

2011 年度 小谷チーム発表論文

- [1] S. Kotani and Pham Van Quoc: On asymptotics of eigenvalues for a certain 1-dimensional random Schrodinger operator, *Osaka J. Math.* 48 (2011) 69-89. [2011.3 発行] DOI なし
- [2] Bin Wen, Seiichi Takami, Yoshiyuki Kawazoe, Tadafumi Adschiri: Carbon-doped K4 nitrogen: A novel high energy density materials, *Chem. Phys. Lett.* 506 (2011), 175-178. DOI: 10.1016/j.cplett.2011.02.042 [2011 年4月発行]
- [3] Tadafumi Adschiri, Lee Youn-Woo, Motonobu Goto, Seiichi Takami: Green materials synthesis with supercritical water, *Green Chem.* 13 (2011), 1380-1390. DOI: 10.1039/C1GC15158D [2011.5.27 発行]
- [4] N. Obata: Markov product of positive definite kernels and applications to Q -matrices of graph products, *Colloq. Math.* 122 (2011), 177-184. DOI なし
- [5] Bin Wen, Seiichi Takami, Yoshiyuki Kawazoe, Tadafumi Adschiri: Pressure-dependent mechanical stability of simple cubic carbon, *Physica B: Physics of Condensed Matter* 406 (2011), 2654-2657. DOI: 10.1016/j.physb.2011.04.009 [2011. 7. 1 発行]
- [6] Arseniy Akopyan and Makoto Tagami: On the number of points in a lattice polytope, *Electronic Journal of Combinatorial Number Theory (Integers)* 11 (2011) A22, 3 page. DOI: 10.1515/INTEG.2011.046
- [7] A. Chan and A. Munemasa: Hamming graphs in Nomura Algebras, *Linear Algebra Appl.* 435 (2011), 330--341. DOI:10.1016/j.laa.2011.01.020
- [8] S.Kotani: On limit behavior of eigenvalues spacing for 1-D random Schrödinger operators, *RIMS Kôkyûroku Bessatsu B27* (2011), 67-78. DOI なし
- [9] Eiichi Bannai and Makoto Tagami: A note on anticoherent spin states, *J. Phys. A: Math. Theor.* 44 (2011) 342002, 8 page DOI: 10.1088/1751-8113/44/34/342002 [2011 年 8 月]
- [10] Francis Comets and Nobuo Yoshida: Branching random walks in space-time random environment: Survival probability, global and local growth rates, *J. Theoretical Prob.* 24 (2011), 657-687. DOI: 10.1007/s10959-009-0267-x
- [11] Kanako Suzuki and Izumi Takagi: On the role of basic production terms in an activator-inhibitor system modeling biological pattern formation, *Funkcialaj Ekvacioj* 54 (2011), 237-274. DOI なし
- [12] Grzegorz Karch and Kanako Suzuki: Blow-up versus global existence of solutions to aggregation equation with diffusion, *Applicationes Mathematicae* 38 (2011), 243-258. DOI:10.4064/am38-3-1

- [13] Jian-Tao Wang, Changfeng Chen and Yoshiyuki Kawazoe: Mechanism for Direct Conversion of Graphite to Diamond, *Phys. Rev. B* 84 (2011), 012102. DOI:10.1103/PhysRevB.84.012102 [2011年7月]
- [14] Gang Chen, Qi Peng, Yoshiyuki Kawazoe: Structural and electronic properties of neutral and charged Ca₈C₁₂ metal carbides, *Chemical Physics Letters* 507 (2011), 260–264. DOI: 10.1016/j.cplett.2011.04.011
- [15] Mina Jung, Atsushi Okada, Takanobu Saito, Takashi Suemasu, Chan-Yeup Chung, Yoshiyuki Kawazoe, and Noritaka Usami: In situ observation of polycrystalline silicon thin films grown using aluminum-doped zinc oxide on glass substrate by the aluminum-induced crystallization, *Japanese J. Applied Phys.* 50 (2011) 04DP02 DOI: 10.1143/JJAP.50.04DP02
- [16] Y. Y. Liang, H. Chen, H. Mizuseki, and Y. Kawazoe: Gate-controlled current and inelastic electron tunneling spectrum of benzene: A self-consistent study, *J. Chem. Phys.* 134 (2011), 144113. DOI: 10.1063/1.3571475
- [17] B. Cai, O. Sugihara, H. I. Elim, T. Adschiri, T. Kaino: A Novel Preparation of High-Refractive-Index and Highly Transparent Polymer Nanohybrid Composites, *Applied Physics Express* 4 (2011) ,092601 3pp. DOI:10.1143/APEX.4.092601 [2011.9.7 発行]
- [18] J. Hopley, S. Gorelik, Y. Kuge, S. Kajimoto, M. Kasuya, K. Hatanaka, H. Fukumura: Dynamics of volume expansion of de-mixing liquids after pulse IR heating, *Aust. J. Chem.* 64(9), 1272–1279 (2011). DOI: 10.1071/CH11171
- [19] M. Harada and A. Munemasa: Classification of quaternary hermitian self-dual codes of length 20, *IEEE Trans. Inform. Theory* 57 (2011), 3758-3762 DOI: 10.1109/TIT.2011.2134330
- [20] N. Obata and H. Ouerdiane: A note on convolution operators in white noise calculus *Infin. Dimen. Anal. Quantum Probab. Rel. Top.* 14 (2011), 661-674. DOI: 10.1142/S0219025711004535
- [21] N. Obata: One-mode interacting Fock spaces and random walks on graphs, *Stochastics*, Available online:24 May 2011, DOI:10.1080/17442508.2010.550919
- [22] M. Taguchi, S. Takami, T. Adschiri, T. Nakane, K. Sato, T. Naka: Simple and rapid synthesis of ZrO₂ nanoparticles from Zr(OEt)₄ and Zr(OH)₄ using a hydrothermal method, *CrystEngComm* 14 (2012), 2117-2123. DOI: 10.1039/C2CE06408A
- [23] M. Taguchi, S. Takami, T. Adschiri, T. Nakane, K. Sato, T. Naka: Synthesis of surface-modified monoclinic ZrO₂ nanoparticles using supercritical water, *CrystEngComm.* 14 (2012), 2132-2138. DOI: 10.1039/C2CE06409J.
- [24] A. Munemasa and H. Tamura: The codes and the lattices of Hadamard matrices,

Europ. J. Combin. 33 (2012), 519-533. DOI: 10.1016/j.ejc.2011.11.007

[25] M. Harada and A. Munemasa: On the classification of weighing matrices and self-orthogonal codes, J. Combin. Des. 20 (2012), 40-57 DOI: 10.1002/jcd.20295

[26] A. Munemasa and M. Sawa: Steiner quadruple systems with point-regular automorphism groups, accepted for publication in J. Stat. Theory Practice 2012.

[27] S. Torii, Y. Goto, T. Ishikawa, H. Hoshi, K. Goryo, K. Yasumoto, H. Fukumura. K. Sogawa: Pro-apoptotic activity of inhibitory PAS domain protein (IPAS), a negative regulator of HIF-1, through binding to pro-survival Bcl-2 family proteins, Cell Death Differ. 18(11), 1711-1725 (2011) DOI:10.1038/cdd.2011.47 [2011.5.6 発行]

[28] K. Betsumiya and A. Munemasa: On triply even binary codes, accepted for publication in J. London Math. Soc.

[29] M. Tagami, Y. Y. Liang, Y. Kawazoe, M. Kotani: New Growth Mechanism of Cubic Rh Clusters Composed of 8-12 Atoms Found by Euclidean Designs, Materials Transactions 53 no.3 (2012), 459-462