

# Hiroki Taniguchi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3244700/publications.pdf>

Version: 2024-02-01

122  
papers

2,449  
citations

257450

24  
h-index

233421

45  
g-index

128  
all docs

128  
docs citations

128  
times ranked

2572  
citing authors

#	ARTICLE	IF	CITATIONS
---	---------	----	-----------

1	Phase variation of ferroelectric $\langle mml:math$		
---	---	--	--

#	ARTICLE	IF	CITATIONS
19	Optical enhancement of dielectric permittivity in reduced lanthanum aluminate. <i>Physical Review B</i> , 2020, 101, .	3.2	1
20	Examination of Nonlinear Conductivity on the Excitonic Insulator Candidate Ta <sub>2</sub> NiSe <sub>5</sub> . <i>Journal of the Physical Society of Japan</i> , 2020, 89, 045001.	1.6	2
21	Improper relaxor state in (Ca <sub>1-x</sub> Sr <sub>x</sub> ) <sub>8</sub> [AlO <sub>2</sub> ] <sub>12</sub> (MoO <sub>4</sub> ) <sub>2</sub> . <i>Physical Review Materials</i> , 2020, 4, .	2.4	2
22	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
23	Interplay between quantum paraelectricity and thermoelectricity in the photo-Seebeck effect in a SrTiO <sub>3</sub> single crystal. <i>Journal of Applied Physics</i> , 2019, 126, 045111.	2.5	4
24	Weak Ferroelectricity in $n = 2$ Pseudo Ruddlesden-Popper-Type Niobate Li <sub>2</sub> SrNb <sub>2</sub> O <sub>7</sub> . <i>Chemistry of Materials</i> , 2019, 31, 6257-6261.	6.7	19
25	Antiferroelectric to Antiferroelectric-Relaxor Phase Transition in Calcium Strontium Sulfoaluminate. <i>Inorganic Chemistry</i> , 2019, 58, 15410-15416.	4.0	8
26	Indium-Free Amorphous Ca-Al-O Thin Film as a Transparent Conducting Oxide. <i>Chemistry of Materials</i> , 2019, 31, 8019-8025.	6.7	9
27	Plastic/Ferroelectric Crystals with Easily Switchable Polarization: Low-Voltage Operation, Unprecedentedly High Pyroelectric Performance, and Large Piezoelectric Effect in Polycrystalline Forms. <i>Journal of the American Chemical Society</i> , 2019, 141, 9349-9357.	13.7	132
28	Structural Phase Transitions and Possibility of the Relaxor-like State in Improper Ferroelectric Strontium-Substituted Calcium Sulfoaluminates. <i>Journal of the Physical Society of Japan</i> , 2019, 88, 034718.	1.6	6
29	Exciton Transport in the Electron-Hole System Ta <sub>2</sub> NiSe <sub>5</sub> . <i>Journal of the Physical Society of Japan</i> , 2019, 88, 113706.	1.6	9
30	Transport and Magnetic Properties of CaPd <sub>3-x</sub> Cu <sub>x</sub> O <sub>4</sub> ( $x \approx 2.4$ ) with Interconnecting Cu(Pd)O <sub>4</sub> Chain Structure. <i>Journal of the Physical Society of Japan</i> , 2018, 87, 104603.	1.6	1
31	Systematic tuning of the photo-dielectric effect in Ba(Al <sub>x</sub> Zn <sub>1-x</sub> ) <sub>2</sub> O <sub>4</sub> . <i>Applied Physics Letters</i> , 2018, 113, .	3.3	6
32	Impurity-Induced Spin-State Crossover in La <sub>0.8</sub> Sr <sub>0.2</sub> Co <sub>1-x</sub> Al <sub>x</sub> O <sub>3</sub> . <i>Crystals</i> , 2018, 8, 411.	2.2	2
33	Dynamical coupling of dilute magnetic impurities with quantum spin liquid state in the dimer compound Ba <sub>3</sub> ZnRu <sub>2</sub> O <sub>9</sub> . <i>Journal of Physics Condensed Matter</i> , 2018, 30, 355801.	1.8	5
34	Structural variations and dielectric properties of $\langle \text{mml:math} \rangle$ xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo></mml:mo><mml:mrow><mn>3</mn></mml:msub></mml:mrow></mml:math>	2.4	12
35	Improper ferroelectrics as high-efficiency energy conversion materials. <i>Physica Status Solidi - Rapid Research Letters</i> , 2017, 11, 1700009.	2.4	5
36	Absence of Magnetic Long Range Order in Ba <sub>3</sub> ZnRu <sub>2</sub> O <sub>9</sub> : A Spin-Liquid Candidate in the $S = 3/2$ Dimer Lattice. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 033702.	1.6	15

#	ARTICLE	IF	CITATIONS
37	Optical control of dielectric permittivity in $\text{LaAl}_{0.99}\text{Zn}_{0.01}\text{O}_3$ . <i>Applied Physics Letters</i> , 2017, 110, .	3.3	13
38	Optical evidence for the spin-state disorder in $\text{LaCo}_{1-x}\text{RhxO}_3$ . <i>Journal of Physics Condensed Matter</i> , 2017, 29, 235802.	1.8	3
39	Broadband micro light scattering observation of ferroelectric sodium metavanadate. <i>Ferroelectrics</i> , 2017, 512, 14-19.	0.6	0
40	Magnetolectric Coupling in the Pyrochlore Ruthenate $\text{Gd}_2\text{Ru}_2\text{O}_7$ . <i>Journal of the Physical Society of Japan</i> , 2017, 86, 084708.	1.6	2
41	Enhancement of the dielectric permittivity of $(\text{Nb}_{1/2}\text{In}_{1/2})_{0.02}\text{Ti}_{0.98}\text{O}_2$ single crystals at low temperatures due to (Nb + In) codoping. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 10PC02.	1.5	11
42	Giant inductance in non-ohmic conductor. <i>Applied Physics Express</i> , 2017, 10, 081801.	2.4	8
43	Improper Ferroelectricity in Stuffed Aluminate Sodalites for Pyroelectric Energy Harvesting. <i>Physical Review Applied</i> , 2017, 7, .	3.8	22
44	Intrinsic Enhancement of Dielectric Permittivity in (Nb + In) co-doped $\text{TiO}_2$ single crystals. <i>Scientific Reports</i> , 2017, 7, 5351.	3.3	36
45	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. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 104707.	1.6	7
46	Photo-induced persistent enhancement of dielectric permittivity in $\text{Zn:BaAl}_2\text{O}_4$ . <i>Applied Physics Letters</i> , 2017, 111, .	3.3	15
47	Novel Charge Ordering in the Trimer Iridium Oxide $\text{BaIrO}_3$ . <i>Crystals</i> , 2016, 6, 27.	2.2	10
48	High temperature stability of the dielectric and insulating properties of $\text{Ca}(\text{Ti}, \text{Zr})\text{SiO}_5$ ceramics. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	11
49	Optical sheet conductivities of layered oxides. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 325501.	1.8	0
50	Ferromagnetic Cluster Glass Phase Embedded in a Paramagnetic and Metallic Host in Non-Uniform Magnetic System $\text{CaRu}_{1-x}\text{Sc}_x\text{O}_3$ . <i>Journal of the Physical Society of Japan</i> , 2016, 85, 034711.	1.6	7
51	Optical conductivity of layered calcium cobaltate $\text{Ca}_3\text{Co}_4\text{O}_9$ . <i>Journal of Physics Condensed Matter</i> , 2016, 28, 085601.	1.8	6
52	Heterovalent Pb-substitution in ferroelectric bismuth silicate $\text{Bi}_2\text{SiO}_5$ . <i>Journal of Materials Chemistry C</i> , 2016, 4, 3168-3174.	5.5	15
53	Effects of the Ir Impurity on the Thermodynamic and Transport Properties of $\text{Ba}_4\text{Ru}_3\text{O}_{10}$ . <i>Journal of the Physical Society of Japan</i> , 2015, 84, 094601.	1.6	3
54	Fractal Dynamics in Relaxor Ferroelectrics Studied by Broad-Band Light Scattering Spectroscopy. <i>Nihon Kessho Gakkaishi</i> , 2015, 57, 219-225.	0.0	0

#	ARTICLE	IF	CITATIONS
55	Raman Tensor Analysis by Angle-Resolved Polarized Spectroscopy. <i>Nihon Kessho Gakkaishi</i> , 2015, 57, 285-290.	0.0	0
56	Strong anisotropy of ferroelectricity in lead-free bismuth silicate. <i>Nanoscale</i> , 2015, 7, 11561-11565.	5.6	26
57	Non-uniform Magnetic System Driven by Non-magnetic Ion Substitution in $\text{CaRu}_{1-x}\text{Sc}_x\text{O}_3$ : Two-Component Analysis. <i>Journal of the Physical Society of Japan</i> , 2015, 84, 014708.	1.6	3
58	Effects of element substitution on the pyroelectric phase transition of stuffed-tridymite-type $\text{BaZnGeO}_4$ . <i>Solid State Communications</i> , 2015, 219, 12-15.	1.9	8
59	Ruthenium oxide as a thermoelectric material: unconventional thermoelectric properties of $\text{Li}_2\text{RuO}_3$ . <i>Journal of Materials Chemistry C</i> , 2015, 3, 10430-10435.	5.5	6
60	Photo-Seebeck effect in ZnS. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 031203.	1.5	17
61	Hierarchical dielectric orders in layered ferroelectrics $\text{Bi}_2\text{Si}_5$ . <i>IUCr</i> , 2014, 1, 160-164.	2.2	30
62	Photo-induced change of dielectric response in $\text{BaCoSiO}_4$ stuffed tridymite. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	19
63	Structural changes and microstructures in stuffed tridymite-type compounds $\text{Ba}_x\text{Sr}_x\text{Al}_2\text{O}_4$ . <i>Japanese Journal of Applied Physics</i> , 2014, 53, 09PB01.	1.5	14
64	Growth and characterization of $\text{Cu}_2\text{ZnSn}(\text{S Se})_4$ alloys grown by the melting method. <i>Journal of Crystal Growth</i> , 2014, 386, 204-207.	1.5	20
65	Pseudogap Observed in the Charge Transport in the Thermoelectric Oxide $\text{Ca}_3\text{Bi}_x\text{Co}_4\text{O}_9$ Single Crystals. <i>Journal of the Physical Society of Japan</i> , 2014, 83, 054710.	1.6	10
66	Epitaxial growth of metastable multiferroic $\text{AlFeO}_3$ film on $\text{SrTiO}_3$ (111) substrate. <i>Applied Physics Letters</i> , 2014, 104, 082906.	3.3	44
67	Growth and characterization of $\text{Cu}_2\text{ZnSnS}_4$ single crystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1328-1331.	1.8	26
68	Structural Modification and Domain Structure in a $\text{BaTiO}_3$ Film on (110) $\text{SrTiO}_3$ . <i>Applied Physics Express</i> , 2013, 6, 015803.	2.4	11
69	High photodegradation efficiency of Rhodamine B catalyzed by bismuth silicate nanoparticles. <i>Catalysis Communications</i> , 2013, 39, 65-69.	3.3	33
70	Ultrafast Real Space Dynamics of Photoexcited State in a Layered Perovskite-Type Spin Crossover Oxide $\text{La}_{1.5}\text{Sr}_{0.5}\text{Co}_4$ . <i>Journal of the Physical Society of Japan</i> , 2013, 82, 074721.	1.6	9
71	Comparative study of phase transitions in $\text{BaTiO}_3$ thin films grown on (001)- and (110)-oriented $\text{SrTiO}_3$ substrate. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 132001.	1.8	23
72	Ferroelectricity Driven by Twisting of Silicate Tetrahedral Chains. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8088-8092.	13.8	62

#	ARTICLE	IF	CITATIONS
73	Confocal micro-Raman imaging on 180°-domain structure in periodically poled stoichiometric LiNbO <sub>3</sub> . Journal of the Ceramic Society of Japan, 2013, 121, 579-582.	1.1	2
74	X-ray Crystal Structure Analysis and Ru Valence of Ba <sub>4</sub> Ru <sub>3</sub> O <sub>10</sub> Single Crystals. Journal of the Physical Society of Japan, 2013, 82, 104603.	1.6	10
75	Unconventional Structure in BaTiO <sub>3</sub> Thin Film Grown on $\sqrt{1/4} \times \sqrt{1/4}$ SrTiO <sub>3</sub> Substrate. Nihon Kessho Gakkaishi, 2013, 55, 290-295.	0.0	0
76	Effect of Ca-Substitution on CdTiO <sub>3</sub> Studied by Raman Scattering and First Principles Calculations. Ferroelectrics, 2012, 426, 268-273.	0.6	7
77	Fractal Dynamics in a Single Crystal of a Relaxor Ferroelectric. Physical Review Letters, 2012, 109, 197601.	7.8	38
78	Ionic liquid-mediated epitaxy of high-quality C60 crystallites in a vacuum. CrystEngComm, 2012, 14, 4939.	2.6	24
79	Preparation of Cu <sub>2</sub> ZnSnS <sub>4</sub> single crystals from Sn solutions. Journal of Crystal Growth, 2012, 341, 38-41.	1.5	69
80	Growth of Cu <sub>2</sub> ZnSnSe <sub>4</sub> single crystals from Sn solutions. Journal of Crystal Growth, 2012, 354, 147-151.	1.5	41
81	Origin of the dielectric response in Ba <sub>0.767</sub> Ca <sub>0.233</sub> TiO <sub>3</sub> . Applied Physics Letters, 2012, 100, .	3.3	14
82	Raman Scattering Study on the Phase Transition Dynamics of Ferroelectric Oxides. , 2012, , .		1
83	Origin of Ferroelectricity in Perovskite-Type Ferroelectric Oxides. Nihon Kessho Gakkaishi, 2012, 54, 276-281.	0.0	0
84	Power-Law Quasielastic Light Scattering Observed in Relaxor Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> . Ferroelectrics, 2011, 415, 24-28.	0.6	6
85	Spontaneous polarization estimation from the soft mode in strain-free epitaxial polar axis-oriented Pb(Zr,Ti)O <sub>3</sub> thick films with tetragonal symmetry. Applied Physics Letters, 2011, 98, .	3.3	23
86	Growth of Cu <sub>2</sub> ZnSnS <sub>4</sub> Single Crystal by Traveling Heater Method. Japanese Journal of Applied Physics, 2011, 50, 128001.	1.5	17
87	First principles calculations of lattice dynamics in CdTiO <sub>3</sub> and CaTiO <sub>3</sub> . Phase stability and ferroelectricity. Physical Review B, 2011, 84, .	3.2	58
88	Raman scattering study of the soft mode in Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> . Journal of Raman Spectroscopy, 2011, 42, 706-714.	2.5	58
89	Mechanism for suppression of ferroelectricity in Cd <sub>1-x</sub> CaxTiO <sub>3</sub> . Physical Review B, 2011, 84, .	3.2	40
90	Ferroelectricity and electromechanical coupling in (1-x)AgNbO <sub>3</sub> (x)NaNbO <sub>3</sub> solid solutions. Applied Physics Letters, 2011, 99, .	3.3	40

#	ARTICLE	IF	CITATIONS
91	Ferroelectricity of Li-doped silver niobate (Ag, Li)NbO <sub>3</sub> . Journal of Physics Condensed Matter, 2011, 23, 075901.	1.8	25
92	High-throughput CW-IR laser deposition and laser microscope imaging of binary ionic liquids in vacuum. Science and Technology of Advanced Materials, 2011, 12, 054204.	6.1	2
93	Enhancement of Quantum Ferroelectricity in SrTiO <sub>3</sub> Thin Film. Applied Physics Express, 2011, 4, 091501.	2.4	3
94	Ferroelectricity in NaNbO <sub>3</sub> : Revisited. Ferroelectrics, 2010, 401, 51-55.	0.6	18
95	Dielectric and soft-mode behaviors of AgTaO <sub>3</sub> . Physical Review B, 2010, 81, .		
96	Molecular Beam Deposition of Nanoscale Ionic Liquids in Ultrahigh Vacuum. ACS Nano, 2010, 4, 5946-5952.	14.6	49
97	Phonon Dynamics in BiFeO <sub>3</sub> Studied by Raman Scattering. Ferroelectrics, 2010, 403, 187-190.	0.6	8
98	Ferroelectricity triggered in the quantum paraelectric AgTaO <sub>3</sub> by Li-substitution. Applied Physics Letters, 2009, 95, 242904.	3.3	11
99	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.	2.4	133
100	Comprehensive Structural Study of Glassy and Metastable Crystalline BaTi <sub>2</sub> O <sub>5</sub> . Chemistry of Materials, 2009, 21, 259-263.	6.7	66
101	Relaxor Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> ) <sub>3</sub> O <sub>9</sub> : A Ferroelectric with Mu. Physical Review Letters, 2009, 103, 207601.	7.8	256
102	Soft-mode Dynamics in the Ferroelectric Phase Transition of Quantum Paraelectric SrTiO <sub>3</sub> . Ferroelectrics, 2009, 379, 168-176.	0.6	5
103	Successive crystallization of ferroelectric-based BaTi <sub>2</sub> O <sub>5</sub> bulk glass studied by Raman scattering. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 148, 48-52.	3.5	13
104	Origin of Giant Dielectric Response in Nonferroelectric CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> : Inhomogeneous Conduction Nature Probed by Atomic Force Microscopy. Chemistry of Materials, 2008, 20, 1694-1698.	6.7	77
105	Reply to Comment on "Origin of Giant Dielectric Response in Nonferroelectric CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> : Inhomogeneous Conduction Nature Probed by Atomic Force Microscopy". Chemistry of Materials, 2008, 20, 6286-6287.	6.7	4
106	Ferroelectricity in Perovskite-Type Oxides. Ferroelectrics, 2008, 369, 127-132.	0.6	11
107	Temperature Evolution of the Optical Phonons in Pb(Ni <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> Single Crystals Studied by Raman Scattering. Ferroelectrics, 2008, 367, 67-72.	0.6	4
108	Ferroelectric phase transition of Cd <sub>2</sub> Nb <sub>10</sub> by Raman scattering. Physical Review B, 2008, 77, .	0.2	10

#	ARTICLE	IF	CITATIONS
109	Piezoelectric properties of lithium modified silver niobate perovskite single crystals. Applied Physics Letters, 2008, 92, .	3.3	44
110	Direct observation of the soft mode in the paraelectric phase of $\text{PbTiO}_3$ by confocal micro-Raman scattering. Physical Review B, 2008, 78, .	3.2	15
111	Dynamics of the Ferroelectric Phase Transition in 18O-exchanged SrTiO <sub>3</sub> Studied by Raman Scattering. Ferroelectrics, 2008, 369, 3-9.	0.6	1
112	Recent Topics on the Light Scattering Study of Ferroelectrics. Ferroelectrics, 2007, 355, 3-12.	0.6	3
113	Critical soft-mode dynamics and unusual anticrossing in CdTiO <sub>3</sub> studied by Raman scattering. Physical Review B, 2007, 76, .	3.2	19
114	Conductive Boundary Layer in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> with Giant-Dielectric-Response. Ferroelectrics, 2007, 347, 140-144.	0.6	7
115	Ideal Soft Mode-Type Quantum Phase Transition and Phase Coexistence at Quantum Critical Point in O <sup>18</sup> -Exchanged SrTiO <sub>3</sub> . Physical Review Letters, 2007, 99, 017602.	7.8	46
116	AgNbO <sub>3</sub> : A lead-free material with large polarization and electromechanical response. Applied Physics Letters, 2007, 90, 252907.	3.3	229
117	Ferroelectricity of SrTiO <sub>3</sub> Induced by Oxygen Isotope Exchange. Structure and Bonding, 2007, , 89-118.	1.0	1
118	Raman Scattering Study of Superionic Conductor Lithium Tetraborate Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub> . Japanese Journal of Applied Physics, 2006, 45, 152-154.	1.5	1
119	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
120	Effect of Oxygen Isotope Exchange on Ferroelectric Microregion in SrTiO <sub>3</sub> Studied by Raman Scattering. Journal of the Physical Society of Japan, 2004, 73, 3262-3265.	1.6	13
121	Neutron Diffraction Study of Crystal Structures of Glycinium Phosphite H <sub>3</sub> NCH <sub>2</sub> COOH·H <sub>2</sub> PO <sub>3</sub> in Paraelectric and Ferroelectric Phases. Journal of the Physical Society of Japan, 2003, 72, 1111-1117.	1.6	19
122	A large piezoelectric voltage coefficient in aluminate-sodalite-type improper ferroelectric oxides. Journal of Materials Chemistry C, 0, , .	5.5	1