

既刊研究報告(Published Papers)

A. 量子物質科学 (Dept. of Quantum Matter)

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Phase Transition without Spontaneous Symmetry Breaking between Hard and Soft Solid States	H. Shimahara	J. Phys. Soc. Jpn.	74	3	823-826	(2005)	原著
Interlayer spin-singlet pairing induced by magnetic interactions in an antiferromagnetic superconductor	H. Shimahara	Phys. Rev. B	72		134518(1-7)	(2005)	原著
Determination of the orbital moment and crystal field splitting in LaTiO <sub>3</sub>	M. W. Haverkort Z. Hu A. Tanaka G. Ghiringhelli H. Roth M. Cwik T. Lorenz C. Schuessler- Langeheine S. Streltsov A. S. Mylnikova V. I. Anisimov C. de Nadai N. B. Brookes H. H. Hsieh H.-J. Lin C. T. Chen T. Mizokawa Y. Taguchi Y. Tokura D. I. Khomskii L. H. Tjeng	Phys. Rev. Lett.	94		056401(1-4)	(2005)	原著
Orbital Symmetry and Electron Correlation in Na <sub>x</sub> CoO <sub>2</sub>	W. B. Wu D. J. Huang J. Okamoto A. Tanaka H.-J. Lin F. C. Chou A. Fujimori C. T. Chen	Phys. Rev. Lett.	94		146402(1-4)	(2005)	原著
Controlling Orbital Moment and Spin Orientation in CoO Layers by Strain	S. I. Csiszar M. W. Haverkort Z. Hu A. Tanaka H. H. Hsieh H.-J. Lin C. T. Chen T. Hibma L. H. Tjeng	Phys. Rev. Lett.	95		187205(1-4)	(2005)	原著
Spectroscopy of Stripe Order in La <sub>1.8</sub> Sr <sub>0.2</sub> NiO <sub>4</sub> Using Resonant Soft X-Ray Diffraction	C. Schuessler- Langeheine J. Schlappa A. Tanaka Z. Hu C. F. Chang E. Schierle M. Benomar H. Ott E. Weschke G. Kaindl O. Friedt G. A. Sawatzky H.-J. Lin C. T. Chen M. Braden L. H. Tjeng	Phys. Rev. Lett.	95		156402(1-4)	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Antiferromagnetic-to-ferromagnetic transition induced by diluted Co in SrFe <sub>1-x</sub> Co <sub>x</sub> O <sub>3</sub> : Magnetic circular x-ray dichroism study	J. Okamoto K. Mamiya S.-I. Fujimori T. Okane Y. Saitoh Y. Muramatsu K. Yoshii A. Fujimori A. Tanaka M. Abbate T. Koide S. Ishiwata S. Kawasaki M. Takano	Phys. Rev. B	71		104401(1-5)	(2005)	原著
High-energy spectroscopic study of the III-V nitride-based diluted magnetic semiconductor Ga <sub>1-x</sub> Mn <sub>x</sub> N	J. I. Hwang Y. Ishida M. Kobayashi H. Hirata K. Takubo T. Mizokawa A. Fujimori J. Okamoto K. Mamiya Y. Saito Y. Muramatsu H. Ott A. Tanaka T. Kondo H. Munekata	Phys. Rev. B	72		085216(1-6)	(2005)	原著
Characterization of magnetic components in the diluted magnetic semiconductor Zn <sub>1-x</sub> Co <sub>x</sub> O by x-ray magnetic circular dichroism	M. Kobayashi Y. Ishida J. I. Hwang T. Mizokawa A. Fujimori K. Mamiya J. Okamoto Y. Takeda T. Okane Y. Saitoh Y. Muramatsu A. Tanaka H. Saeki H. Tabata T. Kawai	Phys. Rev. B	72		201201(R) (1-4)	(2005)	原著
Orbital-Assisted Metal-Insulator Transition in VO <sub>2</sub>	M.W. Haverkort Z. Hu A. Tanaka W. Reichelt S.V. Streltsov M. A. Korotin V. I. Anisimov H. H. Hsieh H.-J. Lin C. T. Chen D. I. Khomskii L. H. Tjeng	Phys. Rev. Lett.	95		196404(1-4)	(2005)	原著
First-principles Predictions of Giant Electric Polarization	Y. Uratani T. Shishidou F. Ishii T. Oguchi	Jpn. J. Appl. Phys.	44		7130-7133	(2005)	原著
First-principles study on exchange force image of NiO(001) surface using a ferromagnetic Fe probe	H. Momida T. Oguchi	Surf. Sci.	590		42-50	(2005)	原著
Electronic band structure and Fermi surface of Ag <sub>5</sub> Pb <sub>2</sub> O <sub>6</sub>	T. Oguchi	Phys. Rev. B	72		245105(1-5)	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Origin of the metallic properties of heavily boron-doped superconducting diamond	T. Yokoya T. Nakamura T. Matsushita T. Muro Y. Takano M. Nagao T. Takenouchi H. Kawarada T. Oguchi	Nature	438		647-650	(2005)	原著
Rapid Suppression of the Commensurate Magnetic Ordered Phase of PrB6 by La Doping	M. Sera S. Goto T. Koshikawa M.-S. Kim H. Tou F. Iga Y. Mitsukawa K. Kojima	Journal of the Physical Society of Japan	74		2691-2694	(2005)	原著
Sb NQR Study of Ferromagnetic Instability in Alkaline-Earth-Filled Skutterudites SrFe4Sb12 and BaFe4Sb12	M. Matsumura G. Hyoudou H. Kato T. Nishioka E. Matsuoka H. Tou T. Takabatake M. Sera	Journal of the Physical Society of Japan	74		2205-2208	(2005)	原著
Upper critical field in the electron-doped layered superconductor ZrNiO.7: Magnetoresistance studies	H. Tou Y. J. Tanaka M. Sera Y. Taguchi T. Sasaki Y. Iwasa L. Zhu S. Yamanaka	Physical Review B	72		020501(R) (1-4)	(2005)	原著
Quasiparticle spin susceptibility in heavy-fermion superconductors: An NMR study compared with specific heat results	藤 秀樹 石田 憲二 北岡 良雄	Journal of the Physical Society of Japan	74	4	1245-1254	(2005)	原著
Possible Coexistence of Quadrupolar and Magnetic Ordering in Ce0.7Pr0.3B6	S. Kishimoto A. Kondo M.-S. Kim H. Tou M. Sera F. Iga	Journal of the Physical Society of Japan	74		2913-2916	(2005)	原著
Sb-NQR probe for multipole degree of freedom in the first Pr-based heavy-fermion superconductor PrOs4Sb12	H. Tou M. Doi M. Sera M. Yogi H. Sugawara H. Sato	Journal of the Physical Society of Japan	74		2695-2698	(2005)	原著
Effects of magnetic field and pressure on the weak ferromagnetism of YbRhSb	Y. Muro Y. Haizaki K. Umeo H. Tou M. Sera T. Sakakibara T. Takabatake	Physica B: Condensed Matter	359-361		124-126	(2005)	国際会議 議事録
121Sb-NMR studies of single-crystal PrOs4Sb12	H. Tou M. Doi M. Sera M. Yogi Y. Kitaoka H. Kotegawa G.-q. Zheng H. Harima H. Sugawara H. Sato	Physica B: Condensed Matter	359-361		892-894	(2005)	国際会議 議事録

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Effects of La substitution on the energy gaps and superstructures of CeRhAs	T. Sasakawa et al	J. Phys. Soc. Jpn.	74		3329-3333	(2005)	原著
Magnetic and transport properties of layered Yb <sub>2</sub> TGe <sub>6</sub> (T = Ni,Cu,Pd,Pt)	K. Shigetoh et al	J. Alloys Comp.	403		15-18	(2005)	原著
Break-junction tunneling spectra of MgB <sub>2</sub> Influence of boron quality	R.A. Ribeiro T. Ekino T. Takasaki T. Takabatake J. Akimitsu	Physica C	426-431		450-453	(2005)	国際会議 議事録
Direct observation of Fe spin reorientation in single-crystalline YbFe <sub>6</sub> Ge <sub>6</sub>	M. A. Avila et al	J. Phys.: Cond. Matter	17		6969-6979	(2005)	原著
Collapse of the pseudogap in Kondo semimetal CeNiSn observed by magnetization and magnetoresistance measurements in high magnetic fields up to 65 T	S. Yoshii et al	J. Phys. Soc. Jpn.	74		2612-2616	(2005)	原著
Magnetic-field induced band-structure change in CeBiPt	N. Kozlova et al	Phys. Rev. Lett.	95		086403(1-4)	(2005)	原著
Probing glasslike excitations in single-crystalline Sr <sub>8</sub> Ga <sub>16</sub> Ge <sub>30</sub> by specific heat and thermal conductivity	K. Umeo et al	J. Phys. Soc. Jpn.	74		2145-2148	(2005)	原著
Inelastic neutron scattering studies of doped CeNiSn and CeRhSb: Crystal-field excitations and origin of the pseudogap	J. Y. So et al	Phys. Rev. B	71		21441 (1-7)	(2005)	原著
Crystal field excitations in the low-dimensional quasi-triangular lattice compound Ce <sub>2</sub> Ge <sub>2</sub> In	D. T. Adroja et al	Physica B	359-361		314-316	(2005)	国際会議 議事録
Low-temperature thermal expansion of CeBiPt	G. Goll et al	Physica B	359-361		193-195	(2005)	国際会議 議事録
Pressure effect on successive magnetic transition in a frustrated compound YbAgGe	K. Umeo et al	Physica B	359-361		130-132	(2005)	国際会議 議事録
Non-Fermi-liquid behavior in CeRhBi and valence-fluctuating behavior in CeIrSb	T. Sasakawa et al	Physica B	359-361		111-114	(2005)	国際会議 議事録
Nearly ferromagnetic metals AFe <sub>4</sub> Sb <sub>12</sub> (A=Ca, Sr, and Ba)	E. Matsuoka et al	J. Phys. Soc. Jpn.	74	5	1382-1385	(2005)	原著
Photoemission study of the temperature-dependent energy-gap formation in the Kondo semiconductor CeRhAs	K. Shimada et al	J. Electron Spectr. Related Phenom.	144-147		857-859	(2005)	原著
High-pressure synthesis and transport properties of a new binary germanide, SrGe <sub>6-x</sub> (x=0.5), with a cagelike structure	H. Fukuoka et al	Inorganic Chemistry	44	5	1460-1465	(2005)	原著
Pressure driven collapse of the magnetism in the Kondo insulator UNiSn	A. Barla et al	Phys. Rev. B	71		020402(R) (1-4)	(2005)	原著
High-resolution soft X-ray photoemission study of a Kondo semiconductor and related compounds	A. Sekiyama et al	J. Electron Spectr. Related Phenom	144-147		655-657	(2005)	原著
High-resolution soft X-ray photoemission of Kondo insulator YbB <sub>12</sub>	A. Sekiyama et al	J. Electron Spectr. Related Phenom	144-147		671-673	(2005)	原著
Pressure effects on the phase transition and energy gap in CeRhAs	K. Umeo K. Masumori T. Sasakawa F. Iga T. Takabatake Y. Ohishi T. Adachi	Phys. Rev. B	71		064110 (1-7)	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Structural, transport, and thermal properties of the single-crystalline type-VIII clathrate Ba <sub>8</sub> Ga <sub>16</sub> Sn <sub>30</sub>	D.Huo T. Sakata T. Sasakawa M. A. Avila M. Tsubota F. Iga H. Fukuoka S. Yamanaka S. Aoyagi T. Takabatake	Phys. Rev. B	71		075113 (1-6)	(2005)	原著
Soft X-ray photoemission study of CeRhAs and related compounds: observation of a bulk pseudo-gap	A. Sekiyama Y. Fujita M. Tsunekawa S. Kasai A. Shigemoto S. Imada D. T. Adroja T. Yoshino F. Iga T. Takabatake T. Nanba S. Suga	Physica B	359-361		115-117	(2005)	国際会議 議事録
Evidence for short-range antiferromagnetic fluctuations in Kondo-insulating YbB <sub>12</sub>	J. M. Mignot P.A. Alekseev K. S. Nemkovski L. P. Regnault F. Iga T. Takabatake	Phys. Rev. Lett.	94		247204(1-4)	(2005)	原著
Indirect and direct gaps in Kondo semiconductor YbB <sub>12</sub>	H. Okamura T. Michizawa T. Nanba S. Kimura F. Iga T. Takabatake	J. Phys. Soc. Jpn.	74		1954-1957	(2005)	原著
Search for Orbital Excitation in YTiO <sub>3</sub> by Neutron Scattering	S. Shamoto M. Tsubota F. Iga B. Fak T. Kajitani	Journal of Neutron Research	13		175-178	(2005)	原著
Experimental evidence of noncollinear magnetism in gadolinium tetraboride	J. Fernandez-Rodriguez J. A. Blanco P. J. Brown K. Katsumata A. Kikkawa F. Iga S. Michimura	Phys. Rev. B	72		052407(1-4)	(2005)	原著
Evidence for Suppressed Screening on the Surface of High Temperature La <sub>2-x</sub> Sr <sub>x</sub> CuO <sub>4</sub> and Nd <sub>2-x</sub> Ce <sub>x</sub> CuO <sub>4</sub>	M. Taguchi J. Hori K. Ishii F. Nakamura T. Suzuki 他	Phys. Rev. Lett.	95		177002(1-4)	(2005)	原著
Antiferromagnetic phase transition in garnet-type AgCa <sub>2</sub> Co <sub>2</sub> V <sub>3</sub> O <sub>12</sub> and AgCa <sub>2</sub> Ni <sub>2</sub> V <sub>3</sub> O <sub>12</sub>	J. Awaka M. Ito T. Suzuki S. Nagata	J. Phys. Chem. Solids	66		851-861	(2005)	原著
High-pressure diffraction studies on Ca <sub>2</sub> RuO <sub>4</sub>	P. Steffens F. Nakamura 他	Phys. Rev. B	72		094104(1-7)	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Transport Properties of the chalcogenide spinel superconductor CuRh <sub>2</sub> S <sub>4</sub> under pressure	M. Ito H. Kurisaki F. Nakamura T. Fujita T. Suzuki J. Hori H. Okada H. Fujii	J. Appl. Phys.	97		10B112/1-3	(2005)	原著
Transport Properties of chalcogenide spinel compound CuRh <sub>2</sub> Se <sub>4</sub> under pressure	M. Ito K. Ishii F. Nakamura T. Suzuki	Physica B	359- 361		1198-1200	(2005)	国際会議 議事録
Elastic properties of valence fluctuating CeRhIn	H. Higaki I. Ishii Moo-Sung Kim D. Hirata T. Takabatake T. Suzuki	Physica B	359- 361		136-138	(2005)	国際会議 議事録
Elastic properties of clathrate compound Ba <sub>8</sub> Ga <sub>16</sub> Sn <sub>30</sub>	I. Ishii H. Higaki T. Sakata D. Huo T. Takabatake T. Suzuki	Physica B	359- 361		1210-1212	(2005)	国際会議 議事録
Possible application of carbon nanotubes to the field emission electron source for portable betatrons	T. Ohnishi I. Endo K. Hayashi A. Kohara T. Yoshida G.L. Chakhlov E.L. Malikov A.P. Naydukov T. Ekino F. Nishiyama	Nucl. Instr. and Methods in Phys. Res.	A539		16-24	(2005)	原著
Search for coherent charged pion production in neutrino-carbon interactions	M. Hasegawa T. Takahashi, et.al	Physical IReview Letters	95		25301(1-5)	(2005)	原著
Evidence for muon neutrino oscillation in an accelerator-based experiment	E. Alu T. Takahashi M. Iinuma S. Nawang, et al	Physical Review Letters	94		081802- 081805	(2005)	原著
Proton polarization with p-terphenyl crystal by integrated solid effect on photoexcited triplet state	M. Iinuma Y. Takahashi I. Shak'e M. Oda A. Masaike T. Yabuzaki H. M. Shimizu	Journal of Magnetic Resonance	175		235-241	(2005)	原著
High proton polarization at high temperature with single crystals of aromatic molecules	M. Iinuma Y. Takahashi I. Shak'e M. Oda A. Masaike T. Yabuzaki H. M. Shimizu	Nuclear Instruments and Methods in Physics Research A	529		199-203	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Observation of second harmonics in laser-electron scattering using low energy electron beam	M. Iinuma K. Matsukado I. Endo M. Hashida K. Hayashi A. Kohara F. Matsumoto Y. Nakanishi S. Sakabe S. Shimizu T. Tauchi K. Yamamoto T. Takahashi	Physics Letter A	346		255-260	(2005)	原著
Proton Polarization with Naphthalene Crystals by Integrated Solid Effect on the Photoexcited Triplet State	M. Iinuma Y. Takahashi I. Shak'e M. Oda H. M. Shimizu A. Masiike T. Yabuzaki	J. Phys. Soc. Jpn.	74	9	2622-2630	(2005)	原著
Feasibility of beam crystallization in a cooler storage ring	Y. Yuri H. Okamoto	Physical Review STAB	8		114201	(2005)	原著
Coulomb coupling constant for spatially confined single-species plasmas	H. Okamoto S. Ochi Y. Yuri	J. Phys. Soc. Jpn.	74	7	2099	(2005)	原著
Frozen Beams	H. Okamoto	(Invited) Proc. Particle Accelerator Conference	1		38815	(2005)	国際会議 議事録
Space-charge simulations and experiments at Hiroshima University	H. Okamoto	(Invited) AIP Conf. Proc.	773		142-146	(2005)	国際会議 議事録
Pulse control of dephasing in two-level quantum systems	Y. Takane T. Murakami	J. Phys. Soc. Jpn.	74	8	2243-2248	(2005)	原著
Pulse control of decoherence in a qubit coupled with a quantum environment	T. Murakami Y. Takane	J. Phys. Soc. Jpn. Suppl.	74		265-268	(2005)	国際会議 議事録
Conductance and its variance of disordered wires with symplectic symmetry	H. Sakai Y. Takane	J. Phys. Soc. Jpn.	74	5	1521-1524	(2005)	原著
Nucleation of $2\pi$ -phase soliton in charge-density-wave systems	Y. Takane	J. Phys. Soc. Jpn.	74	3	847-850	(2005)	原著
Enhanced Coherence of Antinodal Quasiparticles in a Dirty d-Wave Superconductor	K. Wakabayashi T. M. Rice M. Sigrist	Phys. Rev. B	72		214517(1-5)	(2005)	原著
Magnetic vs. charge ordered states, and electric capacitance in zigzag nanographite ribbons	K. Harigaya A. Yamashiro Y. Shimoi K. Wakabayashi	Synthetic Metals	152		317-320	(2005)	国際会議 議事録
Effect of spin-orbit coupling on the zero-conductance resonances in asymmetrically coupled one-dimensional rings	U. Aeberhard K. Wakabayashi M. Sigrist	Phys. Rev. B	72		075328(1-9)	(2005)	原著
Theoretical investigation on electronic properties of topological materials: Mobius nanographite and conjugated polymers	K. Harigaya A. Yamashiro Y. Shimoi K. Wakabayashi	Synthetic Metals	152		261-264	(2005)	国際会議 議事録
Negative Differential Resistance in CDW Nonlinear Transport of Quasi-One Dimensional Conductor (Per)2M(mnt)2 [M=Au, Pt]	M. Nishida N. Mitsu S. Tanda K. Yamaya R. T. Henriques M. Almeida	Journal de Physique IV	131		129-130	(2005)	国際会議 議事録

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Terahertz wave detection performance of photoconductive antennas: Role of antenna structure and gate pulse intensity	R. Yano H. Gotoh Y. Hirayama S. Miyashita Y. Kadoya T. Hattori	Journal of Applied Physics	97	10	103103	(2005)	原著
Propagation Characteristics of THz Electrical Signals on Micro Strip Lines Made of Optically Transparent Conductors	K. Takase T. Ohkubo F. Sawada D. Nagayama J. Kitagawa Y. Kadoya	Japanese Journal of Applied Physics	44	32	L1011– L1014	(2005)	原著
Demonstration of an optical quantum controlled–NOT gate without path interference	R. Okamoto H.F. Hofmann S. Takeuchi K. Sasaki	Physical Review Letters	95		210506	(2005)	原著
Simulation of interaction Hamiltonians by quantum feedback: a comment on the dynamics of information exchange between coupled systems	H.F. Hofmann	Journal of Optics B: Quantum and Semiclassical Optics	7		S208–S214	(2005)	原著
Quantum parallelism of the controlled–NOT operation: an experimental criterion for the evaluation of device performance	H.F. Hofmann	Physical Review A	72		22329	(2005)	原著
Complementary classical fidelities as an efficient criterion for the evaluation of experimentally realized quantum operations	H.F. Hofmann	Physical Review Letters	94		160504	(2005)	原著
A study on the shape of two–photon wavefunctions after the nonlinear interaction with a one–dimensional atom	K. Kojima H.F. Hofmann S. Takeuchi K. Sasaki	Nonlinear Optics, Quantum Optics	32		221	(2005)	原著
Propagation Characteristics of Terahertz Electrical Signals on Micro–Strip Lines Made of Optically Transparent Conductors	K. Takase T. Ohkubo F. Sawada D. Nagayama J. Kitagawa Y. Kadoya	Jpn. J. Appl. Phys.	44	32	L1011	(2005)	原著
Characterization of electroless–plated Cu film over Pd catalytic layer formed by an ionized cluster beam	ZL Wang S. Shingubara H. Sakaue T. Takahagi	J. of The Electrochem. Soc.	152	10	C684–C687	(2005)	原著
Effect of Additives on Bottom–up Electroless Copper Plating	S. Shingubara R. Obata A. Kato Z. Wang O. Yaegashi H. Sakaue T. Takahagi	Technical report of IEICE. SDM	104		43–48	(2005)	原著
Adsorption of dibutyl phthalate and dioctyl phthalate on Si substrate	H. Miya R. Sasajima E. Takami N. Nakamura T. Takahagi	Jpn. J. of Appl. Phys. Part1	44	6A	3864–3866	(2005)	原著
Contact resistance reduction using vacuum loadlock system and plasma dry cleanin	H. Miya S. Shingubara H. Sakaue T. Takahagi	Jpn. J. of Appl. Phys. Part1	44	6A	3860–3863	(2005)	原著
Fabrication of carbon nanotube array using nanoporous templates	SJ. Huang T. Shimizu H. Sakaue S. Shingubara T. Takahagi	Jpn. J. of Appl. Phys. Part1	44	7A	5289–5291	(2005)	原著



論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Nanometer-Scale Control of Film Thickness and Pattern Width of Alkyl SAM on H-Terminated Si(110) Surface	H. Sakaue A. Sunada H. Shikata T. Takahagi	Atomically Controlled Surfaces, Interfaces and Nanostructures			114	(2005)	国際会議 議事録
Nanometer-Scale Control of Film Thickness and Pattern Width of Alkyl SAM on H-Terminated Si(111) Surface	A. Sunada H. Shikata H. Sakaue T. Takahagi	Surface Science and Nanotechnology			536	(2005)	国際会議 議事録
Transverse acoustic impedance of superfluid 3He-B	Y. Nagato M. Yamamoto S. Higashitani K. Nagai	J. Phys. Chem. Solids	66		1352-1354	(2005)	原著
NMR properties of a possible non-unitary state of superfluid 3He in aerogel	M. Miura S. Higashitani M. Yamamoto K. Nagai	J. Low Temp. Phys.	138		153-157	(2005)	原著
Theory of damped Rabi oscillations	H. Kosugi S. Matsuo K. Konno N. Hatakenaka	Physical Review B	72		172509	(2005)	原著
Quantum tunneling of relativistic fluxons	K. Konno F. Kobayashi S. Matsuo M. Nishida N. Hatakenaka	Proceeding of the International Symposium on Mesoscopic Superconductivity and Spintronics, World Scientific			216	(2005)	原著
Observation of surface Andreev bound states of superfluid 3He by transverse acoustic impedance measurements	Y. Aoki Y. Wada M. Saitoh R. Nomura Y. Okuda Y. Nagato M. Yamamoto S. Higashitani K. Nagai	Phys. Rev. Lett.	95		075301(1-4)	(2005)	原著
Microscopic theory of sound propagation in the superfluid 3He-aerogel system	S. Higashitani M. Miura M. Yamamoto K. Nagai	Phys. Rev. B	71		134508(1-13)	(2005)	原著
Sound propagation in superfluid 3He in aerogel	S. Higashitani M. Miura M. Yamamoto K. Nagai	J. Phys. Chem. Solids	66		1334-1338	(2005)	原著
Fourth sound propagation in superfluid 3He in aerogel	S. Higashitani M. Miura M. Yamamoto K. Nagai	J. Low Temp. Phys.	138		147-152	(2005)	原著
Theory of acoustic impedance of superfluid 3He	M. Yamamoto Y. Nagato S. Higashitani K. Nagai	J. Low Temp. Phys.	138		349-354	(2005)	原著
Synergism of electrochemical and mechanical factors of in porous silicon growth	V. Parkhutik M. Udagawa Y. Harima	Phys. Stat. Sol. (a)	202	9	1374-1379	(2005)	原著
Infrared absorption study of Ca <sub>2-x</sub> N <sub>x</sub> CuO <sub>2</sub> X <sub>2</sub> (X=Cl,Br)	Y. Zenitani H. Kawashima T. Suzuki J. Akimitsu N. Ogita T. Kondo M. Udagawa	J. Phys. Soc. Jpn.	74		1877-1878	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 号 (Vol.) (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Raman scattering study of filled skutterudite PrRu4P12	N. Ogita K. Yamamoto S. R.Saha H. Sugawara H. Sato C. Sekine I. Shirovani M. Udagawa	Physica B	359-361	847-849	(2005)	原著
Phonon Raman scattering of RFe4P12 and ROs4Sb12	K. Kondo K. Yamamoto N. Ogita M. Udagawa H. Sugawara H. Sato	Physica B	359-361	904-906	(2005)	原著
Raman scattering study of rare-earth hexaboride	N. Ogita S. Nagai M. Udagawa F. Iga M. Sera T. Oguchi J. Akimitsu S. Kunii	Physica B	359-361	941-943	(2005)	原著
Hydrogen Desorption Mechanism in M-N-H system by Isotopic Exchange Technique.	S. Isobe T. Ichikawa S. Hino H. Fujii	J. Phys. Chem. B	109	14855-14858	(2005)	原著
Pauli effect of the magnetic field on superconductors with charge-density waves	T. Ekino A.M. Gabovich A.I. Voitenko	Low Temp. Phys.	31	41-46	(2005)	原著
Spin-polarized electron tunneling between charge-density-wave metals	T. Ekino A.M. Gabovich A.I. Voitenko	Low Temp. Phys.	31	59-72	(2005)	原著
Manifestations of inhomogeneity in MgB2: From specific heat to tunnel measurements	T. Ekino A.M. Gabovich Mai Suan Li T. Takasaki A.I. Voitenko J. Akimitsu H. Fujii T. Muranaka M. Pekala H. Szymczak	Physica B	359-361	460-462	(2005)	原著
Spatially heterogeneous character of superconductivity in MgB2 as revealed by local probe and bulk measurements	T. Ekino A.M. Gabovich T. Takasaki A.I. Voitenko J. Akimitsu H. Fujii T. Muranaka	Physica C	426-431	230-233	(2005)	原著
Enhancement of the paramagnetic limit for superconductors with charge-density waves	T. Ekino, A.M. Gabovich, A.I. Voitenko	Physica C	426-431	325-329	(2005)	原著
Current carrier localization and coulomb gap observed in SrPbO3-d by transport measurements and tunnel spectroscopy	V.A. Drozd T. Ekino A.M. Gabovich M. Pekala R.A. Ribeiro A.D. Shevchenko V.M. Uvarov	Journal of Physics; Condens. Matter	17	7407-7416	(2005)	原著
Tunneling spectroscopy of deintercalated layered nitride superconductors ZrNC10.7	T. Takasaki T. Ekino H. Fujii S. Yamanaka	J. Phys. Soc. Jpn.	74	2586-2591	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Point-contact spectroscopy measurements of binary superconductor MgB2	T. Takasaki T. Ekino R.A. Ribeiro T. Muranaka H. Fujii J. Akimitsu	Physica C	426-431		300-303	(2005)	原著
Electrical resistivity and tunneling anomalies in CeCuAs2	E.V. Sampathkumaran T. Ekino R.A. Ribeiro K. Sengupta T. Nakano M. Hedo N. Fujiwara M. Abliz Y. Uwatoko S. Rayaprol Th. Doert J.P.F. Jemetio	Physica B	359-361		108-110	(2005)	原著
Composite Materials Based on Light Elements for Hydrogen Storage	T. Ichikawa N. Hanada S. Isobe H.Y. Leng H. Fujii	Mater. Trans.	46	1	1-14	(2005)	レビュー
Rechargeable Hydrogen Storage in Nano-Structured Mixtures of Hydrogenated-Carbon and Lithium Hydride	T. Ichikawa S. Isobe K. Nabeta H. Fujii	Appl. Phys. Lett.	86		24914	(2005)	原著
Hydrogen Absorption Properties of Li-Mg-N-H System	T. Ichikawa K. Tokoyoda H. Y. Leng H. Fujii	J. Alloys Comp.	400		245-248	(2005)	原著
Catalytic effect of nano-particle 3d-transition metals on hydrogen storage properties in magnesium hydride MgH2 prepared by mechanical milling	N. Hanada T. Ichikawa H. Fujii	J. Phys. Chem. B	109		7188-7194	(2005)	原著
Hydrogen Desorption Properties of Lithium-Carbon-Hydrogen System	T. Ichikawa S. Isobe H. Fujii	Mater. Trans.	46		1757-1759	(2005)	原著
Mechanism of Hydrogenation Reaction in the Li-Mg-N-H System	H.Y. Leng T. Ichikawa S. Hino T. Nakagawa H. Fujii	J. Phys. Chem. B	109		10744-10748	(2005)	原著
Hydrogen desorption properties of Ca-N-H system	S. Hino T. Ichikawa H.Y. Leng H. Fujii	J. Alloys Comp.	398		62-66	(2005)	原著
Quantitative estimation of NH3 partial pressure in H2 desorbed from Li-N-H system by Raman spectroscopy	S. Hino T. Ichikawa N. Ogita M. Udagawa H. Fujii	Chem. Comm.	24		3038-3040	(2005)	原著
Hydrogen Desorption Mechanism in a Li-N-H System by Means of Isotopic Exchange Technique	S. Isobe T. Ichikawa S. Hino H. Fujii	J. Phys. Chem. B	109		147855-14858	(2005)	原著
<sup>1</sup> H-NMR measurements of the hydrogen dynamics in nanocrystalline graphite	E. Stanik G. Majer S. Orimo T. Ichikawa H. Fujii	J. Appl. Phys.	98		44302	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 号 (Vol.) (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Hydrogen Storage Properties in Ti Catalyzed Li-N-H System	T. Ichikawa N. Hanada S. Isobe H.Y. Leng H. Fujii	J. Alloys. Comp.	404-406	435-438	(2005)	原著
Effect of Ti Catalysts with Different Chemical Form on Li-N-H Hydrogen Storage Properties	S. Isobe T. Ichikawa N. Hanada H.Y. Leng M. Fichtner O. Kircher H. Fujii	J. Alloys. Comp.	404-406	439-442	(2005)	原著
Desorption Behaviors from Metal-N-H Systems Synthesized by Ball Milling	H.Y. Leng T. Ichikawa S. Isobe S. Hino N. Hanada H. Fujii		404-406	443-447	(2005)	原著
Catalytic Effect of Metal Nano-Particle and Metal Oxide for Ball Milled MgH <sub>2</sub>	N. Hanada T. Ichikawa H. Fujii	J. Alloys. Comp.	404-406	716-719	(2005)	原著

#### B. 分子生命機能科学 (Dept. of Molecular Biotechnology)

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.) 号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Genetic rearrangements on the Chlorovirus genome that switch between hyaluronan synthesis and chitin synthesis	A.M.M. Ali T. Kawasaki T. Yamada	Virology	342	102-110	(2005)	原著
Isolation of high-quality RNA from high-phenolic tissues of eelgrass ( <i>Zostera marina</i> L.) by keeping temperature low	A. Alemzadeh M. Fujie S. Usami T. Yamada	Plant. Mol. Biol. Rep.	23	1a-1h	(2005)	原著
Microbial synthesis of hyaluronan and chitin: new approaches	T. Yamada T. Kawasaki	J. Biosci. Bioeng.	99	521-528	(2005)	総説
共生工学によるヒアルロン酸生産	山田 隆	生物工程学	83	328-330	(2005)	総説
Effect of various halide salts on the incompatibility of cyanocobalamin and ascorbic acid in aqueous solution	M. Ichikawa N. Ide S. Shiraishi K. Ono	Chem. Pharm. Bull.	53	688-690	(2005)	原著
The effect of antihistone H1 antibody on immune cells responsible for rejection reaction	W.L. Hsu S. Goto T. Nakano Y. C. Lai C.Y. Lin S. Kawamoto K. Ono L.C. Wu R. Lord T. Goto H.S. Chen B. Jawan F.Y. Cheng L.C. Chen	Mol. Immunol.	42	1155-1164	(2005)	原著
Expression of a major house dust mite allergen gene from <i>Dermatophagoides farinae</i> in <i>Lotus japonicus</i> accession Miyakojima MG-20	T. Kato Y. Goto K. Ono M. Hayashi Y. Murooka	J. Biosci. Bioeng.	99	165-168	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Molecular cloning of a class IV chitinase allergen from the Japanese cedar ( <i>Cryptomeria japonica</i> ) pollen and competitive inhibition of its IgE-binding capacity by Latex C-serum	T. Fujimura S. Shigeta T. Suwa S. Kawamoto T. Aki M. Masubuchi T. Hayashi M. Hide K. Ono	Clin. Exp. Allergy	35		235-243	(2005)	原著
A new Immunomodulatory function of low-viscous konjac-glucomannan with a small particle size: its oral intake suppresses spontaneously occurring dermatitis in NC/Nga mice	N. Onishi S. Kawamoto M. Nishimura T. Nakano T. Aki S. Shigeta H. Shimizu K. Hashimoto K. Ono	Int. Arch. Allergy Immunol.	136		258-265	(2005)	原著
Characterization of immunosuppressive factors expressed in serum by rat tolerogenic liver transplantation	T. Nakano S. Kawamoto Y.C. Lai T. Sasaki T. Aki S. Shigeta T. Goto S. Goto K. Ono L.C. Chen	Transplant. Proc.	37		80-81	(2005)	原著
COX-2 inhibition enhances the Th2 immune response to epicutaneous sensitization	D. Laouini A. Elkhail A. Yalcindag S. Kawamoto H. Oettgen S.R. Geha	J. Allergy Clin. Immunol.	116		390-396	(2005)	原著
Fatty acid-modifying enzymes: implications for industrial applications	T. Aki S. Kawamoto S. Shigeta K. Ono	Handbook of industrial biocatalysis (How C.T. ed.)			15(1-11)	(2005)	原著
イオン処理によるダニアレルゲンのアレルゲン性の低減化	河本 正次 福岡 宣彦 大下 昌利 秋 庸裕 重田 征子 林 鷹治 米田 哲也 西川 和男 小埜 和久	アレルギーの臨床	25		818-822	(2005)	総説
海洋微生物による有用脂質の生産と応用	秋 庸裕 小埜 和久	FFI ジャーナル	210		758-764	(2005)	総説
スギ花粉アレルゲン解析の現状	藤村 孝志 小埜 和久 重田 征子 阪口 雅弘	アレルギー科	19		557-562	(2005)	総説
ダニアレルゲン --- 分子種構成、分子多型、並びに特異的免疫治療 ---	河本 正次 秋 庸裕 重田 征子 坪井 信治 勝谷 隆 林 鷹治 小埜 和久	アレルギー科	19		549-556	(2005)	総説
高度不飽和脂肪酸の生合成と生産に関する研究	秋 庸裕	オレオサイエンス	5		589-599	(2005)	総説

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Acetate and ethanol production from H <sub>2</sub> and CO <sub>2</sub> by <i>Moorella</i> sp. Using a repeated batch culture	S. Sakai Y. Nakashimada K. Inokuma M. Kita H. Okada N. Nishio	Journal of Bioscience and Bioengineering	99	3	252-258	(2005)	原著
Hydrogen and methane two-stage production directly from brewery effluent by anaerobic fermentation	Y. Mitani Y. Takamoto R. Atsumi T. Hiraga N. Nishio	Master Brewers Association of the Americas	42	4	283-289	(2005)	原著
Hydrogen and ethanol production from glycerol-containing waste discharged after biodiesel manufacturing process	T. Ito Y. Nakashimada K. Senba T. Matsui N. Nishio	Journal of Bioscience and Bioengineering	100	3	260-265	(2005)	原著
<i>Desulfotomaculum carboxydivorans</i> sp. Nov., a novel sulfate-reducing bacterium capable of growth at 100% CO	S.N. Parshina J. Sipma Y. Nakashimada A.M. Henstra H. Smidt A.M. Lysenko P.N.L. Lens G. Lettinga A.J.M. Stams	Int J Syst Evol Microbiol	55	5	2159-2165	(2005)	原著
Process performance and ecological significance of a pilot-scale sewage treatment system combining of a UASB and DHS reactor system enhancing a sulfur-redox cycle action	M. Takahashi T. Yamaguchi K. Abe N. Araki H. Sumino S. Yamazaki N. Nishio	1st IWA-ASPIRE 2005 Conference, Singapore	CD-ROM	7D-2		(2005)	原著
硫黄酸化還元サイクルを活性化したパイロットスケールUASB/DHSシステムによる都市下水の処理性能評価	高橋 優信 倉本 恵治 山口 隆司 霜崎 敏 長野 晃弘 角野 晴彦 荒木 信夫 山崎 慎一 西尾 尚道	環境工学研究論文集	42		51-57	(2005)	原著
水素メタン2段発酵技術	西尾 尚道 中島田 豊 沖 泰弘 三谷 優	クリーンエネルギー	14	10	55-59	(2005)	総説
Fission yeast MO25 protein is localized at SPB and septum and is essential for cell morphogenesis	M. Kanai K. Kume K. Miyahara K. Sakai K. Nakamura K. Leonhard D.J. Wiley F. Verde T. Toda D. Hirata	EMBO J	24		3012-3025	(2005)	原著
Mal3, the fission yeast EB1 homolog, cooperates with Bub1 spindle checkpoint to prevent monopolar attachment	K. Asakawa M. Toya M. Sato M. Kanai K. Kume T. Goshima M.A. Garcia D. Hirata T. Toda	EMBO Rep.	6		1194-1200	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Identification of Chemosensory Proteins for Trichloroethylene in <i>Pseudomonas aeruginosa</i>	M. Shitashiro H. Tanaka C.S. Hong A. Kuroda N. Takiguchi H. Ootake J. Kato	Journal of Bioscience and Bioengineering	99	4	396-402	(2005)	原著
Isolation and Characterization of Benzene-Tolerant <i>Rhodococcus opacus</i> Strains	K-S. Na A. Kuroda N. Takiguchi T. Ikeda H. Ootake J. Kato	Journal of Bioscience and Bioengineering	99	4	378-382	(2005)	原著
Development of a Genetic Transformation System for Benzene-Tolerant <i>Rhodococcus opacus</i> Strains	K-S. Na K. Nagayasu A. Kuroda N. Takiguchi T. Ikeda H. Ootake J. Kato	Journal of Bioscience and Bioengineering	99	4	408-414	(2005)	原著
Expression of <i>Pseudomonas aeruginosa aer-2</i> , One of Two Aerotaxis Transducer Genes, Is Controlled by RpoS	C.S. Hong A. Kuroda N. Takiguchi H. Ootake J. Kato	Journal of Bacteriology	87	4	1533-1535	(2005)	原著
Isolation and Characterization of solvent-tolerant <i>Pseudomonas putida</i> strain T-57 and its application to biotransformation of toluene to cresol in a two-phase (organic-aqueous) system	I. Faizal K. Dozen C.S. Hong A. Kuroda N. Takiguchi H. Ootake K. Takeda H. Tsunekawa J. Kato	J Ind Microbiol Biotechnol	32		542-547	(2005)	原著
運動性細菌をセンサーとした迅速毒性試験法の開発	下城 麻衣子 田中 宏英 洪 昌秀 黒田 章夫 滝口 昇 大竹 久夫 加藤 純一	環境バイオテクノロジー学会誌	5	1	17-22	(2005)	総説
リン酸資源枯渇の聞き予測とそれに対応したリン有効利用技術開発	黒田 章夫 滝口 昇 加藤 純一 大竹 久夫	環境バイオテクノロジー学会誌	4	2	87-94	(2005)	総説
Dual DNA recognition codes of a short peptide derived from the basic leucine zipper protein EmBP1	A. Hirata M. Ueno Y. Aizawa K. Ohkubo T. Morii S. Yoshikawa	Bioorganic & Medicinal Chemistry	13		3107-3116	(2005)	原著
種類の匂い識別は学習によって成立する	奥原 啓輔 中村 卓夫 滝口 昇 黒田 章夫 加藤 純一 大竹 久夫	Foods & Food Ingredients Journal of Japan	210	8	765-769	(2005)	総説
嗅覚刺激に対するメダカ嗅球神経活動の光学計測	角南 数磨 滝口 昇 黒田 章夫 加藤 純一	Aroma Research	6	3	276-282	(2005)	総説

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Cyclization mechanism for the synthesis of macrocyclic antibiotic lankacidin in <i>Streptomyces rochei</i>	K. Arakawa F. Sugino K. Kodama T. Ishii H. Kinashi	Chem. Biol.	12		249-256	(2005)	原著
Implication of Pkc1p protein kinase C in sustaining Cln2p level and polarized bud growth in response to calcium signaling in <i>Saccharomyces cerevisiae</i>	M. Mizunuma D. Hirata T. Miyakawa	J. Cell. Sci.	118		4219-4229	(2005)	原著
Mutational Analysis of the yeast multidrug resistance ABC transporter Pdr5p with altered drug specificity	A.C. Tutulan-Cunita M. Mikoshi M. Mizunuma D. Hirata T. Miyakawa	Gene Cells	10		409-420	(2005)	原著
Involvement of <i>Saccharomyces cerevisiae</i> Pdr5p ATP-binding cassette Transporter in calcium homeostasis	A.C. Tutulan-Cunita T. Ohnishi M. Mizunuma D. Hirata T. Miyakawa	Biosci. Biotechnol. Biochem.	69		857-860	(2005)	原著
Role of L-histidine in conferring tolerance to Ni <sup>2+</sup> in <i>Saccharomyces cerevisiae</i>	Ileana C. Farcasanu M. Mizunuma F. Nishiyama T. Miyakawa	Biosci. Biotechnol. Biochem.	69		2343-2348	(2005)	原著
Glimepiride exhibits prophylactic effect on atherosclerosis in cholesterol-fed rabbits	S. Shakuto K. Oshima E. Tsuchiya	Atherosclerosis	182		209-217	(2005)	原著
Fredericamycin A Affects Mitochondrial Inheritance and Morphology in <i>Saccharomyces cerevisiae</i>	Y. Imamura M. Yukawa K. Kimura H. Takahashi Y. Suzuki M. Ojika Y. Sakagami E. Tsuchiya	Y. Biosci. Biotech. Biochem.	69		2213-2218	(2005)	原著
Effect of mepartricin, a polyene macrolide antibiotic, on the estrogen-induced hyperplastic growth of dorsolateral prostate and seminal vesicle in immature castrated rats	S. Shakuto E. Tsuchiya	Scandinavian Journal of Urology and Nephrology	39	5	358-365	(2005)	原著
High-dimensional and large-scale phenotyping of yeast mutants	Y. Ohya J. Sese M. Yukawa et al	Proc. Natl. Acad. Sci. USA	102		19015-19020	(2005)	原著
Data mining tools for the <i>Saccharomyces cerevisiae</i> morphological database	TL. Saito J. Sese Y. Nakatani F. Sano M. Yukawa Y. Ohya S. Morishita	Nucleic Acides Res.	33		W753-757	(2005)	原著
Mitochondria-specific RNA-modifying enzymes responsible for the biosynthesis of the wobble base in mitochondrial tRNAs. Implications for the molecular pathogenesis of human mitochondrial diseases	N. Umeda T. Suzuki M. Yukawa Y. Ohya H. Shindo K. Watanabe T. Suzuki	J Biol Chem.	280		1613-1624	(2005)	原著
生命を支えるクロマチン構造制御のダイナミズム	土屋 英子	化学と生物	43		310-319	(2005)	総説
Characterization of the <i>roIB</i> promoter on mikimopine-type pRi1724 T-DNA	N.S.N Handayani H. Moriuchi M. Yamakawa I. Yamashita K. Yoshida N. Tanaka	Plant Science	168		1353-1364	(2005)	原著



論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Hairy root-activation tagging: a high-throughput system for activation tagging in trasformed hairy roots	H. Seki T. Nishizawa N. Tanaka Y. Niwa S. Yoshida T. Muranaka	Plant Molecular Biology	59		793-807	(2005)	原著
<i>SKGI</i> , a suppressor gene of synthetic lethality of <i>kex2 Δgas1/Δ</i> mutations, encodes a novel membrane protein that affects cell wall composition	N. Tomishige Y. Noda H. Adachi H. Shimoi K. Yoda	Yeast	22		141-155	(2005)	
High expression of unsaturated fatty acid synthesis gene <i>OLE1</i> in sake yeasts	T. Yamada H. Shimoi K. Ito	Journal of Bioscience and Bioengineering	99		512-516	(2005)	
Identificaton and characterization of a novel biotin biosynthesisgene in <i>Saccharomyces cerevisiae</i>	W. Wu K. Ito H. Shimoi	Applied and Environmental Microbiology	71		6845-6855	(2005)	
Amplified fragment length polymorphism of the <i>AWA1</i> gene of sake yeasts for identification of sake yeast strains	M. Shimizu K. Miyashita H. Kitagaki K. Ito H. Shimoi	Journal of Bioscience and Bioengineering	100		678-680	(2005)	
Cloning and heterologous expression of the antibiotic peptide (ABP) genes from <i>Rhizopus oligosporus</i> NBRC 8631	O. Yamada K. Sakamoto M. Tominaga T. Nakayama T. Kosei A. Fujita O. Akita	Bioscience Biotechnology and Biochemistry	69		477-482	(2005)	
Cloning and expression analysis of two catalase genes from <i>Aspergillus oryzae</i>	H. Hisada Y. Hata A. Kawato Y. Abe O. Akita	Journal of Bioscience and Bioengineering	99		562-568	(2005)	
Genome sequencing and analysis of <i>Aspergillus oryzae</i>	O. Akita et al	Nature	438		1157-1161	(2005)	
麴菌細胞壁への酵素のトラップ	加藤 拓 下飯 仁 伊藤 清	日本醸造協会誌	100	5	513-519	(2005)	
焼酎白麴菌非耐性酸 $\alpha$ -アミラーゼの特異的な発現	加藤 拓 村島 健司 下飯 仁 伊藤 清	日本醸造協会誌	100	7	513-519	(2005)	
Cloning and Heterologous Expression of the Antibiotic Peptide (ABP) genes	O. Yamada K. Sakamoto M. Tominaga T. Nakayama T. Koseki A. Okuda-Fujita O. Akita		69		477-482	2005	原著

### C. 半導体集積科学 (Dept. of Semiconductor Electronics and Integration Science)

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Influence of substrate dc bias on crystallinity of silicon films grown at a high rate from inductively-coupled plasma CVD	N. Kosku H. Murakami S. Higashi S. Miyazaki	Appl. Surf. Sci.	244	1-4	39-42	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Impact of Rapid Thermal Anneal on ALCVD- Al <sub>2</sub> O <sub>3</sub> /Si <sub>3</sub> N <sub>4</sub> /Si(100) Stack Structures- Photoelectron Spectroscopy	F. Takeno A. Ohta S. Miyazaki K. Komeda M. Horikawa K. Koyama	Trans. of the Mat. Res. Soc. of Japan	30	1	213-217	(2005)	原著
Characterization of Atom Diffusion in Polycrystalline Si/SiGe/Si Stacked Gate	H. Murakami Y. Moriwaki M. Fujitake D. Azuma S. Higashi S. Miyazaki	IEICE Trans. on Electronics	E88-C	4	646-650	(2005)	原著
Electrical Characterization of Aluminum-Oxynitride Stacked Gate Dielectrics Prepared by a Layer-by- Layer Process of Chemical Vapor Deposition and Rapid Thermal Nitridation	H. Murakami W. Mizubayashi H. Yokoi A. Suyama S. Miyazaki	IEICE Trans. on Electronics	E88-C	4	640-645	(2005)	原著
Characterization of germanium nanocrystallites grown on SiO <sub>2</sub> by a conductive AFM probe technique	K. Makihara Y. Okamoto H. Murakami S. Higashi S. Miyazaki	IEICE Trans. on Electronics	E88-C	4	705-708	(2005)	原著
Control of the nucleation density of Si quantum dots by remote hydrogen plasma treatment	K. Makihara H. Deki H. Murakami S. Higashi S. Miyazaki	Appl. Surf. Sci.	244	1-4	75-78	(2005)	原著
High-Rate Growth of Highly-Crystallized Si Films from VHF Inductively-Coupled Plasma CVD	N. Kosku S. Miyazaki	Trans. of the Mat. Res. Soc. of Japan	30	1	279-282	(2005)	原著
Application of Plasma Jet Crystallization Technique to Fabrication of Thin-Film Transistor	S. Higashi H. Kaku H. Murakami S. Miyazaki H. Watakabe N. Ando T. Sameshima	Japanese J. of Applied Physics	44	3	L108-L110	(2005)	原著
Characterization of Electronic Charged States of Silicon Nanocrystals as a Floating Gate in MOS Structures	S. Miyazaki T. Shibaguchi M. Ikeda	Mat. Res. Soc. Symp. Proc.	830		D5.8	(2005)	原著
Characterization of Electric Charged States of Silicon Nanocrystals as a Floating Gate in MOS Structure	S. Miyazaki	Mat. Res. Soc. Symp. Proc.	830		249-254	(2005)	原著
Analysis of Leakage Current through Al/HfAlO <sub>x</sub> /SiON <sub>x</sub> /Si(100) MOS Capacitors	S. Nagamachi A. Ohta F. Takeno H. Nakagawa H. Murakami S. Miyazaki T. Kawahara K. Torii	Trans. of the Mat. Res. Soc. of Japan	30	1	197-200	(2005)	原著
Charging and Discharging Characteristics of Stacked Floating Gates of Silicon Quantum Dots	T. Shibaguchi M. Ikeda H. Murakami S. Miyazaki	IEICE Trans. on Electronics	E88-C	4	709-712	(2005)	原著
Characterization of Charge Trapping and Dielectric Breakdown of HfAlO <sub>x</sub> /SiON Dielectric Gate Stack	Y. Pei S. Nagamachi H. Murakami S. Higashi S. Miyazaki T. Kawahara K. Torii Y. Nara	dielectric and semiconductor materials, devices, and processing, Physics and Chemistry of SiO <sub>2</sub> and the Si- SiO <sub>2</sub> Interface-5	1	1	163-172	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Electrical Characterization of HfAlO <sub>x</sub> /SiON Dielectric Gate Capacitors	Y. Pei S. Nagamachi H. Murakami S. Higashi S. Miyazaki T. Kawahara K. Torii	Trans. of the Mat. Res. Soc. of Japan	30	1	205-208	(2005)	原著
Growth of Crystallized Ge Films from VHF Inductively-Coupled Plasma of H <sub>2</sub> -Diluted GeH <sub>4</sub>	T. Sakata H. Murakami S. Higashi S. Miyazaki	Int. Symposium on Dry Process(November 28-30, 2005, Jeju)			233-234	(2005)	原著
Photoemission Study of Ultrathin GeO <sub>2</sub> /Ge Heterostructures Formed by UV-O <sub>3</sub> Oxidation	A. Ohta H. Murakami S. Higashi S. Miyazaki	The 4th Int. Symp. Surface Science and Nanotechnology				543 (2005)	原著
In-Situ Observation of Rapid Crystalline Growth Induced by Excimer Laser Irradiation to Ge/Si Stacked Structure	A. Yamashita Y. Okamoto S. Higashi S. Miyazaki H. Watakabe T. Sameshima	The Fourth Int. conf. on Silicon Epitaxy and Heterostructures(ICSI-4)(Awaji Island, Hyogo, Japan, May 23-26, 2005)			44-45	(2005)	原著
Decay Characteristics of Electronic Charged States of Si Quantum Dots as Evaluated by an AFM/Kelvin Probe Technique	J. Nishitani K. Makihara M. Ikeda H. Murakami S. Higashi S. Miyazaki	The Fourth Int. conf. on Silicon Epitaxy and Heterostructures(ICSI-4)(Awaji Island, Hyogo, Japan, May 23-26, 2005)			294-295	(2005)	原著
Experimental Evidence of Coulombic Interaction among Stored Charges in Single Si Dot as Detected by AFM/Kelvin Probe Technique	J. Nishitani K. Makihara Y. Darma H. Murakami S. Higashi S. Miyazaki	2005 Asia-Pacific Workshop on Fundamentals and Applications of Advanced Semiconductor Devices (June 28-30, 2005, Seoul, Korea)			177-180	(2005)	原著
Light Emitting Diode with MOS Structures Containing Multiple-Stacked Si Quantum Dots	J. Xu K. Makihara H. Deki Y. Kawaguchi H. Murakami S. Higashi S. Miyazaki	2005 China Int. conf. on Nanoscience & Technology(Beijing, China, Jun. 9-12, 2005)				(2005)	原著
Characterization of Electronic Charged States of P-doped Si Quantum Dots Using AFM/Kelvin Probe	K. Makihara J. Xu M. Ikeda H. Murakami S. Higashi S. Miyazaki	The Fourth Int. conf. on Silicon Epitaxy and Heterostructures(ICSI-4)(Awaji Island, Hyogo, Japan, May 23-26, 2005)			32-33	(2005)	原著
Fabrication of Multiply-Stacked Structures Consisting of Si-QDs with Ultrathin SiO <sub>2</sub> and Its Application of Light Emitting Diodes	K. Makihara J. Xu H. Deki Y. Kawaguchi H. Murakami S. Higashi S. Miyazaki	First Int. Workshop on New Group IV Semiconductor Nanoelectronics (May 27-28, 2006, Sendai)			47-48	(2005)	原著
Light Emitting Devices from Multilayered Si Quantum Dots Structures	K. Makihara J. Xu H. Deki Y. Kawaguchi H. Murakami S. Higashi S. Miyazaki	2005 Int. Meeting for Future of Electron Devices(Kyoto, April 11-13, 2005)			93-94	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
The Application of Multiple-Stacked Si Quantum Dots to Light Emitting Diodes	K. Makihara Y. Kawaguchi H. Murakami S. Higashi S. Miyazaki	2005 Asia-Pacific Workshop on Fundamentals and Applications of Advanced Semiconductor Devices (June 28-30, 2005, Seoul, Korea)			173-176	(2005)	原著
HIGH-RATE GROWTH OF HIGHLY-CRYSTALLIZED SI FILMS FROM VHF INDUCTIVELY-COUPLED PLASMA CVD	N. Kosku S. Miyazaki	The European Materials Research Society (EMRS)(Palais de la Musique et des Congres Strasbourg, France - May 31 to June 3, 2005)				(2005)	原著
Analysis of Transient Temperature Profile During Thermal Plasma Jet Annealing of Si Films on Quartz Substrate	T. Okada S. Higashi H. Kaku H. Murakami S. Miyazaki	2005 Int. Workshop on Active-Matrix Liquid-Crystal Displays (July 6-8, 2005, Kanazawa)			171-174	(2005)	原著
Characterization of Charge Trapping and Dielectric Breakdown of HfAlOX/SiON Dielectric Gate Stack	Y. Pei S. Nagamachi H. Murakami S. Higashi S. Miyazaki	The Electrochemical Society, 208th Meeting (Oct. 16-21, 2005, Los Angeles, U.S.A)				(2005)	原著
Control of Charged States of Silicon Quantum Dots and Their Application to Floating Gate MOS Memories and Light Emitting Diodes	S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)			92-93	(2005)	原著
Impact of Rapid Thermal Annealing on ALCVD-Al <sub>2</sub> O <sub>3</sub> /Si <sub>3</sub> N <sub>4</sub> /Si(100) Stack Structures - Photoelectron Spectroscopy	H. Murakami F. Takeno A. Ohta S. Higashi S. Miyazaki K. Komeda M. Horikawa K. Koyama	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)			94-95	(2005)	原著
Formation of Si Nano-crystals by Millisecond Annealing of SiOX Films using Thermal Plasma Jet	S. Higashi T. Okada N. Fujii N. Koba H. Murakami S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)			96-97	(2005)	原著
Fabrication of Multiply-Stacked Structures Consisting of Si-QDs with Ultrathin SiO <sub>2</sub> and Its Application of Light Emitting Diodes	K. Makihara Y. Kawaguchi H. Murakami S. Higashi S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)			98-99	(2005)	原著
Characterization of Electronic Charged States of P-doped Si Quantum Dots Using AFM/Kelvin Probe	K. Makihara H. Murakami S. Higashi S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)			100-101	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻号 (Vol. No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Characterization of Charge Trapping and Dielectric Breakdown of HfAlOX/SiON Dielectric Gate Stack	Y. Pei S. Nagamachi H. Murakami S. Higashi S. Miyazaki T. Kawahara K. Torii Y. Nara	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		102-103	(2005)	原著
Characterization of Chemical Bonding Features of NH3-Annealed Hafnium Oxides Formed on Si(100)	H. Nakagawa A. Ohta H. Murakami S. Higashi S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		104-105	(2005)	原著
XPS Study of Ultrathin GeO2/Ge System	A. Ohta H. Furukawa H. Nakagawa H. Murakami S. Higashi S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		106-107	(2005)	原著
Phase Transformation of Amorphous Si Films in Millisecond Time Domain Induced by Thermal Plasma Jet Irradiation	H. Kaku S. Higashi T. Okada H. Murakami S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		108-109	(2005)	原著
Characterization of Multi Step Electron Chargeing to Silicon-Quantum-Dot Floating Gate by Applying Pulsed Gate Biases	T. Nagai M. Ikeda Y. Shimizu S. Higashi S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		110-111	(2005)	原著
Decay Characteristics of Electronic Charged States of Si Quantum Dots as Evaluated by an AFM/Kelvin Probe Technique	J. Nishitani K. Makihara M. Ikeda H. Murakami S. Higashi S. Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		112-113	(2005)	原著
Analysis of Transient Temperature Profile During Thermal Plasma Jet Annealing of Si Films on Quartz Substrate	T.Okada S.Higashi H.Kaku N.Koba H.Murakami S.Miyazaki	the 4th Hiroshima Int. Workshop on 21th Century COE, Nanoelectronics for Tera-bit Information Processing (Sep. 16, 2005, Hiroshima)		114-115	(2005)	原著
Self-Assembling Formation of Si Quantum Dots and its Application to Floating Gate MOS Devices	M. Ikeda S. Miyazaki	The 16th Symp. of The Materials Research Society of Japan (Dec. 9-11, 2005, Tokyo)			(2005)	原著
Control of Charged States of Silicon-Based Quantum Dots and Its Application to Floating Gate MOS Memories	S. Miyazaki	First Int. Workshop on New Group IV Semiconductor Nanoelectronics (May 27-28, 2005, Sendai)		39-40	(2005)	原著
Control of Discrete Charged States in Si-Based Quantum Dots and Its Application to Floating Gate Memories	S. Miyazaki	The 4th Int. Symp. Surface Science and Nanotechnology (ISSS-4, November 14 - 17, 2005)			(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Control of Discrete Charged States in Si-Based Quantum Dots and Its Application to Floating Gate Memories	S. Miyazaki	Int. Symp. on Surface Science and Nanotechnology (November 14-17, 2005, Omiya, Saitama)				(2005)	原著
Electron charging and discharging characteristics of Si-based quantum dots floating gate	S. Miyazaki	The Second Int. Symp. on Point Defects and Nonstoichiometry (ISPN-2, Kaohsiung, Taiwan, Oct 3-5, 2005)			19	(2005)	原著
High Rate Growth of Crystalline Si and Ge Films from Inductively-Coupled Plasma	S. Miyazaki	SREN 2005 Int. conf. on Solar Renewable Energy News, Low Energy Buildings, Research of Historical Artifacts(Florence, Italy, 2nd - 8th April 2005)				(2005)	原著
Self-Assembling Formation of Si-based Quantum Dots and Control of Their Electric Charged States for Multi-valued Memories	S. Miyazaki	SPIE conference on Nanofabrication: Technologies, Devices, and Applications II (SA111) at Optics East(Oct.23-26, 2005, Boston)				(2005)	原著
ULSI薄膜プロセスの基礎物理	宮崎誠一	半導体界面制御技術第154委員会講演会資料			13-25	(2005)	解説論文
HfO2系high-kゲート絶縁膜の信頼性劣化機構モデル	鳥居 和功 白石 賢 宮崎 誠一 山田啓作	応用物理	74	9	1211-1216	(2005)	解説論文
ゲート絶縁膜およびMOS界面の化学構造および電子状態分析	宮崎 誠一	第34回薄膜・表面物理基礎講座(JSAP No.AP052348),(東京、2005年11月10日-11日)			25-34	(2005)	解説論文
シリコン系量子ドットのフローティングゲートMOSデバイス応用	宮崎 誠一	表面技術	56	12		(2005)	解説論文
シリコン系量子ドットの荷電状態制御とフローティングゲートMOSデバイスへの応用	宮崎 誠一	応用電子物性分科会誌	11	2	65-70	(2005)	解説論文
自己組織化シリコン系量子ドットを用いた次世代・機能メモリ開発	宮崎 誠一	月刊マテリアルステージ	5	3	18-24	(2005)	解説論文
Formation of microcrystalline germanium ( $\mu$ c-Ge:H) films from inductively coupled plasma CVD	Y. Okamoto K. Makihara S. Higashi S. Miyazaki	Appl. Surf. Sci.	244	1-4	12-15	(2005)	共著
Analysis of Transient Temperature Profile During Thermal Plasma Jet Annealing of Si Films on Quartz Substrate	T. Okada S. Higashi H. Kaku H. Murakami S. Miyazaki	Dig. of Tech. Papers 2005 Int. Workshop on Active-Matrix Liquid-Crystal Displays			171-174	(2005)	共著 国際会議 議事録
Control of Substrate Surface Temperature in Millisecond Annealing Technique Using Thermal Plasma Jet	T.Okada S.Higashi H.Kaku N.Koba H.Murakami S.Miyazaki	Proceedings of Int. Symposium on Dry Process			405-406	(2005)	共著 国際会議 議事録

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Characterization of MultiStep Electron Charging to Silicon-Quantum-Dot Floating Gate by Applying Pulsed Gate Biases	T. Nagai M. Ikeda Y. Shimizu S. Higashi S. Miyazaki	Ext. Abst. of The 2005 Int. Conf.on Solid State Devices and Materials			174-175	(2005)	共著 国際会議 議事録
Rapid Thermal Annealing Technique Using Thermal Plasma Jet and its Application to Thin Film Transistor Fabrication	S. Higashi	Tech. Dig. 12th Int. Display Workshop/ Asia Display 2005,			285-288	(2005)	原著 国際会議議 事録(招待講
Rapid Thermal Annealing of Thin Films in Millisecond Time Domain Using Thermal Plasma Jet	S. Higashi	Dig. Tech. Pap. Int. Workshop on Active-Matrix Liquid-Crystal Displays 2005			75-78	(2005)	原著 国際会議議 事録(招待講 演)
Crystallization of Si Films on Glass Substrate Using Thermal Plasma Jet	S. Higashi H. Kaku H. Taniguchi H. Murakami S. Miyazaki	Thin Solid Films	487	1-2	122-125	(2005)	原著
Application of Plasma Jet Crystallization Technique to Fabrication of Thin-Film Transistor	S. Higashi H. Kaku H. Murakami S. Miyazaki H. Watakabe N. Ando T. Sameshima	Ext. Abst. of The 2005 Int. Conf.on Solid State Devices and Materials	44	3	L108-L110	(2005)	原著
Characterization of Chemical Bonding Features of NH <sub>3</sub> -Annealed Hafnium Oxides Formed on Si(100)	H. Nakagawa F. Takeno A. Ohta H. Murakami S. Higashi S. Miyazaki	8th Atomically Controlled Surfaces, Interfaces and Nanostructures (ACSIN-8)			102	(2005)	国際会議 議事録
Phase Transformation of Amorphous Si Films in Millisecond Time Domain Induced by Thermal Plasma Jet Irradiation	H. Kaku S. Higashi T. Okada H. Murakami S. Miyazaki	Abst. of The 18th Symposium on Plasma Science for Materials			17-18	(2005)	国際会議 議事録
Fabrication of Polycrystalline Si Thin Film Transistor Using Plasma Jet Crystallization Technique	H. Kaku S. Higashi S. Miyazaki M. Asami H. Watakabe N. Andoh T. Sameshima	Trans. of the Mat. Res. Soc. of Japan	30	1	283-286	(2005)	原著
Fabrication of Polycrystalline Si Thin Film Transistor using Plasma Jet Crystallization Technique	H. Kaku S. Higashi T. Okada H. Murakami S. Miyazaki H. Watakabe N. Andoh T. Sameshima	Abst. of 2005 Int. Meeting for Future of Electron Devices(			91-92	(2005)	国際会議 議事録
In-Situ Observation of Rapid Crystalline Growth Induced by Excimer Laser Irradiation to Ge/Si Stacked Structure	A. Yamashita Y. Okamoto S. Higashi S. Miyazaki H. Watakabe T. Sameshima	Abst. of The Fourth Int. conf. on Silicon Epitaxy and Heterostructures(ICSIE-4)			44-45	(2005)	国際会議議 事録
A new crystallization technique of Si films on glass substrate using thermal plasma jet	H. Kaku S. Higashi H. Taniguchi H. Murakami S. Miyazaki	Appl. Surf. Sci.	244	1-4	8-11	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
1/f-noise characteristics in 100nm-MOSFETs and its modeling for circuit simulation	S. Matsumoto H. Ueno S. Hosokawa T. Kitamura M. Miura- Mattausch H. J. Mattausch T. Ohguro S. Kumashiro T. Yamaguchi K. Yamashita N. Nakayama	IEICE Transactions on Electronics	E88-C	2	247-254	(2005)	原著
Carrier transport model for lateral p-i-n photodiode in high-frequency operation	K. Konno O. Matsushima K. Hara G. Suzuki D. Navarro M. Miura- Mattausch	Japanese Journal Applied Physics	44	4B	2584-2585	(2005)	原著
A compact model of the pinch-off region of 100 nm MOSFETs based on the surface-potential	D. Navarro T. Mizoguchi M. Suetake K. Hisamitsu H. Ueno M. Miura- Mattausch H. J. Mattausch S. Kumashiro T. Yamaguchi K. Yamashita N. Nakayama	IEICE Transactions on Electronics	E88-C	5	1079-1086	(2005)	原著
Gate-length and drain-voltage dependence of thermal drain noise in advanced metal-oxide-semiconductor-field-effect transistors	S. Hosokawa D. Navarro M. Miura- Mattausch H. J. Mattausch	Applied Physics Letters		87		(2005)	原著
A carrier transit time delay-based non-quasi-static MOSFET model for RF circuit simulation	D. Navarro N. Nakayama K. Machida Y. Takeda M. Miura- Mattausch H. J. Mattausch T. Ohguro T. Iizuka M. Taguchi S. Miyamoto	Proceedings of The 2nd International Workshop on Compact modeling			23-27	(2005)	原著
Non-quasi-static Analysis with HiSIM: A Complete Surface-Potential-Based MOSFET Model	T. Ezaki 他	Mixed Design of Integrated Circuits and Systems		2	923-928	(2005)	招待論文
A 2.7 Gcps and 7-Multiplexing CDMA Serial Communication Chip Using Two-Step Synchronization Technique	岩田 穆 汐崎 充 向井 徹 小野 将寛 佐々木 守	IEICE Trans. Electron	E88-C	6	1233-1240	(2005)	原著
A 2.7 Gcps and 7-Multiplexing CDMA Serial Communication Chip for Real-Time Robot Control with Multiprocessors	岩田 穆 汐崎 充 向井 徹 小野 将寛 佐々木 守	Journal of Robotics and Mechatronics	17	4	463-468	(2005)	原著
A 3D-Integration Scheme Utilizing Wireless Interconnections for Implementing Hyper Brains	岩田 穆 佐々木 守 吉川 公麿 亀田 成司 安藤 博士 木本 健太郎 有園 大介 角南 英夫	IEEE 2005 International Solid-State Circuits Conference Digest of Technical Papers			262-263	(2005)	原著



論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Substrate Integrity Beyond 1GHz	永田 真 村坂 佳隆 岩田 穆 他5	IEEE 2005 International Solid- State Circuits Conference Digest of Proceedings of 2005 IEEE International Symposium on Circuits and Systems			266-267	(2005)	原著
A 1V Supply Successive Approximation ADC with Rail-to-Rail Input Voltage Range	吉田 毅 赤木 美穂 佐々木 守 岩田 穆	IEEE 2005 SYMPOSIUM ON VLSI CIRCUITS			192-195	(2005)	原著
A 1V Supply 50nV/ $\sqrt{\text{Hz}}$ Noise PSD CMOS Amplifier Using Noise Reduction Technique of Autozeroing and Chopper Stabilization	吉田 毅 升井 義博 真下 隆行 佐々木 守 岩田 穆	IEEE 2005 SYMPOSIUM ON VLSI CIRCUITS				(2005)	原著
An Image Filtering Processor for Face/Object Recognition Using Merged/Mixed Analog-Digital Architecture	是角 圭祐 野村 修 森江 隆 中野 鉄平 岩田 穆 他1	IEEE 2005 SYMPOSIUM ON VLSI CIRCUITS				(2005)	原著
Isolation Strategy against Substrate Coupling in CMOS Mixed-Signal/RF Circuits	永田 真 村坂 佳隆 岩田 穆 他4	IEEE 2005 SYMPOSIUM ON VLSI CIRCUITS				(2005)	原著
A 0.95mW/1.0Gbps Spiral-Inductor Based Wireless Chip-Interconnect with Asynchronous Communication Scheme	佐々木 守 岩田 穆	IEEE 2005 SYMPOSIUM ON VLSI CIRCUITS				(2005)	原著
A stochastic computing chip for measurement of Manhattan distance	堀 道弘 岩田 穆 他1	Extended Abstracts of the 2005 International Conference on Solid State Devices and Materials			316-317	(2005)	原著
生命体情報処理とエレクトロニクスの融合	亀田 成司 岩田 穆	応用物理	74	7	884-889	(2005)	解説論文
Diffusion-less junction formation by heat-assisted laser annealing	K. Shibahara K. Kurobe T. Eto Y. Ishikawa	Ext. Abst. Int. Meeting for Future Electron Devices, Kansai (IMFEDK, Kyoto, Apr 11-13)			135-136	(2005)	原著
Ultra Shallow Junction Formation by Green-Laser Annealing with Light Absorber	T. Eto K. Shibahara	Jpn. J. Appl. Phys. Part 1	44	4B	2433-2436	(2005)	原著
Ultra Shallow Junction Formation by Green-Laser Annealing with Light Absorber	E. Takii T. Eto K. Kurobe K. Shibahara	Jpn. J. Appl. Phys. Part 2. Letter	44	24	L756-L759	(2005)	原著
Benefits of heat-assist for laser annealing	K. Shibahara	Ext. Abst. Int. Workshop on Junction Technology (IWJT, Osaka, Jun 6-7)			53-54	(2005)	原著
Anomalous Doping Profile in Heavily Doped Ge	K. Hosawa K. Matsumoto K. Shibahara	Ext. Abst. Int. Workshop on Junction Technology (IWJT, Osaka, Jun 6-7)			39-40	(2005)	原著
Workfunction Tuning Using Various Impurities for Fully Silicided NiSi	K. Sano M. Hino N. Ooishi K. Shibahara	Jpn. J. Appl. Phys. Part 1	44	6A	3774-3777	(2005)	原著
Merits and Demerits of Light Absorbers for Ultra Shallow Junction Formation by Green Laser Annealing	A. Matsuno E. Takii T. Eto K. Kurobe K. Shibahara	Nucl. Instr. and Meth. B	237		136-141	(2005)	原著
Function of Phase Switch Layer for Ultra Shallow Junction Formation by Green Laser Annealing	A. Matsuno K. Shibahara	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM, Kobe, Sep 13-15)			914-915	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Green laser annealing with light absorber	K. Shibahara A. Matsuno E. Takii T. Eto	Ext. Abst. 13th IEEE Int. Conf. on Advanced Thermal Processing of Semiconductors – RTP 2005 (Santa Barbara, Oct. 4-7)			101-104	(2005)	原著
Importance of heat-up ramp rate for palladium-silicide fully-silicided-gate structure formation	K. Sano T. Hosoi K. Shibahara	Ext. Abst. 13th IEEE Int. Conf. on Advanced Thermal Processing of Semiconductors – RTP 2005 (Santa Barbara, Oct. 4-7)			145-148	(2005)	原著
Sheet Resistance Reduction and Crystallinity Improvement in ultrashallow n+/p Junctions by Heat- Assisted Excimer Laser Annealing	K. Kurobe Y. Ishikawa K. Shibahara	Jpn. J. Appl. Phys. Part 1	44	12	8391-8395	(2005)	原著
Characterization of Sb-Doped Fully-Silicided NiSi/SiO <sub>2</sub> /Si MOS Structure	T. Hosoi K. Sano M. Hino A. Ohta K. Makihara H. Kaku S. Miyazaki K. Shibahara	Int. Semiconductor Device Research Symp. Proceedings (ISDRS 2005, Bethesda)			WP-4-05(1- 2)	(2005)	原著
LSI対応レーザー不純物活性化技術	松野 明 楡 孝 芝原 健太郎	レーザー研究	33	7	457-461	(2005)	原著
Ultrawideband characteristics of fractal dipole antennas integrated on Si for ULSI wireless interconnects	T. Kikkawa K. kinoto S. Watanabe	Electron Device Letters, IEEE	26	10	767 - 769	(2005)	原著
Transmission Characteristics of Gaussian Monocycle Pulses for Inter-Chip Wireless Interconnections Using Integrated Antennas	K. kimoto T. Kikkawa	Japanese Journal of Applied Physics	44	4B	2761-2765	(2005)	原著
Efficient Design of Integrated Antennas on Si for On- Chip Wireless Interconnects in Multi-Layer Metal Process	A. B. M. H. Rashid N. Sultana M.R. Khan T. Kikkawa	Japanese Journal of Applied Physics	44	4B	2756-2760	(2005)	原著
A CMOS Monocycle Pulse Generation Circuit in a Ultra-Wideband Transmitter for Intra/Inter Chip Wireless Interconnection	N. Sasaki P.K. Saha T. Kikkawa	Japanese Journal of Applied Physics	44	4B	.2104-2108	(2005)	原著
Theoretical Investigation of Dielectric Constant and Elastic Modulus of Three-Dimensional Isotropic Porous Silica Films with Cubic and Disordered Pore Arrangements	H. Miyoshi K. Yamada K. Kohmura N. Fujii H. Matsuo H. Tanaka Y. Oku Y. Seino N. Hata T. Kikkawa	Japanese Journal of Applied Physics	44	8	5982-5986	(2005)	原著
Skeletal silica characterization in porous-silica low- dielectric-constant films by infrared spectroscopic ellipsometry	S. Takada N. Hata Y. Seiono N. Fujii T. Kikkawa	Journal of Applied Physics	97		113504- 113508	(2005)	原著
Characterization of Photosensitive Low-k Films Using Electron-Beam Lithography	S. Kuroki T. Kikkawa	Journal of The Electrochemical Society	152	4	G281-G285	(2005)	原著
Influence of Slurry Chemistry on Frictional Force in Copper Chemical Mechanical Polishing	A. Ishikawa T. Kikkawa H. Matsuo	Journal of The Electrochemical Society	152	9	G695-G697	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Influence of Humidity on Electrical Characteristics of Self-Assembled Porous Silica Low-k Films	T. Kikkawa S. Kuroki S. Sakamoto K. Kohmura H. Tanaka N. Hata	Journal of The Electrochemical Society	152	7	G560-G566	(2005)	原著
Theoretical Investigation into Effects of Pore Size and Pore Position Distributions on Dielectric Constant and Elastic Modulus of Two-Dimensional Periodic Porous Silica Films	H. Miyoshi N. Hata T. Kikkawa	Japanese Journal of Applied Physics	44	3	1166-1168	(2005)	原著
Theoretical Investigation of Dielectric Constant and Elastic Modulus of Two-Dimensional Periodic Porous Silica Films with Elliptical Cylindrical Pores	H. Miyoshi H. Matsuo H. Tanaka K. Yamada Y. Oku S. Takada N. Hata T. Kikkawa	Japanese Journal of Applied Physics	44	3	1161-1165	(2005)	原著
Data Transmission Characteristics of Integrated Linear Dipole Antennas for UWB Communication in Si ULSI	K. Kimoto T. Kikkawa	Proc. of IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting	1B		678-681	(2005)	原著
Interference of Digital Noise with Integrated Dipole Antenna for Inter-chip Signal Transmission in ULSI	M. Nitta T. Kikkawa	Proc. of IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting	3B		264-267	(2005)	原著
Analysis of Transmission Characteristics of Gaussian Monocycle Pulse for Silicon Integrated Antennas	K. Kimoto N. Sasaki P. K. Saha M. Nitta T. Kikkawa M. Sasaki	Ext. Abst. of the 2005 International Conference on Solid State Devices and Materials			308-309	(2005)	原著
A 2.5 GHz Differential Wavelet Generator in 0.18 $\mu$ m CMOS for 1.4 Gbps UWB Impulse Radio in Wireless Inter/Intra-Chip Data Communication	P. K. Saha N. Sasaki T. Kikkawa	Ext. abst. of the 2005 International Conference on Solid State Devices and Materials			310-311	(2005)	原著
A Single Chip UWB Receiver based on 0.18- $\mu$ m CMOS Technology	N. Sasaki P. K. Saha T. Kikkawa	Proc. of 2005 International Workshop on UWB Technologies			46-50	(2005)	原著
Effect of plasma treatment and TMCTS vapor annealing on the reinforcement of porous low-k films	K. Kohmura S. Ohike M. Muramkami H. Tanaka T. Ono Y. Seino T. Kikkawa	Proc. 2005 MRS Spring B3 Meeting		10	55	(2005)	原著
A Novel Organic Low-k Film Deposited by Plasma-Enhanced Co-Polymerization	N. Kunimi A. Nakano K. Kinoshita M. Komatsu T. Kikkawa	Proc. 2005 MRS Spring B8.1 Meeting		863	103-108	(2005)	原著
Mechanical Strength Enhancement in Porous Silica Film by TMCTS Treatment	N. Fujii T. Nakayama N. Hata Y. Seino Y. Takasu T. Kikkawa	Proc. 2005 MRS Spring B.8.17 Meeting		812	43-48	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 号 (Vol.) (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Recovery of Plasma Process Induced Damage in Porous Silica Low-k Films by Organosiloxane Vapor Post Annealing	T. Ono K. Kinoshita H. Takahashi N. Fujii K. Kohmura Y. Sonoda R. Yagi M. Shimoyama N. Hata T. Kikkawa	Proc. International Conference on IC Design & Technology		107-110	(2005)	原著
Development of Porous Low-k Interlayer Dielectrics for 45 nm Technology Node," Abst. 207th Meeting of The Electrochemical Society, Inc.	T. Kikkawa Y. Oku N. Fujii K. Kohmura N. Hata Y. Seino H. Miyoshi H. Tanaka A. Nakano T. Gotoh A. Ishikawa H. Matsuo Y. Sonoda K. Kinoshita	Abst. 207th Meeting of The Electrochemical Society	723		(2005)	原著
Hybrid Low-k / Cu Dual Damascene Process for 45-32 nm Technology Node Using Self-Assembled Porous-Silica Ultra Low-k Films	S. Chikaki R. Yagi Y. Shishid T. Yoshino T. Ono N. Fujii T. Nakayama K. Kohmura H. Tanaka A. Ishikawa H. Matsuo N. Hata Y. Seino T. Gotoh J. Kawahara Y. Sonoda N. Kunimi Y. Uchida S. Hishiya K. Kinoshita T. Kikkawa	Proc. 2005 IEEE International Interconnect Technology Conference		48-50	(2005)	原著
Control of Process-Induced Damages in Self-Assembled Porous Silica /Cu Damascene Interconnects for 45nm Node and Beyond,	R. Yagi S. Chikaki M. Shimoyama T. Yoshino T. Ono A. Ishikawa N. Fujii N. Hata T. Nakayama K. Kohmura H. Tanaka T. Gotoh J. Kawahara Y. Sonoda H. Matsuo Y. Seino K. Kinoshita T. Kikkawa	Tech. Dig. 2005 Symposium on VLSI Technology, IEEE		146-147	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Feasibility Study of a Novel Molecular-Pore-Stacking (MPS), SiOCH Film in Fully-scale-down, 45nm-node Cu Damascene Interconnects	M. Tada H. Ohtake M. Narihiro F. Itoh T. Hataji M. Tohara K. Motoyama Y. Kawama M. Tanoue M. Abe T. Takeuchi K. Arai S. Saitoh N. Furutake T. Onodera J. Kawahara K. Kinoshita N. Hata T. Kikkawa, et al	Tech. Dig. 2005 Symposium on VLSI Technology, IEEE			18-19	(2005)	原著
Distributions of electron density and deposition rate of a narrow-gap plasma polymerization system	K. Kinoshita N. Nakamura J. Kawahara O. Kiso N. Toyoda H. Sugai T. Kikkawa	Proc. XXVII International Conference on Phenomena in Ionized Gases			200	(2005)	原著
Mechanical Strength of Multilayered Dielectric Structures Measured by Laser-Pulse Generated Surface-Acoustic-Wave Technique	T. Takimura N. Hata T. Nakayama Y. Shishida R. Yagi J. Kawahara S. Chikaki N. Fujii T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials			52-53	(2005)	原著
Electrical Characteristics of Porous Zeolite Interlayer Dielectrics	T. Yoshino G. Guao N. Hata N. Fujii T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials			58-59	(2005)	原著
Adsorption in-situ Spectroscopic Ellipsometry Analysis of Disordered Porous Silica Low-k Films	X. Li N. Fujii N. Hata T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials			294-295	(2005)	原著
Infrared Complex Dielectric Function Analysis for Chemical Bonding Structure of Porous Silica Low Dielectric Constant Films	S. Takada N. Hata S. Hishiya N. Fujii T. Nakayama T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials			552-553	(2005)	原著
Comparison of Pore Shape Models for Small Angle X-ray Scattering of a Disordered Porous Silica Low-k film	N. Kunishige N. Hata N. Fujii T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials			292-293	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Comparative Studies of Pore Seal Films for Porous-Silica / Cu Interconnect	Y. Shishida S. Chikaki M. Shimoyama R. Yagi T. Yoshino T. Ono A. Ishikawa N. Fujii T. Nakayama K. Kohmura H. Tanaka J. Kawahara Y. Sonoda H. Matsuo S. Hishiya T. Yamanishi K. Kinoshita T. Kikkawa	Extend. Abst.2005 International Conference on Solid State Devices and Materials			302-303	(2005)	原著
Extraction of process-induced damage in low-k/Cu damascene structure	S. Chikaki R. Yagi T. Yoshino Y. Shishida T. Ono A. Ishikawa H. Matsuo N. Fujii T. Nakayama K. Kohmura H. Tanaka N. Hata T. Kikkawa, et al	Proc. International Symposium on Semiconductor Manufactureing 2005, IEEE			422-425	(2005)	原著
Influence of Cu Electroplating Solutions on Leakage Current in Self-Assembled Porous Silica Low-k Films	M. Shimoyama R. Yagi S. Chikaki N. Fujii T. Nakayama K. Kohmura H. Tanaka K. Kinoshita T. Kikkawa	Proc. Advanced Metallization Conference 2005		VI.6		(2005)	原著
Influence of CMP chemicals on the properties of porous silica low-k films	A. Ishikawa Y. Shishida T. Yamanishi N. Hata T. Nakayama N. Fujii H. Tanaka H. Matsuo T. Kikkawa	Proc. Advanced Metallization Conference 2005		IX.3		(2005)	原著
Influence of Cu Electroplating Solutions on Leakage Current in Self-Assembled Porous Silica Low-k Films	M. Shimoyama R. Yagi S. Chikaki N. Fujii T. Nakayama K. Kohmura H. Tanaka K. Kinoshita T. Kikkawa	Proc. Advanced Metallization Conference 2005: 15th Asian Session			36-37	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Self-assembled porous silica/Cu damascene interconnects for 45nm node and beyond	T. Kikkawa R. Yagi S. Chikaki M. Shimoyama T. Ono N. Fujii K. Kohmura H. Tanaka T. Nakayama A. Ishikawa H. Matsuo Y. Sonoda N. Hata Y. Seino T. Yoshino K. Kinoshita	Proc. SPIE Optics East 2005			71	(2005)	原著
Fabrication of Mesoporous Silica for Ultra-low-k Interlayer Dielectrics	N. Fujii K. Kohmura T. Nakayama H. Tanaka N. Hata Y. Seino T. Kikkawa	Proc. SPIE Optics East 2005			71	(2005)	原著
Developments of Plasma Copolymerization Technique for Deposition of low-k Films	K. Kinoshita A. Nakano N. Kunimi M. Shimoyama J. Kawahara O. Kiso H. Miyoshi Y. Seino Y. Takasu R. Ichikawa M. Komatsu N. Nakamura Y. Hayashi T. Kikkawa	Proc. AVS 52nd International Symposium			113	(2005)	原著
Effect of Dry Etching Chemistry on Reduction of Surface Roughness of Porous Silica Low-k Film	T. Ono K. Kinoshita K. Kurihara Y. Takasu Y. Seino N. Hata T. Kikkawa	Proc. 27th International Symposium on Dry Process			.41-42	(2005)	原著
A Novel Organosiloxane Vapor Annealing Process for Improving Properties of Porous Low-k Films	K. Kohmura S. Oike M. Murakami H. Tanaka S. Takada Y. Seino T. Kikkawa	Proc. 27th International Symposium on Dry Process			199-200	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Advanced Scalable Ultralow-k/Cu Interconnect Technology for 32 nm CMOS ULSI Using Self-Assembled Porous Silica and Self-aligned CoWP Barrier	T. Kikkawa S. Chikaki R. Yagi M. Shimoyama Y. Shishida N. Fujii K. Kohmura H. Tanaka T. Nakayama S. Hishiya T. Ono T. Yamanishi A. Ishikawa H. Matsuo Y. Seino N. Hata T. Yoshino S. Takada J. Kawahara K. Kinoshita	Technical Digest, International Electron Devices Meeting, IEEE			99-102	(2005)	原著
Evaluation of Front-Opening Unified Pod with Attached UV/Photocatalyst Cleaning Unit	M. Suzuki T. Tabei S. Yokoyama K. Miyamoto T. Wada T. Fujii	Jpn. J. Appl. Phys.	44	2	1130-1131	(2005)	原著
Mechanism of Anomalous Behavior of Metal-Oxide-Semiconductor Capacitors Contaminated with Organic Molecules	M. Suzuki S. Yokoyama	Jpn. J. Appl. Phys.	44	3	1208-1212	(2005)	原著
Contact-Hole Etching with NH <sub>3</sub> -Added C <sub>5</sub> F <sub>8</sub> Pulse-Modulated Plasma	M. Ooka S. Yokoyama	Jpn. J. Appl. Phys.	44	9A	6476-6480	(2005)	原著
プラズマベーススイオン注入滅菌法における窒素イオンエネルギーの推定	近藤 洋平 中島 健 田中 武 高木 俊宜 渡邊 悟志 大倉 健作 芝原 健太郎 横山 新	真空	48	5	339-342	(2005)	原著
Plasma-based ion implantation sterilization technique and ion energy estimation	T. Tanaka S. Watanabe K. Shibahara S. Yokoyama T. Takagi	J. Vac. Sci. Technol.	A 23	4	1018-1021	(2005)	原著
新規変調プラズマによるSiH <sub>4</sub> /H <sub>2</sub> プラズマCVDリアクター内のダスト微粒子の抑制	島田 学 柏原 伸紀 林 豊 奥山 喜久夫 横山 新 池田 弥央	エアロゾル研究	20	3	231-237	(2005)	原著
Structure and Optical Band-Gap Energies of Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> Thin Films Fabricated by RF Magnetron Plasma Sputtering	Zhimou Xu M. Suzuki S. Yokoyama	Jpn. J. Appl. Phys.	44	12	8507-8511	(2005)	原著
Design and Simulation of Ring Resonator Switches using Electro-Optic Materials	Y. Tanushi S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials			318-319	(2005)	原著
Structural and Optical Properties of Electro-Optic Material: Sputtered (Ba,Sr)TiO <sub>3</sub>	M. Suzuki Zhimou Xu Y. Tanushi S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials			732-733	(2005)	原著



論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Groove-Buried Optical Waveguides Based on Metal Organic Solution-Derived Ba <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> Thin Films	Zhimou Xu M. Suzuki, Y. Tanushi K. Wakushima S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials			738-739	(2005)	原著
Fabrication of spin-coat optical waveguides for optically interconnected LSI and influence of fabrication process on lower layer MOS capacitors	T. Tabei K. Maeda S. Yokoyama H. Sunami	Ext. Abst. Int. Conf. on Solid State Devices and Materials			332-333	(2005)	原著
Novel Fabrication Technique of Optical Waveguides using Low Density Silicon Nitride Films Deposited by Plasma-Enhanced Chemical Vapor Deposition	S. Yokoyama T. Kakite	Ext. Abst. Int. Conf. on Solid State Devices and Materials			736-737	(2005)	原著
High-Speed and Low-Voltage Ring Resonator Optical Switches Using Electro- and Magneto-Optic Materials	Y. Tanushi S. Yokoyama	2nd International Conference on Group IV Photonics			165-167	(2005)	原著
Modified Direct-Current Current-Voltage Method for Interface Trap Density Extraction in Metal-Oxide-Semiconductor Field-Effect-Transistor with Tunneling Gate Dielectrics at High Temperature	S. Zhu A. Nakajima T. Ohashi H. Miyake	Jpn. J. Appl. Phys.	44	2A	L60-L62	(2005)	原著
Abnormal enhancement of interface trap generation under dynamic oxide field stress at Mega Hz region	S. Zhu A. Nakajima T. Ohashi H. Miyake	Appl. Phys. Lett.	86	8	083501(1-3)	(2005)	原著
Interface Trap Generation Induced by Charge Pumping Current under Dynamic Oxide Field Stresses	S. Zhu A. Nakajima T. Ohashi H. Miyake	IEEE Electron Device Lett.	26	3	216-218	(2005)	原著
Room-temperature operation of an exclusive-OR circuit using a highly doped Si single-electron transistor	T. Kitade K. Ohkura A. Nakajima	Appl. Phys. Lett.	86	12	123118(1-3)	(2005)	原著
Annealing Temperature Dependence on Nickel-Germanium Solid-State Reaction	S. Zhu A. Nakajima	Jpn. J. Appl. Phys.	44	24	L753-L755	(2005)	原著
Enhancement of BTI Degradation in pMOSFETs under High-Frequency Bipolar Gate Bias	S. Zhu A. Nakajima T. Ohashi H. Miyake	IEEE Electron Device Lett.	26	6	387-389	(2005)	原著
Carrier Mobility in Metal-Oxide-Semiconductor Field Effect Transistor with Atomic-Layer-Deposited Si-Nitride Gate Dielectrics	A. Nakajima H. Ishii S. Yokoyama	Jpn. J. Appl. Phys.	44	28	L903-L905	(2005)	原著
Atomic-Layer-Deposited Si-Nitride/SiO <sub>2</sub> Stack Gate Dielectrics for Future High-Speed DRAM with Enhanced Reliability	A. Nakajima T. Ohashi S. Zhu S. Yokoyama S. Michimata H. Miyake	IEEE Electron Device Lett.	26	8	538-540	(2005)	原著
Pulse Waveform Dependence on Ac Bias Temperature Instability in pMOSFETs	S. Zhu A. Nakajima T. Ohashi H. Miyake	IEEE Electron Device Lett.	26	9	658-660	(2005)	原著
Interface trap and oxide charge generation under negative bias temperature instability of p-channel metal-oxide-semiconductor field-effect transistors with ultrathin plasma-nitrided SiON gate dielectric	S. Zhu A. Nakajima T. Ohashi H. Miyake	J. Appl. Phys.	98	11	114504(1-6)	(2005)	原著
Periodic Coulomb oscillation in Si single-electron transistor based on multiple islands	K. Ohkura T. Kitade A. Nakajima	J. Appl. Phys.	98	12	124503(1-6)	(2005)	原著
Temperature Dependence of Ni-Germanide Formed by Ni-Ge Solid-State Reaction	S. Zhu A. Nakajima Y. Yokoyama K. Ohkura	Extend. Abst. 5th International Workshop on Junction Technology 2005			85-86	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻 (Vol.)	号 (No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Influence of bulk bias on NBTI of pMOSFETs with ultrathin SiON gate dielectric	S. Zhu A. Nakajima T. Ohashi H. Miyake	Extend. Abst. 2005 Int. Conf. on Solid State Devices and Materials			872-873	(2005)	原著
Application of Arsenic Plasma Doping in Three-Dimensional MOS Transistors and the Doping Profile Evaluation	K. Kobayashi T. Eto K. Okuyama K. Shibahara H. Sunami	Jpn. J. Appl. Phys.			2273-2278	(2005)	原著
High-Aspect-Ratio Structure Formation Techniques for Three-Dimensional Metal-Oxide-Semiconductor Transistors	H. Sunami K. Okuyama	Abstract of 31st International Conference on Micro- and Nano-Engineering Systems & Computers in Japan	11B_03		19-22	(2005)	原著
Chip Size and Performance Evaluations of Shared Cache for On-chip Multiprocessors	T. Sasaki T. Inoue N. Omori T. Hironaka H.J. Mattausch T. Koide		36	9	1-13	(2005)	原著
A Cost-Efficient High-Performance Dynamic TCAM with Pipelined Hierarchical Searching and Shift Redundancy Architecture	H. Noda K. Inoue M. Kuroiwa F. Igaue K. Yamamoto H.J. Mattausch T. Koide A. Amo A. Hachisuka S. Soeda F. Morishita K. Dosaka K. Arimoto T. Yoshihara	IEEE Journal of Solid-State Circuits	40		245-253	(2005)	原著
Embedded Low-Power Dynamic TCAM Architecture with Transparently Scheduled Refresh	H. Noda K. Inoue H.J. Mattausch T. Koide K. Dosaka K. Arimoto K. Fujishima K. Anami T. Yoshihara	IEICE Trans. on Electronics	E88-C		622-629	(2005)	原著
A Parallel Hardware Design for Snake Models with an FPGA Architecture	A. Ahmadi H.J. Mattausch T. Koide	International Workshop on Nonlinear Signal and Image Processing			146-150	(2005)	原著
A CAM-based signature-matching co-processor with application-driven power-reduction features	K. Inoue H. Noda K. Arimoto H.J. Mattausch T. Koide	IEICE Trans. On Electronics	E88-C		1332-1342	(2005)	原著
An LSI hardware design for online character recognition using associative memory	A. Ahmadi Y. Shirakawa Md. A. Abedin K. Kamimura H.J. Mattausch T. Koide	Proceedings of the 48th IEEE International Midwest Symposium on Circuits and Systems			464-467	(2005)	原著
A Parallel Hardware Design for Parametric Active Contour Models	A. Ahmadi Md. A. Abedin H.J. Mattausch T. Koide	Proceedings of the IEEE International Conference on Advanced Video and Signal based Surveillance			609-613	(2005)	原著

論文の標題 (Titles)	著者名 (Authors)	誌名 (Magazines)	巻号 (Vol. No.)	頁 (Pages)	(年) (Year)	論文種別 (Classif.)
Evaluation of a Bank-based Multi-port Memory Architecture with Blocking Network	T. Inoue T. Hironaka T. Sasaki S. Fukae T. Koide H.J. Mattausch	IEICE Trans. on Fundamentals of Electronics, Communications and Computer Science	J88-A	498-510	(2005)	原著
A Low-Power Video Segmentation LSI with Boundary-Active-Only Architecture	T. Morimoto O. Kiriya H. Adachi, Z. Zhu T. Koide H.J. Mattausch	Proceedings of the Asia and South Pacific Design Automation Conference		D13-D14	(2005)	原著
Design of Superscalar Processor with Multi-Bank Register File	T. Saito M. Maeda T. Hironaka K. Tanigawa T. Sueyoshi K. Aoyama T. Koide H.J. Mattausch	Proc. IEEE Int. Symposium on Circuits and Systems		3507-3510	(2005)	原著
Object Tracking in Video Pictures based on Image Segmentation and Pattern Matching	T. Morimoto O. Kiriya Y. Harada H. Adachi T. Koide H.J. Mattausch	Proc. IEEE Int. Symposium on Circuits and Systems		3215-3218	(2005)	原著
CAM-based VLSI Architecture for Huffman Coding with Real-time Optimization of the Code Word Table	T. Kumaki Y. Kuroda T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	Proc. IEEE Int. Symposium on Circuits and Systems		5202-5205	(2005)	原著
Multi-Port CAM based VLSI Architecture for Huffman Coding with Real-time Optimized Code Word Table	T. Kumaki Y. Kuroda T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	Proceedings of the 48th IEEE International Midwest Symposium on Circuits and Systems		55-58	(2005)	原著
Image-Scan Architecture for Efficient FPGA/ASIC Implementation of Video-Segmentation by Region Growing	H. Adachi T. Morimoto K. Yamaoka T. Koide H.J. Mattausch	Proceedings of the International SoC Design Conference		301-304	(2005)	原著
Highly Parallel Huffman Encoding by Exploiting Multiple Matches in Content Addressable Memory	Y. Kuroda T. Kumaki, T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	Proceedings of the International SoC Design Conference		313-316	(2005)	原著

博士論文(Doctorial Dissertations)

論文題目(Titles)	著者名(Authors)	主査	副査	出版年
<b>課程博士</b>				
Simulation Study of the Nonlinear Convection and the Dynamo Action in a Rotating Spherical Shell (回転球殻における非線形対流とダイナモ作用に関するシミュレーション研究)	西川 憲明	小口 多美夫	城 健男 小方 厚 草野 完也	(2005)
Study of Magnetic Helicity in Solar Active Regions (太陽活動領域における磁気ヘリシティに関する研究)	真栄城 朝弘	小口 多美夫	城 健男 小方 厚 草野 完也	(2005)
高速シリアル伝送用インタフェース回路技術の研究 (A study of interface circuits for high-speed serial data links)	吉村 勉	岩田 穆	吉川 公麿 マタウシ ユン ス ユルケン 佐々木 守	(2005)
ソース・ドレイン積み上げ型MOSトランジスタの形成技術に関する研究 (Study on Fabrication Technology of Elevated Source and Drain MOSFET)	中野 雅行	新宮原 正三	高萩 隆行 宮崎 誠一 横山 新 芝原 健太郎	(2005)
高密度ビームの空間電荷効果に関する理論的研究 (Theoretical study of space charge effects in high density ion beams)	岡部 晃大	岡本 宏己	小方 厚 遠藤 一太 城 健男	(2005)
Tunneling spectroscopy of novel layered superconductors MgB <sub>2</sub> , Li <sub>0.48</sub> (THF)yHfNCI and related substances (新規層状超伝導体MgB <sub>2</sub> ,Li <sub>0.48</sub> (THF)yHfNCIおよび関連物質のトンネル分光)	高崎 智昭	浴野 稔一	高島 敏郎 永井 克彦 藤井 博信 山中 昭司	(2005)
Laser Cooling and Phase Transition of Fast Ion Beams Circulating in a Storage Ring (高速蓄積イオンビームのレーザー冷却と相転移)	百合 庸介	岡本 宏己	小方 厚 遠藤 一太 小口 多美夫	(2005)
Optimum Target Position of Ion Production in Ultrashort-Pulse Laser Interaction with Foil Targets under the Existence of Prepulses (プリパルスのある超短パルスレーザーと薄膜の相互作用によるイオン生成における薄膜最適位置)	和田 芳夫	小方 厚	遠藤 一太 城 健男	(2005)
Hydrogen storage properties of well-catalyzed magnesium hydride by mechanical milling (メカニカルミリング法により触媒処理したマグネシウム水素化物の水素貯蔵特性)	花田 信子	藤井 博信	高島 敏郎 宇田川 眞行 浴野 稔一 荻田 典男 山中 昭司	(2005)
Isolation, Characterization, and Application of Solvent-Tolerant Rhodococcus opacus Strains (有機溶媒耐性Rhodococcus opacusの取得、解析と活用に関する研究)	羅 景洙	加藤 純一	西尾 尚道 小埜 和久 黒田 章夫 大竹 久夫	(2005)
Studies on some novel functional aspects of the multidrug resistance ABC transporter Pdr5p of Saccharomyces cerevisiae (出芽酵母多剤耐性ABCトランスポーターPdr5pの新規機能に関する研究)	Andreea Cristina Tutulan-Cunita	宮川 都吉	平田 大 木梨 陽康	(2005)
好熱性嫌気性細菌Moorella sp.を用いたガス基質からのエタノール及び酢酸生産に関する研究 (Studies on production of ethanol and acetate from gaseous substrate by a thermophilic anaerobic bacterium, Moorella sp.)	酒井 伸介	西尾 尚道	加藤 純一 小埜 和久 柿園 俊英	(2005)
Pseudomonas aeruginosaの走化性トランスデューサー様蛋白質ファミリーの機能解析 (Functional analysis of chemotaxis transducer like protein family in Pseudomonas aeruginosa)	下城 麻衣子	加藤 純一	西尾 尚道 山田 隆 黒田 章夫	(2005)
大腸菌緊縮応答制御におけるポリリン酸の役割 (Roles of inorganic polyphosphate on the stringent control in Escherichia coli)	野村 和孝	黒田 章夫	宮川 都吉 山田 隆 加藤 純一	(2005)
前立腺肥大症の発生・進展におけるエストロゲンの役割:ポリエン系抗真菌薬メパルトリシンの血中エストロゲン低下を介した抗前立腺肥大作用 (Role of estrogen on the pathogenesis of Benign Prostatic Hyperplasia(BPH):Therapeutic effect of mepartricin, a polyene macroride antibiotic, via blood estrogen-lowering action on BPH)	赤藤 修司	土屋 英子	宮川 都吉 小埜 和久	(2005)

論文題目(Titles)	著者名(Authors)	主査	副査	出版年
High Rate Growth and Characterization of Crystalline Silicon Films from Inductively-Coupled SiH <sub>4</sub> Plasma (誘導結合型SiH <sub>4</sub> プラズマからの高結晶性シリコン薄膜の高速堆積)	Nihan Kosku	宮崎 誠一	横山 新 角南 英夫 東 清一郎	(2005)
Methods and Technologies for Functional Memories with Content Addressability, Optimized Bandwidth and Scalability (コンテンツアドレサビリティ機能メモリとアクセスバンド、スケーラビリティに係る効率的応用技術の研究)	井上 一成	マウシュ ハンス ユルゲン	岩田 穆 吉川 公麿 佐々木 守 小出 哲士	(2005)

#### 論文博士

小型ベータロンを用いた大型建造物の非破壊検査法の研究 (Study for a Method of Non-destructive testing of Huge Construct with the Small-size Betatrons)	大西 健広	遠藤 一太	小方 厚 高萩 隆行 高橋 徹	(2005)
極微細MOSFETのゲートスタックにおける化学構造分析及び電気的特性評価 (Characterization of Electrical Properties and Chemical Structures of Advanced Gate Stacks for Ultra-Small Scaled MOSFETs)	村上 秀樹	宮崎 誠一	角南 英夫 吉川 公麿 横山 新 芝原 健太郎 中島 安理	(2005)
感光性ポリイミドの光反応と熱機械物性の研究 (Study on photoreaction and thermomechanical properties of photosensitive polyimides)	浅野 昌也	高萩 隆行	角屋 豊 宮崎 誠一	(2005)

著書(Published Books)

著書名(編集者)(Book Titles)	著者名(Authors)	発行所(Publisher)	発行年 (Year)	編・著・訳・分担執筆 等の区別
LINEAR COLLIDER PHYSICS IN THE NEW MILLENNIUM	G. A. Blair D. J. Miller J. F. Gunion Y. Sumino J. L. Feng M. M. Nojiri W. Kilian K. Meonig J. L. Hewett P. N. Burrows T. Takahashi D. Atwood A. Soni K. Fujii M. E. Peskin	World Scientific	(2005)	分担執筆
Terahertz Optoelectronics (K. Sakai ed.)	Y. Kadoya K. Hirakawa	Springer Verlag	(2005)	分担執筆
物理学辞典 三訂版	西川 哲治 鈴木 増雄 高根 美武 城 健男 高島 敏郎 永井 克彦 他	培風館	(2005)	分担執筆
水素エネルギーと材料技術 第4章水素貯蔵材料「3. 無機系材料」	監修 秋葉悦男 藤井 博信 市川 貴之 他	CMC出版	(2005)	分担執筆
真核微生物の多剤耐性ABCトランスポーター	植田 和光 編 宮川 都吉	学会出版センター	(2005)	分担執筆
製パン廃棄物(水素・メタン二段発酵技術)からの水素 製造「水素利用技術集成 Vol.2」	中島田 豊 西尾 尚道	エヌ・ティ・エス	(2005)	分担執筆
水素メタン二段発酵技術 「エコバイオエネルギーの最前線-ゼロエミッション型社 会を目指して-」	中島田 豊 西尾 尚道	シーエムシー出版	(2005)	分担執筆

特許 (Registered Patents)

発明の名称(Titles of the Invention)	発明者(全員) (Inventors)	特許番号(Patent No.)	登録年月日 (Date of Registration)
精製ダニアルルゲン	小埜 和久 重田 征子 和田 武志	特許第3729206号	2005.10.14
画像分割処理方法、画像分割処理装置、画像処理方法及び画像処理装置	小出 哲士 マウシュ ハンス ユルゲン 森本 高志 原田 洋明	台湾特許第I 226193号	2005.1.1
画像分割処理方法、画像分割処理装置、画像処理方法及び画像処理装置	小出 哲士	韓国特許第505311号	2005.7.20
画像分割処理方法、画像分割処理装置、リアルタイム画像処理方法、リアルタイム画像処理装置及び画像処理集積化回路	小出 哲士 マウシュ ハンス ユルゲン 森本 高志	特許第3689740号	2005.6.24
マルチポートキャッシュメモリ	マウシュ ハンス ユルゲン 岸 浩二 大森 伸彦	米国特許6845429号	2005.1.18
自己調整型ウィンナ・ラインアップ増幅器	マウシュ ハンス ユルゲン 小出 哲士 マウシュ ハンス ユルゲン 小出 哲士	特許第3742878号 米国特許6853251号	2005.11.25 2005.2.8
自己調整型ウィンナ・ラインアップ増幅器	マウシュ ハンス ユルゲン 小出 哲士	韓国特許第504294号	2005.7.20
酸化膜の角で生じるキャリアのディープレベル捕獲を利用した不揮発性メモリ	三浦道子 小野剛史 マウシュ ハンス ユルゲン	特許第3643864号	2005.2.10
共有メモリ	マウシュ ハンス ユルゲン	米国特許6874068号	2005.3.29
パターンマッチング及びパターン認識システム、このシステムに用いられる連想メモリ装置、パターンマッチング及びパターン認識処理方法	マウシュ ハンス ユルゲン	台湾特許第I 230361号	2005.4.1
半導体連想メモリ	マウシュ ハンス ユルゲン 行天 隆幸	韓国特許第501623号	2005.7.6
半導体連想メモリ	マウシュ ハンス ユルゲン 行天 隆幸	特許第3731046号	2005.10.21
X線発生装置	遠藤 一太 中山 光一 平田 寛	特許第3677103号	2005.5.13