _{1-x} Rh _x O ₃ . Journal of Physics Condensed Matter, 2017, 29, 235802.	1.8	3
95	Thermal Diffusivity of the Mott Insulator Ca ₂ RuO ₄ in a Non-equilibrium Steady State. Journal of the Physical Society of Japan, 2021, 90, 063601.	1.6	3
96	Nanoscale structural analysis of Pb(Mg _{1/3} Nb _{2/3})O ₃ . Journal of Physics Condensed Matter, 2021, 33, 035401.	1.8	3
97	Phase variation of ferroelectric $\langle \text{mml:math} \rangle$		

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109	Optical enhancement of dielectric permittivity in reduced lanthanum aluminate. <i>Physical Review B</i> , 2020, 101, .	3.2	1
110	Size effect of the guest cation on the AlO_4 framework in aluminate sodalite-type oxides $\text{M}_8[\text{Al}_{12}\text{O}_{24}](\text{SO}_4)_2(\text{M})_2$ ($\text{M} = \text{Ca}, \text{Sr}, \text{Ba}$). <i>Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2021, 77, 186-192.	1.1	0
111	A large piezoelectric voltage coefficient in aluminate-sodalite-type improper ferroelectric oxides. <i>Journal of Materials Chemistry C</i> , .	5.5	1
112	Nontrivial Spin Dimer in the Hexagonal Ruthenate $\text{Ba}_3\text{CaRu}_2\text{O}_9$ Revealed by Nonmagnetic Ion Substitution. <i>Journal of the Physical Society of Japan</i> , 2021, 90, .	1.6	1
113	Fractal Dynamics in Relaxor Ferroelectrics Studied by Broad-Band Light Scattering Spectroscopy. <i>Nihon Kessho Gakkaishi</i> , 2015, 57, 219-225.	0.0	0
114	Raman Tensor Analysis by Angle-Resolved Polarized Spectroscopy. <i>Nihon Kessho Gakkaishi</i> , 2015, 57, 285-290.	0.0	0
115	Optical sheet conductivities of layered oxides. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 325501.	1.8	0
116	Broadband micro light scattering observation of ferroelectric sodium metavanadate. <i>Ferroelectrics</i> , 2017, 512, 14-19.	0.6	0
117	Ca-substitution effects on the improper ferroelectric phase transition of $\text{Ca}_8[\text{AlO}_2]_{12}(\text{MoO}_4)_2$. <i>Open Ceramics</i> , 2021, 5, 100080.	2.0	0
118	Unconventional high-temperature ferromagnetic semiconductor $\text{PbPd}_{1-x}\text{Fe}_x\text{O}_2$. <i>Journal of Applied Physics</i> , 2021, 129, 203903.	2.5	0
119	Origin of Ferroelectricity in Perovskite-Type Ferroelectric Oxides. <i>Nihon Kessho Gakkaishi</i> , 2012, 54, 276-281.	0.0	0
120	Unconventional Structure in BaTiO_3 Thin Film Grown on SrTiO_3 Substrate. <i>Nihon Kessho Gakkaishi</i> , 2013, 55, 290-295.	0.0	0
121	Novel Materials with an Optically Tunable Dielectric Response. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2020, 140, 28-31.	0.0	0
122	High-Pressure Thermopower of the Mott Insulator Ca_2RuO_4 . <i>Journal of the Physical Society of Japan</i> , 2022, 91, .	1.6	0