# Hiroyuki Ota

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3177867/publications.pdf

Version: 2024-02-01

| 140 | 1,818 | 19 | 32 |
|---|---|---|---|
| papers | citations | h-index | g-index |

394421 414414

| 140 | 140 | 140 | 1684 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Experimental evidence for the flatband voltage shift of high-k metal-oxide-semiconductor devices due to the dipole formation at the high-kâˆ•SiO2 interface. Applied Physics Letters, 2008, 92, . | 3.3 | 140 |
| 2 | Polarization switching behavior of Hfâ€“Zrâ€“O ferroelectric ultrathin films studied through coercive field characteristics. Japanese Journal of Applied Physics, 2018, 57, 04FB01. | 1.5 | 79 |
| 3 | Fully coupled 3-D device simulation of negative capacitance FinFETs for sub 10 nm integration. , 2016, , . | | 77 |
| 4 | Experimental Demonstration of Ultrashort-Channel (3 nm) Junctionless FETs Utilizing Atomically Sharp V-Grooves on SOI. IEEE Nanotechnology Magazine, 2014, 13, 208-215. | 2.0 | 59 |
| 5 | Study of tunneling transport in Si-based tunnel field-effect transistors with ON current enhancement utilizing isoelectronic trap. Applied Physics Letters, 2015, 106, . | 3.3 | 54 |
| 6 | Performance Enhancement of Tunnel Field-Effect Transistors by Synthetic Electric Field Effect. IEEE Electron Device Letters, 2014, 35, 792-794. | 3.9 | 53 |
| 7 | Comprehensive Study of V<inf>FB</inf> Shift in High-k CMOS - Dipole Formation, Fermi-level Pinning and Oxygen Vacancy Effect. , 2007, , . | | 39 |
| 8 | Phase transformation behavior of ultrathin Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> films investigated through wide range annealing experiments. Japanese Journal of Applied Physics, 2019, 58, SBBA07. | 1.5 | 38 |
| 9 | Self-limiting process for the bismuth content in molecular beam epitaxial growth of Bi2Sr2CuOy thin films. Applied Physics Letters, 1997, 71, 3712-3714. | 3.3 | 36 |
| 10 | Unexpected equivalent-oxide-thickness dependence of the subthreshold swing in tunnel field-effect transistors. Applied Physics Express, 2014, 7, 024201. | 2.4 | 35 |
| 11 | Impacts of plasma-induced damage due to UV light irradiation during etching on Ge fin fabrication and device performance of Ge fin field-effect transistors. Applied Physics Express, 2017, 10, 026501. | 2.4 | 33 |
| 12 | 0.6nm-EOT high-k gate stacks with HfSiOx interfacial layer grown by solid-phase reaction between HfO2 and Si substrate. Microelectronic Engineering, 2007, 84, 1861-1864. | 2.4 | 30 |
| 13 | Operation of inverter and ring oscillator of ultrathin-body poly-Ge CMOS. Applied Physics Express, 2014, 7, 121302. | 2.4 | 29 |
| 14 | Decomposition of On-Current Variability of nMOS FinFETs for Prediction Beyond 20 nm. IEEE Transactions on Electron Devices, 2012, 59, 2003-2010. | 3.0 | 27 |
| 15 | Formation of phase intergrowth in the syntheses of Bi-superconducting thin films. Applied Physics Letters, 1997, 70, 1471-1473. | 3.3 | 25 |
| 16 | A compact model for tunnel field-effect transistors incorporating nonlocal band-to-band tunneling. Journal of Applied Physics, 2013, 114, 144512. | 2.5 | 25 |
| 17 | Gate-First High-Performance Germanium nMOSFET and pMOSFET Using Low Thermal Budget Ion Implantation After Germanidation Technique. IEEE Electron Device Letters, 2016, 37, 253-256. | 3.9 | 25 |
| 18 | Epitaxial Bi4Ti3O12 thin film growth using Bi self-limiting function. Journal of Crystal Growth, 1999, 200, 161-168. | 1.5 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Dielectric Breakdown in High-K Gate Dielectrics - Mechanism and Lifetime Assessment. , 2007, , . | | 23 |
| 20 | Intrinsic Origin of Electron Mobility Reduction in High-k MOSFETs - From Remote Phonon to Bottom Interface Dipole Scattering. , 2007, , . | | 22 |
| 21 | Suppressing V<inf>t</inf> and G<inf>m</inf> variability of FinFETs using amorphous metal gates for 14 nm and beyond. , 2012, , . | | 22 |
| 22 | Band-to-band tunneling current enhancement utilizing isoelectronic trap and its application to TFETs. , 2014, , . | | 22 |
| 23 | Symmetrical threshold voltage in complementary metal-oxide-semiconductor field-effect transistors with HfAlOx(N) achieved by adjusting Hfâˆ•Al compositional ratio. Journal of Applied Physics, 2006, 99, 054506. | 2.5 | 21 |
| 24 | Fabrication and Demonstration of 3-nm-Channel-Length Junctionless Field-Effect Transistors on Silicon-on-Insulator Substrates Using Anisotropic Wet Etching and Lateral Diffusion of Dopants. Japanese Journal of Applied Physics, 2013, 52, 04CA01. | 1.5 | 21 |
| 25 | Physical origins of mobility enhancement of Ge p-channel metal-insulator-semiconductor field effect transistors with Si passivation layers. Journal of Applied Physics, 2010, 108, 104511. | 2.5 | 20 |
| 26 | Material and device engineering in fully depleted silicon-on-insulator transistors to realize a steep subthreshold swing using negative capacitance. Japanese Journal of Applied Physics, 2016, 55, 08PD01. | 1.5 | 20 |
| 27 | Surface morphology for annealed and etched MgO(100). Journal of Low Temperature Physics, 1996, 105, 1343-1348. | 1.4 | 19 |
| 28 | A TCAD device simulator for exotic materials and its application to a negative-capacitance FET. Journal of Computational Electronics, 2019, 18, 534-542. | 2.5 | 19 |
| 29 | Advantages of HfAlON gate dielectric film for advanced low power CMOS application. Microelectronic Engineering, 2005, 80, 190-197. | 2.4 | 18 |
| 30 | Achievement of Higher-k and High-Î¦ in Phase Controlled HfO2 Film Using Post Gate Electrode Deposition Annealing. ECS Transactions, 2007, 11, 35-45. | 0.5 | 18 |
| 31 | Nature of interface traps in Ge metal-insulator-semiconductor structures with GeO2 interfacial layers. Journal of Applied Physics, 2011, 109, . | 2.5 | 18 |
| 32 | Perspective of negative capacitance FinFETs investigated by transient TCAD simulation. , 2017, , . | | 17 |
| 33 | What is the Essence of VFB Shifts in High-k Gate Stack?. ECS Transactions, 2007, 11, 543-555. | 0.5 | 16 |
| 34 | Effect of Al-diffusion-induced positive flatband voltage shift on the electrical characteristics of Al-incorporated high-k metal-oxide-semiconductor field-effective transistor. Journal of Applied Physics, 2009, 105, 064108. | 2.5 | 16 |
| 35 | Impact of Surface Hydrophilicization prior to Atomic Layer Deposition for HfO<sub>2</sub>/Si Direct-Contact Gate Stacks. Applied Physics Express, 2009, 2, 011201. | 2.4 | 16 |
| 36 | Tunnel Field-Effect Transistor with Epitaxially Grown Tunnel Junction Fabricated by Source/Drain-First and Tunnel-Junction-Last Processes. Japanese Journal of Applied Physics, 2013, 52, 04CC25. | 1.5 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Fringing field effects in negative capacitance field-effect transistors with a ferroelectric gate insulator. Japanese Journal of Applied Physics, 2018, 57, 04FD07. | 1.5 | 16 |
| 38 | Superstructure observation on a MgO(100) surface. Surface Science, 1996, 357-358, 150-154. | 1.9 | 15 |
| 39 | Partial silicides technology for tunable work function electrodes on high-k gate dielectrics - fermi level pinning controlled PtS/sub X/, for HfO/sub X/(N) pMOSFET. , 0, , . |  | 15 |
| 40 | Suppression of threshold voltage variability of double-gate fin field-effect transistors using amorphous metal gate with uniform work function. Applied Physics Letters, 2013, 102, . | 3.3 | 15 |
| 41 | Design guidelines to achieve minimum energy operation for ultra low voltage tunneling FET logic circuits. Japanese Journal of Applied Physics, 2015, 54, 04DC04. | 1.5 | 15 |
| 42 | Introduction of SiGe/Si heterojunction into novel multilayer tunnel FinFET. Japanese Journal of Applied Physics, 2016, 55, 04EB06. | 1.5 | 15 |
| 43 | Tunnel FinFET CMOS inverter with very low short-circuit current for ultralow-power Internet of Things application. Japanese Journal of Applied Physics, 2017, 56, 04CD19. | 1.5 | 15 |
| 44 | First Experimental Observation of Channel Thickness Scaling Induced Electron Mobility Enhancement in UTB-GeOI nMOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 4615-4621. | 3.0 | 15 |
| 45 | Accelerated ferroelectric phase transformation in HfO<sub>2</sub>/ZrO<sub>2</sub> nanolaminates. Applied Physics Express, 2021, 14, 051006. | 2.4 | 15 |
| 46 | Particle-free superconducting Bi2Sr2CaCu2Ox ultrathin films prepared by atomic-layer-controlled molecular beam epitaxy technique. Physica C: Superconductivity and Its Applications, 1999, 311, 42-48. | 1.2 | 14 |
| 47 | Memory properties of a ferroelectric gate field-effect transistor with an adjoining metalâ€"ferroelectricâ€"metal assistance cell. Journal of Applied Physics, 2003, 94, 2559-2562. | 2.5 | 14 |
| 48 | Changes in effective work function of HfxRu1â^'x alloy gate electrode. Microelectronic Engineering, 2008, 85, 1524-1528. | 2.4 | 14 |
| 49 | Accurate evaluation of Ge metalâ€"insulatorâ€"semiconductor interface properties. Journal of Applied Physics, 2011, 110, . | 2.5 | 14 |
| 50 | Fabrication of Direct-Contact Higher-k HfO<sub>2</sub> Gate Stacks by Oxygen-Controlled Cap Post-Deposition Annealing. Japanese Journal of Applied Physics, 2011, 50, 10PG01. | 1.5 | 14 |
| 51 | Wake-up-free properties and high fatigue resistance of Hf<i>x</i>Zr1â^'<i>x</i>O2-based metalâ€"ferroelectricâ€"semiconductor using top ZrO2 nucleation layer at low thermal budget (300â€‰Â°C). APL Materials, 2022, 10, . | 5.1 | 14 |
| 52 | All-perovskite-oxide ferroelectric memory transistor composed of Bi2Sr2CuOx and PbZr0.5Ti0.5O3 films. Journal of Applied Physics, 2001, 89, 8153-8158. | 2.5 | 13 |
| 53 | V<inf>FB</inf> Roll-off in HfO<inf>2</inf> Gate Stack after High Temperature Annealing Process - A Crucial Role of Out-diffused Oxygen from HfO<inf>2</inf> to Si. , 2007, , . |  | 13 |
| 54 | Tunnel Field-Effect Transistors with Extremely Low Off-Current Using Shadowing Effect in Drain Implantation. Japanese Journal of Applied Physics, 2011, 50, 06GF14. | 1.5 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Pulsed laser deposition and ferroelectric properties of SrBi2Ta2O9 thin films. Materials Letters, 1999, 38, 406-412. | 2.6 | 12 |
| 56 | Influence of work function variation of metal gates on fluctuation of sub-threshold drain current for fin field-effect transistors with undoped channels. Japanese Journal of Applied Physics, 2014, 53, 04EC11. | 1.5 | 12 |
| 57 | Two-step annealing effects on ultrathin EOT higher-k (k=40) ALD-HfO2 gate stacks. Solid-State Electronics, 2013, 84, 58-64. | 1.4 | 11 |
| 58 | Achieving low parasitic resistance in Ge p-channel metalâ€“oxideâ€“semiconductor field-effect transistors by ion implantation after germanidation. Applied Physics Express, 2015, 8, 054201. | 2.4 | 11 |
| 59 | The influence of Bi-sticking coefficient in the growth of Bi(2212) thin film by ion beam sputtering. Thin Solid Films, 1996, 281-282, 510-512. | 1.8 | 10 |
| 60 | Fabrication and critical currents of thin-film-type Bi2Sr2CaCu2Ox intrinsic Josephson junctions. Physica C: Superconductivity and Its Applications, 2001, 362, 256-260. | 1.2 | 10 |
| 61 | Weak Temperature Dependence of Non-Coulomb Scattering Component of HfAlOx-Limited Inversion Layer Mobility in n+-Polysilicon/HfAlOx/SiO2N-Channel Metalâ€"Oxideâ€"Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2005, 44, 7750-7755. | 1.5 | 10 |
| 62 | Roles of nitrogen incorporation in HfAlO[sub x](N) gate dielectrics for suppression of boron penetration. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2128. | 1.6 | 9 |
| 63 | Carrier separation analysis for clarifying carrier conduction and degradation mechanisms in high-k stack gate dielectrics. Microelectronics Reliability, 2005, 45, 1041-1050. | 1.7 | 9 |
| 64 | Correlation between scanning-probe-induced spots and fixed positive charges in thin HfO2 films. Applied Physics Letters, 2005, 86, 112906. | 3.3 | 9 |
| 65 | Mechanism of Gradual Increase of Gate Current in High-K Gate Dielectrics and Its Application to Reliability Assessment. , 2006, , . |  | 9 |
| 66 | Predictivity of the non-local BTBT model for structure dependencies of tunnel FETs. , 2014, , . |  | 9 |
| 67 | Effect of hot implantation on ON-current enhancement utilizing isoelectronic trap in Si-based tunnel field-effect transistors. Applied Physics Express, 2015, 8, 036503. | 2.4 | 9 |
| 68 | Structural advantages of silicon-on-insulator FETs over FinFETs in steep subthreshold-swing operation in ferroelectric-gate FETs. Japanese Journal of Applied Physics, 2017, 56, 04CD10. | 1.5 | 9 |
| 69 | Gate-First Processed FUSI/HfO<inf>2</inf>/HfSiO<inf>x</inf>/Si MOSFETs with EOT=0.5 nm - Interfacial Layer Formation by Cycle-by-Cycle Deposition and Annealing. , 2007, , . |  | 8 |
| 70 | Materials Science-based Device Performance Engineering for Metal Gate High-k CMOS. , 2007, , . |  | 8 |
| 71 | Impact of reduced pressure crystallization on ferroelectric properties in hafnium-zirconium dioxide films deposited by sputtering. Japanese Journal of Applied Physics, 2021, 60, SFFB05. | 1.5 | 8 |
| 72 | Effect of the interfacial SiO2 layer thickness on the dominant carrier type in leakage currents through HfAlOxâˆ•SiO2 gate dielectric films. Applied Physics Letters, 2004, 85, 6227-6229. | 3.3 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Structural Metastability and Size Scalability of Phase-Controlled HfO2 Formed through Cap-PDA. ECS Transactions, 2009, 19, 563-575. | 0.5 | 7 |
| 74 | Observation of Work Functions, Metallicity, Band Bending, Interfacial Dipoles by EUPS for Characterizing High-kâ^•Metal Interfaces. AIP Conference Proceedings, 2011, , . | 0.4 | 7 |
| 75 | Tunnel Field-Effect Transistors with Extremely Low Off-Current Using Shadowing Effect in Drain Implantation. Japanese Journal of Applied Physics, 2011, 50, 06GF14. | 1.5 | 7 |
| 76 | Performance evaluation of parallel electric field tunnel field-effect transistor by a distributed-element circuit model. Solid-State Electronics, 2014, 102, 82-86. | 1.4 | 7 |
| 77 | Impact of granular work function variation in a gate electrode on low-frequency noise for fin field-effect transistors. Applied Physics Express, 2015, 8, 044201. | 2.4 | 7 |
| 78 | Extremely Scaled (â^¼0.2 nm) Equivalent Oxide Thickness of Higher-k(k= 40) HfO2Gate Stacks Prepared by Atomic Layer Deposition and Oxygen-Controlled Cap Post-Deposition Annealing. Japanese Journal of Applied Physics, 2012, 51, 02BA04. | 1.5 | 7 |
| 79 | Comparison between Bi-superconductor thin films fabricated via co-deposition and layer-by-layer deposition by ion beam sputtering method. Thin Solid Films, 1996, 281-282, 517-520. | 1.8 | 6 |
| 80 | Thermodynamics for formation of each stable single phase in BSCCO thin films. Journal of Low Temperature Physics, 1996, 105, 1283-1288. | 1.4 | 6 |
| 81 | Epitaxial Growth of Bi4Ti3O12/CeO2/Ce0.12Zr0.88O2and Bi4Ti3O12/SrTiO3/Ce0.12Zr0.88O2Thin Films on Si and Its Application to Metal-Ferroelectric-Insulator-Semiconductor Diodes. Japanese Journal of Applied Physics, 2000, 39, 5505-5511. | 1.5 | 6 |
| 82 | Study on Oxynitride Buffer Layers in HfO2Metalâ€"Insulatorâ€"Semiconductor Structures for Improving Metalâ€"Insulatorâ€"Semiconductor Field-Effect Transistor Performance. Japanese Journal of Applied Physics, 2005, 44, 1698-1703. | 1.5 | 6 |
| 83 | Degradation mechanism of HfAlOXâ^•SiO2 stacked gate dielectrics studied by transient and steady-state leakage current analysis. Journal of Applied Physics, 2005, 97, 074505. | 2.5 | 6 |
| 84 | AFM measurement of atomic-scale Si surface etching by active oxidation. Surface Science, 2010, 604, 1432-1437. | 1.9 | 6 |
| 85 | Improvement of epitaxial channel quality on heavily arsenic- and boron-doped Si surfaces and impact on performance of tunnel field-effect transistors. Solid-State Electronics, 2015, 113, 173-178. | 1.4 | 6 |
| 86 | Thickness-independent behavior of coercive field in HfO<inf>2</inf>-based ferroelectrics. , 2017, , . |  | 6 |
| 87 | Design points of ferroelectric field-effect transistors for memory and logic applications as investigated by metal-ferroelectric-metalâ€"insulatorâ€"semiconductor gate stack structures using Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> films. Japanese Journal of Applied Physics, 2019, 58, SLLB06. | 1.5 | 6 |
| 88 | Thermal stability of ferroelectricity in hafniumâ€"zirconium dioxide films deposited by sputtering and chemical solution deposition for oxide-channel ferroelectric-gate transistor applications. Applied Physics Express, 2021, 14, 041006. | 2.4 | 6 |
| 89 | Investigation of the wake-up process and time-dependent imprint of Hf0.5Zr0.5O2 film through the direct piezoelectric response. Applied Physics Letters, 2021, 119, . | 3.3 | 6 |
| 90 | Epitaxial structure SrBi2Ta2O9<116> /SrTiO3<011> /Ce0.12Zr0.88O2<001> /Si<001> for ferroelectric-gate FET memory. Integrated Ferroelectrics, 2001, 40, 135-143. | 0.7 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Low-Threshold-Voltage HfOxN p-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors with Partially Silicided Platinum Gate Electrode. Japanese Journal of Applied Physics, 2006, 45, 6225-6230. | 1.5 | 5 |
| 92 | Reliability Perspective of High-k Gate Stack Assessed by Temperature Dependence of Dielectric Breakdown. , 2007, , . | | 5 |
| 93 | Comparative Study of Charge Trapping Type SOI-FinFET Flash Memories with Different Blocking Layer Materials. Journal of Low Power Electronics and Applications, 2014, 4, 153-167. | 2.0 | 5 |
| 94 | Suppression of tunneling rate fluctuations in tunnel field-effect transistors by enhancing tunneling probability. Japanese Journal of Applied Physics, 2017, 56, 04CD02. | 1.5 | 5 |
| 95 | Fabrication of Direct-Contact Higher-<i>k</i>HfO<sub>2</sub>Gate Stacks by Oxygen-Controlled Cap Post-Deposition Annealing. Japanese Journal of Applied Physics, 2011, 50, 10PG01. | 1.5 | 5 |
| 96 | Roles of high-k and interfacial layers on TDDB reliability studied with HfAlO<inf>X</inf>/SiO<inf>2</inf> stacked gate dielectrics. , 2008, , . | | 4 |
| 97 | Extremely Scaled (${sim}0.2$ nm) Equivalent Oxide Thickness of Higher-$k$ ($k = 40$) HfO$_{2}$ Gate Stacks Prepared by Atomic Layer Deposition and Oxygen-Controlled Cap Post-Deposition Annealing. Japanese Journal of Applied Physics, 2012, 51, 02BA04. | 1.5 | 4 |
| 98 | Simultaneous flattening of Si(110), (111), and (001) surfaces for three-dimensional Si nanowires. Applied Physics Letters, 2012, 100, 261605. | 3.3 | 4 |
| 99 | Scaling breakthrough for analog/digital circuits by suppressing variability and low-frequency noise for FinFETs by amorphous metal gate technology. , 2014, , . | | 4 |
| 100 | Importance of interface engineering for synthesis of SrHfO<sub>3</sub> perovskite thin films on Si substrates through crystallization of amorphous films and control of flat-band voltages of metalâ€“oxideâ€“semiconductor capacitors. Japanese Journal of Applied Physics, 2014, 53, 04EA03. | 1.5 | 4 |
| 101 | (Invited) Charge Trapping Type SOI-FinFET Flash Memory. ECS Transactions, 2014, 61, 263-280. | 0.5 | 4 |
| 102 | Heated ion implantation for high-performance and highly reliable silicon-on-insulator complementary metalâ€“oxideâ€“silicon fin field-effect transistors. Japanese Journal of Applied Physics, 2015, 54, 04DA06. | 1.5 | 4 |
| 103 | Interlayer coupling effect on the performance of monolithic three-dimensional inverters and its dependence on the interlayer dielectric thickness. Japanese Journal of Applied Physics, 2017, 56, 04CC02. | 1.5 | 4 |
| 104 | Model for dielectric breakdown mechanism of HfAlO/sub X//SiO/sub 2/ stacked gate dielectrics dominated by the generated subordinate carrier injection. , 0, , . | | 3 |
| 105 | Effect of Ge Metalâ€“Insulatorâ€“Semiconductor Interfacial Layers on Interface Trap Density near the Conduction Band Edge. Japanese Journal of Applied Physics, 2010, 49, 04DA09. | 1.5 | 3 |
| 106 | (Invited) Epitaxial HfO<sub>2</sub> Thin Films on Si Substrates: Strategy for Sub-1 nm EOT Technology. ECS Transactions, 2011, 41, 135-144. | 0.5 | 3 |
| 107 | Impact of fin length on threshold voltage modulation by back bias for Independent double-gate tunnel fin field-effect transistors. Solid-State Electronics, 2015, 111, 62-66. | 1.4 | 3 |
| 108 | Simulation study of short-channel effects of tunnel field-effect transistors. Japanese Journal of Applied Physics, 2018, 57, 04FD04. | 1.5 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Device Simulation of Negative-Capacitance Field-Effect Transistors With a Ferroelectric Gate Insulator. , 2018, , . | | 3 |
| 110 | Charge and vortex Kosterlitzâ€“Thouless transitions in Bi-superconducting mixed crystal thin films. Physica C: Superconductivity and Its Applications, 1999, 317-318, 661-665. | 1.2 | 2 |
| 111 | Carrier separation analysis for clarifying leakage mechanism in unstressed and stressed HfAlO/sub x//SiO/sub 2/ stack dielectric layers. , 0, , . | | 2 |
| 112 | Design of High-k Interfacial Layer Formation by Cycle-by-Cycle Deposition and Annealing Method. ECS Transactions, 2009, 19, 129-143. | 0.5 | 2 |
| 113 | Experimental study of three-dimensional fin-channel charge trapping flash memories with titanium nitride and polycrystalline silicon gates. Japanese Journal of Applied Physics, 2014, 53, 04ED16. | 1.5 | 2 |
| 114 | Steep subthreshold swing and energy efficiency in MOSFFETs utilizing nonlinear gate dielectric insulators. Japanese Journal of Applied Physics, 2016, 55, 04ED02. | 1.5 | 2 |
| 115 | On the drain bias dependence of long-channel silicon-on-insulator-based tunnel field-effect transistors. Japanese Journal of Applied Physics, 2017, 56, 04CD04. | 1.5 | 2 |
| 116 | Bias temperature instability in tunnel field-effect transistors. Japanese Journal of Applied Physics, 2017, 56, 04CA04. | 1.5 | 2 |
| 117 | Design of steep-slope negative-capacitance FinFETs for dense integration: Importance of appropriate ferroelectric capacitance and short-channel effects. Japanese Journal of Applied Physics, 2018, 57, 04FD03. | 1.5 | 2 |
| 118 | Channel shape and interpoly dielectric material effects on electrical characteristics of floating-gate-type three-dimensional fin channel flash memories. Japanese Journal of Applied Physics, 2015, 54, 04DD04. | 1.5 | 2 |
| 119 | Enhancement of ferroelectricity in sputtered HZO thin films by catalytically generated atomic hydrogen treatment. Japanese Journal of Applied Physics, 2022, 61, SH1004. | 1.5 | 2 |
| 120 | Fabrication and Electrical Characteristics of a Trench-Type Metal-Ferroelectric-Metal-Insulator-Semiconductor Field Effect Transistor. Japanese Journal of Applied Physics, 2001, 40, 5605-5609. | 1.5 | 1 |
| 121 | Metal carbide-induced negative flatband voltage shift in TaCx and HfCx/HfO2 gate stacks. Applied Surface Science, 2008, 254, 6123-6126. | 6.1 | 1 |
| 122 | TDDB and BTI reliabilities of high-k stacked gate dielectrics - Impact of initial traps in high-k layer -. , 2008, , . | | 1 |
| 123 | Exact control of junction position using epitaxial NiSi2 crystallization in ultrathin silicon-on-insulator metal-oxide-semiconductor field-effect transistors. AIP Advances, 2012, 2, . | 1.3 | 1 |
| 124 | Variability of short channel junctionless field-effect transistors caused by fluctuation of dopant concentration. , 2013, , . | | 1 |
| 125 | Study of gate leakage current paths in p-channel tunnel field-effect transistor by current separation measurement and device simulation. Japanese Journal of Applied Physics, 2015, 54, 034202. | 1.5 | 1 |
| 126 | Design and simulation of steep-slope silicon-on-insulator FETs using negative capacitance: Impact of buried oxide thickness and remnant polarization. , 2016, , . | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | (Invited) Floating Gate Type SOI-FinFET Flash Memories with Different Channel Shapes and Interpoly Dielectric Materials. ECS Transactions, 2016, 72, 11-24. | 0.5 | 1 |
| 128 | Device simulation of negative-capacitance field-effect transistors with a uniaxial ferroelectric gate insulator. Nonlinear Theory and Its Applications IEICE, 2020, 11, 145-156. | 0.6 | 1 |
| 129 | Sheet resistance in BSCCO thin films with phase intergrowth. European Physical Journal D, 1996, 46, 1375-1376. | 0.4 | 0 |
| 130 | Molecular beam epitaxial growth of BSCCO and Bi-based oxides: self-limiting growth of the Bi element. , 1998, , . | | 0 |
| 131 | Fabrication and electrical properties of ferroelectric-gate FETS with epitaxial gate structures. Electronics and Communications in Japan, 2004, 87, 24-33. | 0.2 | 0 |
| 132 | Separation of fast and slow NBTI components under long-term stress in pMISFETs with ultra-thin high-k and SiON dielectrics. , 2008, , . | | 0 |
| 133 | Application of Advanced Atomic Layer Deposition for Understanding and Control of VTH and EOT in Metal/High-k Gate Stacks. ECS Transactions, 2009, 16, 69-75. | 0.5 | 0 |
| 134 | Inversion Layer Mobility in High-k Dielectric MOSFETs - Intrinsic Mobility Degradation by Electric Dipoles at High-k/SiO2 Interface. ECS Transactions, 2009, 16, 67-75. | 0.5 | 0 |
| 135 | Two-step annealing effects on ultrathin EOT higher-k (k = 40) ALD-HfO<inf>2</inf> gate stacks. , 2012, , . | | 0 |
| 136 | Experimental Comparisons between Tetrakis(dimethylamino)titanium Precursor-Based Atomic-Layer-Deposited and Physical-Vapor-Deposited Titaniumâ€“Nitride Gate for High-Performance Fin-Type Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2012, 51, 04DA05. | 1.5 | 0 |
| 137 | Extremely Scaled Equivalent Oxide Thickness of High-k (k=40) HfO2 Gate Stacks Prepared by Atomic Layer Deposition and Ti Cap Anneal. Hyomen Kagaku, 2012, 33, 610-615. | 0.0 | 0 |
| 138 | (Invited) Extremely Short Channel Si-MOSFETs Prepared on SOI Substrates Using Anisotropic Wet Etching. ECS Transactions, 2013, 58, 273-280. | 0.5 | 0 |
| 139 | Experimental study of charge trapping type FinFET flash memory. , 2014, , . | | 0 |
| 140 | Fabrication of High-k Gate Insulator Films by Atomic Layer Deposition and Their Properties Influenced by Substrate Hydrophilicity. Journal of the Vacuum Society of Japan, 2011, 54, 105-109. | 0.3 | 0 |