

2013 年度入力データ

Data-Entries of 2013

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1 今年度入力論文リスト

以下の雑誌からデータ収集・入力作業を行った。作業にあたって、国内外の研究機関に所属する著者の方々からご協力を得ることができ、質の高いデータ入力につながっている。

- Chinese Physics Society
- High Energy Physics and Nuclear Physics
- Journal of the Physical Society of Japan
- Nuclear Instruments and Methods in Physics Research B
- Nuclear Physics A
- Physics Letters
- Physics Letters, Section B
- Physical Review C
- Progress in Nuclear Science and Technology
- Radiation Measurements

今年度新規に収録した全論文 42 編のリストを表 1 に示す。

表 1: 採録論文一覧

Data 0736

Title High-resolution measurements of analogue states in ^{57}Co
Author E.Arai *et al.*
Reference Nucl.Phys.A **378** (1982) 259
Table Total : 4 EXFOR : 4 Author : 0 Table : 0 Curve : 4 Unobt : 0

Data 2213

Title Differential cross sections for the $^{14}\text{N}(\text{d},\text{p})^{15}\text{N}$ ground state reaction at the deuteron energy of 16 MeV
Author S.Morita *et al.*
Reference J.Phys.Soc.Jpn. **15** (1960) 361
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2217

Title Protons from the p+d breakup reaction at proton energies of 14 MeV and 10 MeV
Author S.Kikuchi *et al.*
Reference J.Phys.Soc.Jpn. **15** (1960) 749
Table Total : 13 EXFOR : 13 Author : 0 Table : 0 Curve : 13 Unobt : 0

Data 2299

Title Photoproduction of two neutral pions from hydrogen near threshold
Author T.Kitagaki *et al.*
Reference J.Phys.Soc.Jpn. **30** (1971) 595
Table Total : 1 EXFOR : 1 Author : 1 Table : 0 Curve : 0 Unobt : 0

Data 2273

Title Triton-induced reactions on ^{12}C
Author K.Etoh *et al.*
Reference J.Phys.Soc.Jpn. **26** (1969) 1335
Table Total : 72 EXFOR : 72 Author : 0 Table : 0 Curve : 72 Unobt : 0

Data 2316

Title Photoprotons in giant resonance region for ^{31}P
Author H.Tsubota *et al.*
Reference J.Phys.Soc.Jpn. **35** (1973) 330
Table Total : 3 EXFOR : 3 Author : 1 Table : 0 Curve : 2 Unobt : 0

Data 2320

Title Photoproton cross section for ^{19}F
 Author H.Tsubota *et al.*
 Reference J.Phys.Soc.Jpn. **38** (1975) 299
 Table Total : 3 EXFOR : 3 Author : 0 Table : 1 Curve : 2 Unobt : 0

Data 2343

Title Neutron and photon production from thick targets bombarded by
 30-MeV p, 33-MeV d, 65-MeV ^3He , and 65-MeV α ions
 Author K.Shin *et al.*
 Reference Phys.Rev.C **29** (1984) 1307
 Table Total : 160 EXFOR : 160 Author : 0 Table : 36 Curve : 124 Unobt : 0

Data 2354

Title Elastic and inelastic p- α collisions at 55 MeV
 Author S.Hayakawa *et al.*
 Reference Phys.Lett. **8** (1964) 330
 Table Total : 3 EXFOR : 3 Author : 0 Table : 1 Curve : 2 Unobt : 0

Data 2385

Title Total and partial photoneutron cross sections for Pb isotopes
 Author T.Kondo *et al.*
 Reference Phys.Rev.C **86** (2012) 014316
 Table Total : 7 EXFOR : 7 Author : 3 Table : 4 Curve : 0 Unobt : 0

Data 2389

Title High-resolution $^{100}\text{Mo}(^3\text{He,t})^{100}\text{Tc}$ charge-exchange experiment
 and the impact on double-beta decays and neutrino charged-
 current reactions
 Author J.H.Thies *et al.*
 Reference Phys.Rev.C **86** (2012) 044309
 Table Total : 12 EXFOR : 12 Author : 0 Table : 2 Curve : 10 Unobt : 0

Data 2401

Title One- and two-neutron removal reactions from the most neutron-
 rich carbon isotopes
 Author N.Kobayashi *et al.*
 Reference Phys.Rev.C **86** (2012) 054604
 Table Total : 8 EXFOR : 8 Author : 0 Table : 4 Curve : 4 Unobt : 0

Data 2402

Title Giant monopole resonance in even-A Cd isotopes, the asymmetry term in nuclear incompressibility, and the 'softness' of Sn and Cd nuclei

Author D.Patel *et al.*

Reference Phys.Lett.B **718** (2012) 447

Table Total : 5 EXFOR : 5 Author : 5 Table : 0 Curve : 0 Unobt : 0

Data 2403

Title Evidence for radiative coupling of the pygmy dipole resonance to excited states

Author C.T.Angell *et al.*

Reference Phys.Rev.C **86** (2012) 051302

Table Total : 1 EXFOR : 1 Author : 1 Table : 0 Curve : 0 Unobt : 0

Data 2405

Title Determination of the astrophysical $^{12}\text{N}(p,\gamma)^{13}\text{O}$ reaction rate from the $^2\text{H}(^{12}\text{N},^{13}\text{O})n$ reaction and its astrophysical implications

Author B.Guo *et al.*

Reference Phys.Rev.C **87** (2013) 015803

Table Total : 1 EXFOR : 1 Author : 0 Table : 0 Curve : 1 Unobt : 0

Data 2406

Title New result on the production of ^{277}Cn by the $^{208}\text{Pb}+^{70}\text{Zn}$ reaction

Author T.Sumita *et al.*

Reference J.Phys.Soc.Jpn. **82** (2013) 024202

Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2407

Title Shallow and diffuse spin-orbit potential for proton elastic scattering from neutron-rich helium isotopes at 71 MeV/nucleon

Author S.Sakaguchi *et al.*

Reference Phys.Rev.C **87** (2013) 021601

Table Total : 2 EXFOR : 2 Author : 2 Table : 0 Curve : 0 Unobt : 0

Data 2408

Title Dipole strength distribution in ^{56}Fe

Author T.Shizuma *et al.*

Reference Phys.Rev.C **87** (2013) 024301

Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2409

Title Analysis of fragmentation excitation functions of lead by carbon ions up to 400 MeV/u

Author T.Ogawa *et al.*

Reference Nucl.Instrum.Methods B **300** (2013) 35

Table Total : 32 EXFOR : 32 Author : 32 Table : 0 Curve : 0 Unobt : 0

Data 2410

Title Elastic scattering of protons from ^9C with a 290 MeV/nucleon ^9C beam

Author Y.Matsuda *et al.*

Reference Phys.Rev.C **87** (2013) 034614

Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2411

Title Fusion probabilities in the reactions $^{40,48}\text{Ca} + ^{238}\text{U}$ at energies around the Coulomb barrier

Author K.Nishio *et al.*

Reference Phys.Rev.C **86** (2012) 034608

Table Total : 32 EXFOR : 32 Author : 32 Table : 0 Curve : 0 Unobt : 0

Data 2413

Title Evidence for hindrance in fusion between sulfur and lead nuclei

Author J.Khuyagbaatar *et al.*

Reference Phys.Rev.C **86** (2012) 064602

Table Total : 6 EXFOR : 6 Author : 6 Table : 0 Curve : 0 Unobt : 0

Data 2414

Title Measurements of cross sections for production of light nuclides by 300 MeV proton bombardment of Cu and Y

Author S.Sekimoto *et al.*

Reference Nucl.Instrum.Methods B **294** (2013) 475

Table Total : 2 EXFOR : 2 Author : 0 Table : 2 Curve : 0 Unobt : 0

Data 2416

Title Inelastic scattering of ^{32}Mg at 190MeV/nucleon from a thick proton target

Author K.A.Li *et al.*

Reference Chin.Phys.Lett. **29** (2012) 102301

Table Total : 1 EXFOR : 1 Author : 1 Table : 0 Curve : 0 Unobt : 0

Data 2430

Title Angular distributions of the vector A_y and tensor A_{yy} , A_{xx} , A_{xz} analyzing powers in the $dd \rightarrow {}^3\text{He}$ reaction at 200 MeV

Author A.K.Kurilkin *et al.*

Reference Phys.Rev.C **87** (2013) 051001

Table Total : 4 EXFOR : 4 Author : 4 Table : 0 Curve : 0 Unobt : 0

Data 2431

Title Alpha-resonance structure in ${}^{11}\text{C}$ studied via resonant scattering of ${}^7\text{Be}+\alpha$ and with the ${}^7\text{Be}(\alpha,p)$ reaction

Author H.Yamaguchi *et al.*

Reference Phys.Rev.C **87** (2013) 034303

Table Total : 4 EXFOR : 4 Author : 4 Table : 0 Curve : 0 Unobt : 0

Data 2433

Title Photoneutron cross sections for Mo isotopes

Author H.Utsunomiya *et al.*

Reference Phys.Rev.C **88** (2013) 015805

Table Total : 6 EXFOR : 6 Author : 6 Table : 0 Curve : 0 Unobt : 0

Data 2434

Title Investigation of the thermonuclear ${}^{18}\text{Ne}(\alpha,p){}^{21}\text{Na}$ reaction rate via resonant elastic scattering of ${}^{21}\text{Na}+p$

Author L.Y.Zhang *et al.*

Reference Phys.Rev.C **89** (2014) 015804

Table Total : 5 EXFOR : 5 Author : 3 Table : 2 Curve : 0 Unobt : 0

Data 2435

Title Measurement of neutron yields from thick Al and SUS304 targets bombarded by 5-MeV and 9-MeV deuterons

Author K.Hirabayashi *et al.*

Reference NSTP **3** (2012) 60

Table Total : 8 EXFOR : 8 Author : 8 Table : 0 Curve : 0 Unobt : 0

Data 2436

Title Probing effect of tensor interactions in ${}^{16}\text{O}$ via (p,d) reaction

Author H.J.Ong *et al.*

Reference Phys.Lett.B **725** (2013) 277

Table Total : 2 EXFOR : 2 Author : 2 Table : 0 Curve : 0 Unobt : 0

Data 2437

Title Density distributions of ^{11}Li deduced from reaction cross-section measurements

Author T.Moriguchi *et al.*

Reference Phys.Rev.C **88** (2013) 024610

Table Total : 2 EXFOR : 2 Author : 0 Table : 2 Curve : 0 Unobt : 0

Data 2438

Title Excitation functions for production of Rf isotopes in the $^{248}\text{Cm}+^{18}\text{O}$ reaction

Author M.Murakami *et al.*

Reference Phys.Rev.C **88** (2013) 024618

Table Total : 5 EXFOR : 5 Author : 0 Table : 5 Curve : 0 Unobt : 0

Data 2439

Title Activation cross-sections of deuteron-induced nuclear reactions on natural iron up to 24 MeV

Author M.U.Khandaker *et al.*

Reference Nucl.Instrum.Methods B **316** (2013) 33

Table Total : 18 EXFOR : 18 Author : 9 Table : 9 Curve : 0 Unobt : 0

Data 2440

Title Resonant scattering of $^{22}\text{Na}+p$ studied by the thick-target inverse-kinematic method

Author S.J.Jin *et al.*

Reference Phys.Rev.C **88** (2013) 035801

Table Total : 2 EXFOR : 2 Author : 1 Table : 1 Curve : 0 Unobt : 0

Data 2441

Title Testing the mutually enhanced magicity effect in nuclear incompressibility via the giant monopole resonance in the $^{204,206,208}\text{Pb}$ isotopes

Author D.Patel *et al.*

Reference Phys.Lett.B **726** (2013) 178

Table Total : 3 EXFOR : 3 Author : 3 Table : 0 Curve : 0 Unobt : 0

Data 2442

Title Experimental study of the $t+t$ structure in ^6He

Author G.L.Zhang *et al.*

Reference PHE **29** (2005) 940

Table Total : 1 EXFOR : 1 Author : 0 Table : 0 Curve : 1 Unobt : 0

Data 2443

Title Elastic transfer reactions of 25 MeV/u ^6He on ^9Be target
Author D.Y.Pang *et al.*
Reference PHE **30** (2006) 22
Table Total : 1 EXFOR : 1 Author : 0 Table : 0 Curve : 1 Unobt : 0

Data 2444

Title Evaporation-cost dependence in heavy-ion fragmentation
Author L.Audirac *et al.*
Reference Phys.Rev.C **88** (2013) 041602
Table Total : 4 EXFOR : 4 Author : 0 Table : 4 Curve : 0 Unobt : 0

Data 2445

Title Isospin mixing of the isobaric analog state studied in a high-resolution $^{56}\text{Fe}(^3\text{He},t)^{56}\text{Co}$ reaction
Author H.Fujita *et al.*
Reference Phys.Rev.C **88** (2013) 054329
Table Total : 10 EXFOR : 10 Author : 10 Table : 0 Curve : 0 Unobt : 0

Data 2447

Title Isoscalar giant resonance strengths in ^{32}S and possible excitation of superdeformed and $^{28}\text{Si} + \alpha$ cluster bandheads
Author M.Itoh *et al.*
Reference Phys.Rev.C **88** (2013) 064313
Table Total : 10 EXFOR : 10 Author : 10 Table : 0 Curve : 0 Unobt : 0

Data 2448

Title One-neutron knockout reaction of ^{17}C on a hydrogen target at 70 MeV/nucleon
Author Y.Satou *et al.*
Reference Phys.Lett.B **728** (2014) 462
Table Total : 4 EXFOR : 4 Author : 3 Table : 1 Curve : 0 Unobt : 0

Data 2449

Title Experimental study for the production cross sections of positron emitters induced from ^{12}C and ^{16}O nuclei by low-energy proton beams
Author T.Akagi *et al.*
Reference RM **59** (2013) 262
Table Total : 4 EXFOR : 4 Author : 0 Table : 4 Curve : 0 Unobt : 0

今年度採録した論文の実験データが得られた研究所を表2に示す。

表 2: 実験実施研究所内訳

大阪大学	7 件
株式会社東芝	1 件
九州大学	1 件
産業技術総合研究所	4 件
東京工業大学	1 件
東京大学	5 件
東北大学	2 件
日本原子力研究開発機構	2 件
兵庫県立粒子線医療センター	1 件
放射線医学総合研究所	2 件
理化学研究所	16 件