

Takayoshi Shimura

List of Publications by Year in descending order

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1554
citing authors

#	ARTICLE	IF	CITATIONS
1	Synchrotron x-ray photoelectron spectroscopy study on thermally grown SiO ₂ /4H-SiC(0001) interface and its correlation with electrical properties. Applied Physics Letters, 2011, 99, .	1.5	115
2	Origin of flatband voltage shift and unusual minority carrier generation in thermally grown GeO ₂ /Ge metal-oxide-semiconductor devices. Applied Physics Letters, 2009, 94, .	1.5	90
3	Comprehensive study on initial thermal oxidation of GaN(0001) surface and subsequent oxide growth in dry oxygen ambient. Journal of Applied Physics, 2017, 121, .	1.1	63
4	Germanium oxynitride gate dielectrics formed by plasma nitridation of ultrathin thermal oxides on Ge(100). Applied Physics Letters, 2009, 95, .	1.5	54
5	Improved interface properties of GaN-based metal-oxide-semiconductor devices with thin Ga-oxide interlayers. Applied Physics Letters, 2017, 110, .	1.5	53
6	Investigation of unusual mobile ion effects in thermally grown SiO ₂ on 4H-SiC(0001) at high temperatures. Applied Physics Letters, 2012, 100, 252103.	1.5	45
7	Effect of nitrogen incorporation into Al-based gate insulators in AlON/AlGaN/GaN metal-oxide-semiconductor structures. Applied Physics Express, 2016, 9, 101002.	1.1	45
8	Study of SiO ₂ /4H-SiC interface nitridation by post-oxidation annealing in pure nitrogen gas. AIP Advances, 2015, 5, .	0.6	41
9	X-ray phase contrast imaging by compact Talbot-Lau interferometer with a single transmission grating. Optics Letters, 2014, 39, 4297.	1.7	40
10	Fabrication of Local Ge-on-Insulator Structures by Lateral Liquid-Phase Epitaxy: Effect of Controlling Interface Energy between Ge and Insulators on Lateral Epitaxial Growth. Applied Physics Express, 0, 2, 066502.	1.1	39
11	Ultrahigh-temperature rapid thermal oxidation of 4H-SiC(0001) surfaces and oxidation temperature dependence of SiO ₂ /SiC interface properties. Applied Physics Letters, 2016, 109, .	1.5	39
12	Control of Ga-oxide interlayer growth and Ga diffusion in SiO ₂ /GaN stacks for high-quality GaN-based metal-oxide-semiconductor devices with improved gate dielectric reliability. Applied Physics Express, 2018, 11, 015701.	1.1	35
13	Low-Temperature Growth of Epitaxial Si Films by Atmospheric Pressure Plasma Chemical Vapor Deposition Using Porous Carbon Electrode. Japanese Journal of Applied Physics, 2006, 45, 8424-8429.	0.8	33
14	Mobility characterization of Ge-on-insulator metal-oxide-semiconductor field-effect transistors with striped Ge channels fabricated by lateral liquid-phase epitaxy. Applied Physics Letters, 2014, 105, .	1.5	32
15	Impact of NO Annealing on Flatband Voltage Instability due to Charge Trapping in SiD _j MOS Devices. Materials Science Forum, 0, 858, 599-602.	0.3	31
16	Energy Band Structure of SiO ₂ /4H-SiC Interfaces and its Modulation Induced by Intrinsic and Extrinsic Interface Charge Transfer. Materials Science Forum, 0, 679-680, 386-389.	0.3	28
17	Hard x-ray phase contrast imaging using a tabletop Talbot-Lau interferometer with multilines embedded x-ray targets. Optics Letters, 2013, 38, 157.	1.7	26
18	Two dimensional x-ray phase imaging using single grating interferometer with embedded x-ray targets. Optics Express, 2015, 23, 16582.	1.7	26

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19	Characteristics of Pure Ge ₃ N ₄ Dielectric Layers Formed by High-Density Plasma Nitridation. Japanese Journal of Applied Physics, 2008, 47, 2415.	0.8	25
20	Performance and reliability improvement in SiC power MOSFETs by implementing AlON high-k gate dielectrics. , 2012, , .		25
21	Investigation of Surface and Interface Morphology of Thermally Grown SiO ₂ Dielectrics on 4H-SiC(0001) Substrates. Materials Science Forum, 0, 679-680, 342-345.	0.3	24
22	Understanding and controlling bias-temperature instability in SiC metal-oxide-semiconductor devices induced by unusual generation of mobile ions. Applied Physics Letters, 2013, 102, 093510.	1.5	24
23	Design and control of Ge-based metal-oxide-semiconductor interfaces for high-mobility field-effect transistors with ultrathin oxynitride gate dielectrics. Applied Physics Letters, 2013, 103, 033502.	1.5	24
24	Self-limiting oxidation of SiGe alloy on silicon-on-insulator wafers. Applied Physics Letters, 2006, 89, 111923.	1.5	23
25	Relationship between interface property and energy band alignment of thermally grown SiO ₂ on 4H-SiC(0001). Current Applied Physics, 2012, 12, S79-S82.	1.1	22
26	Ideal phonon-scattering-limited mobility in inversion channels of 4H-SiC(0001) MOSFETs with ultralow net doping concentrations. Applied Physics Letters, 2019, 115, .	1.5	22
27	Controlled oxide interlayer for improving reliability of SiO ₂ /GaN MOS devices. Japanese Journal of Applied Physics, 2019, 58, SCCD06.	0.8	22
28	Comprehensive study and design of scaled metal/high-k/Ge gate stacks with ultrathin aluminum oxide interlayers. Applied Physics Letters, 2015, 106, 233503.	1.5	20
29	Large-Scale Atomistic Modeling of Thermally Grown SiO ₂ on Si(111) Substrate. Japanese Journal of Applied Physics, 2004, 43, 492-497.	0.8	19
30	Humidity-dependent stability of amorphous germanium nitrides fabricated by plasma nitridation. Applied Physics Letters, 2007, 91, .	1.5	19
31	AlON/SiO ₂ Stacked Gate Dielectrics for 4H-SiC MIS Devices. Materials Science Forum, 2009, 615-617, 541-544.	0.3	19
32	Passive active oxidation boundary for thermal oxidation of 4H-SiC(0001) surface in O ₂ /Ar gas mixture and its impact on SiO ₂ /SiC interface quality. Applied Physics Express, 2018, 11, 091301.	1.1	19
33	Excellent electrical properties of TiO ₂ -HfSiO ₄ -SiO ₂ layered higher-k gate dielectrics with sub-1nm equivalent oxide thickness. Applied Physics Letters, 2008, 92, 212902.	1.5	18
34	Strain-induced direct band gap shrinkage in local Ge-on-insulator structures fabricated by lateral liquid-phase epitaxy. Applied Physics Letters, 2014, 104, .	1.5	18
35	Improved bias-temperature instability characteristics in SiC metal-oxide-semiconductor devices with aluminum oxynitride dielectrics. Applied Physics Letters, 2014, 104, 122105.	1.5	18
36	Effects of Thermal History on Residual Order of Thermally Grown Silicon Dioxide. Japanese Journal of Applied Physics, 2003, 42, 7250-7255.	0.8	17

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37	Synthesis of large-scale transparent gold nanosheets sandwiched between stabilizers at a solid-liquid interface. <i>New Journal of Chemistry</i> , 2012, 36, 2112.	1.4	17
38	Sub-nanometer-scale depth profiling of nitrogen atoms in SiO ₂ /4H-SiC structures treated with NO annealing. <i>Applied Physics Express</i> , 2018, 11, 101303.	1.1	17
39	Insight into gate dielectric reliability and stability of SiO ₂ /GaN MOS devices. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SMMA03.	0.8	17
40	Impact of Physical Vapor Deposition-Based In situ Fabrication Method on Metal/High-k Gate Stacks. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 1910-1915.	0.8	16
41	Enhancement of photoluminescence from n-type tensile-strained GeSn wires on an insulator fabricated by lateral liquid-phase epitaxy. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	16
42	Fabrication of tensile-strained single-crystalline GeSn on transparent substrate by nucleation-controlled liquid-phase crystallization. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	16
43	Design and control of interface reaction between Al-based dielectrics and AlGaIn layer in AlGaIn/GaN metal-oxide-semiconductor structures. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	16
44	Implementation of atomic layer deposition-based AlON gate dielectrics in AlGaIn/GaN MOS structure and its physical and electrical properties. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 06KA02.	0.8	16
45	Insight into enhanced field-effect mobility of 4H-SiC MOSFET with Ba incorporation studied by Hall effect measurements. <i>AIP Advances</i> , 2018, 8, .	0.6	16
46	Insights into thermal diffusion of germanium and oxygen atoms in HfO ₂ /GeO ₂ /Ge gate stacks and their suppressed reaction with atomically thin AlO _x interlayers. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	15
47	Insight into unusual impurity absorbability of GeO ₂ in GeO ₂ /Ge stacks. <i>Applied Physics Letters</i> , 2011, 99, 142101.	1.5	14
48	X-ray diffraction measurements of internal strain in Si nanowires fabricated using a self-limiting oxidation process. <i>Applied Physics Letters</i> , 2005, 86, 071903.	1.5	13
49	High-mobility p-channel metal-oxide-semiconductor field-effect transistors on Ge-on-insulator structures formed by lateral liquid-phase epitaxy. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	13
50	Insights into ultraviolet-induced electrical degradation of thermally grown SiO ₂ /4H-SiC(0001) interface. <i>Applied Physics Letters</i> , 2014, 104, 012107.	1.5	13
51	Design and demonstration of phase gratings for 2D single grating interferometer. <i>Optics Express</i> , 2015, 23, 29399.	1.7	13
52	Insight into metal-enhanced oxidation using barium on 4H-SiC surfaces. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 120303.	0.8	13
53	Atmospheric In situ Arsenic-Doped SiGe Selective Epitaxial Growth for Raised-Extension N-type Metal-Oxide-Semiconductor Field-Effect Transistor. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 1916-1920.	0.8	12
54	Mechanism of Carrier Mobility Degradation Induced by Crystallization of HfO ₂ Gate Dielectrics. <i>Applied Physics Express</i> , 0, 2, 071402.	1.1	12

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55	Fabrication of advanced La-incorporated Hf-silicate gate dielectrics using physical-vapor-deposition-based <i>in situ</i> method and its effective work function modulation of metal/high-k stacks. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	12
56	Electrical Characteristics of Ge-Based Metal-Insulator-Semiconductor Devices with Ge ₃ N ₄ Dielectrics Formed by Plasma Nitridation. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2856-2860.	0.9	12
57	Novel Approach for Improving Interface Quality of 4H-SiC MOS Devices with UV Irradiation and Subsequent Thermal Annealing. <i>Materials Science Forum</i> , 2013, 740-742, 741-744.	0.3	12
58	Selective detection and recovery of gold at tannin-immobilized non-conducting electrode. <i>Analytica Chimica Acta</i> , 2015, 853, 207-213.	2.6	12
59	Ge diffusion and bonding state change in metal/high-k/Ge gate stacks and its impact on electrical properties. <i>Microelectronic Engineering</i> , 2013, 109, 137-141.	1.1	11
60	Insight into Channel Conduction Mechanisms of 4H-SiC(0001) MOSFET Based on Temperature-Dependent Hall Effect Measurement. <i>Materials Science Forum</i> , 0, 1004, 620-626.	0.3	11
61	Insight into interface electrical properties of metal-oxide-semiconductor structures fabricated on Mg-implanted GaN activated by ultra-high-pressure annealing. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	11
62	Synchrotron X-Ray Topography of Lattice Undulation of Bonded Silicon-On-Insulator Wafers. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 1081-1087.	0.8	10
63	Oxidation of Si(001) with a hyperthermal O-atom beam at room temperature: Suboxide distribution and residual order structure. <i>Applied Physics Letters</i> , 2006, 88, 133512.	1.5	10
64	Lateral Polarity Control in GaN Based on Selective Growth Procedure Using Carbon Mask Layers. <i>Applied Physics Express</i> , 2009, 2, 101001.	1.1	10
65	Thermal Robustness and Improved Electrical Properties of Ultrathin Germanium Oxynitride Gate Dielectric. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 010106.	0.8	10
66	Gate stack technology for advanced high-mobility Ge-channel metal-oxide-semiconductor devices – Fundamental aspects of germanium oxides and application of plasma nitridation technique for fabrication of scalable oxynitride dielectrics. <i>Current Applied Physics</i> , 2012, 12, S10-S19.	1.1	10
67	Mobility enhancement in recessed-gate AlGaIn/GaN MOS-HFETs using an AlON gate insulator. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SCCD16.	0.8	10
68	Performance improvement in 4H-SiC(0001) p-channel metal-oxide-semiconductor field-effect transistors with a gate oxide grown at ultrahigh temperature. <i>Applied Physics Express</i> , 2019, 12, 061003.	1.1	10
69	Structure of silicon oxide on Si(001) grown at low temperatures. <i>Surface Science</i> , 1994, 315, L1021-L1024.	0.8	9
70	Comment on ‘‘Observation of a Distributed Epitaxial Oxide in Thermally Grown SiO ₂ on Si(001)’’. <i>Physical Review Letters</i> , 1997, 79, 4932-4932.	2.9	9
71	Thermal Degradation of HfSiON Dielectrics Caused by TiN Gate Electrodes and Its Impact on Electrical Properties. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 2933-2938.	0.8	9
72	Systematic study on work-function-shift in metal/Hf-based high-k gate stacks. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	9

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73	Fabrication of Fully Relaxed SiGe Layers with High Ge Concentration on Silicon-on-Insulator Wafers by Rapid Melt Growth. Applied Physics Express, 2010, 3, 105501.	1.1	9
74	Direct Observation of Dielectric Breakdown Spot in Thermal Oxides on 4H-SiC(0001) Using Conductive Atomic Force Microscopy. Materials Science Forum, 0, 645-648, 821-824.	0.3	9
75	Reduction of Charge Trapping Sites in Al ₂ O ₃ /SiO ₂ Stacked Gate Dielectrics by Incorporating Nitrogen for Highly Reliable 4H-SiC MIS Devices. Materials Science Forum, 2011, 679-680, 496-499.	0.3	9
76	Impact of UV Irradiation on Thermally Grown 4H-SiC MOS Devices. Materials Science Forum, 2012, 717-720, 765-768.	0.3	9
77	Interface engineering between metal electrode and GeO ₂ dielectric for future Ge-based metal-oxide-semiconductor technologies. Applied Physics Letters, 2012, 101, .	1.5	9
78	Electrical detection of surface plasmon resonance phenomena by a photoelectronic device integrated with gold nanoparticle plasmon antenna. Applied Physics Letters, 2013, 102, .	1.5	9
79	Reliability-aware design of metal/high-k gate stack for high-performance SiC power MOSFET. , 2017, , .		9
80	Fixed-charge generation in SiO ₂ /GaN MOS structures by forming gas annealing and its suppression by controlling Ga-oxide interlayer growth. Japanese Journal of Applied Physics, 2022, 61, SC1034.	0.8	9
81	Characterization of strained Si wafers by X-ray diffraction techniques. Journal of Materials Science: Materials in Electronics, 2008, 19, 189-193.	1.1	8
82	Characteristics of in-situ phosphorus-doped silicon selective epitaxial growth at atmospheric pressure. Journal of Crystal Growth, 2008, 310, 4507-4510.	0.7	8
83	Residual order in the thermal oxide of a fully strained SiGe alloy on Si. Physical Review B, 2010, 81, .	1.1	8
84	Al ₂ O ₃ /GeO ₂ stacked gate dielectrics formed by post-deposition oxidation of ultrathin metal Al layer directly grown on Ge substrates. Current Applied Physics, 2012, 12, S75-S78.	1.1	8
85	Impact of Interface Defect Passivation on Conduction Band Offset at SiO ₂ /4H-SiC Interface. Materials Science Forum, 0, 717-720, 721-724.	0.3	8
86	Exact evaluation of interface-reaction-limited growth in dry and wet thermal oxidation of 4H-SiC(0001) Si-face surfaces. Japanese Journal of Applied Physics, 2015, 54, 098002.	0.8	8
87	Impact of rapid cooling process in ultrahigh-temperature oxidation of 4H-SiC(0001). Japanese Journal of Applied Physics, 2017, 56, 04CR04.	0.8	8
88	Anomalous interface fixed charge generated by forming gas annealing in SiO ₂ /GaN MOS devices. Applied Physics Express, 2020, 13, 081001.	1.1	8
89	Heavy arsenic doping of silicon grown by atmospheric pressure selective epitaxial chemical vapor deposition. Science and Technology of Advanced Materials, 2007, 8, 142-145.	2.8	7
90	X-ray diffraction study of strain distribution in oxidized Si nanowires. Journal of Applied Physics, 2009, 106, 073506.	1.1	7

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91	Impact of a Treatment Combining Nitrogen Plasma Exposure and Forming Gas Annealing on Defect Passivation of SiO ₂ /SiC Interfaces. Materials Science Forum, 2009, 615-617, 525-528.	0.3	7
92	A novel electroless method for the deposition of single-crystalline gold nanocrystals on and inside an organic solid-matrix. New Journal of Chemistry, 2011, 35, 1031.	1.4	7
93	Synchrotron Radiation Photoemission Study of Ge ₃ N ₄ /Ge Structures Formed by Plasma Nitridation. Japanese Journal of Applied Physics, 2011, 50, 10PE03.	0.8	7
94	Structure and Surface Morphology of Thermal SiO ₂ Grown on 4H-SiC by Metal-Enhanced Oxidation Using Barium. Materials Science Forum, 0, 897, 340-343.	0.3	7
95	Demonstration of 4H-SiC CMOS circuits consisting of well-balanced n- and p-channel MOSFETs fabricated by ultrahigh-temperature gate oxidation. Applied Physics Express, 2021, 14, 091006.	1.1	7
96	Comprehensive physical and electrical characterizations of NO nitrided SiO ₂ /4H-SiC(112̄,0) interfaces. Japanese Journal of Applied Physics, 2022, 61, SC1065.	0.8	7
97	Suppression of surface segregation and heavy arsenic doping into silicon during selective epitaxial chemical vapor deposition under atmospheric pressure. Applied Physics Letters, 2007, 91, .	1.5	6
98	Surface Cleaning and Etching of 4H-SiC(0001) Using High-Density Atmospheric Pressure Hydrogen Plasma. Journal of Nanoscience and Nanotechnology, 2011, 11, 2802-2808.	0.9	6
99	(Invited) Impact of Stacked AlON/SiO ₂ Gate Dielectrics for SiC Power Devices. ECS Transactions, 2011, 35, 265-274.	0.3	6
100	Phosphorous ion implantation into NiGe layer for Ohmic contact formation on n-type Ge. Japanese Journal of Applied Physics, 2014, 53, 08LD01.	0.8	6
101	Schottky source/drain germanium-based metal-oxide-semiconductor field-effect transistors with self-aligned NiGe/Ge junction and aggressively scaled high- <i>k</i> gate stack. Applied Physics Letters, 2015, 107, .	1.5	6
102	Synchrotron radiation X-ray photoelectron spectroscopy of Ti/Al ohmic contacts to n-type GaN: Key role of Al capping layers in interface scavenging reactions. Applied Physics Express, 2016, 9, 105801.	1.1	6
103	Lightly doped n-type tensile-strained single-crystalline GeSn-on-insulator structures formed by lateral liquid-phase crystallization. Applied Physics Express, 2018, 11, 011304.	1.1	6
104	Improved channel mobility of 4H-SiC n-MOSFETs by ultrahigh-temperature gate oxidation with low-oxygen partial-pressure cooling. Japanese Journal of Applied Physics, 2018, 57, 120304.	0.8	6
105	High-temperature CO ₂ treatment for improving electrical characteristics of 4H-SiC(0001) metal-oxide-semiconductor devices. Applied Physics Express, 2021, 14, 101001.	1.1	6
106	Thermal Robustness and Improved Electrical Properties of Ultrathin Germanium Oxynitride Gate Dielectric. Japanese Journal of Applied Physics, 2011, 50, 010106.	0.8	6
107	Impact of nitridation on the reliability of 4H-SiC(112̄,0) MOS devices. Applied Physics Express, 2022, 15, 041002.	1.1	6
108	Large-Area X-Ray Topographs of Lattice Undulation of Bonded Silicon-On-Insulator Wafers. Japanese Journal of Applied Physics, 2003, 42, L117-L119.	0.8	5

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109	Interface reactions at TiN/HfSiON gate stacks: Dependence on the electrode structure and deposition method. <i>Science and Technology of Advanced Materials</i> , 2007, 8, 219-224.	2.8	5
110	Nitrogen plasma cleaning of Ge(100) surfaces. <i>Applied Surface Science</i> , 2009, 255, 6335-6337.	3.1	5
111	Impact of Thermally Induced Structural Changes on the Electrical Properties of TiN/HfLaSiO Gate Stacks. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 10PA02.	0.8	5
112	(Invited) Gate Stack Technologies for SiC Power MOSFETs. <i>ECS Transactions</i> , 2011, 41, 77-90.	0.3	5
113	Dielectric Properties of Thermally Grown SiO ₂ on 4H-SiC(0001) Substrates. <i>Materials Science Forum</i> , 0, 740-742, 605-608.	0.3	5
114	Understanding and engineering of NiGe/Ge junction formed by phosphorous ion implantation after germanidation. <i>Applied Physics Letters</i> , 2014, 105, 062107.	1.5	5
115	Physical and electrical characterizations of AlGaN/GaN MOS gate stacks with AlGaN surface oxidation treatment. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 06KA07.	0.8	5
116	Demonstration of mm long nearly intrinsic GeSn single-crystalline wires on quartz substrate fabricated by nucleation-controlled liquid-phase crystallization. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SBBK01.	0.8	5
117	Characterization of the (0001) surface of ice Ih crystal by crystal truncation rod scattering with the use of a synchrotron radiation source. <i>Journal of Crystal Growth</i> , 1992, 121, 360-364.	0.7	4
118	Enhanced Performance of Gate-First p-Channel Metal-Insulator-Semiconductor Field-Effect Transistors with Polycrystalline Silicon/TiN/HfSiON Stacks Fabricated by Physical Vapor Deposition Based In situ Method. <i>Japanese Journal of Applied Physics</i> , 2007, 46, L1111-L1113.	0.8	4
119	Improved Electrical Properties of SiC-MOS Interfaces by Thermal Oxidation of Plasma Nitrided 4H-SiC(0001) Surfaces. <i>Materials Science Forum</i> , 2010, 645-648, 507-510.	0.3	4
120	A novel electroless method for the deposition of single-crystalline platinum nanoparticle films on an organic solid matrix in the presence of gold single crystals. <i>New Journal of Chemistry</i> , 2011, 35, 1503.	1.4	4
121	Electronic Structure Characterization of La Incorporated Hf-Based High- κ Gate Dielectrics by NEXAFS. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2823-2828.	0.9	4
122	Cathodoluminescence study of radiative interface defects in thermally grown SiO ₂ /4H-SiC(0001) structures. <i>Applied Physics Letters</i> , 2015, 106, 261604.	1.5	4
123	SiO ₂ /AlON stacked gate dielectrics for AlGaN/GaN MOS heterojunction field-effect transistors. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 06KA03.	0.8	4
124	Advancement of X-ray radiography using microfocus X-ray source in conjunction with amplitude grating and SOI pixel detector, SOPHIAS. <i>Optics Express</i> , 2018, 26, 21044.	1.7	4
125	Evaluation of the Impact of Al Atoms on SiO ₂ /SiC Interface Property by Using 4H-SiC n ⁺ -Channel Junctionless MOSFET. <i>Materials Science Forum</i> , 0, 963, 171-174.	0.3	4
126	Toward the Super Temporal Resolution Image Sensor with a Germanium Photodiode for Visible Light. <i>Sensors</i> , 2020, 20, 6895.	2.1	4

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127	Probing the surface potential of SiO ₂ /4H-SiC(0001) by terahertz emission spectroscopy. Journal of Applied Physics, 2021, 130, 115305.	1.1	4
128	Impact of Thermally Induced Structural Changes on the Electrical Properties of TiN/HfLaSiO Gate Stacks. Japanese Journal of Applied Physics, 2011, 50, 10PA02.	0.8	4
129	Synchrotron Radiation Photoemission Study of Ge ₃ N ₄ /Ge Structures Formed by Plasma Nitridation. Japanese Journal of Applied Physics, 2011, 50, 10PE03.	0.8	4
130	Formation of epitaxially ordered SiO ₂ in oxygen-implanted silicon during thermal annealing. Journal of Crystal Growth, 2002, 236, 37-40.	0.7	3
131	Investigation of In-situ Boron-Doped Si Selective Epitaxial Growth by Comparison with Arsenic Doping. Japanese Journal of Applied Physics, 2008, 47, 2452-2455.	0.8	3
132	High-quality GeON gate dielectrics formed by plasma nitridation of ultrathin thermal oxides on Ge(100)., 2010, , .		3
133	Interface Reaction and Rate Enhancement of SiGe Thermal Oxidation. ECS Transactions, 2010, 33, 893-899.	0.3	3
134	Initial Stages of High-Temperature CaF ₂ /Si(001) Epitaxial Growth Studied by Surface X-Ray Diffraction. Journal of Nanoscience and Nanotechnology, 2011, 11, 2990-2996.	0.9	3
135	Characterization of SiGe Layer during Ge Condensation Process by X-ray Diffraction Methods. Japanese Journal of Applied Physics, 2011, 50, 010112.	0.8	3
136	Detrimental Hf penetration into TiN gate electrode and subsequent degradation in dielectric properties of HfSiO high-k film. Applied Physics Letters, 2011, 99, 142907.	1.5	3
137	Synchrotron Radiation Photoelectron Spectroscopy Study of Thermally Grown Oxides on 4H-SiC(0001) Si-Face and (000-1) C-Face Substrates. Materials Science Forum, 2012, 717-720, 697-702.	0.3	3
138	Ultrahigh-Temperature Oxidation of 4H-SiC(0001) and an Impact of Cooling Process on SiO ₂ /SiC Interface Properties. Materials Science Forum, 2017, 897, 323-326.	0.3	3
139	A Pixel Design of a Branching Ultra-Highspeed Image Sensor. Sensors, 2021, 21, 2506.	2.1	3
140	Ordered Structure in Buried Oxide Layers of SOI Wafers. Japanese Journal of Applied Physics, 1999, 38, 297.	0.8	2
141	Monitoring of Si Molecular-Beam Epitaxial Growth by an Ellipsometric Method. Japanese Journal of Applied Physics, 2001, 40, 371-375.	0.8	2
142	White X-ray Topography of Lattice Undulation in Bonded Silicon-on-Insulator Wafers. Japanese Journal of Applied Physics, 2006, 45, 6795-6799.	0.8	2
143	High Performance Gate-First pMISFET with TiN/HfSiON Gate Stacks Fabricated with PVD-Based In-Situ Method. ECS Transactions, 2007, 11, 585-599.	0.3	2
144	Dielectric and Interface Properties of TiO ₂ /HfSiO/SiO ₂ Layered Structures Fabricated by in situ PVD Method. ECS Transactions, 2009, 16, 121-129.	0.3	2

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145	La Induced Passivation of High- k Bulk and Interface Defects in Polycrystalline Silicon/TiN/HfLaSiO/SiO ₂ Stacks. Japanese Journal of Applied Physics, 2011, 50, 10PA01.	0.8	2
146	Oxygen-induced high- k degradation in TiN/HfSiO gate stacks. , 2012, , .		2
147	Degradation of SiO ₂ /SiC Interface Properties due to Mobile Ions Intrinsically Generated by High-Temperature Hydrogen Annealing. Materials Science Forum, 2014, 778-780, 541-544.	0.3	2
148	Development of a compact compression test stage for synchrotron radiation micro-Laue diffraction measurements of long-period stacking-ordered phases in Mg-Zn-Y alloys. Japanese Journal of Applied Physics, 2016, 55, 038002.	0.8	2
149	Flatband Voltage Shift Depending on SiO ₂ /SiC Interface Charges in 4H-SiC MOS Capacitors with AlON/SiO ₂ /Stacked Gate Dielectrics. Materials Science Forum, 0, 858, 681-684.	0.3	2
150	Improvement of SiO ₂ /4H-SiC Interface Quality by Post-Oxidation Annealing in N ₂ at High-Temperatures. Materials Science Forum, 0, 858, 627-630.	0.3	2
151	Comparative study on thermal robustness of GaN and AlGaIn/GaN MOS devices with thin oxide interlayers. Japanese Journal of Applied Physics, 2019, 58, SCCD08.	0.8	2
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