

## 1. Paper publication

	Authors	Title	Source	Vol.	No.	1st page	last page	Art No.	Month	Year
1	Zhang, Wei; Takahashi, Mitsue; Sasaki, Yoshikazu; Kusuhara, Masaki; Sakai, Shigeki	3.3 V write-voltage Ir/Ca <sub>0.2</sub> Sr <sub>0.8</sub> Bi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /HfO <sub>2</sub> /Si ferroelectric-gate field-effect transistors with 10 <sup>9</sup> endurance and good retention	Extended Abstracts of the 2016 International Conference on Solid State Devices and Materials (SSDM)			97	98		Sep	2016
2	Asai, Hidehiro; Fukuda, Kouichi; Hattori, Junichi; Koike, Hanpei; Miyata, Noriyuki; Takahashi, Mitsue; Sakai, Shigeki	Compact Model of FeFET Memory Based on Multi-Domain Landau- Khalatnikov Theory	Extended Abstracts of the 2016 International Conference on Solid State Devices and Materials (SSDM)			731	732		Sep	2016
3	Sakai, Shigeki; Takahashi, Mitsue	Novel application of FeFETs to NAND flash memory circuits	Topic in Applied Physics: Ferroelectric-gate Field Effect Transistor Memories, Chapter 13, Springer	131		271	294		Oct	2016
4	Takahashi, Mitsue; Sakai, Shigeki	Development of high-endurance and long-retention FeFETs of Pt/CaySr <sub>1-y</sub> Bi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /(HfO <sub>2</sub> ) <sub>x</sub> (Al <sub>2</sub> O <sub>3</sub> ) <sub>1-x</sub> /Si gate stacks	Topic in Applied Physics: Ferroelectric-gate Field Effect Transistor Memories, Chapter 2, Springer	131		23	56		Oct	2016
5	Le Van Hai; Takahashi Mitsue; Zhang Wei; Sakai, Shigeki	Novel process for widening memory window of sub-200 nm ferroelectric-gate field-effect transistor by ferroelectric coating the gate-stack side wall	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	30	1			015024 (7pp)	Jan	2015
6	Le Van Hai; Takahashi Mitsue; Zhang Wei; Sakai, Shigeki	10 <sup>8</sup> Endurance Nonvolatile Memory Transistor with 100 nm Metal Gate	Extended Abstracts of the 2014 International Conference on Solid State Devices and Materials			434	435		Sep	2014
7	Sakai, Shigeki; Zhang, Xizhen; Le Van Hai; Zhang Wei; Takahashi Mitsue	Downsizing and Memory Array Integration of Pt/SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /Hf- Al-O/Si Ferroelectric-Gate Field- Effect Transistors	Non-Volatile Technology Symposium (NVMTS), 2012 12th Annual			55	59		Oct	2013
8	Zhang, Wei; Takahashi, Mitsue; Sakai, Shigeki	Electrical properties of CaxSr <sub>1-x</sub> Bi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> ferroelectric-gate field-effect transistors	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	28	8			85003	Aug	2013
9	Yan, Kang; Takahashi, Mitsue; Sakai, Shigeki	Electrical properties of ferroelectric-gate FETs with SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> formed using MOCVD technique	APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING	108	4	835	842		Sep	2012
10	Miyaji, Kousuke; Yajima, Ryoji; Hatanaka, Teruyoshi; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	Initialize and Weak-Program Erasing Scheme for High- Performance and High-Reliability Ferroelectric NAND Flash Solid- State Drive	IEICE TRANSACTIONS ON ELECTRONICS	E95 C	4	609	616		Apr	2012
11	Zhang, Xizhen; Takahashi, Mitsue; Takeuchi, Ken; Sakai, Shigeki	64 kbit Ferroelectric-Gate- Transistor-Integrated NAND Flash Memory with 7.5 V Program and Long Data Retention	JAPANESE JOURNAL OF APPLIED PHYSICS	51	4			04DD01	Apr	2012
12	Zhang, Xizhen; Takahashi, Mitsue; Sakai, Shigeki	FeFET Logic Circuits for Operating A 64 kb FeNAND Flash Memory Array	INTEGRATED FERROELECTRICS	132		114	121			2012
13	Zhang Xizhen; Takahashi Mitsue; Takeuchi Ken; Sakai Shigeki	First 64kb Ferroelectric-NAND Flash Memory Array with 7.5 V Program, 10 <sup>8</sup> Endurance and Long Data Retention	Extended Abstracts of the 2011 International Conference on Solid State Devices and Materials			975	976		Sep	2011

14	Le Van Hai; Takahashi Mitsue; Sakai, Shigeki	Recent Progress in Downsizing FeFETs for Fe-NAND Application	Materials Research Society Symposium Proceedings	1337		129	135		Aug	2011
15	Miyaji Kousuke; Hatanaka Teruyoshi; Yajima Ryouji; Takahashi Mitsue; Sakai Shigeki; Takeuchi Ken	Initialize & Weak-Program Erasing Scheme for Elimination of Cell VTH Shift Variation Due to History Effect in Ferroelectric (Fe)-NAND Flash Memories	Silicon Nanoelectronics Workshop (SNW)			81	82		Jun	2011
16	Le Van Hai; Takahashi Mitsue; Sakai, Shigeki	Downsizing of Ferroelectric-Gate Field-Effect-Transistors for Ferroelectric-NAND Flash Memory Cells	2011 3rd IEEE International Memory Workshop (IMW)			175	178		May	2011
17	Zhang Xizhen; Miyaji Kousuke; Takahashi Mitsue; Takeuchi Ken; Sakai Shigeki	0.5V Bit-Line-Voltage Self-Boost-Programming in Ferroelectric-NAND Flash Memory	Proceedings of 2011 3rd IEEE International Memory Workshop			155	158		May	2011
18	Hatanaka, Teruyoshi; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	Improvement of Read Disturb, Program Disturb and Data Retention by Memory Cell V-TH Optimization of Ferroelectric (Fe)-NAND Flash Memories for Highly Reliable and Low Power Enterprise Solid-State Drives (SSDs)	IEICE TRANSACTIONS ON ELECTRONICS	E94 C	4	539	547		Apr	2011
19	Miyaji, Kousuke; Node, Shinji; Hatanaka, Teruyoshi; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	A 1.0 V power supply, 9.3 GB/s write speed, Single-Cell Self-Boost program scheme for high performance ferroelectric NAND flash SSD	SOLID-STATE ELECTRONICS	58	1	34	41		Apr	2011
20	Sakai, Shigeki; Takahashi, Mitsue	Recent Advances in Ferroelectric-Gate Field-Effect-Transistor Technology	INTEGRATED FERROELECTRICS	124		140	146			2011
21	Sakai, Shigeki; Takahashi, Mitsue	Recent Progress of Ferroelectric-Gate Field-Effect Transistors and Applications to Nonvolatile Logic and FeNAND Flash Memory	MATERIALS	3	11	4950	4964		Nov	2010
22	Hai, Le Van; Takahashi, Mitsue; Sakai, Shigeki	Fabrication and characterization of sub-0.6- $\mu$ m ferroelectric-gate field-effect transistors	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	25	11			115013	Nov	2010
23	Haruta, Masakazu; Sakai, Shigeki	Large grain growth by annealing of Ag-covered Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ thin films and its application in the fabrication of intrinsic Josephson junctions	SUPERCONDUCTOR SCIENCE & TECHNOLOGY	23	11			115006	Nov	2010
24	Hatanaka, Teruyoshi; Yajima, Ryoji; Horiuchi, Takeshi; Wang, Shouyu; Zhang, Xizhen; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	Ferroelectric (Fe)-NAND Flash Memory With Batch Write Algorithm and Smart Data Store to the Nonvolatile Page Buffer for Data Center Application High-Speed and Highly Reliable Enterprise Solid-State Drives	IEEE JOURNAL OF SOLID-STATE CIRCUITS	45	10	2156	2164		Oct	2010
25	Miyaji Kousuke; Hatanaka Teruyoshi; Tanakamasu Shuhei; Yajima Ryouji; Noda Shinji; Takahashi Mitsue; Sakai Shigeki; Takeuchi Ken	A Ferroelectric NAND Flash Memory for Low-Power and Highly Reliable Enterprise SSDs and a Ferroelectric 6T-SRAM for 0.5V Low-Power CPU and SoC	Materials Research Society Symposium Proceedings	1250		5	9			
26	Horiuchi, Takeshi; Takahashi, Mitsue; Li, Qiu-Hong; Wang, Shouyu; Sakai, Shigeki	Lowered operation voltage in Pt/SBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /HfO <sub>2</sub> /Si ferroelectric-gate field-effect transistors by oxynitriding Si	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	25	5			55005	May	2010

27	Hatanaka, Teruyoshi; Yajima, Ryoji; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	A Negative Word-Line Voltage Negatively-Incremental Erase Pulse Scheme with Delta V-TH=1/6 Delta V-ERASE for Enterprise Solid-State Drive Application Ferroelectric-NAND	JAPANESE JOURNAL OF APPLIED PHYSICS	49	4			04DD08		2010
28	Noda, Shinji; Hatanaka, Teruyoshi; Miyaji, Kousuke; Yajima, Ryoji; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	A 1.2 V Power Supply, 2.43 Times Power Efficient, Adaptive Charge Pump Circuit with Optimized Threshold Voltage at Each Pump Stage for Ferroelectric-NAND Flash Memories	JAPANESE JOURNAL OF APPLIED PHYSICS	49	4			04DD10		2010
29	Tanakamaru, Shuhei; Hatanaka, Teruyoshi; Yajima, Ryoji; Miyaji, Kousuke; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	A 0.5-V Six-Transistor Static Random Access Memory with Ferroelectric-Gate Field Effect Transistors	JAPANESE JOURNAL OF APPLIED PHYSICS	49	12			121501		2010
30	Haruta, Masakazu; Kume, Eiji; Sakai, Shigeki	Fabrication of thin-film-type Bi2Sr2CaCu2O8+delta intrinsic Josephson junctions by pulsed-laser-deposition	SUPERCONDUCTOR SCIENCE & TECHNOLOGY	22	12			125004	Dec	2009
31	Horiuchi, Takeshi; Takahashi, Mitsue; Ohhashi, Kentaro; Sakai, Shigeki	Memory window widening of Pt/SrBi2Ta2O9/HfO2/Si ferroelectric-gate field-effect transistors by nitriding Si	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	24	10			105026	Oct	2009
32	Wang, Shouyu; Takahashi, Mitsue; Li, Qiu-Hong; Takeuchi, Ken; Sakai, Shigeki	Operational method of a ferroelectric (Fe)-NAND flash memory array	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	24	10			105029	Oct	2009
33	Hatanaka Teruyoshi; Takahashi Mitsue; Sakai Shigeki; Takeuchi Ken	A zero VTH memory cell ferroelectric-NAND flash memory with 32% read disturb, 24% program disturb, 10% data retention improvement for enterprise SSD	Proceedings of European Solid State Device Research Conference, 2009. ESSDERC '09			225	228		Sep	2009
34	Takahashi, Mitsue; Wang, Shouyu; Horiuchi, Takeshi; Sakai, Shigeki	FeCMOS logic inverter circuits with nonvolatile-memory function	IEICE ELECTRONICS EXPRESS	6	12	831	836		Jun	2009
35	Li, Qiu-Hong; Horiuchi, Takeshi; Wang, Shouyu; Takahashi, Mitsue; Sakai, Shigeki	Threshold voltage adjustment of ferroelectric-gate field effect transistors by ion implantation	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	24	2			25012	Feb	2009
36	Tanakamaru, Shuhei; Hatanaka, Teruyoshi; Yajima, Ryoji; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	A 0.5V Operation, 32% Lower Active Power, 42% Lower Leakage Current, Ferroelectric 6T-SRAM with V-TH Self-Adjusting Function for 60% Larger Static Noise Margin	2009 IEEE INTERNATIONAL ELECTRON DEVICES MEETING			260	263			2009
37	Hatanaka, Teruyoshi; Yajima, Ryoji; Horiuchi, Takeshi; Wang, Shouyu; Zhang, Xizhen; Takahashi, Mitsue; Sakai, Shigeki; Takeuchi, Ken	Ferroelectric(Fe)-NAND Flash Memory with Non-volatile Page Buffer for Data Center Application Enterprise Solid-State Drives (SSD)	2009 SYMPOSIUM ON VLSI CIRCUITS			64	65			2009
38	Kume, Eiji; Sakai, Shigeki	Millimeter-wave radiation from a Teflon dielectric probe and its imaging application	MEASUREMENT SCIENCE & TECHNOLOGY	19	11			115501	Nov	2008
39	Takahashi, M.; Horiuchi, T.; Wang, S.; Li, Q. -H.; Sakai, S.	Optimum ambient N-2 pressure during HfAlO pulsed-laser deposition in Pt/SBT/HfAlO/Si field effect transistors	JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B	26	4	1585	1587		Jul	2008

40	Li, Qiu-Hong; Takahashi, Mitsue; Horiuchi, Takeshi; Wang, Shouyu; Sakai, Shigeki	Threshold-voltage distribution of Pt/SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /Hf-Al-O/Si MFIS FETs	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	23	4			45011	Apr	2008
41	Takahashi, M.; Horiuchi, T.; Li, Q.-H.; Wang, S.; Yun, K. Y.; Sakai, S.	Basic operation of novel ferroelectric CMOS circuits	ELECTRONICS LETTERS	44	7	467	468		Mar	2008
42	Sakai, Shigeki; Takahashi, Mitsue; Takeuchi, Ken; Li, Qiu-Hong; Horiuchi, Takeshi; Wang, Shouyu; Yun, Kwi-Young; Takamiya, Makoto; Sakurai, Takayasu	Highly scalable Fe(ferroelectric)-NAND cell with MFIS (metal-ferroelectric-insulator-semiconductor) structure for sub-10nm Tera-bit capacity NAND flash memories	2008 JOINT NON-VOLATILE SEMICONDUCTOR MEMORY WORKSHOP AND INTERNATIONAL CONFERENCE ON MEMORY TECHNOLOGY AND DESIGN, PROCEEDINGS			103	105			2008
43	Horiuchi Takeshi; Oohashi Kentaro; Takahashi Mitsue; Sakai Shigeki	Effect of Nitrogen Inclusion into Hf-Al-O Layer on Device Properties of Pt/Sr/Bi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /Hf-Al-O/Si Diodes	Journal of Japan Society of Powder and Powder Metallurgy	55	1	17	20		Jan	2008
44	Sakai, Shigeki; Takahashi, Mitsue; Motohashi, Kennichi; Yamaguchi, Yuji; Yui, Naomasa; Kobayashi, Takichi	Large-area pulsed-laser deposition of dielectric and ferroelectric thin films	JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A	25	4	903	907		AUG	2007
45	Sakai, Shigeki; Zhao, Xia	Low-magnetic-field operations of intrinsic Josephson junctions with a long c-axis periodicity by artificial critical-current	SUPERCONDUCTOR SCIENCE & TECHNOLOGY	20	2	S79	S86		Feb	2007
46	Li, Qiu-Hong; Takahashi, Mitsue; Horiuchi, Takeshi; Saito, Takeyasu; Wang, Shouyu; Sakai, Shigeki	Statistical threshold-voltage distribution and elevated-temperature operations of Pt/SrBi <sub>2</sub> ( <sub>2</sub> )Ta <sub>2</sub> O <sub>9</sub> /Hf-Al-O/Si MFIS FETs	2007 SIXTEENTH IEEE INTERNATIONAL SYMPOSIUM ON THE APPLICATIONS OF FERROELECTRICS,			62	64			2007
47	Sakai Shigeki	Gate materials and fabrication-processes of metal-ferroelectric-insulator-semiconductor memory FETs with long data retention	Advances in Science and Technology	45		2383	2391		Dec	2006
48	Li, Qiu-Hong; Sakai, Shigeki	Characterization of Pt/SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /Hf-Al-O/Si field-effect transistors at elevated temperatures	APPLIED PHYSICS LETTERS	89	22			222910	NOV	2006
49	Fujino, H.; Kume, E.; Sakai, S.	The fabrication and electrical properties of critical-current-modulated intrinsic Josephson junctions in Bi <sub>2</sub> Sr <sub>2</sub> Ca <sub>1-<math>\gamma</math></sub> Y $\gamma$ Cu <sub>2</sub> O <sub>x</sub> /Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> stacks	SUPERCONDUCTOR SCIENCE & TECHNOLOGY	19	6	459	461		Jun	2006
50	Kume, E; Sakai, S	Properties of a dielectric probe for scanning near-field millimeter-wave microscopy	JOURNAL OF APPLIED PHYSICS	99	5			56105	Mar	2006
51	Wang, C; Takahashi, M; Fujino, H; Zhao, X; Kume, E; Horiuchi, T; Sakai, S	Leakage current of multiferroic (Bi <sub>0.6</sub> Tb <sub>0.3</sub> La <sub>0.1</sub> )FeO <sub>3</sub> thin films grown at various oxygen pressures by pulsed laser deposition and annealing effect	JOURNAL OF APPLIED PHYSICS	99	5			54104	Mar	2006
52	Fujino, H; Kume, E; Sakai, S	Face-to-face annealing of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> thin films for intrinsic Josephson junctions with uniform critical currents	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	426		1474	1478		Oct	2005
53	Zhao, X; Sakai, S	Theoretical and numerical study on multistacked Josephson junctions with a parametric modulation of their critical currents	PHYSICAL REVIEW B	72	13			134501	Oct	2005

54	Sakai, S.; Takahashi, M.; Ilangovan, R.	Long-retention ferroelectric-gate FET with a $(\text{HfO}_2)_x(\text{Al}_2\text{O}_3)_{1-x}$ buffer-insulating layer for 1T FeRAM	2004 International Electron Devices Meeting (IEEE Cat. No.04CH37602)			915	18				2005
55	Takahashi, M; Sakai, S	Self-aligned-gate metal/ferroelectric/insulator/semiconductor field-effect transistors with long memory retention	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS & EXPRESS LETTERS	44	24-27	L800	L802				2005
56	Sakai, S; Ilangovan, R; Takahashi, M	Pt/SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /Hf-Al-O/Si field-effect-transistor with long retention using unsaturated ferroelectric polarization switching	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	43	11B	7876	7878			Nov	2004
57	Kume, E; Fujino, H; Zhao, X; Sakai, S	Temperature dependence of composition ratio of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+delta</sub> film by PLD method	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	412		1354	1357			Oct	2004
58	Fujino, H; Kume, E; Sugimata, E; Zhao, X; Sakai, S	Characteristics of intrinsic Josephson junctions using a Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> thin film estimated overall in a chip	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	412		1410	1413			Oct	2004
59	Sugimata, E; Fujino, H; Kume, E; Sakai, S	Composition analysis of modified layer in YBCO trilayer interface-engineered Josephson junctions	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	412		1419	1423			Oct	2004
60	Zhao, X; Sakai, S; Fujino, H; Kume, E	Resonant characteristics of twofold Josephson junctions with various critical current ratio	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	412		1468	1472			Oct	2004
61	Machida, M; Sakai, S	Unified theory for magnetic and electric field coupling in multistacked Josephson junctions	PHYSICAL REVIEW B	70	14			144520		Oct	2004
62	Sakai, S; Ilangovan, R	Metal-ferroelectric-insulator-semiconductor memory FET with long retention and high endurance	IEEE ELECTRON DEVICE LETTERS	25	6	369	371			Jun	2004
63	Sugimata, E; Fujino, H; Kume, E; Sakai, S	Growth of high-quality single-phase Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> whiskers by a new growth-melt-regrowth method	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	43	6A	3378	3380			Jun	2004
64	Sakai, S; Takahashi, M; Ilangovan, R	Long-retention ferroelectric-gate FET with a $(\text{HfO}_2)_x(\text{Al}_2\text{O}_3)_{1-x}$ buffer-insulating layer for 1T FeRAM	IEEE INTERNATIONAL ELECTRON DEVICES MEETING 2004, TECHNICAL			915	918				2004
65	Xiong, SB; Sakai, S; Ishii, K; Migita, S; Sakamaki, K; Ota, H; Suzuki, E	Memory properties of a ferroelectric gate field-effect transistor with an adjoining metal-ferroelectric-metal assistance cell	JOURNAL OF APPLIED PHYSICS	94	4	2559	2562			Aug	2003
66	Sugimata, E; Fujino, H; Kume, E; Sakai, S	Growth of single phase Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> whiskers using optimized starting compositions for glassy precursors	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	42	8	5022	5023			Aug	2003
67	Zitzmann, J; Ustinov, AV; Levitchev, M; Sakai, S	Super-relativistic fluxon in a Josephson multilayer: Experiment and simulation	PHYSICAL REVIEW B	66	6			64527		Aug	2002
68	Fujino, H; Yamamori, H; Sugimata, E; Matsumoto, K; Sakai, S	Flux-flow cavity resonance modes in intrinsic Josephson junctions by Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> thin films	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	367	41643	404	409			Feb	2002
69	Sakamaki, K; Migita, S; Xiong, SB; Ota, H; Sakai, S; Tarui, Y	Fabrication and electrical characteristics of a trench-type metal-ferroelectric-metal-insulator-semiconductor field effect transistor	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	40	9B	5605	5609			Sep	2001

70	Sakai, S; Yamamori, H	Description of intrinsic Josephson junctions by the inductive coupling theory	PHYSICA C	362		1	9		Sep	2001
71	Fujino, H; Kasai, Y; Ota, H; Migita, S; Yamamori, H; Matsumoto, K; Sakai, S	Fabrication and critical currents of thin-film-type Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> intrinsic Josephson junctions	PHYSICA C	362		256	260		Sep	2001
72	Ota, H; Fujino, H; Migita, S; Xiong, SB; Sakai, S	All-perovskite-oxide ferroelectric memory transistor composed of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> and PbZr <sub>0.5</sub> Ti <sub>0.5</sub> O <sub>3</sub> films	JOURNAL OF APPLIED PHYSICS	89	12	8153	8158		Jun	2001
73	Migita, S; Sakai, S	Epitaxial structure SrTiO <sub>3</sub> < 011 > on Si < 001 >	JOURNAL OF APPLIED PHYSICS	89	10	5421	5424		May	2001
74	Migita, S; Sakamaki, K; Ota, H; Xiong, SB; Tarui, Y; Sakai, S	Epitaxial structure SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> < 116 > /SrTiO <sub>3</sub> < 011 > /Ce <sub>0.12</sub> Zr <sub>0.88</sub> O <sub>2</sub> < 001 > /Si < 001 > for ferroelectric-gate FET memory	INTEGRATED FERROELECTRICS	40	41644	1533	1541			2001
75	Migita, S; Xiong, SB; Sakamaki, K; Ota, H; Tarui, Y; Sakai, S	Epitaxial growth of Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> /CeO <sub>2</sub> /Ce <sub>0.12</sub> Zr <sub>0.88</sub> O <sub>2</sub> and Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> /SrTiO <sub>3</sub> /Ce <sub>0.12</sub> Zr <sub>0.88</sub> O <sub>2</sub> thin films on Si and its application to metal-ferroelectric-insulator-semiconductor diodes	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW PAPERS	39	9B	5505	5511		Sep	2000
76	Pedersen, NF; Sakai, S	Plasma resonance and flux dynamics in layered high-T <sub>c</sub> superconductors	PHYSICA C	332	41643	297	301		May	2000
77	Pedersen, NF; Sakai, S	Prediction of half harmonic generation in stacked Josephson junctions and Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> single crystals	PHYSICAL REVIEW B	61	17	11328	11331		May	2000
78	Ota, H; Migita, S; Xiong, SB; Fujino, H; Kasai, Y; Sakai, S	Surface morphology and dielectric properties of stoichiometric and off-stoichiometric SrTiO <sub>3</sub> thin films grown by molecular beam	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	38	12B	L1535	L1537		Dec	1999
79	Sakai, S; Pedersen, NF	Plasma resonance in anisotropic layered high-T <sub>c</sub> superconductors	PHYSICAL REVIEW B	60	13	9810	9816		Oct	1999
80	Si-Bei Xiong; Sakai, S.	Memory properties of SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> thin films prepared on SiO <sub>2</sub> /Si substrates	Applied Physics Letters	75	11	1613	15		Sep	1999
81	Xiong, SB; Sakai, S	Memory properties of SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> thin films prepared on SiO <sub>2</sub> /Si substrates	APPLIED PHYSICS LETTERS	75	11	1613	1615		Sep	1999
82	Migita, S; Uesugi, T; Kishi, H; Hirai, T; Sakai, S; Tarui, Y	Growth style of Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> thin films on CeO <sub>2</sub> /Ce <sub>0.12</sub> Zr <sub>0.88</sub> O <sub>2</sub> buffered Si substrates	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	38	9B	5411	5416		Sep	1999
83	Ustinov, AV; Sakai, S	Submillimeter-band high-power generation using multilayered Josephson junctions	APPLIED PHYSICS LETTERS	73	5	686	688		Aug	1999
84	Carapella, G; Costabile, G; Pedersen, NF; Sakai, S	Interaction induced by nonuniform self-fields in stacks of two long Josephson junctions	IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY	9	2	3953	3956		Jun	1999
85	Migita, S; Ota, H; Fujino, H; Kasai, Y; Sakai, S	Epitaxial Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> thin film growth using Bi self-limiting function	JOURNAL OF CRYSTAL GROWTH	200	41641	161	168		Apr	1999
86	Xiong, SB; Migita, S; Ota, H; Sakai, S	Pulsed laser deposition and ferroelectric properties of SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> thin films	MATERIALS LETTERS	38	6	406	412		Mar	1999
87	Ota, H; Migita, S; Kasai, Y; Matsuhata, H; Sakai, S	Particle-free superconducting Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> ultrathin films prepared by atomic-layer-controlled molecular beam epitaxy	PHYSICA C	311	41641	42	48		Jan	1999
88	Sakai, S; Ustinov, AV; Thyssen, N; Kohlstedt, H	Dynamics of multiple-junction stacked flux-flow oscillators: Comparison between theory and experiment	PHYSICAL REVIEW B	58	9	5777	5782		Sep	1998
89	Carapella, G; Costabile, G; Sakai, S;	Maximum supercurrent in two Josephson-junction stacks: Theory and experiment	PHYSICAL REVIEW B	58	10	6497	6505		Sep	1998

90	Ustinov, AV; Sakai, S	Submillimeter-band high-power generation using multilayered Josephson junctions	APPLIED PHYSICS LETTERS	73	5	686	688		Aug	1998
91	Pedersen, NF; Sakai, S	Josephson plasma resonance in superconducting multilayers	PHYSICAL REVIEW B	58	5	2820	2826		Aug	1998
92	Ustinov, AV; Malomed, BA; Sakai, S	Bunched fluxon states in one-dimensional Josephson-junction arrays	PHYSICAL REVIEW B	57	18	11691	11697		May	1998
93	Kasai, Y.; Bodin, P.; Sakai, S.	In-situ monitoring technique for atomic-layer-controlled molecular beam epitaxy	Bulletin of the Electrotechnical Laboratory	62	12	223	9			1998
94	Migita, S.; Ota, H.; Fujino, H.; Kasai, Y.; Sakai, S.; Kajimura, K.	Atomic-layer-controlled molecular beam epitaxy of BSCCO superconductor using Bi self-limiting function	Bulletin of the Electrotechnical Laboratory	62	12	231	9			1998
95	Ota, H.; Migita, S.; Kasai, Y.; Matsuhata, H.; Sakai, S.	MBE growth of particle-free oxide thin films and technology for device fabrication	Bulletin of the Electrotechnical Laboratory	62	12	241	8			1998
96	Sakai, S; Migita, S; Ota, H; Fujino, H; Kasai, Y; Oohira, T; Matsuhata, H; Kajimura, K	Molecular beam epitaxial growth of BSCCO and Bi-based oxides: self-limiting growth of the Bi element	SUPERCONDUCTING AND RELATED OXIDES: PHYSICS AND NANOENGINEERING III	3481		161	171			1998
97	Migita, S; Kasai, Y; Ota, H; Sakai, S	Self-limiting process for the bismuth content in molecular beam epitaxial growth of Bi <sub>2</sub> Sr <sub>2</sub> CuO <sub>y</sub>	APPLIED PHYSICS LETTERS	71	25	3712	3714		Dec	1997
98	Kasai, Y; Sakai, S	Atomic absorption spectroscopy system for flux monitoring and atomic-layer control of molecular beam epitaxial growth of	REVIEW OF SCIENTIFIC INSTRUMENTS	68	7	2850	2855		Jul	1997
99	Thyssen, N; Kohlstedt, H; Sakai, S; Ustinov, AV	Josephson flux flow in multi-junction stacks: Experiment and simulation	APPLIED SUPERCONDUCTIVITY 1997, VOLS 1 AND 2: VOL 1: SMALL SCALE AND ELECTRONIC APPLICATIONS; VOL 2: LARGE SCALE AND POWER APPLICATIONS		158	499	502			1997
100	Migita, S; Kasai, Y; Sakai, S	Molecular beam epitaxial growth of SrO and CaO with RHEED intensity oscillation	JOURNAL OF LOW TEMPERATURE PHYSICS	105	41765	1337	1342		Dec	1996
101	Oohira, T; Sakai, S; Kasai, Y; Shimizu, K	Digital laser etching of Bi-Sr-Ca-Cu-O superconducting thin films	THIN SOLID FILMS	282	41641	513	516		Aug	1996
102	Oohira, T; Sakai, S; Kasai, Y; Shimizu, T; Tokumoto, H;	A digital method of gas laser etching for oxide superconductors	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	35	1B	L94	L96		Jan	1996
103	Sakai, S; Oohira, T; Kasai, Y; Migita, S; Suzuki, A	Nanometer level etching and deposition of Bi-Sr-Ca-Cu-O superconducting thin films	OXIDE SUPERCONDUCTOR PHYSICS AND NANO-ENGINEERING II	2697		217	227			1996
104	PETRAGLIA, A; USTINOV, AV; PEDERSEN, NF; SAKAI, S	NUMERICAL STUDY OF FLUXON DYNAMICS IN A SYSTEM OF 2-STACKED JOSEPHSON-JUNCTIONS	JOURNAL OF APPLIED PHYSICS	77	3	1171	1177		Feb	1995
105	Kasai, Y.; Suzuki, A.; Tanoue, H.; Nagai, T.; Sakai, S.	MBE growth of BiSrCaCuO films using flux monitoring by atomic absorption spectroscopy	Advances in Superconductivity VII. Proceedings of the 7th International Symposium on Superconductivity (ISS'94)			897	900 vol.2			1995
106	Matsuhata, H; Endo, K; Kasai, Y; Sakai, S; Kuroda,	Microstructures in Bi-Sr-Ca-Cu-O thin films on LaAlO <sub>3</sub>	ELECTRON MICROSCOPY AND ANALYSIS 1995	147		437	440			1995

107	SAKAI, S; USTINOV, AV; KOHLESTEDT, H; PETRAGLIA, A; PEDERSEN, NF	THEORY AND EXPERIMENT ON ELECTROMAGNETIC-WAVE- PROPAGATION VELOCITIES IN STACKED SUPERCONDUCTING TUNNEL STRUCTURES	PHYSICAL REVIEW B	50	17	12905	12914		Nov	1994
108	KLEINER, R; MULLER, P; KOHLESTEDT, H; PEDERSEN, NF; SAKAI, S	DYNAMIC BEHAVIOR OF JOSEPHSON-COUPLED LAYERED STRUCTURES	PHYSICAL REVIEW B	50	6	3942	3952		Aug	1994
109	SAKAI, S	ELECTRIC-FIELD EFFECTS IN METAL-INSULATOR- SUPERCONDUCTOR DIODES - POSSIBILITY OF SINGULARITY IN CAPACITANCE-VOLTAGE RELATIONSHIPS	PHYSICA B	194		2399	2400		Feb	1994
110	Matsuhata, H.; Kuroda, K.; Kasai, Y.; Bodin, P.; Sakai, S.; Endo, K.	Microstructures in Bi-Sr-Ca-Cu-O films on LaAlO <sub>3</sub>	Bulletin of the Electrotechnical Laboratory	58	6	137	42			1994
111	MATSUHATA, H; KURODA, K; KASAI, Y; SAKAI, S; ENDO, K	Microstructures and heterointerfaces of Bi-Sr-Ca-Cu- O films on LaAlO <sub>3</sub>	ELECTRON MICROSCOPY 1994, VOLS 2A AND 2B: APPLICATIONS IN MATERIALS SCIENCES			961	962			1994
112	SAKAI, S	THEORETICAL-STUDY OF ELECTRIC-FIELD EFFECTS IN HIGH-TC OXIDE SUPERCONDUCTORS USING AN ULTRATHIN-METAL-INSULATOR SUPERLATTICE MODEL	PHYSICAL REVIEW B	47	14	9042	9047		Apr	1993
113	SAKAI, S; BODIN, P; PEDERSEN, NF	FLUXONS IN THIN-FILM SUPERCONDUCTOR-INSULATOR SUPERLATTICES	JOURNAL OF APPLIED PHYSICS	73	5	2411	2418		Mar	1993
114	BODIN, P; SAKAI, S; KASAI, Y	MOLECULAR-BEAM EPITAXY FABRICATION OF SrTiO <sub>3</sub> AND Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> HETEROSTRUCTURES USING A NOVEL REFLECTION HIGH- ENERGY ELECTRON- DIFFRACTION MONITORING	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	31	7B	L949	L952		Jul	1992
115	SAKAI, S; KASAI, Y; BODIN, P	RHEED INTENSITY MONITORED GROWTH OF BI-SR-CA-CU-O SUPERCONDUCTORS	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	31	4A	L399	L401		Apr	1992
116	SAKAI, S; KASAI, Y; BODIN, P; MATSUHATA, H	RHEED INTENSITY MONITORED GROWTH OF BI-SR-CA-CU-O SUPERCONDUCTORS	LAYERED SUPERCONDUCTO RS : FABRICATION, PROPERTIES AND APPLICATIONS	275		73	78			1992
117	SAKAI, S	THE DYNAMICS OF SOLITONS IN LONG JOSEPHSON-JUNCTIONS AND ITS APPLICATION	PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON HIGH TEMPERATURE SUPERCONDUCTIVI TY AND LOCALIZATION	32		167	177			1992
118	KASAI, Y; SAKAI, S	INSITU GROWTH OF BI-SR-CA- CU OXIDE SUPERCONDUCTING THIN-FILMS BY MOLECULAR- BEAM EPITAXY WITH A PURE OZONE SOURCE	JOURNAL OF CRYSTAL GROWTH	115	41643	758	761		Dec	1991
119	SAKAI, S; KASAI, Y; TANOUE, H; MATSUHATA, H; BODIN, P; OOHIRA, T	ATOMIC LAYER BY ATOMIC LAYER GROWTH OF BI-SR-CA- CU OXIDE SUPERCONDUCTING THIN-FILMS BY MOLECULAR- BEAM EPITAXY	PHYSICA C	185		2013	2014		Dec	1991
120	Sakai, S.; Kasai, Y.; Tanoue, H.; Matsuhata, H.; Bodin, P.; Oohira, T.	Atomic layer by atomic layer growth of Bi-Sr-Ca-Cu oxide superconducting thin films by molecular beam epitaxy	Physica C	185- 189		2013	14		Dec	1991



121	OOHIRA, T; SAKAI, S; KASAI, Y; ATODA, N; SHIMIZU, K	LASER ETCHING OF BI-SR-CA- CU-O SUPERCONDUCTING THIN-FILMS	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	30	3A	L355	L357		Mar	1991
122	Akoh, H.; Sakai, S.; Takada, S.	Soliton dynamics of fluxon	Bulletin of the Electrotechnical Laboratory	53	41828	262	74			1989
123	Sakai, S.; Akoh, H.	Fluxon devices	Bulletin of the Electrotechnical Laboratory	53	41828	228	50			1989
124	Sakai, S.	Fluxon shift register	Bulletin of the Electrotechnical Laboratory	53	41828	251	61			1989
125	SAKAI, S; SAMUELSEN, MR; OLSEN, OH	PERTURBATION ANALYSIS OF A PARAMETRICALLY CHANGED SINE-GORDON EQUATION	PHYSICAL REVIEW B	36	1	217	225		Jul	1987
126	SAKAI, S	ANALYTIC SOLUTIONS FOR BUNCHED 2-FLUXON STATES IN JOSEPHSON TRANSMISSION- LINES	PHYSICAL REVIEW B	36	1	812	814		Jul	1987
127	SAKAI, S; SAMUELSEN, MR	CRITERIA FOR FLUXON GENERATION IN LONG JOSEPHSON-JUNCTIONS BY CURRENT PULSES	APPLIED PHYSICS LETTERS	50	16	1107	1109		Apr	1987
128	AKOH, H; SAKAI, S; TAKADA, S	DIRECT OBSERVATION OF FLUXON REFLECTION IN A JOSEPHSON TRANSMISSION-	PHYSICAL REVIEW B	35	10	5357	5360		Apr	1987
129	PAGANO, S; PEDERSEN, NF; SAKAI, S; DAVIDSON, A	ANALYTICAL AND NUMERICAL RESULTS FOR A LONG JOSEPHSON JUNCTION WITH SURFACE LOSSES	IEEE TRANSACTIONS ON MAGNETICS	23	2	1114	1117		Mar	1987
130	HANSEN, JB; SVENSMARK, H; MYGIND, J; SAKAI, S; SAMUELSEN, MR	MEASUREMENTS OF THE HIGH- FREQUENCY LOSS NEAR THE PLASMA RESONANCE IN JOSEPHSON TUNNEL- JUNCTIONS	IEEE TRANSACTIONS ON MAGNETICS	23	2	1118	1121		Mar	1987
131	Akoh, H.; Sakai, S.; Takada, S.	Collision properties of fluxon in a Josephson transmission line	Extended Abstracts of 1987 International Superconductivity Electronics Conference (ISEC '87)			122	5			1987
132	Sakai, S.; Akoh, H.; Takada, S.	A new method for writing binary information into fluxon devices	Extended Abstracts of 1987 International Superconductivity Electronics Conference (ISEC '87)			118	21			1987
133	AKOH, H; SAKAI, S; TAKADA, S	REFLECTION PROPERTIES OF FLUXON IN A JOSEPHSON TRANSMISSION-LINE	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	26		1573	1574			1987
134	SAKAI, S	BUNCHING OF SOLITONS IN LONG JOSEPHSON-JUNCTIONS	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	26		1579	1580			1987
135	Akoh, H.; Sakai, S.; Takada, S.	Reflection properties of fluxon in a Josephson transmission line	Japanese Journal of Applied Physics, Supplement	26		1573	4			1987
136	Sakai, S.	Bunching of solitons in long Josephson junctions	Japanese Journal of Applied Physics, Supplement	26		1579	80			1987
137	SAKAI, S; PEDERSEN, NF	ANALYTIC SOLUTION FOR FLUXONS IN A LONG JOSEPHSON JUNCTION WITH SURFACE LOSSES	PHYSICAL REVIEW B	34	5	3506	3509		Sep	1986

138	Sakai, S.; Akoh, H.; Hayakawa, H.	Fluxon electronics	Proceedings of the Eleventh International Cryogenic Engineering			622	6				1986
139	AKOH, H; SAKAI, S; YAGI, A; HAYAKAWA, H	REAL-TIME FLUXON DYNAMICS IN JOSEPHSON TRANSMISSION-LINE	IEEE TRANSACTIONS ON MAGNETICS	21	2	737	740				1985
140	SAKAI, S; AKOH, H; HAYAKAWA, H	FLUXON TRANSFER DEVICE	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	24	10	L771	L773				1985
141	SAKAI, S; AKOH, H; HAYAKAWA, H	FLUXON DIVIDER	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	24	9	L749	L751				1985
142	Sakai, S.; Akoh, H.; Yagi, A.; Hayakawa, H.	Fluxon devices	Extended Abstracts of the 16th (1984 International) Conference on Solid State Devices and Materials			631	4				1984
143	SAKAI, S; AKOH, H; HAYAKAWA, H	FLUXON FEEDBACK OSCILLATOR	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	23	8	L610	L612				1984
144	TATENO, H; SAKAI, S	TRAVELING WAVES ON A JOSEPHSON TRANSMISSION-LINE	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	22	1	161	170				1983
145	SAKAI, S; TATENO, H	ANALYTICAL SOLUTIONS OF TRAVELING FLUXON WAVES ON A JOSEPHSON TRANSMISSION-LINE WITH SHUNT CONDUCTANCE AND UNIFORM BIAS CURRENT	JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW	22	9	1374	1381				1983
146	AKOH, H; SAKAI, S; YAGI, A; HAYAKAWA, H	A DIRECT-COUPLED JOSEPHSON SAMPLER	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	22	7	L435	L437				1983
147	SAKAI, S; AKOH, H; HAYAKAWA, H	FLUXON OBSERVATION USING A JOSEPHSON SAMPLER	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	22	8	L479	L481				1983
148	SAKAI, S; TATENO, H	QUASIPARTICLE-INJECTED SUPERCONDUCTING WEAK LINK DEVICE	JAPANESE JOURNAL OF APPLIED PHYSICS	21	1	331	336				1982
149	Sakai, S.; Tateno, H.	Quasiparticle-injected superconducting weak link device	Japanese Journal of Applied Physics, Part 1 (Regular Papers & Short Notes)	21		331	6				1982
150	TATENO, H; SAKAI, S	FLUXON WAVES ON A JOSEPHSON TRANSMISSION-LINE	JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS	21	1	L7	L9				1982
151	SAKAI, S; TATENO, H	STATIC CHARACTERISTIC OF A NEW QUASIPARTICLE INJECTED SUPERCONDUCTING WEAK LINK DEVICE	ELECTRONICS LETTERS	17	14	501	503				1981
152	Sakai, S.; Sugiyama, Y.; Tacano, M.; Kataoka, S.; Komamiya, Y.	Electrical characteristics of a super-Schottky contact of Nb on GaAs	Gallium Arsenide and Related Compounds, 1980. Eighth International Symposium on Gallium Arsenide and Related Compounds			503	10				1981
153	Sugiyama, Y.; Tacano, M.; Sakai, S.; Kataoka, S.	Nb/GaAs super-Schottky diode	IEEE Electron Device Letters	EDL-1	11	236	8			Nov	1980

154	Kataoka, S.; Sugiyama, Y.; Tacano, M.; Sakai, S.; Komamiya, Y.	New microwave detector employing Nb/GaAs super-Schottky contact	Conference Proceedings of the 10th European Microwave Conference			662	6			1980
155	SUGIYAMA, Y; TACANO, M; SAKAI, S; KATAOKA, S	NB-GAAS SUPER-SCHOTTKY DIODE	ELECTRON DEVICE LETTERS	1	11	236	238			1980
156	Sakai, S.; Sugano, T.	Theoretical study on the energy band structure of ternary alloy semiconductors	Journal of the Faculty of Engineering, University of Tokyo, Series B	35	2	259	311		Sep	1979
157	SAKAI, S; SUGANO, T	ENERGY-BAND OF TERNARY ALLOY SEMICONDUCTORS – CALCULATION BY A COHERENT-POTENTIAL APPROXIMATION BASED ON THE METHOD OF LINEAR COMBINATION OF BOND ORBITALS	JOURNAL OF APPLIED PHYSICS	50	6	4143	4155			1979
158	SAKAI, S; SUGANO, T; OKABE, Y	OPTICAL-PROPERTIES OF VACUUM-DEPOSITED CDCR2SE4 THIN-FILM	JAPANESE JOURNAL OF APPLIED PHYSICS	15	10	2023	2024			1976

## 2. Book publication

1	Byung-Eun Park, Hiroshi Ishiwara, Masanori Okuyama, Shigeki Sakai, Sung-Min	Ferroelectric-Gate Field Effect Transistor Memories: Device Physics and Applications	Topics in Applied Physics (Springer)	131					Oct	2016
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## 3. Invited talk in international conferences

1)	Shigeki Sakai, T. Oohira, Y. Kasai, K. Shimizu	Nanometer level etching and deposition of Bi-Sr-Ca-Cu-O Superconducting thin Films	SPIE International Symposia on Oxide Superconductor Physics and Nano-Engineering						Jan	1996
2)	Shigeki Sakai, H. Ota	Perovskite oxide transistor by Bi <sub>2</sub> Sr <sub>2</sub> CuO <sub>x</sub> /PbZr <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> on Nb doped SrTiO <sub>3</sub>	Superconducting and Related Oxides: Physics and Nanoengineering						Apr	2000
3)	Shigeki Sakai	Static States and Plasma Oscillations in Intrinsic Josephson Junctions Analyzed by Inductive Coupling Theory	2nd International Symposium Intrinsic Josephson Effects and Plasma Oscillations in High-T <sub>c</sub> Superconductors, Sendai						Aug	2000
4)	Shigeki Sakai	Fabrication and Experimental Data Retention Characteristics of MFIS and MFMIS FETs	The 8th IUMRS International Conference on Electronic Materials Symposium P: Ferroelectric and High-ε Dielectric Materials, Xi'an						Jun	2002
5)	Shigeki Sakai	Thin-film type of intrinsic Josephson junctions, and their flux-flow characteristics under a magnetic field parallel to the junction plane	Future Perspectives of Superconducting Josephson Devices : EuroConference on the Physics and Applications of the Intrinsic Josephson Effect, Pommersfelden						Jul	2002
6)	Shigeki Sakai	Recent studies on intrinsic Josephson junctions in an AIST group	Joint Meeting of 3rd International Symposium on "Future Oriented Interdisciplinary Materials Science(FIMS)", 2nd International Tsukuba-Symposium on "Nano-Science", International Symposium on JSPS Core-to-Core Integrated Action Initiative "Nanoscience and Engineering in Superconductivity"(CTC-NES) and The 4th International Symposium on "Intrinsic Josephson Effect and Plasma Oscillations in High-T <sub>c</sub> Superconductors "(PLASMA 2004), Tsukuba						Nov	2004
7)	Shigeki Sakai, Mitsue Takahashi	Ferroelectric FET with a Pt/SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> /HfAlO/Si gate stack for 1T FeRAM	The 2004 International Electron Devices and Materials Symposia, Hsinchu, Taiwan						Dec	2004
8)	Shigeki Sakai	Gate Materials and Fabrication-processes of Metal-ferroelectric-insulator-semiconductor Memory FETs with Long Data Retention	11th International Ceramics Congress and 4th Forum on New Materials(CIMTEC2006), Acireale, Sicily						Jun	2006

9)	Shigeki Sakai	Fabrication, electrical properties, and numerical simulation of critical-current- modulated intrinsic Josephson junctions	5th International Symposium on the Intrinsic Josephson Effect in High T <sub>c</sub> Superconductors(Plasma2006), Institute of Physics, London	Jul	2006
10)	Shigeki Sakai, Mitsue Takahashi	Recent Advances in Ferroelectric-Gate Field-Effect-Transistor Technology	22nd International Symposium on Integrated Functionalities 2010 (ISIF2010), San Juan, Puerto Rico	Jun	2010
11)	Shigeki Sakai, Mitsue Takahashi	Recent FeFET Technological Progress for FeCMOS Logic and FeNAND Flash Memory Application	Integrated Circuits and Devices in Vietnam (ICDV) 2010, Ho Chi Minh, Vietnam	Aug	2010
12)	Shigeki Sakai, Mitsue Takahashi, Le Hai Van	Recent Progress in Downsizing FeFETs for Fe-NAND Application	2011Materials Research Society (MRS), San Francisco	Apr	2011
13)	Shigeki Sakai, Zhang Xizhen, Le Hai Van, Zhang Wei, Mitsue Takahashi	Downsizing and Memory Array Integration of Pt/SrBi2Ta2O9/Hf-Al-O/Si Ferroelectric-Gate Field-Effect Transistors	IEEE 12th Non-Volatile Memory Technology Symposium 2012, Singapore	Nov	2011
14)	S. Migita, K. Sakamaki, Xiong Si-Bei, H. Ota, Shigeki Sakai	Ferroelectric-gate memory FET developed by epitaxial films	1st International Meeting on Ferroelectric Random Access Memories (FeRAM2001), Gotenba	Nov	2001
15)	Miyaji Kousuke, Hatanaka Teruyoshi, Shuhei Tanakamaru, R. Yajima, Shinji Noda, Mitsue Takahashi, Shigeki Sakai, K. Takeuchi	A Ferroelectric NAND Flash Memory for Low-Power and Highly Reliable Enterprise SSDs and a Ferroelectric 6T-SRAM for 0.5V Low-Power CPU and SoC	2010 MRS Spring Meeting, Moscone West and San Francisco	Apr	2010