

業績

Achievements

1 学術論文

- S. Takács, F. Ditrói, Z. Szűcs, H. Haba, Y. Komori, M. Aikawa, M. Saito, “Crosschecking of alpha particle monitor reactions up to 50 MeV”, Nucl. Instrum. Methods B 397, 33 (2017).
- M. Saito, M. Aikawa, Y. Komori, H. Haba, S. Takács, “Production cross sections of ^{169}Yb and Tm isotopes in deuteron-induced reactions on ^{169}Tm ”, Appl. Radiat. Isot. 125, 23 (2017).
- Shoichiro Kawase (他 48 名、Masayuki Aikawa 8 番目), “Study of proton- and deuteron-induced spallation reactions on the long-lived fission product ^{93}Zr at 105 MeV/nucleon in inverse kinematics”, Prog. Theor. Exp. Phys. 2017, 093D03 (2017).
- M. Kimura, “Structure and decay of the pygmy dipole resonance in ^{26}Ne ”, Phys. Rev. C 95, 034331-1-15 (2017).
- S. Momiyama, P. Doornenbal, H. Scheit, S. Takeuchi, M. Niikura, N. Aoi, K. Li, M. Matsushita, D. Steppenbeck, H. Wang, H. Baba, E. Ideguchi, M. Kimura, N. Kobayashi, Y. Kondo, J. Lee, S. Michimasa, T. Motobayashi, N. Shimizu, M. Takechi, Y. Togano, Y. Utsuno, K. Yoneda, and H. Sakurai, “In-beam g-ray spectroscopy of ^{35}Mg via knockout reactions at intermediate energies”, Phys. Rev. C 96, 034328-1-8 (2017).
- H. Nishibata, T. Shimoda, A. Odahara, S. Morimoto, S. Kanaya, A. Yagi, H. Kanaoka, M.R. Pearson, C.D.P. Levy, and M. Kimura, “Shape coexistence in the $N = 19$ neutron-rich nucleus ^{31}Mg explored by β - γ spectroscopy of spin-polarized ^{31}Na ”, Phys. Lett B 767, 81-85 (2017).
- Y. Chiba and M. Kimura, “Laplace expansion method for the calculation of the reduced-width amplitudes”, Prog. Theor. Exp. Phys. 2017, 053D01-1-20 (2017).
- Y. Chiba, Y. Taniguchi, and M. Kimura, “Inversion doublets of reflection-asymmetric clustering in ^{28}Si and their isoscalar monopole and dipole transitions”, Phys. Rev. C 95, 044328-1-12 (2017).
- T. Baba and M. Kimura, “Three-body decay of linear-chain states in ^{14}C ”, Phys. Rev. C 95, 064318-1-9 (2017).

2 論文(国際会議抄録等)

- M. Aikawa, M. Saito, S. Ebata, Y. Komori, H. Haba, “Activation cross sections of alpha-induced reactions on natural zinc for ^{68}Ge production”, Proceedings of the 2016 Symposium on Nuclear Data, 153 (2018).
- Naoyuki Ukon, Moemi Saito, Masayuki Aikawa, “Production cross sections of ^{52}Fe

- isotope in alpha particle induced reactions on ^{nat}Cr ", Proceedings of the 2016 Symposium on Nuclear Data, 129 (2018).
- D. Ichinkhorloo, M. Aikawa, S. Chiba, Y. Hirabayashi, K. Kato, "Analysis of the $^{16}\text{O}(n,pn)^{15}\text{O}$ reaction using the CDCC method", Proceedings of the 8th AASPP Workshop on Asian Nuclear Reaction Database Development, 122 (2018).
 - N. Ukon, M. Aikawa, Y. Komori, H. Haba, "Activation Cross Sections of Deuteron-Induced Reactions on Natural Palladium for ^{103}Ag Production", Proceedings of the 8th AASPP Workshop on Asian Nuclear Reaction Database Development, 15 (2018).
 - He Wang (他 48 名、Masayuki Aikawa 33 番目), "Spallation reaction study for the long-lived fission products in nuclear waste: Cross section measurements for ^{137}Cs , ^{90}Sr and ^{107}Pd using inverse kinematics method", Energy Procedia 131, 127 (2017).
 - Shuichiro Ebata, Masayuki Aikawa, Shotaro Imai, "Extended methods using thick-targets for nuclear reaction data of radioactive isotopes", EPJ Web of Conferences 146, 03010 (2017).
 - Keita Nakano (他 49 名、Masayuki Aikawa 12 番目), "Cross sections for nuclide production in proton- and deuteron-induced reactions on ^{93}Nb measured using the inverse kinematics method", EPJ Web of Conferences 146, 11046 (2017).
 - Shoichiro Kawase (他 49 名、Masayuki Aikawa 11 番目), "Cross section measurement of residues produced in proton- and deuteron-induced spallation reactions on ^{93}Zr at 105 MeV/u using the inverse kinematics method", EPJ Web of Conferences 146, 03012 (2017).
 - He Wang (他 48 名、Masayuki Aikawa 5 番目), "Spallation reaction study for fission products in nuclear waste: Cross section measurements for ^{137}Cs , ^{90}Sr and ^{107}Pd on proton and deuteron", EPJ Web of Conferences 146, 09022 (2017).
 - Myagmarjav Odsuren, Yuma Kikuchi, Takayuki Myo, Masayuki Aikawa, Kiyoshi Kato, "The first unbound states of mirror ^9Be and ^9B nuclei", EPJ Web of Conferences 146, 12012 (2017).
 - M. Odsuren, Y. Kikuchi, T. Myo, M. Aikawa, G. Khuukhenkhuu, K. Kato, "A Virtual State in a Two-Body System Using the Complex Scaling Method", Journal of Physics: Conference Series 863, 12038 (2017).
 - M. Aikawa, M. Saito, Y. Komori, H. Haba, S. Takács, F. Ditrói, Z. Szűcs, "Activation cross sections of alpha-induced reactions on natural palladium for ^{103}Ag production", Proceedings of the 7th AASPP Workshop on Asian Nuclear Reaction Database Development, 12 (2017).
 - D. Ichinkhorloo, M. Aikawa, S. Chiba, Y. Hirabayashi, K. Kato, "Low energy scattering cross sections for $n + ^6\text{Li}$ and $n + ^7\text{Li}$ reactions", Proceedings of the 7th AASPP Workshop on Asian Nuclear Reaction Database Development, 51 (2017).
 - A. Sarsembayeva, S. Ebata, M. Chiba, N. Otuka, M. Aikawa, "A new Java-based EXFOR editor", Proceedings of the 7th AASPP Workshop on Asian Nuclear Reaction Database Development, 69 (2017).

- M. Kimura, “Probing Di-Nuclear Resonances of Astrophysical Interest Using Isoscalar Monopole/Dipole Transitions”, JPS Conf. Proc. Vol. 14, 010508-1-4 (2017).
- M. Kimura, Y. Chiba, and Y. Taniguchi, “Probing asymmetric clusters by using isoscalar monopole and dipole transitions”, J. Phys.: Conf. Ser. 863, 012024-1-5 (2017).
- T. Baba and M. Kimura, “Structure and decay pattern of linear-chain states in neutron-rich Carbon isotopes”, J. Phys.: Conf. Ser. 863, 012033-1-3 (2017).
- Y. Chiba, Y. Taniguchi and M. Kimura, “Asymmetric cluster structure and isoscalar monopole/dipole transitions of ^{28}Si ”, J. Phys.: Conf. Ser. 863, 012053-1-3 (2017).
- W. von Oertzen, Y. Kanada-En'yo, and M. Kimura, “Covalent Binding with Neutrons on the Femto-scale”, J. Phys.: Conf. Ser. 863, 012066-1-5 (2017).
- H. Masui and M. Kimura, “Deuteron-Like Correlation for the $T=0$ Channel in ^{18}F Studied within the Continuum Contributions”, J. Phys.: Conf. Ser. 863, 012069-1-3 (2017).
- R. Imai and M. Kimura, “A new generator coordinate method to describe gas-like states”, J. Phys.: Conf. Ser. 863, 012013-1-3 (2017).
- 木村真明, 堀内渉, 合川正幸, 江幡修一朗, 「北海道大学 宇宙理学専攻 原子核理論研究室 原子核反応データベース研究開発センター」 原子核研究(人物・研究室紹介), Vol. 61 No.2,
- 今井涼介, 木村真明, 「実時間生成座標法による ^{12}C のクラスター構造の研究」 原子核研究, Vol. 61 Supplement 1, March 2017, p.68-69.
- 馬場智之, 木村真明, 「炭素同位体における直鎖クラスター状態とアルファ崩壊幅」 原子核研究, Vol. 61 Supplement 1, March 2017, p.63-65.

3 口頭発表(国際会議等)

<招待講演>

- M. Kimura, “Nuclear Clustering Probed by the Isoscalar Responses”, International Symposium on Physics of Unstable Nuclei 2017 (ISPUN2017) [Halong Bay, Vietnam, 2017.9.25]
- M. Kimura, “Nuclear Clustering Probed by Nuclear Responses”, Ito International Research Center (IIRC) Symposium “Perspectives of the Physics of Nuclear Structure” [Tokyo, Japan, 2017.11.2]

<一般講演>

- N. Ukon, M. Aikawa, Y. Komori, H. Haba, “Activation Cross Sections of Deuteron-Induced Reactions on Natural Palladium for ^{103}Ag Production”, The 8th AASPP Workshop on Asian Nuclear Reaction Database Development, [National University of Mongolia, Ulaanbaatar, Mongolia, 2017.10.11-13]
- M. Kimura, “Probing nuclear clustering from isoscalar responses”, “Activation Cross Sections of Deuteron-Induced Reactions on Natural Palladium for ^{103}Ag Production”, The 8th AASPP Workshop on Asian Nuclear Reaction Database Development, [National University of Mongolia, Ulaanbaatar, Mongolia, 2017.10.11-13]
- D. Ichinkhorloo, “ $^{16}\text{O}(n,pn)^{15}\text{O}$ reaction using the CDCC method”, “Activation Cross Sections of Deuteron-Induced Reactions on Natural Palladium for ^{103}Ag Production”,

The 8th AASPP Workshop on Asian Nuclear Reaction Database Development,
[National University of Mongolia, Ulaanbaatar, Mongolia, 2017.10.11-13]

4 口頭発表(国内会議等)

<一般講演>

- 木村真明, “実時間発展法と反対称化分子動力学による軽い核の記述”, 日本物理学会第 72 回年次大会, [大阪大学豊中キャンパス, 2017.3.17-20]
- 木村真明, “Nuclear Clustering probed by Nuclear Responses”, RIBF Nuclear Physics Seminar [理研, 2017.06.15]
- 村田朋大、合川正幸、齋藤萌美、右近直之、小森有希子、羽場宏光、タカッチ サンドール, “Zr 標的へのアルファ粒子照射による ^{99}Mo の励起関数測定”, 日本原子力学会 2018 年春の年会[大阪大学, 2018.03.26-28]
- 江幡修一郎、合川正幸、仁井田浩二, “LLFP 安定核種化・短寿命化のための核変換法の開発 (12) ImPACT 核データ収集と PHITS インターフェイス”, 日本原子力学会 2017 年秋の大会[北海道大学, 2017.9.13-15]