

## Journal Papers (Theory)

1. *K Asahi, Y Ichikawa, M Chikamori, Y Ohtomo, E Hikota, T Suzuki, T Inoue, T Furukawa, A Yoshimi, K Suzuki, T Nanao, H Miyatake, M Tsuchiya, N Yoshida, H Shirai, T Ino, H Ueno, Y Matsuo, and T Fukuyama.* *Phys. Part. Nucl.*, 45(1):199–201, 2014. doi:10.1134/S1063779614010080, Search for electric dipole moment in  $^{129}\text{Xe}$  atom using a nuclear spin oscillator.
2. *Y Chiba and M Kimura.* *Phys. Rev. C - Nucl. Phys.*, 89(5):054313, 2014. doi:10.1103/PhysRevC.89.054313, Collectivity and instability of the  $\text{N}=\text{Z}=28$  shell gap and strongly deformed bands with  $g9/2$  configuration in  $\text{Ni } 56$ .
3. *Y Chiba and M Kimura.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012047, Study of cluster structure in  $^{13}\text{C}$  with AMD+HON-constraint method.
4. *A Dote, T Inoue, and T Myo.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012084, Essential K cluster "k-pp" studied with a coupled-channel Complex Scaling Method + Feshbach method.
5. *A Dote and T Myo.* *Nucl. Phys. A*, 930:86–103, 2014. doi:10.1016/j.nuclphysa.2014.08.041, Double-pole nature of  $\Lambda(1405)$  studied with coupled-channel complex scaling method using complex-range Gaussian basis.
6. *K Egashira, K Minomo, M Toyokawa, T Matsumoto, and M Yahiro.* *Phys. Rev. C - Nucl. Phys.*, 89(6), 2014. doi:10.1103/PhysRevC.89.064611, Microscopic optical potentials for  $\text{He } 4$  scattering.
7. *Faisal Etminan, Hidekatsu Nemura, Sinya Aoki, Takumi Doi, Tetsuo Hatsuda, Yoichi Ikeda, Takashi Inoue, Noriyoshi Ishii, Keiko Murano, and Kenji Sasaki.* *Nucl. Phys. A*, 928:89–98, aug 2014. doi:10.1016/j.nuclphysa.2014.05.014, Spin-2  $\text{N}\Omega$  dibaryon from lattice QCD.
8. *T Fukui, K Ogata, and P Capel.* *Phys. Rev. C - Nucl. Phys.*, 90(3), 2014. doi:10.1103/PhysRevC.90.034617, Analysis of a low-energy correction to the eikonal approximation.
9. *T Fukui, Y Taniguchi, T Suhara, Y Kanada-En'Yo, and K Ogata.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012023, Probing  $\alpha$ -cluster distribution via  $\alpha$ -transfer reaction.
10. *T Fukuyama.* *Mod. Phys. Lett. A*, 29(11), 2014. doi:10.1142/S0217732314500564, Chiral molecule in the Standard Model.
11. *T Furumoto, Y Sakuragi, and Y Yamamoto.* *Phys. Rev. C - Nucl. Phys.*, 90(4), 2014. doi:10.1103/PhysRevC.90.041601, Medium effect in the high-density region probed by nucleus-nucleus elastic scattering.
12. *E J Garzon, R Molina, A Hosaka, and E Oset.* *Phys. Rev. D - Part. Fields, Gravit. Cosmol.*, 89(1), 2014. doi:10.1103/PhysRevD.89.014504, Strategies for an accurate determination of the  $X(3872)$  energy from QCD lattice simulations.
13. *H Guo, K Nagaoka, Y Watanabe, T Matsumoto, K Ogata, and M Yahiro.* *Nucl. Data Sheets*, 118(1):254–257, 2014. doi:10.1016/j.nds.2014.04.051, Application of the continuum discretized coupled channels method to nucleon-induced reactions on  $^{6,7}\text{Li}$  for Energies up to 150 MeV.
14. *K Horii, T Myo, and H Toki.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012076, Tensor force and delta excitation for the structure of light nuclei.
15. *K Horikawa, S Miyamoto, T Mochizuki, S Amano, D Li, K Imasaki, Y Izawa, K Ogata, S Chiba, and T Hayakawa.* *Phys. Lett. Sect. B Nucl. Elem. Part. High-Energy Phys.*, 737:109–113, 2014. doi:10.1016/j.physletb.2014.08.024, Neutron angular distribution in  $(\gamma, n)$  reactions with linearly polarized  $\gamma$ -ray beam generated by laser Compton scattering.
16. *H Horiuchi.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012001, Present status of nuclear cluster physics (theory).
17. *Yoichi Ikeda, Bruno Charron, Sinya Aoki, Takumi Doi, Tetsuo Hatsuda, Takashi Inoue, Noriyoshi Ishii, Keiko Murano, Hidekatsu Nemura, and Kenji Sasaki.* *Phys. Lett. B*, 729:85–90, feb 2014. doi:10.1016/j.physletb.2014.01.002, Charmed tetraquarks  $\text{Tcc}$  and  $\text{Tcs}$  from dynamical lattice QCD simulations.

18. *M Isaka, K Fukukawa, M Kimura, E Hiyama, H Sagawa, and Y Yamamoto.* *Phys. Rev. C - Nucl. Phys.*, 89(2), 2014. doi:10.1103/PhysRevC.89.024310, Superdeformed  $\Lambda$  hypernuclei with antisymmetrized molecular dynamics.
19. *H Kamano, S X Nakamura, T.-S.H. Lee, and T Sato.* *Phys. Rev. C - Nucl. Phys.*, 90(6), 2014. doi:10.1103/PhysRevC.90.065204, Dynamical coupled-channels model of K-p reactions: Determination of partial-wave amplitudes.
20. *K Kato, T Myo, and Y Kikuchi.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012025, Many-body resonances and continuum states above many-body decay thresholds.
21. *Y Kikuchi, T Myo, K Kat, and K Ikeda.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012034, Mechanism of Coulomb breakup reactions of two-neutron halo nuclei  $^6\text{He}$  and  $^{11}\text{Li}$ .
22. *H.-C. Kim, H.-Y. Ryu, A Titov, and A Hosaka.* *Few-Body Syst.*, 55(8-10):787–790, 2014. doi:10.1007/s00601-014-0883-6,  $\phi$  photoproduction coupled with the  $\Lambda\Lambda^*$  channel.
23. *S.-H. Kim, A. Hosaka, H.-C. Kim, H. Noumi, and K. Shirotori.* *Prog. Theor. Exp. Phys.*, 2014(10):103D01–103D01, oct 2014. doi:10.1093/ptep/ptu131, Pion-induced reactions for charmed baryons.
24. *S.-H. Kim, A. Hosaka, and H.-C. Kim.* *Phys. Rev. D - Part. Fields, Gravit. Cosmol.*, 90(1), 2014. doi:10.1103/PhysRevD.90.014021, Effects of  $N$  (2000)  $5/2^+$ ,  $N$  (2060)  $5/2^-$ ,  $N$  (2120)  $3/2^-$ , and  $N$  (2190)  $7/2^-$  on  $\Lambda$  photoproduction.
25. *M Kimura and Y Chiba.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012005, Clustering aspects in  $N = Z$  nucleus  $^{24}\text{Mg}$  studied by antisymmetrized molecular dynamics.
26. *M Lyu, Z Ren, B Zhou, A Tohsaki, and H Horiuchi.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012041, Investigation of  $^9\text{Be}$  with THSR wave function.
27. *Mengjiao Lyu, Zhongzhou Ren, Bo Zhou, Akihiro Tohsaki, and Hisashi Horiuchi.* *J. Phys. Conf. Ser.*, 569(1):012041, dec 2014. doi:10.1088/1742-6596/569/1/012041, Investigation of  $^9\text{Be}$  with THSR wave function.
28. *Y Manabe, I Nakamura, and M Bando.* *J. Phys. Soc. Japan*, 83(11), 2014. doi:10.7566/JPSJ.83.114003, Reaction rate theory of radiation exposure and scaling hypothesis in mutation frequency.
29. *T Matsumoto, K Ogata, K Minomo, and M Yahiro.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012036, CDCC studies on clustering physics.
30. *K Minomo, T Matsumoto, K Egashira, K Ogata, and M Yahiro.* *Phys. Rev. C - Nucl. Phys.*, 90(2), 2014. doi:10.1103/PhysRevC.90.027601, Eikonal reaction theory for two-neutron removal reactions.
31. *K Minomo, M Toyokawa, M Kohno, and M Yahiro.* *Phys. Rev. C - Nucl. Phys.*, 90(5), 2014. doi:10.1103/PhysRevC.90.051601, Effects of a chiral three-nucleon force on nucleus-nucleus scattering.
32. *T Mizusaki, T Myo, and K Kato.* *Prog. Theor. Exp. Phys.*, 2014(9), 2014. doi:10.1093/ptep/ptu124, A new approach for many-body resonance spectroscopy with the complex scaling method.
33. *K Mizuyama and K Ogata.* *Phys. Rev. C - Nucl. Phys.*, 89(3), 2014. doi:10.1103/PhysRevC.89.034620, Low-lying excited states of O24 investigated by a self-consistent microscopic description of proton inelastic scattering.
34. *K. Murano, N. Ishii, S. Aoki, T. Doi, T. Hatsuda, Y. Ikeda, T. Inoue, H. Nemura, and K. Sasaki.* *Phys. Lett. B*, 735:19–24, jul 2014. doi:10.1016/j.physletb.2014.05.061, Spin-orbit force from lattice QCD.
35. *T Myo and K Kato.* *Prog. Theor. Exp. Phys.*, 2014(8), 2014. doi:10.1093/ptep/ptu112, Mirror symmetry breaking in He isotopes and their mirror nuclei.
36. *T Myo, Y Kikuchi, H Masui, and K Kato.* *Prog. Part. Nucl. Phys.*, 79:1–56, 2014. doi:10.1016/j.ppnp.2014.08.001, Recent development of complex scaling method for many-body resonances and continua in light nuclei.
37. *T Myo, A Umeya, K Horii, H Toki, and K Ikeda.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012065, Role of tensor force in light nuclei with tensor-optimized shell model.

38. *T Myo, A Umeya, K Horii, H Toki, and K Ikeda.* *Prog. Theor. Exp. Phys.*, 2014(3), 2014. doi:10.1093/ptep/ptu012, Shell and alpha cluster structures in 8Be with tensor-optimized shell model.
39. *H Nagahiro and A Hosaka.* *Phys. Rev. C - Nucl. Phys.*, 90(6), 2014. doi:10.1103/PhysRevC.90.065201, Elementarity of composite systems.
40. *S Nakayama, S Araki, Y Watanab, O Iwamoto, T Ye, and K Ogata.* *Nucl. Data Sheets*, 118(1):305–307, 2014. doi:10.1016/j.nds.2014.04.065, Cross section calculations of deuteron-induced reactions using the extended CCONE code.
41. *H Nishiura and T Fukuyama.* *Mod. Phys. Lett. A*, 29(28), 2014. doi:10.1142/S0217732314501478, Simple neutrino mass matrix with only two free parameters.
42. *M Odsuren, K Kat, Y Kikuchi, M Aikawa, and T Myo.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012072, A resonance problem on the low-lying resonant state in the 9Be system.
43. *M Odsuren, K KatÅ, M Aikawa, and T Myo.* *Phys. Rev. C - Nucl. Phys.*, 89(3), 2014. doi:10.1103/PhysRevC.89.034322, Decomposition of scattering phase shifts and reaction cross sections using the complex scaling method.
44. *S Ohkoda, S Yasui, and A Hosaka.* *Phys. Rev. D - Part. Fields, Gravit. Cosmol.*, 89(7), 2014. doi:10.1103/PhysRevD.89.074029, Decays of Zb  $\Upsilon\pi$  via triangle diagrams in heavy meson molecules decays of Zb  $\Upsilon\pi$  VIA ... S. ohkoda, S. yasui, and A. hosaka.
45. *S Ohkubo and Y Hirabayashi.* *Phys. Rev. C - Nucl. Phys.*, 89(6), 2014. doi:10.1103/PhysRevC.89.061601, Similarity between nuclear rainbow and meteorological rainbow: Evidence for nuclear ripples.
46. *S Ohkubo and Y Hirabayashi.* *Phys. Rev. C - Nucl. Phys.*, 89(5), 2014. doi:10.1103/PhysRevC.89.051601, Evidence for a secondary bow in Newton's zero-order nuclear rainbow.
47. *S Ohkubo, Y Hirabayashi, A A Ogloblin, Yu.A. Gloukhov, A S Dem'Yanova, and W H Trzaska.* *Phys. Rev. C - Nucl. Phys.*, 90(6), 2014. doi:10.1103/PhysRevC.90.064617, Refractive effects and Airy structure in inelastic O 16 + C 12 rainbow scattering.
48. *G. Röpke, P. Schuck, Y. Funaki, H. Horiuchi, Zhongzhou Ren, A. Tohsaki, Chang Xu, T. Yamada, and Bo Zhou.* *Phys. Rev. C - Nucl. Phys.*, 90(3):034304, sep 2014. doi:10.1103/PhysRevC.90.034304, Nuclear clusters bound to doubly magic nuclei: The case of Po 212.
49. *H.-Y. Ryu, A I Titov, A Hosaka, and H.-C. Kim.* *Prog. Theor. Exp. Phys.*, 2014(2), 2014. doi:10.1093/ptep/ptu004,  $\Phi$  Photoproduction with coupled-channel effects.
50. *P Schuck, Y Funaki, H Horiuchi, G Röpke, A Tohsaki, and T Yamada.* *J. Phys. Conf. Ser.*, 529(1):012014, aug 2014. doi:10.1088/1742-6596/529/1/012014, Theory for quartet condensation in fermi systems with applications to nuclei and nuclear matter.
51. *T. Sekihara and S. Kumano.* *Phys. Rev. C*, 89(2):025202, feb 2014. doi:10.1103/PhysRevC.89.025202, Determination of compositeness of the  $\Lambda$  ( 1405 ) resonance from its radiative decay.
52. *T Suhara, Y Funaki, B Zhou, H Horiuchi, and A Tohsaki.* *Phys. Rev. Lett.*, 112(6), 2014. doi:10.1103/PhysRevLett.112.062501, One-dimensional  $\alpha$  condensation of  $\alpha$ -linear-chain states in C 12 and O 16.
53. *T Suhara, Y Funaki, B Zhou, H Horiuchi, and A Tohsaki.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012008, One-dimensional  $\alpha$  condensation of  $\alpha$ -linear-chain states.
54. *A I Titov, B Kämpfer, T Shibata, A Hosaka, and H Takabe.* *Eur. Phys. J. D*, 68(10), 2014. doi:10.1140/epjd/e2014-50324-y, Laser pulse-shape dependence of Compton scattering.
55. *E Uegaki and Y Abe.* *J. Phys. Conf. Ser.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012091, 12C + 12C resonances by a molecular model.
56. *S Watanabe, T Matsumoto, K Minomo, K Ogata, and M Yahiro.* *J. Phys.*, 569(1), 2014. doi:10.1088/1742-6596/569/1/012048, Breakup dynamics in 6Li elastic scattering with four-body and three-body CDCC.
57. *S Watanabe, K Minomo, M Shimada, S Tagami, M Kimura, M Takechi, M Fukuda, D Nishimura, T Suzuki, T Matsumoto, Y R Shimizu, and M Yahiro.* *Phys. Rev. C - Nucl. Phys.*, 89(4), 2014. doi:10.1103/PhysRevC.89.044610, Ground-state properties of neutron-rich Mg isotopes.

58. *Y Yamaguchi, S Yasui, and A Hosaka.* *Nucl. Phys. A*, 927:110–118, 2014. doi:10.1016/j.nuclphysa.2014.04.002, Exotic dibaryons with a heavy antiquark.
59. *K Yoshida, T Fukui, K Minomo, and K Ogata.* *Prog. Theor. Exp. Phys.*, 2014(5), 2014. doi:10.1093/ptep/ptu063, Extracting the electric dipole breakup cross section of one-neutron halo nuclei from inclusive breakup observables.
60. *B. Zhou, Y. Funaki, A. Tohsaki, H. Horiuchi, and Z. Ren.* *Prog. Theor. Exp. Phys.*, 2014(10):101D01–101D01, oct 2014. doi:10.1093/ptep/ptu127, The container picture with two-alpha correlation for the ground state of  $^{12}\text{C}$ .
61. *Bo Zhou, Yasuro Funaki, Hisashi Horiuchi, Zhongzhou Ren, Gerd Röpke, Peter Schuck, Akihiro Tohsaki, Chang Xu, and Taichi Yamada.* *Phys. Rev. C - Nucl. Phys.*, 89(3):034319, mar 2014. doi:10.1103/PhysRevC.89.034319, Nonlocalized cluster dynamics and nuclear molecular structure.