

## 誌 上 発 表 Publications

## [雑誌]

(原著論文) \*印は査読制度がある論文誌

Wakasa T., Ihara E., Fujita ., Funaki Y., Hatanaka K., Horiuchi H., Itoh M., Kamiya ., Roepke G., Sakaguchi H., Sakamoto ., Sakemi ., Schuck P., Shimizu Y., Takashina M., Terashima S., Suzuki A., Uchida M., Yoshida ., and Yosoi .: “New candidate for an alpha cluster condensed state in  $^{16}\text{O}$  ( $\alpha$ ,  $\alpha'$ ) at 400 MeV”, *Phys. Lett. B* **653**, 173–177 (2007). \*

Itagaki N., Kimura M., Kurokawa C., Ito M., and von Oertzen W.: “ $\alpha$  condensed state with a core nucleus”, *Phys. Rev. C* **75**, 0377303-1–037303-4 (2007). \*

Nakatsukasa T., Inakura T., and Yabana K.: “Finite amplitude method for the solution of the random-phase approximation”, *Phys. Rev. C* **76**, 024318-1–024318-9 (2007). \*

Ito M. and Itagaki N.: “ $\alpha+^{6,8}\text{He}$  resonant scattering and exotic structures in  $^{10,12}\text{Be}$ ”, *AIP Conf. Proc.* **1016**, 199–204 (2008). \*

Ito M., Itagaki N., Sakurai H., and Ikeda K.: “Exotic molecular states in ht highly-excited states of  $^{10,12}\text{Be}$ ”, *J. Phys.: Con. Ser.* **111**, 012010-1–012010-6 (2008). \*

Itagaki N., Kokalova T., Ito M., Kimura M., and von Oertzen W.: “Coupling between  $\alpha$  condensed states and normal cluster states”, *Phys. Rev. C* **77**, 037301-1–037301-4 (2008). \*

Nakatsukasa T., Matsuo M., Matuyanagi K., and Hinohara N.: “Microscopic derivation of collective Hamiltonian by means of the adiabatic self-consistent collective coordinate method”, *Prog. Theor. Phys.* **119**, No. 1, pp. 59–101 (2008). \*

## (総説)

Funaki Y., Horiuchi H., Roepke G., Schuck P., Suzuki A., and Yamada T.: “Alpha particle condensation in nuclear systems”, *Nucl. Phys. News* **17**, No. 4, pp. 11–18 (2007).

中務孝: “人物・研究室紹介: 化学研究所仁科加速器研究センター原子核理論研究室”, *原子核研究* **53**, No. 2, pp. 3–10 (2008).

## [単行本・Proc.]

(原著論文) \*印は査読制度がある論文誌

Schuck P., Funaki Y., Horiuchi H., Roepke G., Suzuki A., and Yamada T.: “Quartetting in fermionic matter and  $\alpha$ -particle condensation in nuclear systems”, *Progress in Particle and Nuclear Physics*, Erice, Italy, 2006–9, Elsevier, Holland, pp. 285–304 (2007).

## (その他)

Schuck P., Funaki Y., Horiuchi H., Roepke G., Suzuki A., and Yamada T.: “Alpha particle condensation in nuclear systems”, *Nuclear Physics A*, Sankt Goar, Germany, 2006–6, Elsevier, Holland, pp. 293–300 (2007).

## (国際会議等)

Yamagami M.: “Di-neutron superfluidity and the collective motions in deformed weakly-bound nuclei”, *International Workshop on Joint JUSTIPEN-LACM Meeting*, (Oak Ridge National Laboratory), Oak Ridge, USA, Mar. (2007).

Yamagami M.: “Rotational excitation of weakly-bound nuclei with di-neutron pairing”, *ECT\* Sminars 2006: Many-body Open Quantum Systems: from Atomic Nuclei to Quantum Systems*, Trento, Italy, May (2007).

Funaki Y., Yamada T., Horiuchi H., Roepke G., Schuck P., and Suzuki A.: “Indication of  $4\alpha$ -particle Bose condensate in  $^{16}\text{O}$ ”, *International Nuclear Physics Conference (INPC2007)*, (Science Council of Japan, RIKEN and others), Tokyo, June (2007).

Yamagami M.: “Rotational motion in nuclei with di-neutron superfluidity”, *International Nuclear Physics Conference (INPC2007)*, (Science Council of Japan, RIKEN and others), Tokyo, June (2007).

Yamagami M.: “Di-neutron superfluidity and the collective motions in deformed unstable nuclei”, *International Workshop on Nuclear Structure: New Pictures in the Extended Isospin Space (NS07)*, (Yukawa Institute for Theoretical Physics, Kyoto University), Kyoto, June (2007).

Funaki Y., Yamada T., Horiuchi H., Roepke G., Schuck P., and Suzuki A.: “ $\alpha$ -cluster states and  $4\alpha$ -particle condensation in  $^{16}\text{O}$ ”, *The International Symposium on Physics of Unstable Nuclei (ISPUN07)*, Hoi An, Viet Nam, July (2007).

Nakatsukasa T., Yabana K., and Inakura T.: “Dipole response calculations with Skyrme TDDFT”, *UNEDF Annual Workshop*, (University of Washington), Pack Forest, USA, Aug. (2007).

Funaki Y., Yamada T., Horiuchi H., Roepke G., Schuck P., and Suzuki A.: “ $\alpha$ -cluster states and  $4\alpha$ -particle Bose condensate in  $^{16}\text{O}$ ”, *Clusters '07*, Stratford upon Avon, UK, Sept. (2007).

Nakatsukasa T., Inakura T., and Yabana K.: “Nuclear response function calculated with the time-dependent Skyrme density functional”, *3rd Japanese-German Workshop on Nuclear Structure and Astrophysics*, (GSI), Chiemsee, Germany, Sept.–Oct. (2007).

Nakatsukasa T.: “Energy density functional in nuclei”, *1st FIDIPRO-JSPS Workshop on Energy Density Functional in Nuclei*, (University of Jyväskylä), Keurusselka, Finland, Oct. (2007).

Funaki Y., Yamada T., Horiuchi H., Roepke G., Schuck P., and Suzuki A.: “ $\alpha$ -cluster states and  $4\alpha$ -particle Bose condensate in  $^{16}\text{O}$ ”, *INT Workshop on Correlations in Nuclei: From Di-Neutrons to Clusters*, Seattle, USA, Nov. (2007).

Nakatsukasa T.: “Photonuclear response studied with time-dependent methods”, *Seminar at University of Sur-*

- rey, (University of Surrey), Guildford, UK, Nov. (2007).  
(国内会議)
- 山上雅之: “低密度・強相関系の多核子ダイナミクス”, RIBF  
理論研究推進会議拡大ワークショップ, 和光, 5月(2007).
- 中務孝: “原子核密度汎関数理論の発展”, 研究会「原子核物  
理学の将来像」, (京都大学), 京都, 8月(2007).
- 山上雅之: “変形した中性子過剰核における対相関と回転運  
動”, 日本物理学会第62回年次大会, 札幌, 9月(2007).
- 中務孝: “実時間解法による原子核光応答計算”, 九州大学理  
学部原子核セミナー, 福岡, 11月(2007).
- 中務孝: “原子核光応答の時間依存密度汎関数計算”, 第4回  
「停止・低速不安定核を用いた核分光研究」研究会, 仙台,  
12月(2007).
- 山上雅之: “Isovector density dependence of pairing effec-  
tive interaction and the influence on rotational excita-  
tions”, RIBF ミニワークショップ「2核子相関と不安定原  
子核」, 和光, 12月(2007).
- 中務孝, 矢花一浩, 稲倉恒法, 日野原伸生, 松尾正之, 松柳研一:  
“密度汎関数アプローチによる原子核数値シミュレーショ  
ン”, シンポジウム「未来の素粒子・原子核数値シミュレ  
ーション」, (高エネルギー加速器研究機構), つくば, 12月  
(2007).
- 山上雅之: “重い不安定核における新奇な集団励起の理論的探  
索”, シンポジウム「未来の素粒子・原子核数値シミュレ  
ーション」, (高エネルギー加速器研究機構), つくば, 12月  
(2007).
- 岩崎照平, 堀内渉, 鈴木宜之, 小濱洋央: “酸素同位体の全反  
応断面積の系統的計算”, 日本物理学会第63回年次大会,  
東大阪, 3月(2008).