

5 研究業績(学術誌掲載論文および学術著書)

〈地 理 学〉

- 小元久仁夫(2003)「与那国島および波照間島から採取したビーチロックの¹⁴C年代と安定同位体比($\delta^{13}\text{C}$)」, 日本大学文理学部自然科学研究所「研究紀要」, 38, 1-17
- 小元久仁夫(2002)「AMS年代測定の現状と展望」, 季刊地理学, 54(3), p.179-180
- 小元久仁夫(2002)「安定同位体比($\delta^{13}\text{C}$)によるビーチロック試料の¹⁴C年代の補正(予報)」, 日本地理学会発表要旨集(62), p.131
- 高阪宏行・関根智子(2003)「国勢調査小地域統計のArcView」での利用法, 地理誌叢, 44(1・2), p.66-74
- 高阪宏行(2002)『地理情報技術ハンドブック』, 朝倉書店, p.481.
- 佐野 充(2003)「交通における環境調和型都市」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.29-34
- 佐野 充(2002)「地方都市における中心市街地再生の諸問題」, 日本地理学会発表要旨集(62), p.184.
- 永野征男(2003)「統計で見る横浜一生糸からIT産業へ」, 日本統計協会「統計」, 54(3) p.8-13
- 永野征男(2002)「歴史都市川越の中心商業地の転移について」, 地理誌叢, 43(1・2), p.42-54
- 永野征男(2002)「富山県山田村における地域情報化の経緯と現状」, 日本大学文理学部自然科学研究所研究紀要, 37, p.1-10
- 野上道男・小疇 尚・ほか(2003)『日本の地形 北海道編』, 東大出版会.
- 野上道男・岡部篤行・ほか(2002)『地理情報学入門』, 東大出版会, p163
- 水嶋一雄(2003)「都市農業の存続に向けた環境保全型農業の導入と課題—東京都世田谷区の「有機農業研究会」について—」, 地理誌叢, 44(1・2), p.1-20
- 水嶋一雄(2002)わが国における環境保全型農業の現状と課題(第5報)—神奈川県「座間市稲作研究会」について—, 日本大学文理学部自然科学研究所「研究紀要」, 36, p.11-24.
- 水嶋一雄(2002)「自然環境と共生する地域社会づくりの考え方—カリフォルニア州デービス市の都市づくりの視点—」, 黒部川扇状地, 27, p.55-63 黒部川扇状地研究所
- WARAGAI, T (2003) Weatherability and weathering processes on building stones of Angkor Wat, Cambodia, Proceedings of International Symposium on Industrial Minerals and Building Stones, p.353-361
- 藁谷哲也(2003)環境の持続性にかかわる分析の重要性. 高田邦道・横内憲久編著『環境と資源の安全保障47の提言』共立出版, p.94-97
- 藁谷哲也(2003)世界遺産における石材保全のあり方. 高田邦道・横内憲久編著『環境と資源の安全保障47の提言』共立出版, p.159-165
- 藁谷哲也(2002)『東村山の地形と地質』, 『東村山市史1』通史編 上巻, p.36-58
- 落合康浩(2003)「パキスタン北部地域バスー村における生活様式の変化—住民の地域振興策・観光業への取り組み—」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.19-27
- 関根智子・二瓶直子・吉田政弘・小林睦生・高阪宏行・安居院宣昭(2002)「地理情報システム(GIS)による大阪府におけるセアカゴケグモ生息地の拡大状況の解析」, 厚生科学研究費補助金振興・再興感染症研究事業 疾病媒

- 介昆虫の侵入・移動分散の監視・防御に関する研究－平成13年度総括・分担研究報告書－, p.206–209
- 宮地忠幸 (2003) 「輸入野菜の増加に対する国内産地の対応とその課題－埼玉県深谷市を事例として－」, 地理誌叢, 44 (1・2), p.51–65
- 宮地忠幸・両角政彦・水嶋一雄 (2003) 「東京都小平市における有機野菜生産の展開意義－改正生産緑地制度下における農業経営の新展開－」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.35–54

〈地球システム科学〉

- 瀧 尚子・千葉達朗・田島靖久・宮地直道・遠藤邦彦 (2003) 「富士山北東斜面における火砕流堆積物の古地磁気学的検討」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.89–101
- 宮内和則・橋本哲夫・中川貴博・印牧もとこ・遠藤邦彦 (2003) 「RTL年代測定法における Single grain法の検討－洞爺火砕流堆積物石英粒子の例－」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.207–221
- 遠藤邦彦 (2002) 「奥東京湾をめぐる」, 葦のみち, 14, p.144–150
- 遠藤邦彦・坪井哲也・大野希一・小林貴之 (2002) 「富士山監視カメラ・システム－噴火のリアルタイム予測に向けて－」, 月刊地球, 24 (9), (通巻279), p.645–650
- 長井大輔・遠藤邦彦・国方まり・中山聡子・本松史年・大野希一・千葉達朗・鈴木正章 (2002) 「粒度分布と凝集構造から見た有珠山2000年3月31日噴火の火山灰」, 火山, 47 (5), p.607–617
- 遠藤邦彦 (2002) 「タクラマカン沙漠－黄砂のふるさと－」, 文明のクロスワード, 19 (3), (通巻73), p.8–15
- FENG, Q., ENDO, K. & CHENG, G. (2002) Soil carbon in desertified land in relation to site characteristics, Geoderma, 106, p.21–43
- FENG, Q., ENDO, K. & CHENG, G. (2002) Soil water and chemical characteristics of sandy soils and their significance to land reclamation, Journal of Arid Environments, p.1–20
- 遠藤邦彦 (2001) 「微小・微少テフラ研究の意義」, 平成9年度～平成11年度科学研究費補助金 (基盤研究 (C) (2)) 研究成果報告書「微量火山灰の同定に関する基礎的研究」, p.1–2
- 林 伸幸・遠藤邦彦・福岡孝昭・大野希一・河野美香・藤井理行 (2001) 「南極に到達した1991年ピナツボ噴火テフラ微粒子」, 平成9年度～平成11年度科学研究費補助金 (基盤研究 (C) (2)) 研究成果報告書「微量火山灰の同定に関する基礎的研究」, p.3–29
- 遠藤邦彦・林 伸幸・福岡孝昭・藤井理行・河野美香 (2001) 「南極H15氷床コア中の微粒子はタンボラ1815年噴火起源か?」, 平成9年度～平成11年度科学研究費補助金 (基盤研究 (C) (2)) 研究成果報告書「微量火山灰の同定に関する基礎的研究」, p.31–57
- 遠藤邦彦・大野希一・国方まり・諸星真帆・鈴木正章・西村裕一・長井大輔・千葉達朗・陶野郁雄 (2001) 「有珠山2000年噴火におけるマグマ水蒸気爆発」, 日本大学文理学部自然科学研究所「研究紀要」, 36, p.65–73
- FENG, Q., ENDO, K. & CHENG, G. (2001) Dust Storm in China—a case study on dust storm variation and dust sediments characteristics, Bulletin of International Association for Engineering Geology and the Environment, 60 (5).

- FENG, Q., ENDO, K. & CHENG, G. (2001) Dust Storm variations and formation in China, *Journal of the Meteorological Society of Japan*, accepted.
- FENG, Q., ENDO, K. & CHENG, G. (2001) Soil water and its chemical variation of sandy land in China, *Journal of Arid Environment*, in print.
- FENG, Q., ENDO, K. & CHENG, G. (2001) Towards sustainable development of the environmentally degraded River Heihe basin, China, *Hydrological Sciences-Journal-des Sciences Hydrologiques*, 46 (5), p.647-658
- 大庭 (関) 祐美子・小坂和夫 (2001) 「新潟県小千谷地域の活褶曲—地層傾斜角度からみた2.5～2Maのテクトニクス転換の可能性—」, 日本大学文理学部自然科学研究所「研究紀要」, 36, p.111-116
- SUN, Y., ZHU, W., GUO, J. & KOSAKA, K. (2001) Comparison of Fractal Dimensions of Fracture Surfaces Originated from Different Mechanical Conditions in the Northern Tarim Basin, Northwest China,” “Proceedings of the Institute of Natural Sciences, Nihon University,” 36, p.75-79
- 川野辰康・小坂和夫 (2002) 「中世石窟遺構の塩類風化—鎌倉のやぐらの例—」, *応用地質*, 43 (3), p.124-133
- 佐藤キエ子・何 報寅・杜 耘・陳 世儉・蔡 述明 (2003) 「中国長江上・中流域における水環境の変化」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.221-231
- 尾口俊一・佐藤キエ子 (2003) 「八丈島東山恒常河川上流域における湧水の湧出機構について」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.233-242
- 高橋正樹・市川八州夫・安井真也・浅香尚英・下斗米朋子・荒牧重雄 (2003) 「浅間・前掛火山天仁噴火噴火物の全岩化学組成と天明噴火噴出物との比較」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.65-88
- 高橋正樹・小見波正修・根本靖彦・長谷川有希絵・永井 匡・田中英正・西 直人・安井真也 (2003) 「富士火山噴火物の全岩化学組成—分析データ847個の総括—」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.117-166
- TAKAHASHI, M., TAGIRI, M. & NOTSU, K. (2002) Comparative study of Quaternary arc volcanic belts: Southern Chile vs. Northeast Japan. “Proceedings of the Institute of Natural Sciences, Nihon University”, 37, p.135-156
- 高橋正樹・安井真也・永井 匡 (2001) 「富士火山における山頂・山腹同時噴火の可能性—最新期山頂火口マガマ噴火時の例—」, *月刊地球*, 24 (9), p.63-639
- 高橋正樹・菊池康次・漆畑忠之・荒牧重雄・葉室和親 (2002) 「東伊豆単成火山群玄武岩類の液相濃集元素」, 日本大学文理学部自然科学研究所研究紀要, 37, p.119-134
- 高橋正樹 (2003) 「大規模カルデラ噴火のリスクと予測可能性」, *月刊地球*, 25, p.857-860
- 森 和紀 (2003) 「長江流域の水文気象特性と下流部における水面積の変化」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.215-220
- 吉野正敏 (監修)・山川修治・加藤央之・小柴 厚・西森基貴ほか (2002) 『日本の気候 I—最新データでメカニズムを考える—』, 二宮書店, p.275
- 浮田典良 (編)・山川修治・豊田哲也・野間晴雄・藤井 正・松本博之・山田 誠・吉越昭久ほか (2002) 『最新地理学用語辞典』, 大明堂, p.288

- 河合隆繁・遠藤邦彦・山川修治・牧口ゆきみ・近藤有紀(2002)「富士山周辺の風と降灰分布」, 月刊地球, 24 (2) p.651-659
- 安井真也・高橋正樹・永井 匡・小笠原耕助(2003)「富士火山山頂部の最新期溶結火砕岩と東側山腹の巨大岩塊を含む火砕成溶岩」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.103-115
- 安井真也・菅沼由里子(2003)「降下軽石堆積物中の遊離結晶の破碎組織」, 火山, 48, p.221-228
- YOSHII, T., IWASAKI, T., ITO, T. & SATO, H. (2001) Seismological features of island arc crust as inferred from recent seismic expeditions in Japan, *Tectonophysics*, 355, p.53-66
- NAKAYAMA, Y., TANAKA, S. & ENDO, K. (2002) Production of an ADEOS/OCTS mosaic data for land cover investigation in continental scale, *Advances Space Research*, 29 (1), p.17-22
- NAKAYAMA, Y., MURAYAMA, N. & ENDO, K. (2002) Analysis of plural satellite mosaic data sets for investigation of flood in the middle reaches of Yangtze river, *Proceedings of the Twenty-third International Symposium on Space Technology and Science*, p.2145-2149
- MIYAJI, N. (2002) The 1707 eruption of Fuji Volcano and its tephra, *Global Environmental Research*, 6 (2), p.37-39
- MARTIN, A.J., TAKAHASHI, M., UMEDA, K. & YUSA, Y. (2003) Probabilistic methods for estimating the long-term spatial characteristics of monogenetic volcanoes in Japan. *Acta Geophysica Polonica*, 51, p.271-289
- 小山真人(編)・荒牧重雄・鶴川元雄・宮地直道・高橋正樹ほか(2002)『富士を知る』, 集英社, p.199
- 大野希一・国方まり・鈴木正章・西村裕一・長井大輔・遠藤邦彦・千葉達朗・諸星真帆(2002)「有珠山2000年噴火でもたらされた火砕物の層序」, 火山, 47, p.619-643
- 本松史年・大野希一・国方まり(2003)「有珠山2000年4月1日～7日噴火の推移」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.181-205
- 国方まり・大野希一・本松史年(2003)「有珠山2000年3月31日噴火の推移」, 日本大学文理学部自然科学研究所「研究紀要」, 38, p.167-180

〈数 学〉

- 黒田耕嗣(2002)『生保年金数理1』, 培風館.
- TOMARI, M (2002) Multiplicity of filtered rings and simple $K3$ singularities of multiplicity two (2002) *Publ. RIMS, Kyoto Univ.*, vol.38, 693-724
- MOTEGI, K. & MIYAZAKI, K (2002) Seifert fibering surgery on periodic knots, *Topology Appl.*, 121, p.275-285
- MOTEGI, K (2003) Dehn surgeries, group actions and Seifert fiber spaces, *Communications in Analysis and Geometry*, 11, p.343-389
- MOTEGI, K (2003) An experimental study of Seifert fibered Dehn surgery via SnapPea., *Interdisciplinary Information Sciences*, 9, p.95-125
- MOTEGI, K. & MIYAZAKI, K (2002) Crossing change and exceptional Dehn surgery, *Osaka J. Math*, 40, p.1-5

- MOTEGI, K. & ICHIHARA, K (2002) Stably filling curves on a surface, *Kobe J. Math.* 19, p.61–66
- MOTEGI, K., AITNOUH, M. & MATIGNON, D (2003) Twisted unknots, *C. R. Acad. Sci. Paris, Ser. I*, 337, P.321–326
- MOTEGI, K. & ICHIHARA, K (2002) Sectional knots in Seifert fibered 3-manifolds, *数理解析研究所講究録*, 1270, p.101–111
- 森 真・小川重義 (2002) 『現象からみた確率論入門』, 講談社.
- 森 真・田中ゆかり (2003) 『なっとくする統計』, 講談社.
- MORI, M., BERTHE, V., FERENCZI, S., SIEGEL, A., TAMURA, J., ITO, S., ARNOUX, P., MAUDUIT, C., PERIERE, J. & WEN, Z.Y (2003) *Substitutions in Dynamics, Arithmetics and Combinatorics*, Springer.
- 森 真 (2003) 『確率と確率過程の基礎』, 共立出版.
- 渡邊敬一 (2002) 『環と体』, 朝倉出版.
- WATANABE, K (2002) F-regular and F-pure Rings vs. Log-terminal and Log-canonical Singularities, *J. Alg. Geom.* (2002), 363–392 (with N. Hara).
- WATANABE, K (2002) F-rationality of Rees algebras, *J. of Alg.* 247 (2002), 153–190 (with N.Hara and K.Yoshida), p.153–190
- WATANABE, K (2002) Rees algebras of F-regular type, *J. of Alg.* 247 (2002), 191–218 (with N.Hara and K.Yoshida), p.191–218
- YAMAURA, Y (2002) A construction of a Lipschitz continuous minimizer of a free boundary problem, *Nonlinear Analysis*, 54, p.1175–1191
- 〈情報システム解析学〉
- SAITO, A., CHEN, G., WEI, B. & XHANG, X (2002) The hamiltonicity of bipartite graphs involving neighborhood unions, *Discrete Mathematics*, 249, p.45–56
- SAITO, A., KAWARABAYASHI, K. & OTA, K (2002) Hamiltonian cycles in n-extendable graphs, *Journal of Graph Theory*, 40, p.75–82
- SUZUKI, O. & PARTHARATHARSI, R (2002) Abelianization of Wilson loop of non-abelian gauge theory on complex manifold and Polyakov's conjecture, *Reports on Mathematical Physics*, 50, p.69–83
- 戸田誠之助 (2002) 「グラフ同型写像の数え上げ問題に対するアルゴリズム」, *電子情報通信学会論文誌*, J85-D-I (5), p.424–435
- 戸田誠之助 (2002) 「グラフ同型性判定問題の計算量」, *電子情報通信学会論文誌*, J85-D-I (2), p.100–115
- YAKU, T., INOUE, O., TSUCHIDA, K., NAKAGAWA, S. & ARITA, T (2003) An XML Viewer for Tabular Forms for Use with Mechanical Documentation, *Proc. 21th IASTED Intenat. Conf. Applied Informatics (AI2003)*, p.284–1289
- YAKU, T. & KIRISHIMA, K (2003) Syntax for Tables, *Proceedings of the IASTED International Conference on Applied Informatics, Austria (2003)*, p.1185–1190

- YAKU, T. & TSUCHIDA, K (2003) Algorithms on Attribute Graphs for Tables, Proceedings of the 3rd Hungarian-Japanese Symposium on Discrete Mathematics and Its Applications, Tokyo (2003), p.171-178
- YAKU, T., MOTOHASHI, T. & TSUCHIDA, K (2002) Attribute Graphs for Tables and Their Algorithms, Proceedings of Foundation of Software Engineering, K.Inoue ed, Kinndaikagakusha, p.183-186
- YAKU, T., MOTOHASHI, T. & TSUCHIDA, K (2002), proceedings of the 6th IASTED International Conference on Software Engineering and Applications, p.317-322
- 谷 聖一・原 正雄・山本 慎 (2003) 「結び目の非自明性判定問題に対する対話型証明系について」, 電子情報通信学会技術研究報告書, 102 (593), p.67-72
- 谷 聖一・原 正雄・山本 慎・谷 聖一 (2002) 「Arborescent 絡み目に対するジョーンズ多項式計算アルゴリズム」, 情報技術レターズ, 1, p.16-17
- 谷 聖一・田邊利崇・原 正雄・山本 慎・谷 聖一 (2002) 「ブレイド群における共役問題の計算量について」, 電子情報通信学会技術研究報告書, COMP2001 (84), p.9-16
- 谷 聖一・名古屋孝幸・戸田誠之助・谷 聖一 (2002) 「グラフ同型写像の数え上げ問題に対するアルゴリズムについて」, 電子情報通信学会論文誌, J95-DI (5), p.424-435

〈物理・応用物理学〉

- ISHIKAWA, A (2003) Effect of the collection of ions on the etching rate of the specimens in CO₂ atmosphere, *Proc. Int. Symposium on In-situ Electron Microscopy (Nagoya, 2003)* 22, p.22
- ISHIKAWA, A. & MIYATA, H (2002) Closed Type Environmental Cell with Carbon Sealing Film Withstanding Atmospheric Pressure, *Proc. China-Japan Joint Seminar on Atomic Level Characterization-2002*, p.20-25
- W.-A.Chiou., ISHIKAWA, A., K.H. Foo, MIYATA, H., TSUKADA, H. & FUKUSHIMA, K (2002) In situ TEM study of small particles in liquid environment, *Proc. 15th Intern. Congr. Electron Microsc.*, 1, p.31-32
- ISHIDA, H. & LIEBSCH, A (2002) Static and quasistatic response of Ag surfaces to a uniform electric field, *Physical Review B, American Physical Society*, 66 (15), 155413
- WORTMANN, D., ISHIDA, H. & BLUEGEL, S (2002) An embedded Green-function approach to the ballistic electron transport through an interface, *Physical Review B, American Physical Society*, 66 (7), p.75113
- KUBO, Y., KAKUTANI, Y., KOIZUMI, A. & SAKAI, N (2003) Magnetic Compton Profiles of Fcc-Ni, Fcc-Fe₅₀Ni₅₀ and Hcp-Co, *Journal of the Physical Society of Japan*, 72 (3), p.599-606
- SATOKO, C (2002) Electronic and geometric properties of alkali-C60 molecules, *The European Physical Journal D*, 19, p.211-221
- SUZUKI, T. & SAGAWA, H (2003) Gamow-Teller and spin-dipole strength in ²⁰⁸Bi and neutrino-induced reactions, *Nuclear Physics A*, 718, p.446-448
- SUZUKI, T., FUJIMOTO, R. & OTSUKA, T (2003) New aspects of spin degrees of freedom in nuclei, *Nuclear Physics A*,

722, p.538–542

- SUZUKI, T., FUJIMOTO, R. & OTSUKA, T (2003) Gamow-Teller transitions and magnetic properties of nuclei and shell evolution, *Physical Review C*, **67** (044302), p.1–15
- SUZUKI, T., SAGAWA, H. & HAGINO, K (2003) Electromagnetic moments and electric dipole transitions in carbon isotopes, *Physical Review C*, **68** (014317), p.1–10
- SUZUKI, T., & OTSUKA, T (2002) Shell structure of Be and Li isotopes studied by electroweak probes, *Nuclear Physics A*, **704**, p.79–87
- MOTOYAMA, N., EISAKI, H., UCHIDA, S., TAKESHITA, N., MORI, N., NAKANISHI, T. & TAKAHASHI, H (2002) Electronic phase diagram of a hole-doped two-leg ladder system, $\text{Sr}_{14-x}\text{Ca}_x\text{Cu}_{24}\text{O}_{41}$, *Europhys. Lett.*, **58**, p.758–763
- SHIROTANI, I., HAYASHI, J., ADACHI, T., SEKINE, C., KAWAKAMI, T., NAKANISHI, T., TAKAHASHI, H., TANG, J., MATSUSHITA, A. & MATUMOTO, T (2002) Metal to insulator transition of filled skutterudite $\text{PrRu}_4\text{P}_{12}$ at low temperature and high pressures, *Physica B*, **322**, P.408–412
- 高橋博樹 (2002) 「圧力装置の現状」, 高圧力の科学と技術, **12** (4), p.273–279
- MARUTA, S., MIZUKURA, Y. & CHAEN, S (2002) Interaction of a new fluorescent ATP analogue with skeletal muscle myosin subfragment-1, *J. Biochem*, **131** (6), p.905–911.
- TAKIZAWA, T., KATO, A., YAMAZAKI, M., NAJAFOV, H., IWAI, K., BAYRAMOV, A., HIDAKA, C. & IIDA, S (2003) Radiative and non-radiative processes of Ce related transitions in CaGa_2S_4 and SrGa_2S_4 , *Journal of Physics and Chemistry of Solids*, **64**, p.1511–1517
- TAKIZAWA, T., HIDAKA, C. & MAKABE, N (2003) Determination of a pseudo-binary $\text{SrSe-Ga}_2\text{Se}_3$ phase diagram and single crystal growth of SrGa_2Se_4 compounds, *Journal of Physics and Chemistry of Solids*, **64**, p.1797–1800.
- TAKIZAWA, T., OZAWA, H. & HIDAKA, C (2003) ESR study of Ce^{3+} ions doped in the CdIn_2S_4 lattice, *Journal of Physics and Chemistry of Solids*, **64**, p.1807–1810.
- TAKIZAWA, T., YAMAMOTO, N., MAMEDOV, N., SHIM, Y., HIDAKA, C., NIWA, E. & MASUMOTO, K (2003) Light figure spectroscopy of optically active anisotropic materials, *Journal of Physics and Chemistry of Solids*, **64**, p.1959–1962 .
- TAKIZAWA, T., MATSUSHITA, H. & TOJO, Y (2003) Schottky properties of CuInSe_2 single crystals grown by the Horizontal Bridgman method with controlling Se vapor pressure, *Journal of Physics and Chemistry of Solids*, **64**, p.1825–1829 .
- TAKIZAWA, T., MAMEDOV, N., YAMAMOTO, N., SHIM, Y., NINOMIYA, Y., MARUTA, S., MIZUKURA, Y. & CHAEN, S (2003) Extended Application of Light Figures to Optically Active Materials with Transversally Isotropic Dielectric Function, *Jpn. J. Appl. Phys.*
- 滝沢武男・日高千晴 (2002) 「IIa-III₂-VI₄系化合物の単結晶作製」, 応用物理, 第71巻, 第5号, p.553–556.
- TAKIZAWA, T., TAKIZAWA, T. & MATSUSHITA, H (2002) Defect physics of CuInSe_2 and CuGaSe_2 bulk single crystals grown by the horizontal Bridgman method, " IPAP Book Series 1, Japanese Research Review for Pioneering Ternary and Multinary Compounds in the 21st Century, *The Institute of Pure and Applied Physics*, p.190–196

- TAKIZAWA, T., ASAKA, K., HIDAHA, C. & MATSUSHITA, H (2002) Phase diagrams and crystal structures of the CdS- In_2S_3 - Ga_2S_3 system, *IPAP Book Series 1, Japanese Research Review for Pioneering Ternary and Multinary Compounds in the 21st Century, The Institute of Pure and Applied Physics*, p.73–78
- TAKIZAWA, T. & HIDAHA, C (2002) Single crystal growth of CaGa_2S_4 and SrGa_2S_4 , *IPAP Book Series 1, Japanese Research Review for Pioneering Ternary and Multinary Compounds in the 21st Century, The Institute of Pure and Applied Physics*, p.68–72
- TAKIZAWA, T., & MATSUSHITA, H (2002) Thermal analysis of chemical reaction processes of chalcopyrite compound semiconductors, *IPAP Book Series 1, Japanese Research Review for Pioneering Ternary and Multinary Compounds in the 21st Century, The Institute of Pure and Applied Physics*, p.11–16
- TAKIZAWA, T., & HIDAHA, C (2002) Single-crystal growth and optical properties of undoped and Ce^{3+} doped CaGa_2S_4 , *Journal of Crystal Growth*, **237–239**, p.2009–2013
- TAKIZAWA, T., MATSUSHITA, H. & KATSUI, A (2002) Cu-based multinary compounds and their crystal growth: synthesis processes, phase diagrams and control of vapor pressures, *Journal of Crystal Growth*, **237–239**, p.1986-1992)
- 村山和郎 (2002) 「アモルファス半導体とフラクタル」, 固体物理, 37巻 p.889–897.
- MURAYAMA, K., OHNO, K., ANDO, Y., & MATSUDA, A. (2002) Power Law Behavior in Amorphous Si: H and Si: D due to Hopping-Randomwalk of Electrons in Localized Band Tail States in Random Fractal Fluctuation, *physica status solidi (b)*, **230** (1), p.221–226.
- ANDO, Y., SASAKI, A., SHINGAI, M., & MURAYAMA, K. (2002) Hopping-Randomwalk in Random Fractal Fluctuation and the Application to Photoluminescence Decay in Amorphous Si: H and Nanometer Film, *physica status solidi (b)*, **230** (1), p.15–20.
- MOCHIZUKI, S. & FUJISHIRO, F (2003) Shallow and deep excited states of mesoscopic structure in $\text{AgI}-\gamma \text{Al}_2\text{O}_3$ composites, *physica status solidi (b)* (2), p. 763–766
- MOCHIZUKI, S. & FUJISHIRO, F (2003) Shallow and deep luminescence centers in AgI-based superionic conductor glass, *physica status solidi (b)* (2), p. 767–770
- MOCHIZUKI, S. & FUJISHIRO, F (2002) The photoexcitation and Relaxation of High-Ionic Conductivity Glasses (AgI)_x (AgPO_3)_{1-x}, *Nonlinear Optics* (29), p. 443–449
- MOCHIZUKI, S. & NAKANISHI, T (2002) Enhanced Photoluminescence of C_{70} -Porous Glass Composite, *Nonlinear Optics* (29), p.603–608
- MOCHIZUKI, S., MITA, Y., SAKAI, Y., KOBAYASHI, M. & ENDO, S (2002) Magnetic Phase Transition in Antiferromagnetic Materials under High Pressure, *physica status solidi (a)*, **189** (3), p. 935–938
- MINAGAWA, H., KANEKO, H. & SHIMADA, J (2002) Thermostabilization of enzymes for improvement of computer-aided protein engineering, *NEC Research & Development*, **43**, p.251–255
- ATODA, H., KANEKO, H., MIZUNO, H. & MORITA, T (2002) Calcium-binding analysis and molecular modeling reveal

echis coagulation factor IX/factor X-binding protein has the Ca-binding properties and Ca ion-independent folding of other C-type lectin-like proteins, *FEBS Letters*, **53**, p.229–234

TAKAGI, H., KODAMA, K., SAITO, M. & SUZUKI, H (2003) Presynaptic K⁺ Channel Modulation is a Crucial Ionic Basis of Neuronal Damage Induced by Ischemia in Rat Hippocampal CA1 Pyramidal Neurons, *Zoological Science*, **20**, p.7–11

HIRANO, A., MORIDERA, N., AKASHI, M., SAITO, M. & SUGAWARA, M. (2003) Imaging of L-Glutamate Fluxes in Mouse Brain Slices Based on an Enzyme-Based Membrane Combined with a Difference Image Analysis, *Analytical Chemistry*, **75**, p.3775–3783

HASHIMOTO, T., KOMAZAKI, K. & WANG, S (2003) Evaluation of Thermal Expansion and Structural Phase Transition Temperature Measured by High Temperature X-ray Diffraction, *Proceedings of The Institute of Natural Sciences, Nihon University*, **38**, p.265–276

KATSUKI, M., WANG, S., DOKIYA, M., & HASHIMOTO, T (2003) High Temperature Properties of La_{0.6}Sr_{0.4}Co_{0.8}Fe_{0.2}O_{3-δ} Oxygen Nonstoichiometry and Chemical Diffusion Constant, *Solid State Ionics*, **156**, p.453–461

MORITO, Y., TAKAHASHI, K., WANG, S., ABE, H., KATOH, A. & HASHIMOTO, T (2002) Press-Free Preparation Method of Dense Negative-Thermal-Expansion Oxide, Zr_{1-x}Y_xW₂O_{8-δ} (x=0.00-0.02) Ceramic Using Reactive Sintering, *Journal of the Ceramic Society of Japan*, **110**, p.807–812

HASHIMOTO, T & MORITO, Y. (2002) Thermal Analysis of Phase Transition in Negative-Thermal-Expansion Oxide, ZrW₂O₈- Detection of Trace Amount of H₂O and λ -type Transition, *Journal of the Ceramic Society of Japan*, **110**, p.823–825

HASHIMOTO, T., TSUDA, K., SHIONO, J., MIZUSAKI, J. & TANAKA, M (2002) Determination of Space Group of BaPb_{0.75}Bi_{0.25}O₃ by Convergent-beam Electron Diffraction, *Physica C*, **382**, p.422-430

MORITO, Y., WANG, S., OHSHIMA, Y., UHARA, T. & HASHIMOTO, T (2002) Preparation of Dense Negative-Thermal-Expansion Oxide by Rapid Quenching of ZrW₂O₈ Melt, *Journal of the Ceramic Society of Japan*, **110**, p.544–548

TSUDA, K., OGATA, Y., TAKAGI, K., HASHIMOTO, T. & TANAKA, M (2002) Refinement of Crystal Structural Parameters and Charge Density Using Convergent-beam Electron Diffraction-the Rhombohedral phase of LaCrO₃, *Acta Crystallographica A*, **58**, p.514–525

HASHIMOTO, T., UEDA, Y., YOSHINAGA, M., KOMAZAKI, K., ASAOKA, K. & WANG, S (2002) Observation of Two Kinds of Structural Phase Transitions in the Ba₂In₂O₅ System, *Journal of the Electrochemical Society*, **149**, A1381–A1384

HASHIMOTO, T., YOSHINAGA, M., UEDA, Y., KOMAZAKI, K., ASAOKA, K. & WANG, S (2002) Characterization of Phase Transition of Ba_{2-x}Sr_xIn₂O₅ by Thermal Analysis and High Temperature X-ray Diffraction, *Journal of Thermal Analysis and Calorimetry*, **69**, p.909–917

NAKAZATO, K., Homma T. & Tomo, T. (2004) Rapid solubility measurement of protein crystals as a function of precipitant concentration with micro-dialysis cell and two-beam interferometer, *Journal of Synchrotron Radiation*, **11**, p.34–37

MIZUSAWA, N., TOMO, T., SATOH, K. & MIYAO, M (2003) Degradation of the D1 protein of photosystem II under illumi-

nation *in vivo*: Two different pathways involving cleavage or intermolecular cross-linking, *BIOCHEMISTRY*, **42** (33), p.10034–10044

SUZUKI, T., MINAGAWA, J., TOMO, T., SONOIKE, K., OHTA, H. & ENAMI, I. (2003) Binding and functional properties of the extrinsic proteins in oxygen-evolving Photosystem II complex from a green alga, *Chlamydomonas reinhardtii* having His-tagged CP47, *Plant Cell Physiology*, (44), p.76–84

〈化 学〉

FUJIMORI, H., ASAJI, T., HANAYA, M. & OGUNI, M. (2002) Orientational Ordering of Pyridinium Ion in its Tetrabromaurate (III) Salt: Intermediate Situation between Schottky Anomaly and Phase Transition, *J. Thermal Analysis and Calorimetry*, **69**, p.985-996

ASAJI, T., SEKIOKA, M. & SUZUKI, K. (2002) Change in Electronic Structure of the ICl_2^- Anion in NH_4ICl_2 Crystals due to an Excitation of Reorientational Motion of the Ammonium Ion, *Z. Naturforsch.* **57a**, p.327-332

KUME, Y. & ASAJI, T. (2002) Hydrogen Isotope Effect on the Temperature Dependence of the ^{35}Cl -NQR Frequency in $(\text{NH}_4)_2\text{IrCl}_6$, *Z. Naturforsch.* **57a**, p.504-508

ASAJI, T., TAJIMA, F. & HASHIMOTO, M. (2002) On the Crystal Structure of Some Protonic Complexes of Oxo-ligands with Tetrachloroauric acid, $[(\text{RO})_n\text{H}][\text{AuCl}_4]$ (R: Py, Ph_3As ; n : 1, 2), Prepared from Deuterated and Non-deuterated Solvent Systems, *Polyhedron*, **22**, p.2207–2213

ASAJI, T., SAKURAI, T. & IKEDA, R. (2003) Bromine-adsorption behavior of a one-dimensional bromine-bridged mixed-valence palladium (II), (IV) complex, $[\text{Pd}(\text{chxn})_2][\text{PdBr}_2(\text{chxn})_2]\text{Br}_4$, *Solid State Communications*, **125**, p.171–173

飯田 隆・澁川雅美・菅原正雄・鈴鹿 敢・宮入伸一編著 (2003) 『イラストで見る化学実験の基礎知識』, 丸善(株), pp.255

IIDA, T., SHIRAIISHI, K., OGAWA, S., GOTO, T., MANO, N., GOTO, J. & NAMBARA, T. (2003) Functionalization of Unactivated Carbons in 3α , 6- and 3α , 24-Dihydroxy-5 β -cholane Derivatives by Dimethyldioxirane, *Lipids*, **38** (3), p.281-287

KAKIYAMA, G., NAKAMORI, R. & IIDA, T. (2003) A Convenient Synthesis of 24-Oxo-5 α -cholestan-3 β -yl Acetate -A Key Intermediate in the Synthesis of 24-Alkyl Sterols, *Proc. Institute of Natural Sci. Nihon Univ*, **38**, p.283–287

IIDA, T., KAKIYAMA, G., SHIMADA, A., MUSHIAKE, K., MANO, N., GOTO, J. & NAMBARA, T. (2003) Complete ^1H and ^{13}C NMR Signal Assignments of Carboxyl-Linked Glucosides of Bile Acids, *Magn. Reson. Chem.*, **41** (4), p.260–264

春日祐佳・飯田 隆 (2002) 「LIPID BANK (生理活性脂質データベース) の構築とその活用について」, 日本大学文学部自然科学研究所「研究紀要」, **37**, p.217–222

IIDA, T., YABUTA, R., GOTO, J. & NAMBARA, T. (2002) Direct Capillary Gas Chromatographic Analysis and Thermal Stability of Bile Acid Esters of Glucose, *Chromatographia*, **56** (7), p.489–494

IIDA, T., NAKAMORI, R., YABUTA, R., YADA, S., TAKAGI, Y., MANO, N., IKEGAWA, S., GOTO, J. & NAMBARA, T. (2002) Potential Bile Acid Metabolites. 24. An Efficient Synthesis of Carboxyl-Linked Glucosides and Their Chemical Proper-

- ties, *Lipids*, 37 (1), p.101–110
- IIDA, T., HIKOSAKA, M., KAKIYAMA, G., SHIRAIISHI, K., SCHTEINGART, C. D., HAGEY, L. R., TON-NU, H. T., HOFMANN, A. F., MANO, N., GOTO, J. & NAMBARA, T. (2002) Potential Bile Acid Metabolites. 25. Synthesis and Chemical Properties of Stereoisomeric 3α , 7α , 16α - and 3α , 7α , 15α -Trihydroxy- 5β -cholan-24-oic Acids, *Chem. Pharm. Bull.*, 50 (10), p.1327–1334
- HIRANO, A., MORIDERA, N., AKASHI, M., SAITO, M. & SUGAWARA, M. (2003) Imaging of L-Glutamate Fluxes in Mouse Brain Slices Based on an Enzyme-Based Membrane Combined with a Differential-Image Analysis, *Anal. Chem.*, 75, p.3775–3783
- HIRANO, A., WAKABAYASHI, M., MATSUNO, Y. & SUGAWARA, M. (2003) A Single-Channel Sensor Based on Gramicidin Controlled by Molecular Recognition at Bilayer Lipid Membranes Containing Receptor, *Biosensors & Bioelectronics*, 18, p.973–983
- HIRANO, A., NAMATAME, Y., WAKAIZUMI, E., MATSUNO, Y. & SUGAWARA, M. (2003) Arachidonic Acid-Induced Channel and Carrier-Type Ion Transport across Planar Bilayer Lipid Membranes, *Anal. Sci.*, 19, p.191–197
- NAKAJIMA, K., YAMAGIWA, T., HIRANO, A. & SUGAWARA, M. (2003) A Glass Capillary Microelectrode Based on Capillarity and Its Application to Detection of L-glutamate Release from Mouse Brain Slices, *Anal. Sci.*, 19, p.55–60
- 菅原正雄・平野愛弓 (2002) 「キャピラリー電気化学センサーの開発と応用」, 分析化学 (総合論文), 51, p.1121–1133
- SUGAWARA, M., HIRANO, A., BÜHLMANN, P. & UMEZAWA, Y. (2002) Design and Application of Ion-channel Sensors Based on Biological and Artificial Receptors, *Bull. Chem. Soc. Jpn.*, 75, p.187–201
- 菅原正雄・平野愛弓 (2002) 「DNA 損傷の高感度検出」, 月刊バイオインダストリー, 19, p.14–23
- 菅原正雄 (2002) 『試料の前処理ハンドブック (分担執筆)』, 丸善, p.353–359
- HONDA, M., CAFFEE, M.W., MIURA, Y.N., NAGAI, H., NAGAO, K. & NISHIIZUMI, K. (2002) Cosmogenic nuclides in the Brenham pallasite, *Meteoritics & Planetary Science*, 37, p.1711–1728
- NAKAMURA, K., KUMASHIRO, Y., DOI, Y., HIRATA, K., YOKOYAMA, T. & SATO, K. (2002) The Preparation of B-SbThin Films by Molecular Flow Region PVD Process, *J. Cryst. Growth*, 237–239, p. 1531–1535
- WANG, L. Y., WANG, N. L., YAO, X. S., MIYATA, S. & KITANAKA, S. (2002) Diterpenes from the roots of *Euphorbia kansui* and their in vitro effects on the cell division of *Xenopus*, *J. Nat. Prod.*, 65, p.1246–51
- SEKIGUTI, T., HOSOYAMA, Y. & MIYATA, S. (2002) Effect of proteasome inhibitor (lactacystin) and cysteine protease inhibitor (E-64) on processes of mitosis of *Xenopus* embryos, *Zoo. Sci.*, 19, p.1251–55
- WANG, L. Y., WANG, N. L., YAO, X. S., MIYATA, S. & KITANAKA, S. (2003) Euphane and Tirucallane Triterpenes from the Roots of *Euphorbia kansui* and their in Vitro Effects on the Cell Division of *Xenopus*, *J. Nat. Prod.*, 66, p.630–633
- WANG, L. Y., WANG, N. L., YAO, X. S., MIYATA, S. & KITANAKA, S. (2003) Diterpenes from the Roots of *Euphorbia kansui* and their in Vitro Effects on the Cell Division of *Xenopus* (2), *Chem. Pharm. Bull.*, 51, p.935–941
- 石井飛鳥・宮田昇平・細山喜行 (2003) 「ハンノウザサ (*Sasaella ramosa* アズマザサ) の雌親種」, *Bamboo Journal*, 20,

p.12–18

- SAIDO, K., KODERA, Y., TAGUTI, H., YASUI, A., YADA, S., TAKAGI, Y., ISHIHARA, Y. & KUROKI, T. (2002) Endocrine Disruptors Contained in Synthetic Polymers (5) . *Environmental Science*, 9, p.250–251
- TAMEGAI, H., KATO, C. & HORIKOSHI, K. (2002) Gene cluster of nitrous oxide reduction in the deep sea of Mariana Trench, *J. Biochem. Mol. Biol. Biophys.* 6, p. 221–224
- TAMEGAI, H., NANGO, E., KOIKE-TAKESHITA, A., KUDO, F. & KAKINUMA, K. (2002) Significance of the 20 kDa subunit of heterodimeric 2-deoxy-scyllo-inosose synthase for the biosynthesis of butirosin antibiotics in *Bacillus circulans*, *Biosci. Biotechnol. Biochem.* 6, p.1538–1545
- TAMEGAI, H., NANGO, E., KUWAHARA, M., YAMAMOTO, H., OTA, Y., KURIKI, H., EGUCHI, T. & KAKINUMA, K. (2002) Identification of L-Glutamine: 2-deoxy-scyllo-inosose aminotransferase required for the biosynthesis of butirosin in *Bacillus circulans*, *J. Antibiotics*, 55, p.707–714
- TAMEGAI, H., EGUCHI, T. & KAKINUMA, K. (2002) First identification of *Streptomyces* genes involved in the biosynthesis of 2-deoxystreptomine-containing aminoglycoside antibiotics. Genetic and evolutionary analysis of L-glutamine: 2-deoxy-scyllo-inosose aminotransferase genes, *J. Antibiotics*, 55, p.1016–1018
- SAITO, T., OHTA, T., KOIKE, Y. & SATO, J. (2003) A New analytical approach for ^{226}Ra and ^{228}Ra in environmental waters, *J. Radioanal. Nucl. Chem.* 255 (2), p.535–538
- SAITO, T., SATO, S., KOIKE, Y. & SATO, J. (2003) Atmospheric concentration of ^{210}Pb and ^7Be at Sarufutu, Hokkaido, Japan, *J. Radioanal. Nucl. Chem.* 255, (3), p.351–353
- SAITO, T., OHTA, T. & SATO, J. (2002) Determination of Radium Concentrations in Hot-Spring Waters with Cation Exchange Resin, *J. Balneol. Soc. Jpn.*, 52, p.3–11
- SUZUKI, K., FUJIMORI, H., ASAJI, T., ISHIMARU, S. & IKEDA, R. (2002) ^1H , ^2H and ^{13}C NMR Studies of Cation Dynamics in a Layered Perovskite-Type Incommensurate Compound $(n\text{-C}_3\text{H}_7\text{NH}_3)_2\text{CdCl}_4$, *Z. Naturforsch.* 57a, p.451–455
- SUZUKI, K., ISHIMARU, S. & IKEDA, R. (2002) ^{133}Cs NMR Spin-Lattice Relaxation Time and Chemical Shift Studies on Cs_2MX_4 Crystals with Sr_2GeS_4 and $\beta\text{-K}_2\text{SO}_4$ Structures without Low Temperature Phase Transitions, *Z. Naturforsch.* 57a, p.461–464