

業績

Achievement

1 学術論文

- M. Isaka, H. Homma, M. Kimura, A. Doté and A. Ohnishi, “Modification of triaxial deformation and change of spectrum in ${}_{\Lambda}^{25}\text{Mg}$ caused by the Λ hyperon”, *Phys. Rev. C* **85**, 034303 (2012).
- K. Minomo, T. Sumi, M. Kimura, K. Ogata, Y.R. Shimizu and M. Yahiro, “Determination of the Structure of ${}^{31}\text{Ne}$ by a Fully Microscopic Framework”, *Phys. Rev. Lett.* **108**, 052503 (2012).
- M. Kimura, R. Yoshida and M. Isaka, “Excitation and Structure Change of ${}^{24}\text{Mg}$. I - Triaxial Deformed Mean Field in Low-Lying States -”, *Prog. Theor. Phys.* **127**, 287 (2012).
- Yuma Kikuchi, Nozomi Kurihara, Atsushi Wano, Kiyoshi Katō, Takayuki Myo and Masaaki Takashina, “Three-body model analysis of $\alpha + d$ elastic scattering and the ${}^2\text{H}(\alpha, \gamma){}^6\text{Li}$ reaction in complex-scaled solutions of the Lippmann-Schwinger equation”, *Phys. Rev. C* **84**, 064610 (2011)
- K. Minomo, T. Sumi, M. Kimura, K. Ogata, Y.R. Shimizu and M. Yahiro, “Deformation effect on total reaction cross sections for neutron-rich Ne isotopes”, *Phys. Rev. C* **84**, 034602 (2011)
- T. Matsumoto, D. Ichinkhorloo, Y. Hirabayashi, K. Katō and S. Chiba, “Systematic description of the ${}^6\text{Li}(n, n){}^6\text{Li} \rightarrow d + \alpha$ reactions with the microscopic coupled-channels method”, *Phys. Rev. C* **83**, 064611 (2011)
- M. Isaka, M. Kimura, A. Doté and A. Ohnishi, “Shell and cluster states of ${}_{\Lambda}^{21}\text{Ne}$ studied with antisymmetrized molecular dynamics”, *Phys. Rev. C* **83**, 054304 (2011)
- M. Isaka, M. Kimura, A. Doté and A. Ohnishi, “Deformation of hypernuclei studied with antisymmetrized molecular dynamics”, *Phys. Rev. C* **83**, 044323 (2011)
- M. Kimura and N. Furutachi, “Molecule-like structure with covalent neutrons in F isotopes toward neutron-drip line”, *Phys. Rev. C* **83**, 044304 (2011)
- D. Ichinkhorloo, T. Matsumoto, Y. Hirabayashi, K. Katō and S. Chiba, “Analysis of $n + {}^6\text{Li}$ Reactions Using the Continuum-Discretized Coupled-Channels Method”, *Jour. Nucl. Sci. Tech.* **48**, 1357 (2011)

- H.M. Mittal and Vidya Devi, “Nuclear structure of Xe-Pt nuclei in the framework of ARM and odd-even staggering”, Turk. J. Physics, **35**, 1 (2011)

2 論文（国際会議プロシーディングス等）

- D. Ichinkhorloo, T. Matsumoto, Y. Hirabayashi, K. Katō and S. Chiba, “ ${}^6\text{Li}+n$ Reactions in the Continuum Discretized Coupled Channels method”, AIP Conference Proceeding **1342**, 102-105 (2011)
- Kiyoshi Katō, Yuhei Yamamoto and Tomoaki Togashi, “Brueckner-AMD Study of Light Nuclei”, AIP Conference Proceeding **1342**, 37-42 (2011)
- T. Matsumoto, K. Katō and M. Yahiro, “New description of four-body break-up reaction”, AIP Conference Proceeding **1342**, 49-52 (2011)
- Y. Kikuchi, K. Katō, T. Myo, M. Takashina and K. Ikeda, “Two-neutron correlations in halo nuclei via Coulomb breakup reactions”, Int. J. Mod. Phys. E **20**, 843 (2011)
- T. Myo and K. Katō, “Resonances and continuum states of halo nuclei using the complex scaling method”, Int. J. Mod. Phys. E **20**, 839 (2011)
- Y. Yamamoto, T. Togashi and K. Katō, “Brueckner-AMD study of light nuclei”, Int. J. Mod. Phys. E **20**, 863 (2011)
- M. Isaka, H. Honma, M. Kimura, A. Doté and K. Ohnishi, “Impurity effects in ${}_{\Lambda}^{12}\text{Be}$ and ${}_{\Lambda}^{21}\text{Ne}$ hypernuclei”, Int. J. Mod. Phys. E **20**, 859 (2011)
- M. Kimura, “Systematic study of the many-particle and many-hole states in and around the island of inversion”, Int. J. Mod. Phys. E **20**, 893 (2011)
- Y. Taniguchi, M. Kimura, Y. Kanada-Enyo and H. Horiuchi, “Clustering correlations and triaxiality in the sd-shell region”, Int. J. Mod. Phys. E **20**, 1046 (2011)
- M. Odsuren and G. Khuukhenkhuu, “Statistical Model Analysis of (n,p) Cross Sections and Average Energy For Fission Neutron Spectrum”, AIP Conference Proceeding **1342**, 59 (2011)
- G. Khuukhenkhuu, M. Odsuren, Yu.M. Gledenov and M.V.Sedysheva, “Statistical Model Analysis of (n,p) Cross Sections Averaged Over the Fission Neutron Spectrum”, Journal of the Korean Physical Society, **59**, 851 (2011)
- G. Khuukhenkhuu, Yu.M. Gledenov, M.V. Sedysheva and M. Odsuren, “(n,a) Reaction Cross Section and Alpha Decay Probability of Nucleus”, In proceedings book: Neutron Spectroscopy, Nuclear Structure, Related Topics, JINR, Dubna, 89 (2011)
- G. Khuukhenkhuu, M. Odsuren, Yu.M. Gledenov and M.V. Sedysheva, “Statistical Model Analysis of (n,a) Cross Sections Averaged Over the Fission Neutron Spectrum”, Abstracts of the XIX International Seminar on Interaction of Neutrons with Nuclei, JINR, Dubna, 38 (2011)

- H. M. Mittal and Vidya Devi, “The odd-even staggering in $^{122-124}\text{Xe}$ and $^{124-128}\text{Ba}$ nuclei”, Journal of Physics G, Conference Series, **312**, 092041 (2011)
- H. M. Mittal and Vidya Devi, “Study of triaxiality in Xe-Hg nuclei”, Journal of Physics G, Conference Series, **312**, 092042 (2011)
- Vidya Devi and J. B. Gupta, “Two parameter formula for ground band energy spectra for superdeformed ^{194}Hg and $^{192-194}\text{Pb}$ nuclei”, Proc. Sympo. On Nucl. Phys. (India), **56**, 246 (2011)
- Vidya Devi and H. M. Mittal, “The study of triaxial rotor model in A=120-200 mass region nuclei”, Proc. Sympo. On Nucl. Phys. (India), **56**, 248 (2011)
- Vidya Devi and H. M. Mittal, “The study of ^{152}Gd and ^{154}Dy isotopes in the framework of interacting boson model and SU(5) symmetry, Proc. Sympo. On Nucl. Phys. (India), **56**, 250 (2011)
- Jagjit Singh Matharu and Vidya Devi, “Two-parameter formula for ground-band energy spectra of Xe-Pt nuclei”, Proc. Sympo. On Nucl. Phys. (India), **56**, 432 (2011)

3 口頭発表（国際会議等）

- Technical Meeting on the International Network of Nuclear Reaction Data Centres, Apr. 23-24, 2011, Vienna, Austria
 - Kiyoshi KATŌ, “Japan Nuclear Reaction Data Centre (JCPRG) Progress Report”
- Workshop on Data Compilation of the Multinationally-maintained Experimental Nuclear Reaction Database (EXFOR), Apr. 25-27, 2011, Vienna, Austria
 - Ayano MAKINAGA, “Update of GSYS”
- The 2nd Asian Nuclear Reaction Database Development Workshop, Sep. 5-9, 2011, Beijing, China
 - Masayuki AIKAWA, “Current Status and Future Plans of JCPRG”
 - Naoya FURUTACHI, “Current status of EXFOR and NRDF compilation in JCPRG”
 - Toshiyuki KATAYAMA, “JCPRG activity in collaborate with unaffiliated steering committee board”
 - Kiyoshi KATŌ, “History of JCPRG and JSPS Program of 'R&D Platform Formation of Nuclear Reaction Data in Asian Countries'”
 - Ayano MAKINAGA, “Nuclear data for astrophysics -experiment at Hokkaido univ.”
 - Kohsuke TSUBAKIHARA, “Recent progress of the project to build a new database in XML format”
 - Kazuyuki YAMAMOTO, “Nuclear data for astrophysics -evaluation using OCM”

- Asian Nuclear Data Workshop -For further development of Asian collaboration-, Nov. 10-12, 2011, Sapporo, Japan
 - Masayuki AIKAWA, “Current Status and Future Plans of Nuclear Reaction Data Centre (JCPRG)”
- IAEA’s consultants’ meeting on the Further Development of EXFOR, Mar. 6-9, 2012, Vienna, Austria
 - Kiyoshi KATŌ, “Comments on New EXFOR from Experiences of NRDF”
 - Masayuki AIKAWA, “New Editor and XML Format”

4 口頭発表（学会等）

- 核データ研究会, Nov. 16-17, 2011, Tokai, Japan
 - Masayuki Aikawa, “Low-Energy Nuclear Reactions of Light Nuclei”
 - Ayano Makinga, “Gamma-ray strength function measurement on ^{181}Ta at ELBE”
- 日本原子力学会 2011 年秋の大会, Sep. 19-22, 2011, Kitakyushu, Japan
 - 合川正幸, “北海道一道央地域における環境放射線の測定／公開システム”
 - 牧永あや乃, “ELBE 施設における $^{181}\text{Ta}(\gamma, \gamma')$ 反応断面積の測定”
- 日本物理学会 2011 年秋季大会, Sep. 16-19, 2011, Hirosaki, Japan
 - 木村真明, “Shape coexistence and shell evolution of N-28 system - the case of ^{43}S -”
 - 椿原康介, “三体力を含んだ相対論的平均場によるハイペロン混合中性子星物質”
 - 古立直也, “炭素同位体における陽子、中性子変形と E2 遷移確率の研究”
 - 松本琢磨, “ $^6\text{He}+^{12}\text{C}$, ^{208}Pb 反応の CDCC 解析”
 - 山本一幸, “COSM アプローチによる中性子捕獲反応解析”
- 日本物理学会第 67 回年次大会, Mar. 24-27, 2012, Nishinomiya, Japan
 - 古立直也, “中性子過剰炭素同位体の構造研究”
 - 山本一幸, “COSM を用いた酸素同位体への中性子捕獲反応の研究”

5 口頭発表（その他）

- 仁科センター共用促進・産業連携部ミニワークショップ「不安定核ビーム反応実験データ採録の課題と将来」, Dec. 13-14, 2011, Wako, Japan
 - 加藤幾芳, “Nuclear Structures and Reactions around Threshold Energy Regions”
 - 椿原康介, “2010 年度理研 RIBF ミニワークショップとその後の進展について”

- 古立直也, “JCPRG における理研データ採録の現状と課題”
- 山本一幸, “Gamow 状態を取り入れた COSM による天体核反応データ評価 (NRDF/A)”
- 牧永あや乃, “天体核反応データベース NRDF/A の開発 -実験系から見た採録の課題-”
- 129th RIKEN RIBF Nuclear Physics Seminar, Dec. 13, 2011, Wako, Japan
 - Masayuki AIKAWA, “Current Status and Future Plans of Nuclear Reaction Data Centre (JCPRG)”
- RCNP での核データ研究戦略検討会, Jun. 28-29, 2011, Osaka, Japan
 - 合川正幸, “荷電粒子核反応データの収集と公開”
 - 牧永あや乃, “天体核反応データベース NRDF/A”
 - 松本琢磨, “ ${}^6\text{Li}(n,n')$ 反応の CDCC 解析”
- Hokudai Simulation Salon ワークショップ, Feb. 17, 2012, Sapporo, Japan
 - 合川正幸, “原子核反応データベースと国際連携”
 - 椿原康介, “中性子星観測から示唆される核物質状態方程式”