

# Yoshitaka Ehara

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Influence of cooling rate on ferroelastic domain structure for epitaxial (100)/(001)-oriented Pb(Zr, Ti)O <sub>3</sub> thin films. Applied Physics Letters, 2019, 115, 071101.	1.5	6
2	Domain structure transition in compressively strained (100)/(001) epitaxial tetragonal PZT film. Journal of Applied Physics, 2021, 129, 024101.	2.5	2
3	Dynamic Manipulation in Piezoresponse Force Microscopy: Creating Nonequilibrium Phases with Large Electromechanical Response. ACS Nano, 2020, 14, 10569-10577.	14.6	14
4	Tensor factorization for elucidating mechanisms of piezoresponse relaxation via dynamic Piezoresponse Force Spectroscopy. Npj Computational Materials, 2020, 6, .	8.7	2
5	Large Electromechanical Responses Driven by Electrically Induced Dense Ferroelastic Domains: Beyond Morphotropic Phase Boundaries. ACS Applied Electronic Materials, 2020, 2, 1908-1916.	4.3	11
6	Temperature dependence on the domain structure of epitaxial PbTiO <sub>3</sub> films grown on single crystal substrates with different lattice parameters. Japanese Journal of Applied Physics, 2020, 59, SPPB01.	1.5	8
7	Control of domain motion by pulsed electric field in rhombohedral epitaxial PbTiO <sub>3</sub> thin films. Physical Review B, 2019, 100, .	3.2	3
8	Superdomain structure and high conductivity at the vertices in the (111)-oriented epitaxial tetragonal Pb(Zr,Ti)O <sub>3</sub> thin film. Current Applied Physics, 2019, 19, 418-423.	2.4	6
9	Electric field-temperature phase diagram of sodium bismuth titanate-based relaxor ferroelectrics. Journal of Materials Science, 2018, 53, 9393-9400.	3.7	23
10	Effect of in-plane tensile strain in (100)/(001)-oriented epitaxial PbTiO <sub>3</sub> films on their phase transition temperature and tetragonal distortion. Applied Physics Letters, 2017, 110, .	3.3	10
11	Direct Imaging of the Relaxation of Individual Ferroelectric Interfaces in a Tensile-Strained Film. Advanced Electronic Materials, 2017, 3, 1600508.	5.1	7
12	In-situ observation of ultrafast 90° domain switching under application of an electric field in (100)/(001)-oriented tetragonal epitaxial Pb(Zr <sub>0.4</sub> Ti <sub>0.6</sub> )O <sub>3</sub> thin films. Scientific Reports, 2017, 7, 9641.	3.3	23
13	Fabrication and characterization of {110}-oriented Pb(Zr,Ti)O <sub>3</sub> thin films on Pt/SiO <sub>2</sub> /Si substrates using PdO/Pd buffer layer. Japanese Journal of Applied Physics, 2017, 56, 10PF09.	1.5	3
14	Relaxor-ferroelectric crossover in PbTiO <sub>3</sub> thin films. Physical Review B, 2017, 96, .	3.2	38
15	Orientation change with substrate type and composition in (100)/(001)-oriented epitaxial tetragonal Pb(Zr <sub>1-x</sub> Ti <sub>x-1</sub> )O <sub>3</sub> films. Journal of the Ceramic Society of Japan, 2017, 125, 458-462.	1.1	3
16	Influence of Internal Strains of (110)-One-Axis-Oriented (Ba <sub>0.5</sub> Sr <sub>0.5</sub> )TiO <sub>3</sub> (BST) Thin Films on Their Dielectric Behaviors. Science of Advanced Materials, 2017, 9, 1806-1809.	0.7	1
17	Phase transformation induced by electric field and mechanical stress in Mn-doped (Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> -(Bi <sub>1/2</sub> K <sub>1/2</sub> )TiO <sub>3</sub> ceramics. Journal of Applied Physics, 2016, 120, .	2.5	41
18	Large irreversible non-180° domain switching after poling treatment in Pb(Zr, Ti)O <sub>3</sub> films. Applied Physics Letters, 2016, 108, .	3.3	10

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19	Phase transitions associated with competing order parameters in compressively strained $\text{SrTiO}_3$ thin films. Physical Review B, 2015, 91, .	3.3	11
20	Orientation control of epitaxial tetragonal $\text{Pb}(\text{Zr}_x\text{Ti}_{1-x})\text{O}_3$ thin films grown on (100) $\text{KTaO}_3$ substrates by tuning the $\text{Zr}/(\text{Zr}+\text{Ti})$ ratio. Applied Physics Letters, 2015, 107, .	3.3	11
21	Electric-field-temperature phase diagram of Mn-doped $\text{Bi}_{0.5}(\text{Na}_{0.9}\text{K}_{0.1})_{0.5}\text{TiO}_3$ ceramics. Applied Physics Letters, 2015, 107, .	3.3	59
22	Fabrication and characterization of (110)-oriented $(\text{Ba}_{0.5}\text{Sr}_{0.5})\text{TiO}_3$ thin films using $\text{PdO}/\text{Pd}$ buffer layer. Japanese Journal of Applied Physics, 2015, 54, 10NA15.	1.5	8
23	Epitaxial $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Ferroelectric Bilayers with Giant Electromechanical Properties. Advanced Materials Interfaces, 2015, 2, 1500075.	3.7	13
24	Crystal orientation dependency of ferroelectric property in rhombohedral $\text{Pb}(\text{Zr,Ti})\text{O}_3$ films. Japanese Journal of Applied Physics, 2014, 53, 04ED06.	1.5	3
25	Direct observation of intrinsic piezoelectricity of $\text{Pb}(\text{Zr,Ti})\text{O}_3$ by time-resolved x-ray diffraction measurement using single-crystalline films. Applied Physics Letters, 2014, 105, .	3.3	24
26	Dependence of $\langle e_{31} \rangle$ on polar axis texture for tetragonal $\text{Pb}(\text{Zr}_x\text{Ti}_{1-x})\text{O}_3$ thin films. Journal of Applied Physics, 2014, 116, .	2.5	26
27	Impact of pulse poling on static and dynamic ferroelastic-domain contributions in tetragonal $\text{Pb}(\text{Ti}, \text{Tj ETQq1 1 0.784314 rgBT / Overlaid}$ .	2.5	25
28	Nanoscale Origins of Nonlinear Behavior in Ferroic Thin Films. Advanced Functional Materials, 2013, 23, 81-90.	14.9	20
29	Small-strain (100)/(001)-oriented epitaxial $\text{PbTiO}_3$ films with film thickness ranging from nano- to micrometer order grown on (100) $\text{CaF}_2$ substrates by metal organic chemical vapor deposition. Journal of Materials Research, 2013, 28, 696-701.	2.6	5
30	Direct Observation of Atomic Arrangement around $90^\circ$ Domain Wall in Lead Titanate Thin Films.. Materials Research Society Symposia Proceedings, 2013, 1515, 1.	0.1	1
31	Growth of (111) One-Axis-Oriented $\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ Films on (100) $\text{Si}$ Substrates. Japanese Journal of Applied Physics, 2013, 52, 04CH09.	1.5	4
32	Squareness Control in Polarization-Dependent Electric Field Hysteresis Curves in Rhombohedral $\text{Pb}(\text{Zr,Ti})\text{O}_3$ Films. Japanese Journal of Applied Physics, 2013, 52, 04CD09.	1.5	1
33	Phase Boundary Shift by Thermal Strain in 100-Oriented Epitaxial $\text{Pb}(\text{Zr}_x\text{Ti}_{1-x})\text{O}_3$ Film Grown on $\text{CaF}_2$ Substrates. Japanese Journal of Applied Physics, 2013, 52, 09KA02.	1.5	6
34	Nano-Structure around $90^\circ$ Domain Wall and Elastic Interaction with Misfit Dislocation in $\text{PbTiO}_3$ Thin Film. Key Engineering Materials, 2013, 566, 167-170.	0.4	1
35	Control of Volume Fraction of Non- $180^\circ$ Domains by Thermal Strain in Epitaxial Rhombohedral $\text{Pb}(\text{Zr}, \text{Tj ETQq1 1 0.784314 rgBT / Overlaid}$ .	0.1	2
36	Crystal Structure Change with Applied Electric Field for (100)/(001)-oriented Polycrystalline Lead Zirconate Titanate Films. Materials Research Society Symposia Proceedings, 2013, 1507, 1.	0.1	3

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37	Film Thickness Dependence of Ferroelectric Properties of (111)-Oriented Epitaxial $\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ Films. Japanese Journal of Applied Physics, 2012, 51, 09LA04.	1.5	13
38	Film Thickness Dependence of Crystal Structure in 100-Oriented Epitaxial $\text{Pb}(\text{Zr}_{0.65}\text{Ti}_{0.35})\text{O}_3$ Films Grown on Single-Crystal Substrates with Different Thermal Expansion Coefficients. Japanese Journal of Applied Physics, 2012, 51, 09LA14.	1.5	6
39	Domain tuning in mixed-phase $\text{BiFeO}_3$ thin films using vicinal substrates. Applied Physics Letters, 2012, 100, 202901.	3.3	11
40	Temperature and Frequency Dependencies of Ferroelectric Properties in Rhombohedral Epitaxial $\text{Pb}(\text{Zr,Ti})\text{O}_3$ Films with Perfect (111) Orientations Grown on $\text{CaF}_2$ Substrates.. Materials Research Society Symposia Proceedings, 2012, 1397, 65.	0.1	0
41	Noncontact probing method for estimation of ferroelectric properties of $\text{PbTiO}_3$ -based films for microelectromechanical systems. Journal of Materials Research, 2012, 27, 1430-1435.	2.6	0
42	Growth of (111)-oriented $\text{BaTiO}_3/\text{Bi}(\text{Mg}_{0.5}\text{Ti}_{0.5})\text{O}_3$ epitaxial films and their crystal structure and electrical property characterizations. Journal of Applied Physics, 2012, 111, .	2.5	15
43	Complex domain structure in relaxed $\text{PbTiO}_3$ thick films grown on (100) $\text{cSrRuO}_3$ /(100) $\text{SrTiO}_3$ substrates. Journal of Applied Physics, 2012, 112, .	2.5	15
44	Stacking faults in an epitaxially grown $\text{PbTiO}_3$ thick film and their size distribution. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 528-531.	3.5	1
45	Film Thickness Dependence of Crystal Structure in 100-Oriented Epitaxial $\text{Pb}(\text{Zr}_{0.65}\text{Ti}_{0.35})\text{O}_3$ Films Grown on Single-Crystal Substrates with Different Thermal Expansion Coefficients. Japanese Journal of Applied Physics, 2012, 51, 09LA14.	1.5	3
46	Preparation of InP Nanoparticles by Laser Ablation in Liquid. The Review of Laser Engineering, 2012, 40, 117.	0.0	1
47	TEM Observation on Ferroelectric Domain Structures of $\text{PbTiO}_3$ Epitaxial Films. Key Engineering Materials, 2011, 485, 179-182.	0.4	0
48	Spontaneous polarization estimation from the soft mode in strain-free epitaxial polar axis-oriented $\text{Pb}(\text{Zr,Ti})\text{O}_3$ thick films with tetragonal symmetry. Applied Physics Letters, 2011, 98, .	3.3	23
49	Intrinsic Characteristics of $\text{Bi}(\text{Zn}_{1/2}\text{Ti}_{1/2})\text{O}_3$ -substituted $\text{Pb}(\text{Zr}_{0.4}\text{Ti}_{0.6})\text{O}_3$ Thin Films. IOP Conference Series: Materials Science and Engineering, 2011, 18, 092008.	0.6	0
50	Ultrafast switching of ferroelastic nanodomains in bilayered ferroelectric thin films. Applied Physics Letters, 2011, 99, 182906.	3.3	21
51	Configuration and local elastic interaction of ferroelectric domains and misfit dislocation in $\text{PbTiO}_3/\text{SrTiO}_3$ epitaxial thin films. Science and Technology of Advanced Materials, 2011, 12, 034413.	6.1	41
52	Diffraction contrast analysis of $90^\circ$ and $180^\circ$ ferroelectric domain structures of $\text{PbTiO}_3$ thin films. Science and Technology of Advanced Materials, 2011, 12, 034403.	6.1	14
53	Crystal Orientation Control of Bismuth Layer-Structured Dielectric Films Using Interface Layers of Perovskite-Type Oxides. Japanese Journal of Applied Physics, 2011, 50, 09NA04.	1.5	13
54	Orientation control of (001) and (101) in epitaxial tetragonal $\text{Pb}(\text{Zr,Ti})\text{O}_3$ films with (100)/(001) and (110)/(101) mixture orientations. Journal of the Ceramic Society of Japan, 2010, 118, 627-630.	1.1	18

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55	Growth of polar axis oriented tetragonal Pb(Zr,Ti)O <sub>3</sub> films on CaF <sub>2</sub> substrates with transparent (La <sub>0.07</sub> Sr <sub>0.93</sub> )SnO <sub>3</sub> . Journal of Crystal Growth, 2010, 312, 3127-3130.	1.5	0
56	Single crystal-like selection rules for unipolar-axis oriented tetragonal Pb(Zr,Ti)O <sub>3</sub> thick epitaxial films. Applied Physics Letters, 2010, 97, 111901.	3.3	8
57	<i>In situ</i> Raman spectroscopy for characterization of the domain contributions to electrical and piezoelectric responses in Pb(Zr,Ti)O <sub>3</sub> films. Applied Physics Letters, 2010, 97, .	3.3	19
58	Experimental evidence for orientation property of Pb(Zr <sub>0.35</sub> Ti <sub>0.65</sub> )O <sub>3</sub> by manipulating polar axis angle using CaF <sub>2</sub> substrate. Applied Physics Letters, 2010, 96, 102905.	3.3	26
59	Structural Property and Electric Field Response of a Single Perovskite PbTiO <sub>3</sub> Nanowire Using Micro X-ray Beam. Japanese Journal of Applied Physics, 2010, 49, 09MC09.	1.5	4
60	Effect of Preparation Conditions of Ti Ion Species on Structural Properties of TiO <sub>2</sub> Pillared Mica. International Journal of the Society of Materials Engineering for Resources, 2010, 17, 41-46.	0.1	0
61	Determination Factors of Strain-relaxed Complex Domain Structure observed in Thick Epitaxial Pb(Zr,Ti)O <sub>3</sub> Films. Materials Research Society Symposia Proceedings, 2009, 1199, 142.	0.1	1
62	Analysis of Lattice Defects in an Epitaxial PbTiO <sub>3</sub> Thick Film by Transmission Electron Microscopy. Key Engineering Materials, 0, 566, 171-174.	0.4	0
63	<i>In-situ</i> observation of reversible 90°-domain switching in Pb(Zr, Ti)O <sub>3</sub> films for microcantilever structure. Japanese Journal of Applied Physics, 0, , .	1.5	0