

2018年度入力データ

Data-Entries of 2018

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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。

- Applied Radiation and Isotopes
- Chinese Journal of Physics (Taiwan)
- Journal of Inorganic and Nuclear Chemistry
- Journal of Nuclear Science and Technology
- Journal of Radioanalytical and Nuclear Chemistry
- Journal of the Physical Society of Japan
- Nuclear Instruments and Methods in Physics Research A
- Nuclear Instruments and Methods in Physics Research B
- Nuclear Physics A
- Physical Review C
- Physical Review Letters
- Physics Letters B
- Progress in Nuclear Science and Technology
- Progress of Theoretical and Experimental Physics
- Radiation Measurements

- Scientific Papers of the Institute of Physical and Chemical Research
- Scientific Reports
- Scient.Papers Inst.Phys.Chem.Res.,Tokyo
- Energy Procedia

今年度新規に収録した全論文 78 編のリストを表 1 に示す。

表 1: 採録論文一覧

Data 0078

Title Measurement and semi-phenomenological analysis of the $2\text{H}(\alpha, \text{pa})\text{n}$ reaction at 18 MeV
Author K.Sagara *et al.*
Reference Nucl.Phys.A **299** (1978) 77
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2236

Title Protons from several elements bombarded with 30 MeV alpha particles
Author I.Kumabe *et al.*
Reference J.Phys.Soc.Jpn. **17** (1962) 1526
Table Total : 8 EXFOR : 8 Author : 0 Table : 0 Curve : 8 Unobt : 0

Data 2253

Title Two-Particle States Excited by The (a,d) Reactions on s-d Shell Nuclei
Author D.-H.Kim *et al.*
Reference J.Phys.Soc.Jpn. **21** (1966) 2445
Table Total : 4 EXFOR : 4 Author : 0 Table : 0 Curve : 4 Unobt : 0

Data 2258

Title Compound-Nucleus Cross sections far below the Coulomb Barrier
Author K. Miyano *et al.*
Reference J.Phys.Soc.Jpn. **23** (1967) 895
Table Total : 1 EXFOR : 1 Author : 0 Table : 0 Curve : 1 Unobt : 0

Data 2265

Title Single- and multi-nucleon transfer reactions induced by oxygen ions on boron 10 and 11
Author Y.Okuma *et al.*
Reference J.Phys.Soc.Jpn. **25** (1968) 1
Table Total : 11 EXFOR : 11 Author : 0 Table : 1 Curve : 10 Unobt : 0

Data 2266

Title Scattering of 34.4-MeV alpha particles by the Tin isotopes
Author I.Kumabe *et al.*
Reference J.Phys.Soc.Jpn. **25** (1968) 14
Table Total : 10 EXFOR : 10 Author : 0 Table : 0 Curve : 10 Unobt : 0

Data 2267

Title Breakup of deuteron by impact of alpha particle and deuteron
Author T.Tanabe *et al.*
Reference J.Phys.Soc.Jpn. **25** (1968) 21
Table Total : 4 EXFOR : 4 Author : 0 Table : 0 Curve : 4 Unobt : 0

Data 2268

Title j-forbidden (d,p) stripping reactions on C12, O16 and Mg24
Author K.Hosono *et al.*
Reference J.Phys.Soc.Jpn. **25** (1968) 36
Table Total : 8 EXFOR : 5 Author : 0 Table : 3 Curve : 5 Unobt : 0

Data 2269

Title Precision evaluation of the $^{71}\text{Ga}(\text{nue},\text{e}^-)$ solar neutrino capture rate from the $(^3\text{He},\text{t})$ charge-exchange reaction
Author D.Frekers *et al.*
Reference Phys.Rev.C **91** (2015) 034608
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2270

Title A study of the nuclear structure of ^{46}Ti by the $^{45}\text{Sc}(^3\text{He},\text{d})$ reaction
Author H.Ohmura *et al.*
Reference J.Phys.Soc.Jpn. **25** (1968) 953
Table Total : 20 EXFOR : 20 Author : 0 Table : 0 Curve : 20 Unobt : 0

Data 2271

Title Low-lying states of ^9Be studied by the $^7\text{Li}(^3\text{He},\text{p})^9\text{Be}$ reaction
Author J.Sanada *et al.*
Reference J.Phys.Soc.Jpn. **26** (1969) 853
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2275

Title The $^{91}\text{Zr}(\text{p},\text{p}')$ reaction at 14.52 MeV
Author Y.Awaya *et al.*
Reference J.Phys.Soc.Jpn. **27** (1969) 1087
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2276

Title A nuclear structure study of ^{141}Pr and ^{143}Pm using the $(^3\text{He},\text{d})$ reaction on ^{140}Ce and ^{142}Nd
Author T.Ishimatsu *et al.*
Reference J.Phys.Soc.Jpn. **28** (1970) 291
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2277

Title Excited states in ^{27}Al from the reaction $^{26}\text{Mg}(p,p)^{26}\text{Mg}$
Author T.Murata *et al.*
Reference J.Phys.Soc.Jpn. **28** (1970) 1101
Table Total : 2 EXFOR : 2 Author : 0 Table : 1 Curve : 1 Unobt : 0

Data 2278

Title Excited States in ^{40}Ar from inelastic alpha-particle scattering
Author T.Wakatsuki *et al.*
Reference J.Phys.Soc.Jpn. **28** (1970) 1107
Table Total : 2 EXFOR : 2 Author : 0 Table : 2 Curve : 0 Unobt : 0

Data 2301

Title Elastic and inelastic scattering of protons on ^{14}N in the energy region of 10 to 15 MeV. I. Experimental
Author Y.Oda *et al.*
Reference J.Phys.Soc.Jpn. **30** (1971) 1217
Table Total : 3 EXFOR : 3 Author : 0 Table : 1 Curve : 2 Unobt : 0

Data 2302

Title Study of (d,a) reactions on ^{40}Ca and ^{40}Ar
Author K.Suzuki *et al.*
Reference J.Phys.Soc.Jpn. **30** (1971) 1523
Table Total : 5 EXFOR : 5 Author : 0 Table : 2 Curve : 3 Unobt : 0

Data 2344

Title Spectroscopic factors and strength distributions for the deeply bound orbitals in ^{40}Ca obtained from the (p,2p) reaction at 392 MeV
Author Y.Yasuda *et al.*
Reference Phys.Rev.C **81** (2010) 044315
Table Total : 2 EXFOR : 2 Author : 0 Table : 2 Curve : 0 Unobt : 0

Data 2351

Title High-resolution study of the $^9\text{Be}(^3\text{He},t)^9\text{B}$ reaction up to the ^9B triton threshold
Author C.Scholl *et al.*
Reference Phys.Rev.C **84** (2011) 014308
Table Total : 25 EXFOR : 25 Author : 0 Table : 25 Curve : 0 Unobt : 0

Data 2352

Title Complete set of polarization transfer observables for the $^{16}\text{O}(p,n)^{16}\text{F}$ reaction at 296 MeV and 0 degrees
Author T.Wakasa *et al.*
Reference Phys.Rev.C **84** (2011) 014614
Table Total : 3 EXFOR : 3 Author : 3 Table : 0 Curve : 0 Unobt : 0

Data 2374

Title Pygmy dipole resonance in ^{208}Pb
Author I.Poltoratska *et al.*
Reference Phys.Rev.C **85** (2012) 041304
Table Total : 5 EXFOR : 5 Author : 0 Table : 3 Curve : 1 Unobt : 1

Data 2381

Title Separation of pigmy dipole and M1 resonances in ^{90}Zr by a high-resolution inelastic proton scattering near 0 deg
Author C.Iwamoto *et al.*
Reference Phys.Rev.Lett. **108** (2012) 262501
Table Total : 5 EXFOR : 5 Author : 5 Table : 0 Curve : 0 Unobt : 0

Data 2383

Title The $(^3\text{He},t)$ reaction on ^{76}Ge , and the double-beta-decay matrix element
Author J.H.Thies *et al.*
Reference Phys.Rev.C **86** (2012) 014304
Table Total : 21 EXFOR : 21 Author : 0 Table : 1 Curve : 20 Unobt : 0

Data 2386

Title Projectile fragmentation of 388 A MeV ^{20}Ne in polyethylene, carbon and aluminum targets
Author D.H.Zhang *et al.*
Reference Nucl.Instrum.Methods B **286** (2012) 238
Table Total : 8 EXFOR : 8 Author : 0 Table : 8 Curve : 0 Unobt : 0

Data 2387

Title Measurements and Monte Carlo calculations of forward-angle secondary-neutron-production cross-sections for 137 and 200 MeV proton-induced reactions in carbon
Author Y.Iwamoto *et al.*
Reference Nucl.Instrum.Methods A **690** (2012) 10
Table Total : 3 EXFOR : 3 Author : 2 Table : 1 Curve : 0 Unobt : 0

Data 2390

Title High resolution ($^3\text{He,t}$) experiment on the double-beta decaying nuclei ^{128}Te and ^{130}Te
Author P.Puppe *et al.*
Reference Phys.Rev.C **86** (2012) 044603
Table Total : 12 EXFOR : 12 Author : 0 Table : 0 Curve : 12 Unobt : 0

Data 2393

Title Angular distributions and excitation functions of $\text{Be}^9(\text{d,p})\text{Be}^{10}$ ground-state reaction
Author T.Ishimatsu *et al.*
Reference J.Phys.Soc.Jpn. **16** (1961) 367
Table Total : 8 EXFOR : 8 Author : 0 Table : 0 Curve : 8 Unobt : 0

Data 2394

Title Excitation functions for the formation of ^7Be in ^3He particle induced reactions on C, N, O, F, Mg, Al and Si
Author T.Mikumo *et al.*
Reference Phys.Lett. **23** (1966) 586
Table Total : 8 EXFOR : 8 Author : 0 Table : 0 Curve : 8 Unobt : 0

Data 2505

Title Experimental study of the knockout reaction mechanism using ^{14}O at 60 MeV/nucleon
Author Y.L.Sun *et al.*
Reference Phys.Rev.C **93** (2016) 044607
Table Total : 2 EXFOR : 2 Author : 1 Table : 1 Curve : 0 Unobt : 0

Data 2510

Title Characterization of quasi-monoenergetic neutron source using 137, 200, 246 and 389 MeV $^7\text{Li}(\text{p,n})$ reactions
Author Y.Iwamoto *et al.*
Reference NSTP **4** (2014) 657
Table Total : 12 EXFOR : 12 Author : 12 Table : 0 Curve : 0 Unobt : 0

Data 2512

Title New isotopes and proton emitters-crossing the drip line in the vicinity of ^{100}Sn
Author I.Celikovic *et al.*
Reference Phys.Rev.Lett. **116** (2016) 162501
Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2513

Title Deformation effects on isoscalar giant resonances in ^{24}Mg

Author Y.K.Gupta *et al.*
Reference Phys.Rev.C **93** (2016) 044324
Table Total : 16 EXFOR : 16 Author : 16 Table : 0 Curve : 0 Unobt : 0

Data 2516

Title First direct measurement of the $^{11}\text{C}(\alpha, p)^{14}\text{N}$ stellar reaction by an extended thick-target method
Author S.Hayakawa *et al.*
Reference Phys.Rev.C **93** (2016) 065802
Table Total : 5 EXFOR : 5 Author : 5 Table : 0 Curve : 0 Unobt : 0

Data 2517

Title Projectile fragmentation of 471 A MeV ^{56}Fe in polyethylene, carbon and aluminum targets
Author Dong-Hai Zhang *et al.*
Reference RM **50** (2013) 56
Table Total : 8 EXFOR : 8 Author : 4 Table : 4 Curve : 0 Unobt : 0

Data 2519

Title Are there nuclear structure effects on the isoscalar giant monopole resonance and nuclear incompressibility near A 90?
Author Y.K.Gupta *et al.*
Reference Phys.Lett.B **760** (2016) 482
Table Total : 4 EXFOR : 4 Author : 4 Table : 0 Curve : 0 Unobt : 0

Data 2520

Title High energy-resolution measurement of the $^{82}\text{Se}(^3\text{He}, t)^{82}\text{Br}$ reaction for double-beta decay and for solar neutrinos
Author D. Frekers *et al.*
Reference Phys.Rev.C **94** (2016) 014614
Table Total : 33 EXFOR : 33 Author : 0 Table : 1 Curve : 32 Unobt : 0

Data 2524

Title Systematic measurement of double-differential neutron production cross sections for deuteron-induced reactions at an incident energy of 102 MeV
Author S.Araki *et al.*
Reference Nucl.Instrum.Methods A **842** (2017) 62
Table Total : 12 EXFOR : 12 Author : 12 Table : 0 Curve : 0 Unobt : 0

Data 2525

Title Measurement of thick-target gamma-ray production yields of the ${}^7\text{Li}(p,p'){}^7\text{Li}$ and ${}^7\text{Li}(p,g){}^8\text{Be}$ reactions in the near-threshold energy region for the ${}^7\text{Li}(p,n){}^7\text{Be}$ reaction
Author T.Saito *et al.*
Reference J.Nucl.Sci.Technol. **54** (2017) 253
Table Total : 6 EXFOR : 6 Author : 2 Table : 4 Curve : 0 Unobt : 0

Data 2526

Title Charge-changing cross-section measurements of ${}^{12-16}\text{C}$ at around 45A MeV and development of a Glauber model for incident energies 10A-2100A MeV
Author D.T.Tran *et al.*
Reference Phys.Rev.C **94** (2016) 064604
Table Total : 5 EXFOR : 5 Author : 0 Table : 5 Curve : 0 Unobt : 0

Data 2528

Title Experimental investigation of a linear-chain structure in the nucleus ${}^{14}\text{C}$
Author H.Yamaguchi *et al.*
Reference Phys.Lett.B **766** (2017) 11
Table Total : 8 EXFOR : 8 Author : 8 Table : 0 Curve : 0 Unobt : 0

Data 2529

Title Development of the high-energy neutron fluence rate standard field in Japan with a peak energy of 45 MeV using the ${}^7\text{Li}(p,n){}^7\text{Be}$ reaction at TIARA
Author T.Matsumoto *et al.*
Reference J.Nucl.Sci.Technol. **54** (2017) 529
Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2530

Title Intruder configurations in the ground state of ${}^{30}\text{Ne}$
Author H.N.Liu *et al.*
Reference Phys.Lett.B **767** (2017) 58
Table Total : 3 EXFOR : 3 Author : 0 Table : 3 Curve : 0 Unobt : 0

Data 2531

Title Investigations of charge-changing processes for light proton-rich nuclei on carbon and solid-hydrogen targets
Author K.Sawahata *et al.*
Reference Nucl.Phys.A **961** (2017) 142
Table Total : 24 EXFOR : 24 Author : 0 Table : 24 Curve : 0 Unobt : 0

Data 2532

Title Observation of isoscalar and isovector dipole excitations in neutron-rich ${}^{200}\text{O}$

Author N.Nakatsuka *et al.*
Reference Phys.Lett.B **768** (2017) 387
Table Total : 2 EXFOR : 2 Author : 0 Table : 2 Curve : 0 Unobt : 0

Data 2533

Title Production cross sections of ^{169}Yb and Tm isotopes in deuteron-induced reactions on ^{169}Tm
Author M.Saito *et al.*
Reference Appl.Radiat.Isot. **125** (2017) 23
Table Total : 4 EXFOR : 4 Author : 0 Table : 4 Curve : 0 Unobt : 0

Data 2535

Title Time-Reversal Measurement of the p-Wave Cross Sections of the $^7\text{Be}(n,\alpha)^4\text{He}$ Reaction for the Cosmological Li Problem
Author T.Kawabata *et al.*
Reference Phys.Rev.Lett. **118** (2017) 052701
Table Total : 2 EXFOR : 2 Author : 2 Table : 0 Curve : 0 Unobt : 0

Data 2536

Title Excitation functions of alpha particles induced nuclear reactions on natural titanium in the energy range of 10.4-50.2 MeV
Author A.R.Usman *et al.*
Reference Nucl.Instrum.Methods B **399** (2017) 34
Table Total : 12 EXFOR : 12 Author : 0 Table : 12 Curve : 0 Unobt : 0

Data 2537

Title Study of deuteron-induced nuclear reactions on natural tungsten for the production of theranostic ^{186}Re via AVF cyclotron up to 38 MeV
Author M.U.Khandaker *et al.*
Reference Nucl.Instrum.Methods B **403** (2017) 51
Table Total : 11 EXFOR : 11 Author : 0 Table : 11 Curve : 0 Unobt : 0

Data 2538

Title Study of the reaction $^{48}\text{Ca} + ^{248}\text{Cm} \rightarrow ^{296}\text{Lv}^*$ at RIKEN-GARIS
Author D.Kaji *et al.*
Reference J.Phys.Soc.Jpn. **86** (2017) 034201
Table Total : 2 EXFOR : 2 Author : 2 Table : 0 Curve : 0 Unobt : 0

Data 2541

Title Fragmentation cross sections of 788A MeV ^{28}Si on carbon and polyethylene targets
Author J.-S.Li *et al.*

Reference CHP **54** (2016) 314
Table Total : 4 EXFOR : 4 Author : 2 Table : 2 Curve : 0 Unobt : 0

Data 2542

Title Decay measurement of ^{283}Cn produced in the $^{238}\text{U}(^{48}\text{Ca},3\text{n})$ reaction using GARIS-II
Author D.Kaji *et al.*
Reference J.Phys.Soc.Jpn. **86** (2017) 085001
Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2543

Title Single-neutron knockout from ^{20}C and the structure of ^{19}C
Author J.W.Hwang *et al.*
Reference Phys.Lett.B **769** (2017) 503
Table Total : 6 EXFOR : 6 Author : 5 Table : 1 Curve : 0 Unobt : 0

Data 2545

Title Astrophysical S factor for the $^6\text{Li}(d,\alpha)^4\text{He}$ and $^6\text{Li}(d,p_0/p_1)^7\text{Li}$ reactions and their astrophysical implications
Author K.Fang *et al.*
Reference Phys.Rev.C **94** (2016) 054602
Table Total : 4 EXFOR : 4 Author : 0 Table : 0 Curve : 4 Unobt : 0

Data 2548

Title New measurement of the $^8\text{Li}(a,n)^{11}\text{B}$ reaction in a lower-energy region below the Coulomb barrier
Author S.K.Das *et al.*
Reference Phys.Rev.C **95** (2017) 055805
Table Total : 1 EXFOR : 1 Author : 1 Table : 0 Curve : 0 Unobt : 0

Data 2549

Title Observation of new neutron-rich Mn, Fe, Co, Ni, and Cu isotopes in the vicinity of ^{78}Ni
Author T.Sumikama *et al.*
Reference Phys.Rev.C **95** (2017) 051601
Table Total : 1 EXFOR : 1 Author : 1 Table : 0 Curve : 0 Unobt : 0

Data 2551

Title Investigating neutron-proton pairing in sd-shell nuclei via (p, ^3He) and (^3He ,p) transfer reactions
Author Y.Ayyad *et al.*
Reference Phys.Rev.C **96** (2017) 021303

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

Data 2553

Title In-beam gamma-ray spectroscopy of ^{35}Mg via knockout reactions at intermediate energies

Author S.Momiyama *et al.*

Reference Phys.Rev.C **96** (2017) 034328

Table Total : 6 EXFOR : 6 Author : 2 Table : 4 Curve : 0 Unobt : 0

Data 2554

Title Discovery of new isotopes $^{81,82}\text{Mo}$ and $^{85,86}\text{Ru}$ and a determination of the particle instability of ^{103}Sb

Author H.Suzuki *et al.*

Reference Phys.Rev.C **96** (2017) 034604

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

Data 2557

Title Gamma Decay of Unbound Neutron-Hole States in ^{133}Sn

Author V.Vaquero *et al.*

Reference Phys.Rev.Lett. **118** (2017) 202502

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

Data 2561

Title Identification of new neutron-rich isotopes in the rare-earth region produced by 345 MeV/nucleon ^{238}U

Author N.Fukuda *et al.*

Reference J.Phys.Soc.Jpn. **87** (2018) 014202

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

Data 2562

Title Observation of new neutron-rich isotopes among fission fragments from in-flight fission of 345 MeV/nucleon ^{238}U

Author Y.Shimizu *et al.*

Reference J.Phys.Soc.Jpn. **87** (2018) 014203

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

Data 2563

Title Production of $^{119\text{m}}\text{Sn}$ by alpha particle bombardment of ^{116}Cd and its carrier-free separation

Author H. Muramatsu *et al.*

Reference J.Inorg.Nucl.Chem. **43** (1981) 1727

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

Data 2564

Title Inelastic alpha-particle scattering on copper 65 at 29 MeV
Author I.Kumabe *et al.*
Reference J.Phys.Soc.Jpn. **25** (1968) 301
Table Total : 2 EXFOR : 2 Author : 0 Table : 0 Curve : 2 Unobt : 0

Data 2568

Title Measurement of nuclear reaction cross sections by using Cherenkov radiation toward high-precision proton therapy
Author T.Masuda *et al.*
Reference SCR **8** (2018) 2570
Table Total : 3 EXFOR : 3 Author : 3 Table : 0 Curve : 0 Unobt : 0

Data 2574

Title Activation cross sections of alpha-induced reactions on natIn for 117mSn production
Author M.Aikawa *et al.*
Reference Nucl.Instrum.Methods B **426** (2018) 18
Table Total : 5 EXFOR : 5 Author : 0 Table : 5 Curve : 0 Unobt : 0

Data 2575

Title Production cross sections of deuteron-induced reactions on natural palladium for Ag isotopes
Author N.Ukon *et al.*
Reference Nucl.Instrum.Methods B **426** (2018) 13
Table Total : 7 EXFOR : 7 Author : 0 Table : 7 Curve : 0 Unobt : 0

Data 2576

Title Spectroscopy of Pionic Atoms in $^{122}\text{Sn}(d,^3\text{He})$ Reaction and Angular Dependence of the Formation Cross Sections
Author T.Nishi *et al.*
Reference Phys.Rev.Lett. **120** (2018) 152505
Table Total : 5 EXFOR : 5 Author : 5 Table : 0 Curve : 0 Unobt : 0

Data 2578

Title Activation cross sections of alpha-induced reactions on natZn for Ge and Ga production
Author M.Aikawa *et al.*
Reference Nucl.Instrum.Methods B **427** (2018) 91
Table Total : 4 EXFOR : 4 Author : 0 Table : 4 Curve : 0 Unobt : 0

Data 2580

Title Proton elastic scattering at 200 A MeV and high momentum transfers of 1.7-2.7 fm⁻¹ as a probe of the nuclear matter density of ⁶He
Author S.Chebotaryov *et al.*
Reference PTEP **2018** (2018) 053D01
Table Total : 2 EXFOR : 2 Author : 2 Table : 0 Curve : 0 Unobt : 0

Data 2581

Title Cross section measurement in J-PARC for neutronics of the ADS
Author S.Meigo *et al.*
Reference 2017QUEBEC **none** (2017) 396
Table Total : 3 EXFOR : 3 Author : 0 Table : 3 Curve : 0 Unobt : 0

Data 2583

Title First measurement of ³⁰S+alpha resonant elastic scattering for the ³⁰S(alpha,p) reaction rate
Author D.Kahl *et al.*
Reference Phys.Rev.C **97** (2018) 015802
Table Total : 1 EXFOR : 1 Author : 1 Table : 0 Curve : 0 Unobt : 0

Data 2584

Title Inelastic scattering of neutron-rich Ni and Zn isotopes off a proton target
Author M.L.Cortes *et al.*
Reference Phys.Rev.C **97** (2018) 044315
Table Total : 4 EXFOR : 4 Author : 0 Table : 4 Curve : 0 Unobt : 0

Data 2586

Title Discovery of ⁶⁰Ca and implications for the stability of ⁷⁰Ca
Author O.B.Tarasov *et al.*
Reference Phys.Rev.Lett. **121** (2018) 022501
Table Total : 1 EXFOR : 1 Author : 0 Table : 1 Curve : 0 Unobt : 0

Data 2589

Title Activation cross sections of deuteron-induced reactions on niobium up to 24 MeV
Author M.Aikawa *et al.*
Reference Nucl.Instrum.Methods B **436** (2018) 217
Table Total : 3 EXFOR : 3 Author : 0 Table : 3 Curve : 0 Unobt : 0

Data 2590

Title Studies of ¹⁴N-, ¹²C-, ¹¹B-induced reactions on ⁹⁰Zr and ⁹²⁻¹⁰⁰Mo at energies above the coulomb barrier

Author M.Yoshie *et al.*
Reference SCP **69** (1975) 63
Table Total : 42 EXFOR : 42 Author : 0 Table : 42 Curve : 0 Unobt : 0

Data 2591

Title Measurement of double differential neutron yields from thick carbon target irradiated by 5-MeV and 9-MeV deuterons
Author Y.Tajiri *et al.*
Reference NSTP **4** (2014) 582
Table Total : 2 EXFOR : 2 Author : 2 Table : 0 Curve : 0 Unobt : 0

Data 2592

Title Production cross sections of Mo, Nb and Zr radioisotopes from alpha-induced reaction on natZr
Author T.Murata *et al.*
Reference Appl.Radiat.Isot. **144** (2019) 47
Table Total : 18 EXFOR : 18 Author : 0 Table : 18 Curve : 0 Unobt : 0

Data 2593

Title Measurement of double differential neutron yields from thick aluminum target irradiated by 9 MeV deuteron
Author S.Araki *et al.*
Reference EPRC **71** (2015) 197
Table Total : 1 EXFOR : 1 Author : 1 Table : 0 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

産業技術総合研究所	1 件
理化学研究所	12 件
放射線医学総合研究所	3 件
日本原子力研究開発機構	1 件
高輝度光科学研究センター	2 件
京都大学	8 件
九州大学	3 件
大阪大学	14 件
東京大学	14 件