Takahisa Shiraishi

List of Publications by Year
in descending order

84	1,334	394421	395702
papers	citations	19 h-index	33 g-index

84	84	84	1195
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of mechanical stress on ferroelectricity in (Hf0.5Zr0.5)O2 thin films. Applied Physics Letters, 2016, 108, .	3.3	187
2	Ferroelectricity mediated by ferroelastic domain switching in HfO2-based epitaxial thin films. Applied Physics Letters, 2018, 113, .	3.3	69
3	Contribution of oxygen vacancies to the ferroelectric behavior of Hf0.5Zr0.5O2 thin films. Applied Physics Letters, 2015, 106, .	3.3	65
4	Growth of (111)-oriented epitaxial and textured ferroelectric Y-doped HfO2 films for downscaled devices. Applied Physics Letters, 2016, 109, .	3.3	62
5	Study on the effect of heat treatment conditions on metalorganic-chemical-vapor-deposited ferroelectric Hf_{0.5}Zr_{0.5}O₂thin film on Ir electrode. Japanese Journal of Applied Physics, 2014, 53, 09PA04.	1.5	59
6	Orientation control and domain structure analysis of {100}-oriented epitaxial ferroelectric orthorhombic HfO2-based thin films. Journal of Applied Physics, 2016, 119, .	2.5	57
7	Ferroelectric and Magnetic Properties in Roomâ€Temperature Multiferroic Ga_xFe<sub>2â^'_xO₃ Epitaxial Thin Films. Advanced Functional Materials, 2018, 28, 1704789.	14.9	44
8	Effect of the film thickness on the crystal structure and ferroelectric properties of (Hf 0.5 Zr 0.5)O 2 thin films deposited on various substrates. Materials Science in Semiconductor Processing, 2017, 70, 239-245.	4.0	41
9	Solid state epitaxy of (Hf,Zr)O₂ thin films with orthorhombic phase. Journal of the Ceramic Society of Japan, 2016, 124, 689-693.	1.1	34
10	Formation of the orthorhombic phase in CeO2-HfO2 solid solution epitaxial thin films and their ferroelectric properties. Applied Physics Letters, 2019, 114, .	3.3	30
11	Thickness scaling of (Al_{0.8}Sc_{0.2})N films with remanent polarization beyond 100ÂĩC/cm^{â^'2} around 10Ânm in thickness. Applied Physics Express, 2021, 14, 105501.	2.4	30
12	Growth of Epitaxial 100-Oriented KNbO$_{3}$â€“NaNbO$_{3}$ Solid Solution Films on (100)$_{ext{c}}$SrRuO$_{3}$$$parallel$(100)SrTiO$_{3}$ by Hydrothermal Method and Their Characterization. Japanese Journal of Applied Physics, 2011, 50, 09ND11.	1.5	26
13	Crystal structure and dielectric/ferroelectric properties of CSD-derived HfO 2 -ZrO 2 solid solution films. Ceramics International, 2017, 43, S501-S505.	4.8	24
14	In-situ observation of ultrafast 90Â° domain switching under application of an electric field in (100)/(001)-oriented tetragonal epitaxial Pb(Zr0.4Ti0.6)O3 thin films. Scientific Reports, 2017, 7, 9641.	3.3	23
15	Fabrication of ferroelectric Fe doped HfO₂ epitaxial thin films by ion-beam sputtering method and their characterization. Japanese Journal of Applied Physics, 2018, 57, 11UF02.	1.5	23
16	Electricâ€Fieldâ€Induced Ferroelectricity in 5%Yâ€doped Hf_{0.5}Zr_{0.5}O₂: Transformation from the Paraelectric Tetragonal Phase to the Ferroelectric Orthorhombic Phase. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000589.	2.4	23
17	Crystal Structure Analysis of Hydrothermally Synthesized Epitaxial (K_xNa_{1-x})NbO₃ Films. Japanese Journal of Applied Physics, 2013, 52, 09KA11.	1.5	22
18	Composition dependency of crystal structure, electrical and piezoelectric properties for hydrothermally-synthesized 3 Âµm-thickness (K<i>_x</i>Na_{1â^'}<i>_x</i>)NbO<sub>3& films. Journal of the Ceramic Society of Japan, 2013, 121, 627-631.	1.1	21

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19	Negligible substrate clamping effect on piezoelectric response in (111)-epitaxial tetragonal Pb(Zr, Ti)O3 films. Journal of Applied Physics, 2015, 118, .	2.5	21
20	Corrosion and mechanical properties of cast aluminium alloys. International Journal of Cast Metals Research, 2013, 26, 319-329.	1.0	20
21	Ferroelectric and piezoelectric properties of (K,Na)NbO3 thick films prepared on metal substrates by hydrothermal method. Journal of the Korean Physical Society, 2013, 62, 1055-1059.	0.7	19
22	Vibration-energy-harvesting properties of hydrothermally synthesized (K,Na)NbO3films deposited on flexible metal foil substrates. Japanese Journal of Applied Physics, 2015, 54, 10ND06.	1.5	18
23	Effects of starting materials on the deposition behavior of hydrothermally synthesized {1â€¯0â€¯0} -oriented epitaxial (K,Na)NbO3 thick films and their ferroelectric and piezoelectric properties. Journal of Crystal Growth, 2019, 511, 1-7.	1.5	18
24	Domain orientation relationship of orthorhombic and coexisting monoclinic phases of YO_{1.5}-doped HfO₂ epitaxial thin films. Japanese Journal of Applied Physics, 2018, 57, 11UF16.	1.5	16
25	Demonstration of ferroelectricity in ScGaN thin film using sputtering method. Applied Physics Letters, 2021, 119, .	3.3	15
26	Crystallisation characteristics of primary silicon particles in cast hypereutectic Alâ€“Si alloy. International Journal of Cast Metals Research, 2013, 26, 105-113.	1.0	14
27	Ferroelectric and piezoelectric properties of KNbO₃films deposited on flexible organic substrate by hydrothermal method. Japanese Journal of Applied Physics, 2014, 53, 09PA10.	1.5	14
28	Crystal structure and magnetism in Îº-Al2O3-type AlxFe2-xO3 films on SrTiO3(111). Journal of Applied Physics, 2017, 122, 015301.	2.5	14
29	Growth of 130 Î¼m Thick Epitaxial KNbO3 Film by Hydrothermal Method. Materials Research Society Symposia Proceedings, 2013, 1494, 291-296.	0.1	13
30	Epitaxial PbZr_xTi_{1â€²x}O₃ Ferroelectric Bilayers with Giant Electromechanical Properties. Advanced Materials Interfaces, 2015, 2, 1500075.	3.7	13
31	Switchable third ScFeO₃ polar ferromagnet with YMnO₃-type structure. Journal of Materials Chemistry C, 2020, 8, 4447-4452.	5.5	13
32	Growth of epitaxial (K, Na)NbO3 films with various orientations by hydrothermal method and their properties. Japanese Journal of Applied Physics, 2019, 58, SLLB14.	1.5	11
33	Enhancement of crystal anisotropy and ferroelectricity by decreasing thickness in (Al,Sc)N films. Journal of the Ceramic Society of Japan, 2022, 130, 436-441.	1.1	11
34	Large irreversible non-180Â° domain switching after poling treatment in Pb(Zr, Ti)O3 films. Applied Physics Letters, 2016, 108, .	3.3	10
35	Characterization of (111)-oriented epitaxial (K_{0.5}Na_{0.5})NbO₃thick films deposited by hydrothermal method. Japanese Journal of Applied Physics, 2017, 56, 10PF04.	1.5	10
36	Preparation of {001}_c-oriented epitaxial (K, Na)NbO₃ thick films by repeated hydrothermal deposition technique. Journal of the Ceramic Society of Japan, 2018, 126, 281-285.	1.1	10

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37	Thermal stability of self-polarization in a (K,Na)NbO₃ film prepared by the hydrothermal method. Japanese Journal of Applied Physics, 2021, 60, SFFB03.	1.5	10
38	Growth of Epitaxial 100-Oriented KNbO3â€“NaNbO3Solid Solution Films on (100)cSrRuO3â^¥(100)SrTiO3by Hydrothermal Method and Their Characterization. Japanese Journal of Applied Physics, 2011, 50, 09ND11.	1.5	10
39	High yield preparation of (100)_c-oriented (K,Na)NbO₃ thick films by hydrothermal method using amorphous niobium source. Journal of the Ceramic Society of Japan, 2020, 128, 512-517.	1.1	9
40	Domain structure of tetragonal Pb(Zr,Ti)O₃ nanorods and its size dependence. Japanese Journal of Applied Physics, 2015, 54, 10NA07.	1.5	8
41	Thermally stable dielectric responses in uniaxially (001)-oriented CaBi4Ti4O15 nanofilms grown on a Ca2Nb3O10â^' nanosheet seed layer. Scientific Reports, 2016, 6, 20713.	3.3	8
42	Strain-induced nanostructure of Pb(Mg_{1/3}Nb_{2/3})O₃â€“PbTiO₃on SrTiO₃epitaxial thin films with low PbTiO₃concentration. Japanese Journal of Applied Physics, 2017, 56, 10PB12.	1.5	8
43	Formation of polar phase in Fe-doped ZrO2 epitaxial thin films. Applied Physics Letters, 2018, 113, .	3.3	8
44	Effect of Ta-substitution on the deposition of (K,Na)(Nb,Ta)O3 films by hydrothermal method. Japanese Journal of Applied Physics, 2019, 58, SLLB12.	1.5	8
45	Good piezoelectricity of self-polarized thick epitaxial (K,Na)NbO3 films grown below the Curie temperature (240â€‰Â°C) using a hydrothermal method. Applied Physics Letters, 2020, 117, .	3.3	8
46	Structural and electrical characterization of hydrothermally deposited piezoelectric (K,Na)(Nb,Ta)O3 thick films. Journal of Materials Science, 2020, 55, 8829-8842.	3.7	8
47	Low-temperature deposition of Li substituted (K,Na)NbO₃ films by a hydrothermal method and their structural and ferroelectric properties. Journal of the Ceramic Society of Japan, 2019, 127, 388-393.	1.1	8
48	Composition dependence of ferroelectric properties in (111)-oriented epitaxial HfO₂-CeO₂ solid solution films. Japanese Journal of Applied Physics, 2022, 61, SN1019.	1.5	8
49	Effects of heat treatment on electrical and electromechanical properties of hydrothermally synthesized epitaxial (K_{0.51}Na_{0.49})NbO₃ films. Japanese Journal of Applied Physics, 2014, 53, 05FE02.	1.5	7
50	Effect of incubation time on preparation of continuous and flat Ru films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	7
51	Crystal structure and compositional analysis of epitaxial (K_{0.56}Na_{0.44})NbO₃films prepared by hydrothermal method. Journal of Materials Research, 2016, 31, 693-701.	2.6	7
52	Deposition of orientation-controlled thick (K,Na)NbO₃ films on metal substrates by repeated hydrothermal deposition technique. Journal of the Ceramic Society of Japan, 2019, 127, 478-484.	1.1	7
53	Rapid deposition of (K,Na)NbO3 thick films using microwave-assisted hydrothermal technique. Japanese Journal of Applied Physics, 2020, 59, SPPB02.	1.5	7
54	Ferroelectric and piezoelectric properties of 100â€‰nm-thick CeO2-HfO2 epitaxial films. Applied Physics Letters, 2022, 120, .	3.3	7

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55	Structural evolution of epitaxial CeO2-HfO2 thin films using atomic-scale observation: Formation of ferroelectric phase and domain structure. Acta Materialia, 2022, 235, 118091.	7.9	7
56	Short range biaxial strain relief mechanism within epitaxially grown BiFeO3. Scientific Reports, 2019, 9, 6715.	3.3	6
57	Influence of cooling rate on ferroelastic domain structure for epitaxial (100)/(001)-oriented Pb(Zr,) Tj ETQq1 1 0.784314 rgBT /Overlo	1.5	6
58	Polar-axis-oriented epitaxial tetragonal (Bi,K)TiO3 films with large remanent polarization deposited below Curie temperature by a hydrothermal method. Applied Physics Letters, 2022, 120, 022903.	3.3	6
59	Mechanical properties of AC4CH alloys produced by heated mould continuous casting process. International Journal of Cast Metals Research, 2013, 26, 160-167.	1.0	5
60	Strain induced martensite formation characteristics of austenite stainless steel during various loading conditions. Materials Science and Technology, 2014, 30, 301-308.	1.6	5
61	Growth mechanism and domain structure study on epitaxial BiFeO3 film grown on (La0.3Sr0.7)(Al0.65Ta0.35)O3. Journal of Applied Physics, 2020, 127, .	2.5	5
62	Energy storage properties of epitaxially grown xCaZrO3â€“(1â^’x)NaNbO3 thin films prepared with chemical solution deposition method. Journal of Applied Physics, 2020, 128, .	2.5	5
63	Effect of film thickness on piezoelectric vibrator using hydrothermally synthesized epitaxial (K_{0.88}Na_{0.12})NbO₃ film. Japanese Journal of Applied Physics, 2022, 61, SN1016.	1.5	5
64	Interface structure of Pb(Zr,Ti)O3/MgO(001) epitaxial thin film in early stage of Stranskiâ€“Krastanov growth mode. Japanese Journal of Applied Physics, 2019, 58, SLLA08.	1.5	4
65	Evaluation of spatial and temporal resolution on in situ annealing aberration-corrected transmission electron microscopy with proportionalâ€“integralâ€“differential controller. Microscopy (Oxford,) Tj ETQq1 1 0.784314 rgBT /Overlock	1.4	4
66	Redox-Based Multilevel Resistive Switching in AlFeO₃ Thin-Film Heterostructures. ACS Applied Electronic Materials, 2020, 2, 1065-1073.	4.3	4
67	Epitaxial growth mechanism of Pb(Zr,Ti)O₃ thin films on SrTiO₃ by chemical solution deposition via self-organized seed layer. Journal of the Ceramic Society of Japan, 2020, 128, 501-511.	1.1	4
68	Effect of domain wall characteristics on material properties of lead zirconate titanate piezoelectric ceramics. Advances in Applied Ceramics, 2012, 111, 187-195.	1.1	3
69	Low Temperature Preparation of KNbO₃Films by Hydrothermal Method and Their Characterization. Materials Research Society Symposia Proceedings, 2014, 1659, 49-54.	0.1	3
70	Ferroelastic domain motion by pulsed electric field in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mm rhombohedral epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Pb</mml:mi><mml:mrow><. Physical Review B, 2019, 100, .	3.2	3
71	Fabrication of tetragonal Pb(Zr,Ti)O<inf>3</inf> nanorods by focused ion beam and characterization of the domain structure. , 2015, , .		2
72	The microstructural evolution in high sodium epitaxial sodium potassium niobate films deposited by low-temperature hydro-thermal method. Journal of Materials Science, 2017, 52, 6950-6961.	3.7	2

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73	Interface reaction between PbTiO₃ epitaxial thin films and La-doped SrTiO₃ (001) substrates through edge dislocations induced by 90Â° domain formation. Journal of the Ceramic Society of Japan, 2020, 128, 492-500.	1.1	2
74	Polarization switching behavior of one-axis-oriented lead zirconate titanate films fabricated on metal oxide nanosheet layer. Japanese Journal of Applied Physics, 2017, 56, 10PF10.	1.5	2
75	Noâ€Heating Deposition of 1â€¼mâ€Thick Yâ€Doped HfO₂ Ferroelectric Films with Good Ferroelectric and Piezoelectric Properties by Radio Frequency Magnetron Sputtering Method. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	2
76	Film thickness dependence of ferroelectric properties in polar-axis-oriented epitaxial tetragonal (Bi,K)TiO₃ films prepared by hydrothermal method. AIP Advances, 2022, 12, 035241.	1.3	2
77	Electricâ€Fieldâ€Induced Ferroelectricity in 5%Yâ€doped Hf_{0.5}Zr_{0.5}O₂: Transformation from the Paraelectric Tetragonal Phase to the Ferroelectric Orthorhombic Phase. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2170023.	2.4	1
78	Effect of Ta substitution on the synthesis of (K,Na)(Nb,Ta)O₃ powders by hydrothermal reaction: Insight into the combination of alkaline solution and raw powder. Journal of the Ceramic Society of Japan, 2021, 129, 365-371.	1.1	1
79	Lower-temperature processing of potassium niobate films by microwave-assisted hydrothermal deposition technique. Journal of the Ceramic Society of Japan, 2022, 130, 123-130.	1.1	1
80	Evaluation of bulk and surface acoustic waves propagation properties of (K,Na)NbO₃ films deposited by hydrothermal synthesis or RF magnetron sputtering methods. Japanese Journal of Applied Physics, 2022, 61, SG1077.	1.5	1
81	Study of resonance fatigue properties of piezoelectric ceramics using new fatigue testing system. Advances in Applied Ceramics, 2012, 111, 181-186.	1.1	0
82	Texture Observation for α-Fe₂O₃ Doped HfO₂ Ultrathin Films. Materia Japan, 2016, 55, 599-599.	0.1	0
83	Hydrothermal Deposition of KNbO₃ Films on Metal Substrates having Three-Dimensional Structure. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2018, 65, 673-677.	0.2	0
84	Misfit Strain Induced Interface Structure in PMN-PT Epitaxial Thin Films. Materia Japan, 2019, 58, 97-97.	0.1	0