

A. 量子物質科学

	論文課題	著者名	誌名、巻、号、(年頁)	論文種別
A1	On the Orbital Magnetic Moment of V Ion in Vanadium Perovskites	T. Jo	J. Phys. Soc. Japan, 72, 1 (2003) 原著 pp. 155-159	
A2	On the Magnetic State of Titanium Ion in YTiO ₃	T. Jo	J. Phys. Soc. Japan, 72, 6 (2003) 原著 pp. 1814-1815	
A3	Upper critical field and field-induced superconductivity in layered superconductors with antiferromagnetic subsystems	H. Shimahara	Physica B, 329-333 (2003) 原著 pp. 1442-1443	
A4	Internal Transition of Superconducting State by Impurity Doping with a Jump of Isotope Effect Coefficient in Multi-Band Superconductors	H. Shimahara	J. Phys. Soc. Japan (Letters), 72, 原著 8 (2003) pp. 1843-1846	
A5	Isotope Effect of Superconductors with Coexisting Interactions of Phonon and Nonphonon Mechanisms	H. Shimahara	J. Phys. Soc. Japan (Letters), 72, 原著 8 (2003) pp. 1851-1854	
A6	A New Scenario on the Metal-Insulator Transition in VO ₂	A. Tanaka	Journal of the Physical Society of Japan, 72 (2003) 原著 pp. 2433-2436	
A7	Theory on electronic structure and phase transitions in V ₂ O ₃	A. Tanaka	Physica B, 329-333P2 (2003) 原著 pp. 753-754	
A8	Anomalous spin polarization and dualistic electronic nature of Cr ₂ O ₃	D. J. Huang L. H. Tjeng J. Chen C. F. Chang W. P. Wu S. C. Chung A. Tanaka G. Y. Guo H. -J. Lin S. G. Shyu C. C. Wu C. T. Chen	Physical Review B, 67 (2003) 原著 pp. 214419 (5 pages)	
A9	Crossing the gap from p- to n-type doping: nature of the states near the chemical potential in La _{2-x} Sr _x CuO ₄ and Nd _{2-x} Ce _x CuO ₄	P. G. Steeneken L. H. Tjeng G. A. Sawatzky A. Tanaka O. Tjernberg G. Ghiringhelli N. B. Brookes A. A. Nugroho A. A. Menovsky	Phy. Rev. Lett., 90 (2003) 原著 pp. 247005 (4 pages)	
A10	Polarization Performance of a New Spectrometer Based on a Multilayer-Coated Laminar Grating in the 150-190-eV Region	S. Ishikawa S. Ichikura T. Imazono S. Otani T. Oguchi M. Yanagihara	Optical Rev., 10 (2003) 原著 pp. 58-62	
A11	First-Principles Studies of Antiferromagnetic MnO and NiO Surfaces	H. Momida T. Oguchi	J. Phys. Soc. Jpn., 72 (2003) 原著 pp. 588-593	
A12	Contribution of Pb to Ferroelectricity in Perovskite-type Oxides	H. Miyazawa F. Ishii N. Ishida E. Natori T. Shimoda T. Oguchi	Mat. Res. Soc. Symp. Proc., 748 (2003) 原著 pp. 187-197	

A13	Electronic structure of B 2p _x and p _y states in MgB ₂ , AlB ₂ and ZrB ₂ single crystal	J. Nakamura S. Nasubida E. Kabasawa H. Yamazaki N. Yamada K. Kuroki M. Watanabe T. Oguchi S. Lee A. Yamamoto S. Tajima Y. Umeda S. Minakawa N. Kimura H. Aoki S. Otani S. Shin T. A. Callcott D. L. Ederer J. D. Denlinger R. C. C. Perera	Physical Review, B 68 (2003) 原著 pp. 064515 (5 pages)
A14	First-principles prediction of half-metallic ferromagnetic semiconductors: V- and Cr-doped BeTe	S. Picozzi T. Shishidou A. J. Freeman B. Delley	Physical Review, B 67, 16 (2003) 原著 pp. 165203
A15	Ruderman-Kittel-Kasuya-Yoshida-like Ferromagnetism in Mn[sub x]Ge[sub 1-x]	Yu-Jun Zhao T. Shishidou A. J. Freeman	Phy. Rev. Lett., 90, 4 (2003) 原著 pp. 047204
A16	Overlayer and superlattice studies of metal/ceramic interfaces: Fe/TiC	T. Shishidou Joo-Hyoung Lee Yu-Jun Zhao A. J. Freeman G. B. Olson	Journal of Applied Physics, 93, 10 原著 (2003) pp. 6876
A17	Measurement of Magnetic Helicity Flux into the Solar Corona	K. Kusano T. Maeshiro T. Yokoyama T. Sakurai	Advances in Space Research, 32, 原著 10 (2003) pp. 1917-1922
A18	Annihilation of Magnetic Helicity: A New Model for Solar Flare Onset	K. Kusano T. Yokoyama T. Maeshiro T. Sakurai	Advances in Space Research, 32, 原著 10 (2003) pp. 1931-1936
A19	Relation between Magnetic Helicity Injection and Flare Activities in Active Region NOAA8100	T. Yokoyama K. Kusano T. Maeshiro T. Sakurai	Advances in Space Research, 32, 原著 10 (2003) pp. 1949-1952
A20	CDW-induced negative thermal expansion in two-dimensional conductor -Mo ₄ O ₁₁	H. Negishi Y. Kuroiwa H. Akamine S. Aoyagi A. Sawada T. Shobu S. Negishi M. Sasaki	Solid State Commun., 125, 1 原著 (2003) pp. 45-49

A21	Electronic structure of oxysulfide $(LaO)CuS$ and $(La_{1-x}Ca_xO)Cu_{1-x}Ni_xS$ ($x < 0.10$) studied by photoemission and inverse-photoemission spectroscopies	H. Sato H. Negishi A. Wada A. Ino S. Negishi C. Hirai H. Namatame M. Taniguchi K. Takase Y. Takahashi T. Shimizu Y. Takano K. Sekizawa	Physical Review, B 68, 3 (2003) 原著 pp. 035112(1-8)
A22	Electrical resistivity and photoemission spectra of layered oxysulfide $(La_{1-x}Ca_xO)Cu_{1-x}Ni_xS$	K. Takase T. Shimizu K. Makihara H. Sato H. Negishi Y. Takahashi Y. Takano K. Sekizawa Y. Kuroiwa S. Aoyagi A. Utsumi A. Wada A. Ino H. Namatame M. Taniguchi	Physica B, 329-333 (2003) 原著 pp. 898-899
A23	Electron charge density study on the bonding nature in MoO_3	Y. Kuroiwa N. Sato A. Sawada S. Negishi H. Negishi S. Aoyagi	J. Phys. Soc. Japan, 72, 11 (2003) 原著 pp. 2811-2815
A24	NMR studies of the electron-doped hafnium nitride superconductor	H. Tou Y. Maniwa S. Yamanaka M. Sera	Physica B, 329-333 (2003) 原著 pp. 1323-1324
A25	C70 Molecular Stumbling inside Single-Walled Carbon Nanotubes	Y. Maniwa H. Kataura M. Abe A. Fujiwara R. Fujiwara H. Kira H. Tou S. Suzuki Y. Achiba E. Nishibori M. Takata M. Sakata H. Suematsu	Journal of the Physical Society of Japan, 72 (2003) pp. 45-48 原著
A26	Superconducting characteristics in electron-doped layered hafnium nitride: ^{15}N isotope effect	H. Tou Y. Maniwa S. Yamanaka	Physical Review, B 67 (2003) 原著 pp. 100509 (R) (1-4)
A27	Apperance of the Phase IV in $Ce_xLa_{1-x}B_6$ at $x < 0.8$	S. Kobayashi Y. Yoshino S. Tsuji N. Tou M. Sera F. Iga	Journal of the Physical Society of Japan, 72 (2003) 原著 pp. 2947-2954

A28	⁷⁵ As NQR/NMR Study of Successive Phase Transitions and Energy Gap Formation in Kondo Semiconductor CeRhAs	M. Matsumura T. Sasakawa T. Takabatake S. Tsuji H. Tou M. Sera	Journal of the Physical Society of Japan, 72 (2003) pp. 1030-1033
A29	Al knight-shift measurement in the superconducting state of UNi ₂ Al ₃	K. Ishida H. Tou N. Tateiwa Y. Kitaoka K. N. Sato N. Aso C. Geibel F. Steglich	Physica C: Superconductivity, 原著 388-389 (2003) pp. 535-536
A30	Electron doping and superconductivity in layer-structured nitride chlorides, beta-MNCL(M=Zr, Hf)	S. Yamanaka L. Zhu X. Chen H. Tou	Physica B: Condensed matter, 原著 328(1-2) (2003) pp. 6-9
A31	強相関電子系におけるスピン3重項超伝導 - NMR 実験を中心として		固体物理(アグネ), 38 (2003) 解説 pp. 179-200
A32	Kondo Effect in the Long-Range Antiferromagnetic Ordered State-Ce _x Nd _{1-x} B ₆ -	S. Kobayashi Y. Yoshino S. Tsuji M. Sera F. Iga	J. Phys. Soc. Jpn., 72, 1 (2003) 原著 pp. 25-28
A33	Magnetic and Thermoelectric Properties of Ce ₂ NiB ₁₀₋ (=0.3), a Ni-incorporated Variant of CeB ₆	E. Matsuoka K. Umeo S. Tsuji M. Sera F. Iga T. Takabatake	J. Phys. Soc. Jpn., 72, 9 (2003) 原著 pp. 2344-2349
A34	Cu-NQR study for stripe ordering in La-based cuprate	M. Matsumura T. Sawa T. Tamura N. Yamamoto M. Sera H. Yamagata	Physica B, 329-333 (2003) 原著 pp. 779-780
A35	Low-temperature anomalies in the magnetic, transport, and thermal properties of single-crystal CeRhSn with valence fluctuations	K. S. Kim Y. Echizen K. Umeo S. Kobayashi M. Sera P. S. Salamakha O. L. Sologub T. Takabatake X. Chen T. Tayama T. Sakakibara M. H. Jung M. B. Maple	Physical Review, B 68 (2003) 原著 pp. 054416 (1-7)

A36	Orbital-ordering-induced phase transition in LaVO ₃ and CeVO ₃	Y. Ren A. A. Nugroho A. A. Menovsky J. Stremper U. Rütt F. Iga T. Takabatake C. W. Kimball	Physical Review, B 67 (2003) pp. 014107(1-6)	原著
A37	On the magnetic phase diagram of Ce ₇ Ni ₃ in the H-T plane	A. Schenck F. N. Gygax D. Andreica K. Umeo T. Takabatake	Physica B, 326 (2003) pp. 394-397	原著
A38	Dynamics of the internal field in RB ₁₂ (R=Er, Yb, Lu)	G. M. Kalvius D. R. Noakes M. Marcano R. Wäppeling F. Iga T. Takabatake	Physica B, 326 (2003) pp. 398-402	原著
A39	Thermoelectric properties of Ce-based Kondo semimetals and semiconductors	T. Takabatake T. Sasakawa J. Kitagawa T. Suemitsu Y. Echizen K. Umeo M. Sera Y. Bando	Physica B, 328 (2003) pp. 53-57	原著
A40	Field-induced magnetic transition in the heavy-fermion antiferromagnet Ce ₇ Ni ₃	K. Umeo Y. Echizen M. H. Jung T. Takabatake T. Sakakibara T. Terashima C. Terakura C. Pfleiderer M. Uhlarz H.V.Löhneysen	Physical Review, B 67 (2003) pp. 144408 (1-6)	原著
A41	Thermoelectric and magnetic properties of CeRh _{1-x} M _x Sn (M=Co, Ni, Ru)	Y. Echizen K. Yamane T. Takabatake	Physica B, 329-333 (2003) pp. 522-523	原著
A42	Anisotropic transport and magnetic properties of frustrated CeRhSn	M. S. Kim Y. Echizen K. Umeo T. Tayama T. Sakakibara T. Takabatake	Physica B, 329-333 (2003) pp. 524-525	原著
A43	The Fermi surface in the "Kondo semiconductor" CeNiSn	T. Terashima C. Terakura S. Uji H. Aoki Y. Echizen T. Takabatake	Physica B, 329-333 (2003) pp. 535-536	原著
A44	Magnetic-field effects on the pseudogap in CeRhAs	S. Yoshii K. Kindo T. Sasakawa T. Suemitsu T. Takabatake	Physica B, 329-333 (2003) pp. 568-569	原著

A45	High-resolution, low-temperature photoemission spectroscopy of Kondo semiconductor CeRhAs and related compounds	K. Shimada K. Kobayashi T. Narimura P. Baltzer H. Namatame M. Taniguchi T. Suemitsu T. Sasakawa T. Takabatake	Physica B, 329-333 (2003) pp. 576-577	原著
A46	Successive structural phase transitions of the semiconductive CeRhAs	M. Nakajima K. Iwasa M. Kohgi T. Sasakawa T. Takabatake	Acta Physica Polonica B, 34 (2003) pp. 1109-1112	原著
A47	Anisotropic thermoelectric properties of CeRhAs with superstructures	T. Takabatake T. Suemitsu T. Sasakawa J. Kitagawa K. Umeo	Acta Physica Polonica B, 34 (2003) pp. 1303-1308	原著
A48	Electronic states of the Kondo semiconductor CeRhAs and related compounds: a high-resolution resonant photoemission study	K. Shimada P. Baltzer H. Namatame M. Taniguchi K. Kobayashi T. Narimura T. Suemitsu T. Sasakawa T. Takabatake	Acta Physica Polonica B, 34 (2003) pp. 1359-1362	原著
A49	Magnetic form factor of URhGe	K. Prokes A. Gukasov T. Takabatake T. Fujita V. Sechovsky	Acta Physica Polonica B, 34 (2003) pp. 1473-1476	原著
A50	Thermoelectric properties of a clathrate compound Ba ₈ Cu ₁₆ P ₃₀	D. Huo T. Sasakawa Y. Muro T. Takabatake	Appl. Phys. Lett., 82 (2003) pp. 2640-2642	原著
A51	Superconductivity in magnetically ordered CeTe _{1.82}	M. H. Jung A. Alsmadi H. C. Kim Y. Bang K. H. Ahn K. Umeo A. H. Laserda H. Nakotte H. C. Ri T. Takabatake	Physical Review B, 67 (2003) pp. 212504 (1-4)	原著
A52	The field-induced magnetic phase in a heavy-fermion antiferromagnet, Ce ₇ Ni ₃	K. Umeo Y. Echizen T. Takabatake T. Sakakibara T. Terashima C. Terakura	J. Phys.: Cond. Matter, 15 (2003) pp. S2159-2162	原著
A53	Magnetic and thermoelectric properties of a heterogenous mixed-valence system, Yb ₂ Pt ₃ Sn ₅	Y. Muro K. Yamane M. S. Kim T. Takabatake C. Godart P. Rogl	J. Phys. Soc. Japan, 72 (2003) pp. 1745-1750	原著

A54	Ion pairs and spontaneous break of symmetry in the valence-fluctuating compound YbB ₁₂	T. S. Altshuler Yu.V.Goryunov M. S. Bresler F. Iga T. Takabatake	Physical Review, B 68 (2003) pp. 014425 (1-7)	原著
A55	Thermoelectric Properties of Single-Crystal CeRhSn with Valence Fluctuations	M. S. Kim T. Sasakawa Y. Echizen T. Takabatake	Jpn. J. Appl. Phys., 42 (2003) pp. 6512-6515	原著
A56	Hole-doping and Pressure Effects on the Metal-Insulator Transition in Single Crystals of Y _{1-x} Ca _x TiO ₃ (0.37=x=0.41)	M. Tsubota F. Iga T. Nakano K. Uchida S. Kura M. Takemura Y. Bando K. Umeo T. Takabatake E. Nishibori M. Takata K. Kato Y. Ohishi	J. Phys. Soc. Japan, 72 (2003) pp. 3182-3188	原著
A57	Elastic properties of ferromagnetic Mott insulator YTiO ₃	T. Suzuki H. Higaki I. Ishii M. Tsubota F. Iga	Physica B, 329-333 (2003) pp. 868-869	原著
A58	Spontaneous strain due to ferroquadrupolar ordering in UCu ₂ Sn	I. Ishii H. Higaki T. Takabatake H. Goshima T. Fujita T. Suzuki	Physical Review B, 68 (2003) pp. 144413 (1-4)	原著
A59	Strong diamagnetic response and specific heat anomaly above T _c in underdoped La _{2-x} Sr _x CuO ₄	U. Thisted J. Nyhus T. Suzuki J. Hori K. Fosseheim	Physical Review B, 67 (2003) pp. 184510 (1-5)	原著
A60	Transverse elastic moduli in spin-triplet superconductor Sr ₂ RuO ₄	N. Okuda T. Suzuki Z. Mao Y. Maeno T. Fujita	Physica C, 388-389 (2003) pp. 497-498	原著
A61	Thermal expansion of UCu ₂ Sn in the basal plane	I. Ishii H. Higaki K. Katoh T. Takabatake H. Goshima T. Fujita T. Suzuki	Physica B, 329-333 (2003) pp. 553-554	原著
A62	Pressure-Induced Superconductor-Insulator Transition in the Spinel Compound CuRh ₂ S ₄	M. Ito J. Hori H. Kurisaki H. Okada A. J. P. Kuroki N. Ogita M. Udagawa H. Fujii F. Nakamura T. Fujita T. Suzuki	Phys. Rev. Lett., 91 (2003) pp. 077001 (1-4)	原著

A63	Difference in the transport properties between Y ₇ Rh ₃ and La ₇ Rh ₃	Y. Nakamori H. Fujii T. Tsutaoka T. Tokunaga M. Ito T. Suzuki T. Fujita	Physica B, 329-333 (2003) pp. 1087-1089	原著
A64	Specific heat of CeMg ₂ Cu ₉ with a two-dimensional Ce arrangement	M. Ito K. Asada Y. Nakamori H. Fujii T. Fujita T. Suzuki	Physica B, 329-333 (2003) pp. 482-483	原著
A65	Pressure-induced ferromagnetic metal for a Mott insulator Ca ₂ RuO ₄	F. Nakamura Y. Senoo T. Goko M. Ito T. Suzuki S. Nakatsuji H. Fukuzawa Y. Maeno P. Alireza S. R. Julian	Physica B, 329-333 (2003) pp. 803-804	原著
A66	Superconductivity and in-plane resistivity in La _{2-x} Sr _x CuO ₄	J. Hori S. Iwata H. Kurisaki F. Nakamura T. Suzuki T. Fujita	Physica C, 388-389 (2003) pp. 331-332	原著
A67	Analysis of mutual communication between qubits by capacitive coupling	T. Murakami M. Iinuma T. Takahashi Y. Kadoya M. Yamanishi	Physical Review A, 67 (2003) pp. 050301 (R)	原著
A68	Stark spectroscopy of high-lying odd parity levels in atomic samarium	T. Kondo D. Angom I. Endo A. Fukumi T. Horiguchi M. Iinuma T. Takahashi	European Physical Journal D, 25 (2003) pp. 103-111	原著
A69	Isotope shift of the thallium (6s6p ²) ⁴ P _{1/2} state	R. H. Wynar M. Iinuma W. Nagourney E. N. Fortson	Phys. Review A, 68 (2003) pp. 032504	原著
A70	T3レーザーと薄膜の相互作用による粒子生成	和田 芳夫 小方 厚 久保田 哲生	レーザー研究, 31 (2003) pp. 742	原著
A71	Plasmon linac: A laser wake-field accelerator based on a solid-state plasma	N. Saito A. Ogata	Physics Plasmas, 10 (2003) pp. 3358	原著
A72	Visible Spectroscopy in T3 Laser Interaction with Thin Foil Targets	T. Kubota Y. Wada A. Ogata	Jpn. J. Appl. Phys., 42 (2003) pp. L1512	原著

A73	Energetic Protons from a Few Micron Metalic Foil Evaporated by Intense Laser Pulse	K. Matsukado T. Esirkepov K. Kinoshita H. Daido T. Utsumi Z. Li A. Fukumi Y. Hayashi S. Orimo M. Nishiuchi S. V. Bulanov T. Tajima A. Noda Y. Iwashita T. Shirai T. Takeuchi S. Nakamura A. Yamazaki M. Ikegami T. Miura A. Morita M. Uesaka K. Yoshii T. Watanabe T. Hosokai A. Zhidkov A. Ogata Y. Wada T. Kubota	Phys. Rev. Lett., 91 (2003) pp. 215001	原著
A74	Oscillating Coulomb chain in a storage ring	H. Okamoto Y. Yuri K. Okabe	Physical Review, E 67, 4-2 (2003)	原著 pp. 046501
A75	Emittance limitation in cooled hadron beams	K. Okabe H. Okamoto	Jpn. J. Appl. Phys., 42, 7A (2003)	原著 pp. 4584
A76	Parametric collective resonances and space-charge limit in high-intensity rings	A. V. Fedotov I. Hofmann R.L. Gluckstern H. Okamoto	Phys. Rev. STAB, 6 (2003)	原著 pp. 094201
A77	Formation of a vortex crystal cell assisted by a background vorticity distribution	A. Sanpei Y. Kiwamoto K. Ito Y. Soga	Physical Review, E 68 (2003) 016404(1-6)	
A78	Rough Surface Effect on Diamagnetic Response of Normal-Superconducting Proximity Contact System with Arbitrary Concentration of Impurities	J. Hara S. Higashitani K. Nagai	J. Low. Temp. Phys., 132 (2003)	原著 pp. 147-165
A79	Viscoelastic Theory of Liquid ^3He in Aerogel	S. Higashitani T. Ichikawa M. Yamamoto M. Miura K. Nagai	Physica B, 329-333 (2003)	原著 pp. 299-300
A80	A-B Transition of Superfluid ^3He in Aerogel under Magnetic Field	M. Yamamoto S. Higashitani K. Nagai	Physica B, 329-333 (2003)	原著 pp. 301-302
A81	Local Density of States of Normal-Superconducting Proximity-contact Systems with Arbitrary Concentration of Impurities	J. Hara Y. Nagato K. Nagai	Physica B, 329-333 (2003)	原著 pp. 1433-1434

A82	Raman Scattering Study of Hexaboride Crystals	N. Ogita S. Nagai N. Okamoto F. Iga J. Akimitsu S. Kunii M. Udagawa	Physica B, 328 (2003) pp. 131-134	原著
A83	Raman scattering study of CeRhAs	N. Ogita M. Udagawa T. Sasakawa T. Suemitsu T. Takabatake	Physica B, 328 (2003) pp. 151-153	原著
A84	Raman Scattering Study of $Y_{1-x}Ca_xTiO_3$ Single Crystals	T. Tsuriu N. Ogita M. Udagawa M. Tsubota K. Uchihira F. Iga	Physica B, 329-333 (2003) pp. 833-834	原著
A85	Raman scattering of RB_6 (R=Ca, Ce, Pr, Gd, Dy and Yb)	N. Ogita S. Nagai N. Okamoto M. Udagawa F. Iga M. Sera J. Akimitsu S. Kunii	Physica B, 329-333 (2003) pp. 661-662	原著
A86	Raman scattering study of electronic and magnetic excitations in $La_{2-x}Sr_xCuO_4$	M. Udagawa N. Ogita S. Sakita J. Hori F. Nakamura T. Suzuki T. Fujita	Physica C, 388-389 (2003) pp. 315-316	原著
A87	Unusual hydrogen absorption properties in graphite mechanically milled under various hydrogen pressures up to 6MPa	D. M. Chen T. Ichikawa H. Fujii N. Ogita M. Udagawa Y. Kitano T. Tanabe	J. Alloys and Compounds, 354 (2003) pp. L5-L9	原著
A88	Raman scattering investigation of RB_6 (R=Ca, La, Ce, Pr, Sm, Gd, Dy and Yb)	N. Ogita S. Nagai N. Okamoto M. Udagawa F. Iga M. Sera J. Akimitsu S. Kunii	Physical Review, B 68 (2003) pp. 224605(1-9)	原著
A89	Multiple-gap structure of binary superconductor MgB_2	T. Takasaki T. Ekino T. Muranaka H. Fujii J. Akimitsu	Physica C, 388-389 (2003) pp. 147-148	原著

A90	Tunneling spectroscopy of the superconducting gap in MgB ₂	T. Ekino T. Takasaki T. Muranaka J. Akimitsu H. Fujii	Physical Review, B 67 (2003) pp. 094504 (1-5)	原著
A91	Tunneling spectroscopy of MgB ₂ and Li _{0.5} (THF) _y HfNCl	T. Ekino T. Takasaki T. Muranaka H. Fujii J. Akimitsu S. Yamanaka	Physica B, 328 (2003) pp. 23-25	原著
A92	Tunneling spectroscopy of the electron-doped layered superconductor Li _{0.48} (THF) _{0.3} HfNCl	T. Ekino T. Takasaki H. Fujii S. Yamanaka	Physica C, 388-389 (2003) pp. 573-574	原著
A93	Tunneling spectroscopy of the energy gap in MgB ₂ under magnetic fields	T. Ekino T. Takasaki H. Fujii T. Muranaka J. Akimitsu	Acta Physica Polonica, B 34 (2003) pp. 523-527	原著
A94	Hydrogen in mechanically milled amorphous boron	P. Wang S. Orimo K. Tanabe H. Fujii	J. Alloys and Compounds, 350 (2003) pp. 218-221	原著
A95	Hydrogen storage properties in nano-structured magnesium and carbon-related materials	H. Fujii S. Orimo	Physica B, 328 (2003) pp. 77-80	総説
A96	Hydrogen interaction with carbon nanostructures: current situation and future prospects	S. Orimo A. Züttel L. Schlapbach G. Majer T. Fukunaga H. Fujii	J. Alloys and Compounds, 356-357 (2003) pp. 716-719	総説
A97	Hydriding properties of ordered-/disordered-Mg based ternary Laves phase structures	N. Hanada S. Orimo H. Fujii	J. Alloys and Compounds, 356-357 (2003) pp. 429-432	原著
A98	The local structure of hydrogen storage nanocrystalline graphite by neutron scattering	K. Itoh Y. Miyahara S. Orimo H. Fujii T. Kamiyama T. Fukuhara	J. Alloys and Compounds, 356-357 (2003) pp. 608-611	原著
A99	Characterization of hydrogenated amorphous boron by a combination of infrared absorption spectroscopy and thermal analyses	P. Wang S. Orimo H. Fujii	J. Alloys and Compounds, 359 (2003) pp. L1-L3	原著
A100	Magnetic phase diagram of Ce ₂ Fe ₁₇ under high pressure in high magnetic fields	F. Ishikawa T. Goto H. Fujii	Physica, B 329-333 (2003) pp. 657-658	原著

A101	Magneto-volume effect in the ground and field-induced states of Ce ₂ Fe ₁₇	Y. Makihara H. Fujii T. Fujikawa K. Watanabe K. Takahashi K. Koyama M. Motokawa	Physica, B 329-333 (2003) 原著 pp. 663-664
A102	Recent development on hydrogen storage systems	H. Fujii J. I. Gottward T. Ichikawa	Fuel Chemistry Division Preprints, 総説 47, 1 (2003) pp. 523-524
A103	Spin-and charge-polarized states in nanographene ribbons with zigzag edges	A. Yamashiro Y. Shimoji K. Harigaya K. Wakabayashi	Physical Review, B 68 (2003) 原著 pp. 193410 (1-4)
A104	Magnetic Structure of Nano-Graphite Moebius Ribbons	K. Wakabayashi K. Harigaya	J. Phys. Soc. Japan (Letters), 72, 原著 5 (2003) pp. 998-1001
A105	DC Josephson current through the nano-graphite ribbons	K. Wakabayashi	J. Phys. Soc. Japan (Letters), 72, 原著 5 (2003) pp. 1010-1013
A106	DC Josephson current through the nanographite ribbon junctions	K. Wakabayashi	Physica E, 18, 1-3 (2003) 原著 pp. 229-230
A107	Anomalous behavior of the dephasing time in open diffusive cavities	Y. Takane	J. Phys. Soc. Jpn., 72, 2 (2003) 原著 pp. 233-236
A108	Quantum interference effect on the conductance of a ferromagnetic wire with a domain wall	Y. Koyama Y. Takane	J. Phys. Soc. Jpn., 72, 3 (2003) 原著 pp. 634-644
A109	Coulomb blockade of phase slip in mesoscopic charge-density-wave systems	Y. Takane	Physica E, 18, 1-3 (2003) 原著 pp. 262-263
A110	Dephasing due to spin-wave excitations in ferromagnetic metals	Y. Takane	J. Phys. Soc. Jpn., 72, 5 (2003) 原著 pp. 1155-1160
A111	Synchronized phase slips in a mesoscopic charge-density-wave system	Y. Takane	J. Phys. Soc. Jpn., 72, 8 (2003) 原著 pp. 1835-1838
A112	Random-matrix approach to quantum electron transport in metallic carbon nanotubes	Y. Takane K. Wakabayashi	J. Phys. Soc. Jpn., 72, 11 (2003) 原著 pp. 2710-2713
A113	Broadband photon-number squeezing in light-emitting diodes at low photon-flux levels	R. Masuyama A. Higashi K. Tanaka Y. Kadoya M. Yamanishi	Appl. Phys. Lett., 83, 6 (2003) 原著 pp. 1113-1115
A114	Electronic Charging State of Si Quantum Dots Formed on Ultrathin SiO ₂ as Evaluated by AFM/Kelvin Probe Method	K. Takeuchi H. Murakami S. Miyazaki	Semiconductor Technology: Proc. 原著 of 2002 Electrochemical Society Int. Semicond. Tech. Conf. (2003) pp. 1-8
A115	Photoemission Study of Ultrathin Hafnium Oxide Films Evaporated on Si(100)	M. Yamaoka M. Narasaki H. Murakami S. Miyazaki	Semiconductor Technology: Proc. 原著 of 2002 Electrochemical Society Int. Semicond. Tech. Conf. (2003) pp. 229-236
A116	Multiple-Step Electron Charging in Silicon-Quantum-Dot Floating Gate Metal-Oxide-Semiconductor Memories	M. Ikeda Y. Shimizu H. Murakami S. Miyazaki	Jpn. J. Appl. Phys., 42, 6B (2003) 原著 pp. 4134-4137

A117	Photoemission Study of Interfacial Oxidation in ZrO ₂ /Sub-Nanometer SiONx/Si(100) Stacked Structures	S. Miyazaki H. Yamashita H. Nakagawa M. Yamaoka	Mat. Res. Soc. Symp. Proc., 747 原著 (2003) pp. 281-286
A118	Self-assembling formation of silicon quantum dots with a germanium core by low-pressure chemical vapor deposition	Y. Darma R. Takaoka H. Murakami S. Miyazaki	Nanotechnology, 14 (2003) 原著 pp. 413-415
A119	Electronic Structure and Energy Band Offsets for Ultrathin Silicon Nitride on Si(100)	S. Miyazaki M. Narasaki A. Suyama M. Yamaoka H. Murakami	Appl. Surf. Sci., 216/1-4 (2003) 原著 pp. 252-257
A120	Diffusion and Incorporation of Zr into Thermally-Grown SiO ₂ on Si(100)	M. Yamaoka H. Murakami S. Miyazaki	Appl. Surf. Sci., 216/1-4 (2003) 原著 pp. 223-227
A121	Formation of Nanometer Silicon Dots with Germanium Core by Highly-Selective Low-Pressure Chemical Vapor Deposition	Y. Darma H. Murakami S. Miyazaki	Jpn. J. Appl. Phys., 42, 6B (2003) 原著 pp. 4129-4133
A122	High-rate deposition highly crystallized silicon films from inductively coupled plasma	N. Kosku F. Kurisu M. Takegoshi H. Takahashi S. Miyazaki	Thin Solid Films, 435 (2003) 原著 pp. 39-43
A123	Scheme for the energy-band calculation under the external magnetic field	K. Higuchi M. Higuchi	Physica B, 329-333 (2003) 原著 pp. 1273-1274
A124	Dominant Noise Source of Low Frequency Noise in AlGaAs/InGaAs High Electron Mobility Transistors	S. Nishiyama K. Higuchi	Japanese Journal of Applied Physics, 42, 4B (2003) 原著 pp. 2296-2299
A125	Low Frequency Noise Caused by Substrate Current in AlGaAs/InGaAs HEMTs	M. Wada S. Nishiyama T. Nakamoto K. Higuchi	Extended Abstract of Solid State Devices and Materials 2003 (2003) pp. 532-533
A126	Temperature-Independence-Point Properties for 0.1um-Scale Pocket-Implant Technologies and the Impact on Circuit Design	K. Hisamitsu H. Ueno M. Tanaka D. Kitamaru M. Miura-Mattausch H. J. Mattausch S. Kumashiro T. Yamaguchi K. Yamashita N. Nakayama	Proc. Of ASP-DAC (2003) 原著 pp. 179-183
A127	HiSIM: Accurate Change Modeling Important for RF Era	M. Miura-Mattausch D. Navarro H. Ueno S. Jinbou H. J. Mattausch K. Morikawa S. Itoh A. Kobayashi H. Masuda	Proc. Modeling and Simulation of Microsystems, 2 (2003) 原著 pp. 258-261

A128	Gate Current Partitioning in MOSFET Models for Circuit Simulation	Q. Ngo D. Navarro T. Mizoguchi S. Hosokawa H. Ueno M. Miura-Mattausch C. Y. Yang	Proc. Modeling and Simulation of Microsystems, 2 (2003) pp. 322-325
A130	High-Electric-Field Electron Transport at Silicon/Silicon-Dioxide Interface Inversion Layer	M. Tanaka H. Ueno O. Matsushima M. Miura-Mattausch	Jpn. J. Appl. Phys., 42, 3B (2003) 原著 pp. L280-282
A131	Circuit-Simulation Model of Cgd Changes in Small-Size MOSFETs Due to High Channel-Field Gradients	D. Navarro H. Kawano K. Hisamitsu T. Yamaoka M. Tanaka H. Ueno M. Miura-Mattausch H. J. Mattausch S. Kumashiro T. Yamaguchi K. Yamashita N. Nakayama	IEICE Transactions on Electronics, 原著 E86-C[3] (2003) pp. 474-480
A132	Extraction of Inter-and Intra-Chip Device-Parameter Variations with a Differential-Amplifier-Stage Test Circuit	T. Mizoguchi H. J. Mattausch H. Ueno D. Kitamaru K. Hisamitsu M. Miura-Mattausch S. Itoh K. Morikawa	SASMI 2003 Proceedings(1-8) 原著 (2003) pp. 76-82
A133	A Self-consistent Non-Quasi static MOSFET model for circuit simulation based on transient carrier response	N. Nakayama H. Ueno T. Inoue T. Isa M. Tanaka M. Miura-Mattausch	Jpn. J. Appl. Phys., 42[4B] 原著 pp. 2132-2136
A134	100nm-MOSFET Model for Circuit Simulation: Challenges and Solutions	M. Miura-Mattausch H. Ueno H. J. Mattausch K. Morikawa S. Itoh A. Kobayashi H. Masuda	IEICE Transactions on Electronics, E86-C[6] (2003) 原著 pp. 1009-1021
A135	Parameter Extraction of HiSIM1.1/HiSIM1.2	S. Ito K. Morikawa A. Kobayashi H. Masuda S. Fujimoto T. Mizoguchi H. Ueno M. Miura-Mattausch	JPSJ Symposium Series, 2003, 原著 11(DAシンポジウム2003論文集) (2003) pp. 247-252
A136	Carrier Transport in Highly Generated Carrier Concentration	O. Matsushima M. Tanaka H. Ueno K. Hara K. Konno M. Miura-Mattausch	Proc. Int. Conf. Nonequilibrium Carrier Dynamics in Semiconductors (2003) pp. PTu4-8

A137	Origin of Enhanced Thermal Noise for 100nm-MOSFETs	S. Hosokawa Y. Shiraga H. Ueno M. Miura-Mattausch H. J. Mattausch T. Ohguro S. Kumashiro M. Taguchi H. Masuda S. Miyamoto	Ext. Abs. Int. Conf. Solid-State Devices and Materials (2003) 原著 pp. 20-21
A138	A Complete Surface-Potential-Based SOI-MOSFET Model for Circuit Simulation	D. Kitamaru Y. Uetsuji M. Miura-Mattausch	Ext. Abs. Int. Conf. Solid-State Devices and Materials (2003) 原著 pp. 622-623
A139	Highly adhesive electroless Cu layer formation using an ultra thin ionized cluster beam (ICB)-Pd catalytic layer for sub-100 nm Cu interconnections	Z. L. Wang O. Yaegashi H. Sakaue T. Takahagi S. Shingubara	Jpn. J. Appl. Phys., 42, 10b (2003) 原著 pp. L1223-L1225
A140	Suppression of native oxide growth in sputtered TaN films and its application to Cu electroless plating	Z. L. Wang O. Yaegashi H. Sakaue T. Takahagi S. Shingubara	Jpn. J. Appl. Phys., 42, 7 (2003) 原著 pp. 4697-4701
A141	Thickness dependences of nucleation and annihilation fields of magnetic vortices in submicron supermalloy dots	G. R. Wu K. Watanabe S. Shingubara H. Sakaue T. Takahagi	Jpn. J. Appl. Phys., 42, 8 (2003) 原著 pp. 5038-5039
A142	Low dielectric constant porous diamond films formed by diamond nanoparticles	H. Sakaue N. Yoshimura S. Shingubara T. Takahagi	Appl. Phys. Lett., 83, 11 (2003) 原著 pp. 2226-2228
A143	Depth profile analysis of polyimide film treated by potassium hydroxide	H. Okumura T. Takahagi N. Nagai S. Shingubara	Journal of Polymer Science Part B-Polymer Physics, 41, 17 (2003) 原著 pp. 2071-2078
A144	Formation of aluminum nanodot array by combination of nanoindentation and anodic oxidation of aluminum	S. Shingubara Y. Murakami K. Morimoto T. Takahagi	Surface Science, 532 (2003) 原著 pp. 317-323
A145	Influence of surface oxide of sputtered TaN on displacement plating of Cu	Z. L. Wang H. Sakaue S. Shingubara T. Takahagi	Jpn. J. Appl. Phys., 42, 4b (2003) 原著 pp. 1843-1846
A146	Analysis of chemical structures of ultrathin oxynitride films by X-ray photoelectron spectroscopy and secondary ion mass spectrometry	H. Miya M. Izumi S. Konagata T. Takahagi	Jpn. J. Appl., 42, 3 (2003) 原著 pp. 1119-1122
A147	Computer-aided chemistry estimation method of electronic-polarization dielectric constants for the molecular design of low-k materials	T. Takahagi A. Saiki H. Sakaue S. Shingubara	Jpn. J. Appl. Phys., 42, 1 (2003) 原著 pp. 157-161
A148	Electroless plating of copper on metal-nitride diffusion barriers initiated by displacement plating	Z. L. Wang T. Ida H. Sakaue S. Shingubara T. Takahagi	Electrochemical and Solid State Letters, 6, 3 (2003) pp. C38-C41

A149	Fabrication of nanomaterials using porous alumina templates	S. Shingubara	Journal of Nanoparticle Research, 総説 5, 1-2 (2003) pp. 17-30
A150	Aluminum nanodot array formed by anodic oxidation and its conduction properties	S. Shingubara Y. Murakami H. Sakaue T. Takahagi	Proc. of SPIE, 4999, Quantum Sensing: Evolution and Revolution from Past to Future, edited by M. Razeghi and G. J. Brown, SPIE, invited paper (2003) pp. 387-395
A151	Advanced Design for Analog-RF and Digital Mixed LSIs-Crosstalknoise Evaluation and Reduction	A. Iwata	Proc. of the Workshop on SASIMI 原著 (2003) pp. 17-22
A152	A Design of Neural Signal Sensing LSI with Multi-Input-Channels	T. Yoshida T. Mashimo M. Akagi A. Iwata M. Yoshida K. Uematsu	Proc. of the Workshop on SASIMI 原著 (2003) pp. 206-210
A153	Pulse Modulation VLSI Implementation of Clustering Algorithm Based on Stochastic Association Model	T. Morie T. Matsuura A. Iwata	Artificial Neural Networks and Neural Information Processing ICANN/ICONIP 2003 International Conference (2003) pp. 434-437
A154	Coarse Image Region Segmentation Using Resistive-fuse Networks Implemented in FPGA	T. Nakano H. Ando H. Ishizu T. Morie A. Iwata	The 7th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2003), Proceedings, IV (2003) pp. 186-191
A155	A Face/Object Recognition System Using FPGA Implementation of Coarse Region Segmentation	T. Nakano T. Morie A. Iwata	SICE Annual Conference 2003, Organized session: Intelligent Integrated Systems and its Applications-Embedding Intelligence into Integrated Circuits (2003) pp. 1418-1423
A156	A Convolutional Neural Network VLSI for Image Recognition Using Merged/Mixed Analog-Digital Architecture	K. Korekado T. Morie Osamu Nomura H. Ando T. Nakano M. Matsugu A. Iwata	7th Int. Conf. on Knowledge-Based Intelligent Information and Engineering Systems (KES'2003) pp. II-169-176
A157	A Multi-Nano dot Floating-Gate MOSFET Circuit for Spiking Neuron Models	T. Morie T. Matsuura N. Nagata A. Iwata	IEEE Trans. Nanotechnology, 2, 3 原著 (2003) pp. 158-164
A158	A Pulse-Coupled Neural Network Simulator Using a Programmable Gate Array Technique	K. Katayama A. Iwata	IEICE Trans. Inf. & Syst., E86-D, 5 原著 (2003) pp. 872-881
A159	A Substrate Noise Analysis Methodology for Large-Scale Mixed-Signal ICs	Wen Kung Chu Nishath Verghese Heany-Jun Cho Kenji Shimazaki Hiroyuki Tsujikawa Shouzou Hirano Shirou Doushoh Makoto Nagata Atsushi Iwata Takafumi Ohmoto	Proceedings of IEEE 2003 Custom Integrated Circuits Conference (CICC 2003) pp. 369-372

A160	Carrier Mobility in p-MOSFET with Atomic-Layer-Deposited Si-Nitride/SiO ₂ Stack Gate Dielectrics	A. Nakajima Q. D. M. Khosru T. Kasai S. Yokoyama	IEEE Electron Device Lett., 24 原著 (2003) pp. 472-474
A161	High quality atomic-layer deposited ultrathin Si-nitride gate dielectrics with low density of interface and bulk traps	A. Nakajima Q. D. M. Khosru T. Yoshimoto T. Kasai S. Yokoyama	Appl. Phys. Lett., 84, 2 (2003) 原著 pp. 335-337
A162	Phosphorous-Assisted Low-Energy Arsenic Implantation Technology for N-Channel Metal-Oxide-Semiconductor Field Effect Transistor Source/drain Formation Process	K. Imai S. Shishiguchi K. Shibahara S. Yokoyama	Jpn. J. Appl. Phys., 42, 5A (2003) 原著 pp. 2654-2659
A163	Comparative Studies of Perfluorocarbon Alternative Gas Plasmas for Contact Hole Etch	S. Nakamura M. Itano H. Aoyama K. Shibahara S. Yokoyama M. Hirose	Jpn. J. Appl. Phys., 42, 9A (2003) 原著 pp. 5759-5764
A164	Evaluation of Surface Contamination by Noncontact Capacitance Method under UV Irradiation	M. Kohno T. Kitajima S. Hirae S. Yokoyama	Jpn. J. Appl. Phys., 42, 9A (2003) 原著 pp. 5837-5843
A165	Compact Branched Optical Waveguides Using High-Index-Contrast Stacked Structure	Y. Hara S. Yokoyama K. Umeda	Optical Rev., 10, 5 (2003) 原著 pp. 357-360
A166	Organic Contamination Dependence of Process Induced Interface Trap Generation in Ultrathin Oxide Metal Oxide Semiconductor Transistors	Q. D. M. Khosru S. Yokoyama A. Nakajima K. Shibahara T. Kikkawa H. Sunami T. Yoshino	Jpn. J. Appl. Phys., 42, Pt 2, 12A 原著 (2003) pp. L1429-L1432
A167	Investigation of Surface Contamination on Silicon Oxide after HF Etching by Noncontact Capacitance Method	M. Kohno T. Kitajima S. Hirae S. Yokoyama	Jpn. J. Appl. Phys., 42, Pt 1, 12 原著 (2003) pp. 7601-7602
	Defect density reduction and sheet resistance improvement by multi-pulse KrF-excimer-laser annealing	K. Kurobe Y. Ishikawa K. Kagawa Y. Niwatsukino A. Matsuno K. Shibahara	Extend. Abst. Fabrication, Characterization, and Modeling of Ultra-Shallow Doping Profiles in Semiconductors (USJ 2003) pp. 98-103
	60-nm Gate Length SOI CMOS Technology Optimized for System-on-a-SOI-Chip Solution	K. Imai S. Maruyama T. Suzuki T. Kudo S. Miyake M. Ikeda T. Abe S. Masuda A. Tanabe J. -W. Lee K. Shibahara S. Yokoyama H. Ooka	Proc. of the 203rd Meeting of Electrochemical Society, Silicon-on-insulator Technology and Devices XI (2003) pp. 149-158

Influence of Nitrogen Profile on Metal Workfunction in Mo/SiO ₂ /Si MOS Structure	M. Hino T. Amada N. Maeda K. Shibahara	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM 2003) pp. 494-495	原著
Ultra-shallow Boron Profile Fitting Compensating for Surface Contamination by Utilizing Genetic Algorithms	M. Murakawa K. Shibahara Y. Oda T. Higuchi K. Nishi	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM 2003) pp. 504-505	原著
KrF Excimer Laser Annealing For Ultra Shallow Junction Formation: Approach For Irradiation Energy Density Reduction	K. Shibahara K. Kurobe Y. Ishikawa K. Kagawa Y. Niwatsukino A. Matsuno	Extend. Abst. 11th Int. Conf. on Adv. Thermal Processing of Semiconductors (RTP 2003) pp. 13-16 (Invited)	原著

B. 分子生命機能科学

	論文課題	著者名	誌名、巻、号、(年頁)	論文種別
B1	Retrotransposon-mediated restoration of Chlorella telomeres: accumulation of Zepp retrotransposons at termini of newly formed minichromosomes	Y. Yamamoto Y. Fujimoto R. Arai M. Fujie S. Usami T. Yamada	Nucleic Acids Research, 31, 15 (2003) pp. 4646-4653	
B2	Minichromosome Formation in Chlorella Cells Irradiated with Electron Beams	T. Yamada Y. Fujimoto Y. Yamamoto K. Machida M. Oda M. Fujie S. Usami H. Nakayama	Journal of Bioscience and Bioengineering, 95, 6 (2003) pp. 601-607	
B3	染色体工学	山田 隆	化学便覧応用化学編, 6 (2003) pp. 1545-1548	
B4	バイオマスリサイクル用新規酵素系の開発	山田 隆 宇佐美 昭二 藤江 誠	ハイテクインフォメーション, 147 (2003) pp. 9-14	
B5	Introduction of inducible nitric oxide synthase mRNA expression and nitric oxide production from macrophages stimulated with high-molecular size mite antigen HM1	A. Tategaki T. Okuda S. Kawamoto K. Ono S. Shigeta	Allergology International, 52 (2003) pp. 97-103	原著
B6	Production and Properties of Phytase and Acid Phosphatase from a Sake Koji Mold, Aspergillus oryzae	J. Fujita Y. Yamane H. Fukuda Y. Kizaki S. Wakabayashi S. Shigeta O. Suzuki K. Ono	Journal of Bioscience and Bioengineering, 95, 4 (2003) pp. 348-353	原著
B7	Production of Two Types of Phytase from Aspergillus oryzae during Industrial Koji Making	J. Fujita S. Shigeta Y. Yamane H. Fukuda Y. Kizaki S. Wakabayashi K. Ono	Journal of Bioscience and bioengineering, 95, 5 (2003) pp. 460-465	原著

B8	Evidence of Isozymes for 6 Fatty Acid Desaturase in Rat Hepatocytes	K. Inagaki T. Aki T. Shiota S. Kawamoto S. Shigeta O. Suzuki K. Ono	Biosci. Biotechnol. Biochem., 67, 原著 2 (2003) pp.451-454
B9	Extracellular Secretion of Free Fatty Acids by Disruption of a Fatty Acyl-CoA Synthetase Gene in <i>Saccharomyces cerevisiae</i>	Y. Michinaka T. Shimauchi T. Aki T. Nakajima S. Kawamoto S. Shigeta O. Suzuki K. Ono	Journal of Bioscience and Bioengineering, 95, 5 (2003) pp. 435-440 原著
B10	Thraustochytrid as a Potential Source of Carotenoids	T. Aki K. Hachida M. Yoshinaga Y. Katai T. Yamasaki S. Kawamoto T. Kakizono T. Maoka S. Shigeta O. Suzuki K. Ono	J. Am. Oil Chem. Soc., 80 (2003) 原著 pp. 789-794
B11	cDNA cloning and functional expression of glucosidase from <i>Mortierella alliacea</i>	- Y. Tanaka T. Aki K. Ishihara S. Kawamoto S. Shigeta K. Ono	Appl. Microbiol. Biotechnol., 62 原著 (2003) pp. 202-209
B12	Differential response to low temperature of two 6 fatty acid desaturases from <i>Mucor circinelloides</i>	Y. Michinaka T. Aki T. Shimauchi T. Nakajima S. Kawamoto S. Shigeta O. Suzuki K. Ono	Appl. Microbiol. Biotechnol., 62 原著 (2003) pp. 362-368
B13	Grouping Newly Isolated Docosahexaenoic Acid-Producing Thraustochytrids Based on Their Polyunsaturated Fatty Acid Profiles and Comparative Analysis of 18S rRNA Genes	J. Huang T. Aki T. Yokochi T. Nakahara D. Honda S. Kawamoto S. Shigeta K. Ono O. Suzuki	Mar. Biotechnol., 5 (2003) 原著 pp. 450-457
B14	Epicutaneous sensitization with superantigen induces allergic skin inflammation.	D. Laouini S. Kawamoto A. Yalcindag P. J. Bryce E. Mizoguchi H. C. Oettgen R. S. Geha	Journal of Allergy and Clinical Immunology, 112, 5 (2003) 原著 pp. 981-987.
B14	微生物によるカロテノイドの生産	秋 庸裕 小埜 和久	オレオサイエンス, 3 (2003) 総説 pp. 175-181
B15	アレルゲンのプロテオミクス解析	重田 征子 藤村 孝志 小埜 和久	臨床検査, 47 (2003) 総説 pp. 1413-1420

B16	米胚乳細胞内デンプン蓄積と -グルコシダーゼ活性	岩田 博 磯谷 敦子 宇都宮 仁 猪谷 富雄 西尾 尚道	日本農芸化学会誌, 77, 11 (2003) pp. 1130-1136
B17	食品廃棄物のメタン発酵及び水素・メタン二段発酵	中島田 豊 西尾 尚道	FFI Journal, 208, 9 (2003) pp. 703-708
B18	水素・メタン発酵技術	中島田 豊 西尾 尚道	バイオエネルギー技術と応用展開 (2003) pp. 155-164
B19	Evaluation of bacterial aerotaxis for its potential use in detecting the toxicity of chemicals to microorganisms	M. Shitashiro J. Kato T. Fukumura A. Kuroda T. Ikeda N. Takiguchi H. Ohtake	Journal of Biotechnology, 101 (2003) pp. 11-18
B20	Applications of Polyphosphate and other Biopolymers in Wastewater Treatment	A. Kuroda H. Ohtake	pp. 139-157
B21	A Method for Screening Polyphosphate-Accumulating Mutants Which Remove Phosphate Efficiently from Synthetic Wastewater	T. Morohoshi T. Yamashita J. Kato T. Ikeda N. Takiguchi H. Ohtake A. Kuroda	Journal of Bioscience and Bioengineering, 95, 6 (2003) pp. 637-640
B22	Strictly Polyphosphate-Dependent Glucokinase in a Polyphosphate-Accumulating Bacterium, <i>Microlunatus phosphovorus</i>	S. Tanaka S. Lee K. Hamaoka J. Kato N. Takiguchi K. Nakamura H. Ohtake A. Kuroda	Journal of Bacteriology, Sept. (2003) pp. 5654-5656
B23	Pilot Plant Tests on the Novel Process for Phosphorus Recovery from Municipal Wastewater	N. Takiguchi A. Kuroda J. Kato K. Nukanobu H. Ohtake	Journal of Chemical Engineering of Japan, 36, 10 (2003) pp. 1143-1146
B24	Mutants of the nematode <i>Caenorhabditis elegans</i> that are defective specifically in their attraction to cycloheximide	T. Tajima N. Takiguchi J. Kato T. Ikeda A. Kuroda H. Ohtake	Journal of Bioscience and Bioengineering, 96, 2 (2003) pp. 149-153
B25	ケミカルバイオテクノロジーによる酸化バイオプロセス	成川 隆也 加藤 純一	バイオサイエンスとインダストリー, 61, 12 (2003) pp. 17-20
B26	微生物におけるポリリン酸代謝制御機構の解明と利用	黒田 章夫	生物工学会誌, 81, 3 (2003) pp. 104-111
B27	Chromosomal Arm Replacement in <i>Streptomyces griseus</i>	T. Uchida M. Miyawaki H. Kinashi	J. Bacteriol., 185 (2003) pp. 1120-1124 原著
B28	Limited regions of homology between linear and circular plasmids encoding methylenomycin biosynthesis in two independently isolated streptomycetes	M. Yamasaki Y. Ikuto A. Ohira K. Chater H. Kinashi	Microbiology, 149 (2003) pp. 1351-1356 原著

B29	Chromosomal Circularization in Streptomyces griseus by Nonhomologous Recombination of Deletion Ends	S. Inoue K. Higashiyama T. Uchida K. Hiratsu H. Kinashi	Biosci. Biotechnol. Biochem., 67 原著 (2003) pp. 1101-1108
B30	The large linear plasmid pSLA2-L of Streptomyces rochei has an unusually condensed gene organization for secondary metabolism	S. Mochizuki K. Hiratsu M. Suwa T. Ishii F. Sugino K. Yamada H. Kinashi	Mol. Microbiol., 48 (2003) 原著 pp. 1501-1510
B31	Biosynthetic studies on the alpha-glucosidase inhibitor acarbose: the chemical synthesis of isotopically labelled 2-epi-5-epi-valiolone analogs	K. Arakawa S. G. Bowers B. Michels V. Trin T. Mahmud	Carbohydr. Res., 338 (2003) 原著 pp. 2075-2082
B32	Streptomyces griseusの線状染色体のダイナミックな構造変化の解析	内田 哲也 木梨 陽康	応用微生物学研究, 1 (2003) 総説 pp. 76-84
B33	Thrombospondin-1 Plays a Critical Role in the Induction of Hair Follicle Involution and Vascular Regression During the Catagen Phase	K. Yano L. F. Brown J. Lawler T. Miyakawa M. Detmar	The Journal of Investigative Dermatology, 120 (2003) pp. 14-19
B34	Ultraviolet B-Induced Skin Angiogenesis is Associated with a Switch in the Balance of Vascular Endothelial Growth Factor and Thrombospondin-1 Expression	K. Yano K. Kajiyama M. Ishikawa Y. Hong T. Miyakawa M. Detmar	The Journal of Investigative Dermatology, 122 (2003) pp. 201-208
B36	Ca ²⁺ シグナル伝達による細胞周期制御	水沼 正樹	生物工学, 81 (2003) pp. 162
B37	細胞形態形成と細胞周期とを連携制御するチェックポイント	金井宗良 平田 大	化学と生物, 41 (2003) pp. 651-656 総説
B38	No Effects of Estrogen Receptor Overexpression on Gonadal Sex Differentiation and Reversal in Medaka Fish	T. Kawamura S. Omura S. Sakai I. Yamashita	Zoological science, 20 (2003) 原著 pp. 43-47
B39	メダカによる環境監視 - 目で見るバイオ	山下 一郎	バイオサイエンスとインダストリー, 総説 61, 12 (2003) pp. 789-790
B40	メダカの血管形成と環境監視への応用	山下 一郎	バイオサイエンスとインダストリー, 総説 61, 12 (2003) pp. 801-804
B41	Mutations that are synthetically lethal with a gas1 allele cause defects in the cell wall of <i>Saccharomyces cerevisiae</i>	N. Tomishige Y. Noda H. Adachi H. Shimoji A. Takatsuki K. Yoda	Mol. Genet. Genomics., 269 (2003) pp. 562-573
B42	Analysis of the Pyruvate Permease Gene (JEN1) in Glucose Derepression Yeast (<i>Saccharomyces cerevisiae</i>) Isolated from a 2-Deoxyglucose-tolerant Mutant, and Its Application to Sake Making	H. Tsuboi Y. Wakisaka M. Hirotsune T. Akao O. Yamada O. Akita	Biosci. Biotechnol. Biochem., 67, 原著 4 (2003) pp. 765-771

B43	Cloning and Sequence Analysis of Endoglucanase Genes from an Industrial Fungus, Aspergillus kawachii	Y. Hara Y. Hinoki H. Shimo K. Ito	Biosci. Biotechnol. Biochem., 67, 9 (2003) pp. 2010-2013
B44	Mode of α -Amylase Production by the Shochu Koji Mold Aspergillus kawachii	K. Nagamine K. Murashima T. Kato H. Shimo K. Ito	Biosci. Biotechnol. Biochem., 67, 10 (2003) pp. 2194-2202
B45	dffA Gene from Aspergillus oryzae Encodes L-Ornithine N ⁵ -Oxygenase and Is Indispensable for Deferriferrichrysin Biosynthesis	O. Yamada S. N. Nan T. Akao M. Tominaga H. Watanabe T. Satoh H. Enei O. Akita	Journal of Bioscience and Bioengineering, 95, 1 (2003) pp. 82-88 原著
B46	Characterization of an α -Ketoglutarate-Resistant Sake Yeast Mutant with High Organic Acid Productivity	S. Yano T. Asano N. Kurose J. Hiramatsu H. Shimo K. Ito	Journal of Bioscience and Bioengineering, 96, 4 (2003) pp. 332-336
B47	醤油色度について - 麹菌からのアプローチ -	橋本 忠明 中田 佳幸 森下 めぐみ 辻 安信 伊藤 清	日本醤油研究所雑誌, 29, 4 (2003) pp. 145-152
B48	清酒酵母の高泡形成遺伝子	下飯 仁	バイオサイエンスとインダストリー, 61, 7 (2003) pp. 27-30

博士論文(Doctorial Dissertations)

論文題目	著者名	主査	副査	出版年
課程博士				
Time-of-Flight法を用いたSi-MOSデバイス反転層 内のキャリア輸送に関する研究	田中 聖康	三浦 道子	伊澤 義雅 岩田 穆 高萩 隆行 宮崎 誠一 山西 正道 横山 新	2003
Simulation of Transport Phenomena of Charge-Density Wave (電荷密度波における輸送現象の計算機シミュレーション)	磯部 義興	世良 正文	城 健男 高畠 敏郎	2003
First-Principles Studies on Surface and Interface Magnetism (第一原理計算による表面及び界面の磁性に関する研究)	畠田 浩義	小口 多美夫	城 健男 高畠 敏郎	2003
Studies on bacteria-type ribosome and related factors (細菌型リボソームおよび関連因子の解析)	笠井 光治	山田 隆	木梨 陽康 加藤 純一 宇佐美 昭二	2003
哺乳動物における脂肪酸不飽和化・鎖長延長酵素の構造および発現調節機構に関する研究	稻垣 勝也	小塙 和久	木梨 陽康 山田 隆 秋 廉裕	2003
Streptomyces griseus の線状染色体のダイナミックな構造変化の解析	内田 哲也	木梨 陽康	山田 隆 加藤 純一	2003
Studies on the coordinated regulation of cell growth and division in fission yeast (分裂酵母における細胞増殖と分裂との連携制御機構の解析)	須田 雅子	平田 大	宮川 都吉 山下 一郎 山田 隆	2003
Mortierella 属糸状菌由来 -グルコシダーゼの構造と機能に関する研究	田中 良男	小塙 和久	宮川 都吉 加藤 純一 秋 廉裕	2003
Studies on 2,3-Butanediol Production in Paenibacillus polymyxa (Paenibacillus polymyxaによる2,3-ブタンジオール生産に関する研究)	BAMBANG MARWOTO	西尾 尚道	大竹 久夫 加藤 純一 柿薗 俊英	2003
清酒麹菌の生産するフィターゼの性質と清酒醸造への役割	藤田 仁	小塙 和久	西尾 尚道 秋田 修 重田 征子	2003
微生物における長鎖脂肪酸の不飽和化ならびに輸送に関する分子機構の解析	道中 康也	小塙 和久	土屋 英子 大竹 久夫 秋 廉裕	2003
バクテリアのポリリン酸蓄積機構の解析と応用	諸星 知広	黒田 章夫	大竹 久夫 宮川 都吉 加藤 純一	2003
Studies on the Regulatory Mechanisms of Cutaneous Angiogenesis in Hair Cycling and Photo-Damage (毛周期および光老化における皮膚血管新生制御機構に関する研究)	矢野 喜一郎	宮川 都吉	山田 隆 小塙 和久 平田 大	2003
1T-TaS2単結晶における電荷密度波転移と特異な輸送現象	伊佐 隆志	三浦 道子	城 健男 世良 正文 宮崎 誠一 佐々木 実	2003

Theory of Orbital Ordering and X-Ray Absorption Linear Dichroism in Transition-Metal Oxides (遷移金属酸化物における軌道秩序とX線吸収線 二色性の理論)	黃 紅斌	城 健男	小口 多美夫 高畠 敏郎 伊賀 文俊	2003
Thermoelectric and Magnetic Properties of CeRhSn and SmBiPt (CeRhSnとSmBiPtの熱電物性と磁性)	金 武星	高畠 敏郎	城 健男 世良 正文 伊賀 文俊	2003
Development of Semiconductor In-line Process Monitoring System using Noncontact Capacitance Method and its Application to Surface Contamination Evaluation (非接触容量測定法を用いた半導体インライン測定 装置の開発と汚染評価への応用)	河野 元宏	横山 新	高萩 隆行 宮崎 誠一 芝原 健太郎	2003
回路シミュレーションのためのキャリア走行遅延を 考慮したMOSFETモデル (A Non-Quasi-Static Model for Metal-Oxide- Semiconductor Field-Effect Transistor Based on Carrier-Transit Delay)	中山 範明	三浦 道子	高萩 隆行 宮崎 誠一 山西 正道 横山 新	2003
バルクSiおよびSOIを用いた90nmノードCMOSイン テグレーション技術に関する研究 (A Study on 90nm Node CMOS Integration Technology with Bulk and SOI Devices)	今井 清隆	芝原 健太郎	岩田 穆 宮崎 誠一 横山 新	2003
Studies on the growth regulation by the Ca ²⁺ - signaling pathways in budding yeast (出芽酵母におけるCa ²⁺ シグナルによる増殖制御 機構に関する研究)	下向 敦範	宮川 都吉	山田 隆 小埜 和久 平田 大	2003
論文博士				
Stark spectroscopy of high-lying odd parity levels in atomic samarium (サマリウム原子における高励起奇parity準位の シュタルク分光)	近藤 嵩久	遠藤 一太	城 健男 宇田川 真行	2003
High Resolution CMOS Analog-to Digital and Digital-to-Analog Converters using Delta-Sigma Modulation (デルタシグマ変調方式による高分解能CMOSA/D 変換器及びD/A変換器)	藤森 一郎	岩田 穆	高萩 隆行 横山 新 芝原 健太郎	2003

既刊著書(Published Books)

著書名(編集者)	著者名	発行所	発行年	編・著・訳・ 分担執筆等 の区別
21世紀版 薄膜作製応用ハンドブック「プラズマ CVD法」	宮崎誠一	エヌ・ティー・エス	2003	分担執筆
薄膜工学「化学気相成長法」	宮崎誠一	丸善	2003	分担執筆
人工格子の基礎「アモルファス半導体人工格子」	広瀬全孝、宮崎誠一	シーエムシー出版	2003	分担執筆
清酒酵母の研究「90年代の研究」(清酒酵母・麹研 土屋 英子 研究会)pp. 20-24		日本醸造協会	2003	分担執筆
清酒酵母の研究「90年代の研究」(清酒酵母・麹研 研究会) pp. 39-46	下向 敦範 水沼 正樹 平田 大 宮川 都吉	日本醸造協会	2003	分担執筆
農芸化学の辞典	水田 啓子 宮川 都吉	朝倉書店	2003	分担執筆
回路シミュレーション技術とMOSFETモデリング (Circuit-Simulation Technics and MOSFET Modeling)	三浦 道子 名野 隆夫 盛 健次	サイベック	2003	共著
第17回「大学と科学」公開シンポジューム講演収録 藤井 博信 集 21世紀を拓く水素の世界 - 新しい材料とクリー ンエネルギー「カーボン材料」pp. 119-128		クバプロ	2003	分担執筆
"Rough Interface Effects on N-S Proximity-Contact Systems", Towards the Controllable Quantum States pp. 276-281	Y. Nagato K. Nagai	World Scientific Publishing Co. Ltd.	2003	分担執筆

既登録特許(Registered Patents)

発明の名称	特許番号	発明者(全員)	登録年月日
X線発生装置	特許第3419906号	遠藤 一太 佐藤 義久	2003.4.18
エストロゲン高感受性メダカ	特許第3448641号	山下 一郎	2003.7.11
ZrNi系水素吸蔵合金およびその製造方法	特許第3394088号	対尾 良則 山本 研一 谷岡 真一 藤井 博信	2003.1.31
汚泥の処理方法及び当該処理方法を含む有機性廃水処理方法	特許第3499151号	大竹 久夫	2003.12.5
駆動回路及び表示装置	特許第3407371号	東 清一郎	2003.3.14
液晶表示装置、液晶表示装置の駆動方法、および液晶表示装置の検査方法	特許第3446209号	東 清一郎	2003.7.4
アクティピマトリクス基板の製造方法及び液晶表示装置	特許第3477969号	東 清一郎	2003.10.3
薄膜トランジスタ回路およびそれを用いた液晶表示装置	特許第3489184号	東 清一郎	2003.11.7
高速入出力装置を備えた半導体集積回路装置の試験方法及び試験装置	特許第3446124号	佐々木 守	2003.7.4
Nonvolatile Memory Using Deep Level Capture Of Carrier At Corner Structure Of Oxide Film (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)	第6563163号 (アメリカ合衆国特許)	三浦道子 小野 剛史 マタウシュ ハンス ユルゲン	2003.5.13