76Pa01 *Structure of the Excited Rotational Band in ^{40}Ca*

L. Pauling, Phys. Rev. Lett. 36, 162 (1976).

Nuclear Structure: ^{40}Ca; calculated rotational band structure. Orbital model.

76Pa02 *Self-Consistent Cranking Calculations for ^{20}Ne*

K. H. Passler, U. Mosel, Nucl. Phys. A257, 242 (1976).

Nuclear Structure: ^{20}Ne; calculated rotational spectrum. Self-consistent cranking model, Skyrme interaction.

76Pa03 *Calculation of Odd and Doubly Odd Nuclei with Skyrme-Type Forces*

K. -H. Passler, Nucl. Phys. A257, 253 (1976).

Nuclear Structure: ^{13}C, ^{14}N, ^{16}O; calculated binding energies, radii. ^{7}, ^{8}, ^{9}Be, ^{9}, ^{10}, ^{11}B, ^{11}, ^{12}, ^{13}C, ^{13}, ^{14}, ^{15}N, ^{15}, ^{16}, ^{17}O, ^{17}, ^{18}, ^{19}F, ^{19}, ^{20}Ne; calculated quadrupole moment.

76Pa04 *Nuclear Data Sheets for A = 138*

S. C. Pancholi, M. J. Martin, Nucl. Data Sheets 18, 167 (1976).

Compilation: ^{138}Te, ^{138}I, ^{138}Xe, ^{138}Cs;^{138}Ba, ^{138}La, ^{138}Ce, ^{138}Pr, ^{138}Nd, ^{138}Pm, ^{138}Sm; compiled, evaluated structure data.

76Pa05 *Direct Measurement of the Sign of the Deformation of Light Nuclei by the Method of Blair Phase Shifts*

N. N. Pavlova, A. V. Yushkov, Yad. Fiz. 23, 252 (1976); Sov. J. Nucl. Phys. 23, 131 (1976).

Nuclear Reactions: ^{12}C(α,α), (α,α'), E=39.0, 50.5 MeV; ^{24}Mg(α,α), (α,α'), E=38.0, 50.5 MeV; measured $\sigma(\theta)$; deduced Blair phase shifts. ^{12}C, ^{13}C, ^{24}Mg deduced deformation β.

76Pa06 *Multi-Band Spectra of Odd and Even Nuclei of the s-d Shell*

J. K. Parikh, Pramana 6, 42 (1976).

Nuclear Structure: ^{21}, ^{23}Na, ^{21}, ^{22}, ^{23}Ne, ^{24}, ^{28}Mg, ^{25}, ^{29}Al; calculated levels. Deformed Hartree-Fock method.

76Pa07 *Radiochemical Study of the $^{12}C(^{3}He,^{7}Be)$ Reaction Mechanism at 30 MeV*

A. J. Pape, S. S. Markowitz, Phys. Rev. C13, 2116 (1976).

Nuclear Reactions: $^{12}C(^{3}He,^{7}Be)$, $E \leq 31$ MeV; measured $\sigma(E,E(^{7}Be),\theta)$; deduced reaction mechanisms.

76Pa08 *Nuclear Structure of ^{69}, ^{71}Ge in the Semimicroscopic Model*

V. Paar, U. Eberth, J. Eberth, Phys. Rev. C13, 2532 (1976).

Nuclear Structure: ^{69}, ^{71}Ge; calculated levels, B(λ). Neutron hole clusters coupled to quadrupole vibration. Alaga, Bohr-Mottelson microscopic models.

76Pa09 *An Energy-Dependent Lane-Model Nucleon-Nucleus Optical Potential*

D. M. Patterson, R. R. Doering, A. Galonsky, Nucl. Phys. A263, 261 (1976); Erratum Nucl. Phys. A308, 532 (1978).

Nuclear Reactions: ^{48}Ca, ^{90}Zr, ^{120}Sn, ^{208}Pb(p, n), E=25, 35, 45 MeV; analyzed previously measured IAS $\sigma(\theta)$; deduced energy-dependent isovector parameters. ^{27}Al, Fe, Sn, ^{209}Bi(n,n), E=7.0, 14, 24 MeV; calculated $\sigma(\theta)$.

76Pa10 *Coulomb Excitation of ^{135}Ba*

D. C. Palmer, R. C. Morgan, J. R. Cresswell, P. D. Forsyth, I. Hall, M. Maynard, D. J. Thomas, J. Phys. (London) G2, 421 (1976).

Nuclear Reactions: ^{135}Ba(α,$\alpha'\gamma$), E=8.0, 10.0 MeV; measured Coulomb excitation, Iγ. ^{135}Ba levels deduced B(E2), $T_{1/2}$. Ge(Li) detector.

76Pa11 *Decays of ^{126}Ba and ^{126}Cs*

B. P. Pathak, L. Lessard, L. Nikkinen, I. L. Preiss, Phys. Rev. C14, 1573 (1976).

Radioactivity: ^{126}Ba, ^{126}Cs [from ^{115}In(^{16}O, 5n), ^{121}Sb(^{11}B,6n), ^{133}Cs(p,8n)]; measured Eγ, Iγ, I(ce), βγ-, xrayγ-, γγ-coin; deduced log ft, ICC, EC/β+ ratio, Q. ^{126}Ba; measured $T_{1/2}$. ^{126}Cs, ^{126}Xe deduced levels, J, π, B(E2).

76Pa12 *The Closed-Shell Effect on Fission Barriers at Z = 82 and N = 126*

H. L. Pai, D. G. Andrews, Can. J. Phys. 54, 2056 (1976).

Nuclear Structure: ^{207}, ^{208}Pb, ^{209}Bi, ^{210}, ^{211}Po; calculated closed shell effect on fission barrier.

76Pa13 *Measurement of the Static Quadrupole Moments of the First 2+ States in ^{94}Mo, ^{96}Mo, ^{98}Mo, and ^{100}Mo*

P. Paradis, G. Lamoureux, R. Lecomte, S. Monaro, Phys. Rev. C14, 835 (1976).

Nuclear Reactions: ^{94}, ^{96}, ^{98}, ^{100}Mo(α,α'), E=8.0 MeV; measured σ(Eα',θ). ^{94}, ^{96}, ^{98}, ^{100}Mo(^{16}O,^{16}O'), E=36 MeV; measured σ(E(^{16}O'),θ). ^{94}, ^{96}, ^{98}, ^{100}Mo levels deduced quadrupole moment, B(E2). Enriched targets.

76Pa14 *Improved Treatment of Pauli Operator in Calculation of Saturation Diagrams in ^{16}O*

R. Padjen, B. Rouben, Can. J. Phys. 54, 1854 (1976).

Nuclear Structure: ^{16}O; calculated renormalization of saturation diagrams.

76Pa15 *A Note on the Statistical Calculation of (n,α) Cross Sections Using Shell Independent Parameters*

H. L. Pai, Ann. Nucl. Energy 3, 129 (1976).

Nuclear Reactions: ^{32}, ^{34}S, ^{35}, ^{37}Cl, ^{39}, ^{41}K, ^{40}, ^{44}Ca, ^{45}Sc, ^{48}, ^{50}Ti, ^{51}V, ^{55}Mn, ^{54}Fe, ^{58}Ni, ^{63}, ^{65}Cu, ^{64}, ^{68}Zn(n,α), E=14 MeV; calculated σ.

76Pa16 *g Factor of the 635.4 keV Level in ^{171}Tm*

S. B. Patel, P. N. Tandon, K. P. Gopinathan, Phys. Rev. C14, 2027 (1976).

Radioactivity: ^{171}Er [from ^{170}Er(n,γ)]; measured γγ(θ), γγ(θ,H). ^{171}Tm levels deduced g, μ. Enriched target.

76Pa17 *Neutron Resonance Spectroscopy in Natural Copper*

M. S. Pandey, J. B. Garg, Nucl. Sci. Eng. 60, 399 (1976).

Nuclear Reactions: Cu(n,X), E=0.2-50 keV; measured total σ(E). ^{64}, ^{66}Cu deduced resonances, J, π, Γn, < d >.

76Pa18 *Excitation Function for the Production of ^{123}I via the $^{127}I(p,5n)^{123}Xe$ Reaction*

A. M. J. Paans, W. Vaalburg, G. van Herk, M. G. Woldring, Int. J. Appl. Radiat. Isotop. 27, 465 (1976).

Nuclear Reactions: $^{127}I(p,5n)$, E=43-66 MeV; measured $\sigma(E)$ for production of ^{123}I after decay of ^{123}Xe.

76Pa19 *Analogue Resonance in $^{51}V(p,n)^{51}Cr$*

D. Pal, K. Krishan, Nucl. Phys. A272, 365 (1976).

Nuclear Structure: ^{52}V; calculated IAS parameters.

76Pa20 *Influence of the Pauli Principle on the Optical Potential for* $\alpha + {}^{16}O$ *Scattering*

R. A. Partridge, Y. C. Tang, D. R. Thompson, R. E. Brown, Nucl. Phys. A273, 341 (1976).

Nuclear Reactions: $^{16}O(\alpha,\alpha)$, E=20, 25 MeV; calculated $\sigma(\theta)$.

76Pa21 *Semi-Microscopic Description of ^{133}Xe by GVISR and Diagonalization*

V. Paar, B. K. S. Koene, Z. Phys. A279, 203 (1976).

Nuclear Structure: ^{133}Xe; calculated levels, B(λ), quadrupole moment, μ.

76Pa22 *The Photodisintegration of ^{15}N Through Excited States of ^{14}N, ^{14}C and ^{12}C*

B. H. Patrick, E. M. Bowey, E. G. Muirhead, J. Phys. (London) G2, 751 (1976).

Nuclear Reactions: ^{15}N, $^{16}O(\gamma,n)$, (γ,p), $^{15}N(\gamma, t)$, E < 35 MeV; measured $\sigma(E,E\gamma')$. ^{15}N giant resonances deduced structure parameters. Enriched targets, Ge(Li) detector.

76Pa23 *Is There an Anomaly in the Backward Cross Section of n-t Scattering Around 14 MeV (Question)*

G. Paic, D. Rendic, V. Pecar, Fizika 8, 73 (1976).

Nuclear Reactions: ^{3}H(n,n), E=13.94-14.94 MeV; measured σ; analyzed data E=6-23 MeV.

76Pa24 *The Role of Cluster-Vibration Coupling in the Nuclear Structure of Negative Parity States in ^{67}Zn*

V. Paar, E. Coffou, U. Eberth, J. Eberth, J. Phys. (London) G2, 917 (1976).

Nuclear Structure: ^{67}Zn; calculated levels, S, electromagnetic properties. Cluster-vibration model.

76Pa25 *Determination of the Signs of the Deformation of Light Nuclei from the Blair Phase Shift*

N. N. Pavlova, A. V. Yushkov, Izv. Akad. Nauk SSSR, Ser. Fiz. 40, 820 (1976); Bull. Acad. Sci. USSR, Phys. Ser. 40, No. 4, 110 (1976).

Nuclear Reactions: ^{12}C, ^{24}Mg(α,α), (α,α'), E=30-50 MeV; measured σ(E,θ), Blair phase shift. ^{12}C, ^{24}Mg deduced sign of β.

76PaZH

Journal: PPSSA 19B 131, Pandey

Nuclear Reactions: ^{238}U(n,F), E=2-14 MeV; measured σ(fragment mass,θ).

76PaZI

Thesis: DABBB 37B 306, Palmer

Nuclear Reactions: ^{35}, ^{37}Cl, ^{36}Ar(n,d), E=14.1 MeV; measured σ(Ed,θ). ^{34}, ^{36}S, ^{35}Cl levels deduced S.

76PaZJ

Report: IKO 1976 Ann, P26,Panman

Nuclear Moments: esic-Atoms ^{181}Ta; measured hyperfine splitting of pionic atoms; deduced quadrupole moment.

76PaZK

Thesis: DABBB 37B 831, Payne

Nuclear Reactions: ^{6}Li(e,e), (e,e'); calculated form factors.

76PaZL *Study of High Resolution Neutron Total and Capture Cross-Sections in Separated Isotopes of Copper($^{6365}_{29}$Cu)*

M. S. Pandey, Thesis, State University New York at Albany (1975); Diss. Abst. Int. 36B, 5659 (1976).

Nuclear Reactions: ^{63}, ^{65}Cu(n,X), E 1-150 keV; measured total σ(E). ^{64}, ^{66}Cu deduced resonances, parameters.

76PaZN

Conference proceedings: Baku p349

Nuclear Reactions: ^{54}, ^{56}, ^{58}Fe(α,α'), E=29.3, 38, 40, 50 MeV; measured σ(E;θ). ^{54}, ^{56}, ^{58}Fe deduced deformation parameters.

76PaZO

Conference proceedings: Baku p162

Nuclear Reactions: ^{12}C(p,p'γ), E=1.2-1.6 MeV; measured Eγ, Iγ. ^{13}N levels deduced Γ. Ge(Li) detectors.

76PaZP *Decay of Mass-Separated ^{143}Ba*

J. C. Pacer, J. C. Hill, W. L. Talbert, Jr., D. G. Shirk, Bull. Am. Phys. Soc. 21, No. 8, 1003, EC6 (1976)

Radioactivity: ^{143}Ba; measured $T_{1/2}$, Eγ, Iγ, γγ-coin. ^{143}La deduced levels.

76PaZR

Journal: PHCAA 32 53 EA2

Radioactivity: ^{126}Ba, ^{126}Cs; measured β, γ-spectra; deduced log ft. ^{126}Cs, ^{126}Xe deduced level properties.

76PaZS

Journal: PHCAA 32 28 CA9

Nuclear Reactions: ^{94}, ^{96}, ^{98}, ^{100}Mo(α,α'), E=8 MeV; ^{94}, ^{96}, ^{98}, ^{100}Mo(^{16}O, ^{16}O'), E=36.5 MeV; measured Coulomb excitation. ^{94}, ^{96}, ^{98}, ^{100}Mo deduced quadrupole moment, B(E2).

76PaZT

Report: JINR-P15-9649, S S Parzhitsky

Nuclear Reactions: $^{12}C(p,\gamma)$, E=1.2-1.6 MeV; measured $\sigma(E, E\gamma)$. ^{13}N deduced resonances, Γ.

76PaZU *Level Structure of ^{126}Cs and ^{126}Xe*

B. P. Pathak, L. Lessard, L. Nikkinen, Bull. Am. Phys. Soc. 21, No. 5, 814, EA2 (1976)

Radioactivity: ^{126}Ba, ^{126}Cs; measured β-, γ-spectra. ^{126}Cs, ^{126}Xe deduced levels, K, J, π.

76PaZV *Investigation of the Reorientation Effect in ^{94}Mo, ^{96}Mo, ^{98}Mo, ^{100}Mo*

P. Paradis, G. Lamoureux, R. Lecomte, S. Monaro, Bull. Am. Phys. Soc. 21, No. 5, 789, CA9 (1976)

Nuclear Reactions: ^{94}, ^{96}, ^{98}, ^{100}Mo(α,α'), E=8 MeV; ^{94}, ^{96}, ^{98}, ^{100}Mo(^{16}O, ^{16}O'), E=36 MeV; measured Coulomb excitation. ^{94}, ^{96}, ^{98}, ^{100}Mo levels deduced B(E2), quadrupole moment.

76PaZW *Spectroscopic Study of ^{140}Ce(d,p)^{141}Ce at 17 MeV*

J. E. Park, W. W. Daehnick, M. J. Spisak, Bull. Am. Phys. Soc. 21, No. 4, 636, HF17 (1976)

Nuclear Reactions: ^{140}Ce(d,p), E=17 MeV; measured σ(Ep,θ). ^{141}Ce deduced levels, L, J, π, S.

76PaZX *Decay of ^{68}As*

R. C. Pardo, C. N. Davids, E. B. Norman, L. A. Parks, Bull. Am. Phys. Soc. 21, No. 4, 580, EF8 (1976)

Radioactivity: ^{68}As; measured $T_{1/2}$, Eγ, Iγ, $\gamma\gamma$-coin. ^{68}Ge deduced levels.

76PaZY *I. The Decay of Arsenic-68 and Excited States in Arsenic-68. II. The Decay of Managanese-59*

R. C. Pardo, Thesis, Univ. Texas at Austin (1976).

Nuclear Reactions: ^{58}Ni(^{12}C,pn), E=32 MeV; ^{54}Fe(^{16}O, pn), E=41 MeV; measured Eγ, Iγ, nγ-, γγ-coin. ^{68}As deduced levels, γ-branching.

Radioactivity: ^{68}As [from ^{58}Ni(^{12}C,pn), E=39 MeV; ^{54}Fe(^{16}O,pn), E=38-44 MeV]; measured Eγ, Iγ, Eβ^{+}, βγ-, γγ-, nγ-coin, $T_{1/2}$, βγ(t); deduced Q(ε), log ft, mass excess. ^{68}Ge deduced levels, γ-branching.

76PaZZ

Report: MSUCL-200, D M Patterson

Nuclear Reactions: ^{48}Ca, ^{90}Zr, ^{120}Sn, ^{208}Pb(p, n), E=25, 35, 45 MeV; measured IAS $\sigma(\theta)$; deduced potential, parameters. DWBA parameter search.

76Pe01 *Two-Neutron Stripping Reaction (^{18}O,^{16}O) on ^{48}Ca*

J. F. Petersen, D. A. Lewis, D. Dehnhard, H. P. Morsch, B. F. Bayman, Phys. Rev. Lett. 36, 307 (1976).

Nuclear Reactions: ^{48}Ca(^{18}O,^{16}O), E=50 MeV; measured σ(E(^{16}O),θ). DWBA analysis.

76Pe02 *Spectroscopic and Reaction Mechanism Information Derived from ^{160}Gd(d,t)^{159}Gd and ^{162}Dy(d, t)^{161}Dy Reaction Measurements*

J. C. Peng, J. V. Maher, G. H. Wedberg, C. M. Cheng, Phys. Rev. C13, 1451 (1976).

Nuclear Reactions: ^{160}Gd, ^{162}Dy(d,t), E=17 MeV; measured σ(Et,θ). ^{159}Gd, ^{161}Dy deduced levels, L, S. DWBA analysis.

76Pe03 *The $^{15}N(p,\alpha)^{12}C$ Reaction with Polarized Protons from 0.34 to 1. 21 MeV*

G. H. Pepper, L. Brown, Nucl. Phys. A260, 163 (1976).

Nuclear Reactions: ^{15}N(polarized p,α), E=0.34-1.21 MeV; measured analyzing power A(θ). Enriched target.

76Pe04 *Band Mixing in Light Nuclei: Treatment of Hold Excitations and Importance of Isospin*

F. R. Peiffer, R. W. Zurmuhle, D. P. Balamuth, Phys. Lett. 62B, 19 (1976).

Nuclear Structure: ^{23}Na; calculated levels; deduced statements regarding correct treatment of hole states in band mixing calculations to be incorrect.

76Pe05 *Energy Dependences of (^{16}O,^{12}C) Transitions*

J. C. Peng, J. V. Maher, W. Oelert, D. A. Sink, C. M. Chang, H. S. Song, Nucl. Phys. A264, 312 (1976).

Nuclear Reactions: $^{24}Mg(^{16}O,^{12}C)$, E=36, 42, 48 MeV; measured $\sigma(E(^{12}C),\theta)$. $^{28}Si(^{16}O, ^{12}C)$, E=36, 42, 48, 53 MeV; measured $\sigma(E(^{12}C), \theta)$. ^{28}Si, ^{32}S levels deduced S. DWBA analysis.

76Pe06 *Investigation of the $^{32}S(n,\alpha)^{29}Si$ Reaction at 14.1 MeV*

C. -C. Perng, S. -Y. Lin, M. -C. Chou, Y. -C. Hsu, Y. -C. Hsu, Chin. J. Phys. (Taiwan) 14, 62 (1976).

Nuclear Reactions: $^{32}S(n,\alpha)$, E=14.1 MeV; measured $\sigma(E\alpha, \theta)$. ^{29}Si deduced nuclear temperature. DWBA analysis.

76Pe07 *Comments of Primordial Superheavy Elements*

F. Petrovich, R. J. Philpott, D. Robson, J. J. Bevelacqua, M. Golin, D. Stanley, Phys. Rev. Lett. 37, 558 (1976).

Nuclear Structure: superheavy; calculated single particle levels, $Q\alpha$, $T_{1/2}$.

76Pe08 *Tensor Analyzing Power Measurements in the $^{16}O(d, \alpha)^{14}N$ Reaction at 0^0*

D. T. Petty, J. A. Kuehner, J. Szucs, P. W. Green, G. D. Jones, Phys. Rev. C14, 12 (1976).

Nuclear Reactions: ^{16}O(polarized d,α), E=11, 12, 13, 14 MeV; measured A(θ), α-yields. ^{14}N levels deduced J, π.

76Pe09 *Neutron Cross Sections of the Isomeric Nuclei ^{85m}Kr, ^{87m}Sr, and ^{91m}Nb*

Y. V. Petrov, A. I. Shlyakhter, Yad. Fiz. 23, 1186 (1976); Sov. J. Nucl. Phys. 23, 631 (1977).

Nuclear Reactions: ^{85m}Kr, ^{87m}Sr, ^{91m}Nb(n,n'), E=0.02-2.0 MeV; calculated σ(E) for isomer excitation.

76Pe10 *Excitation of Three Isospin Modes of the Giant Magnetic Dipole Resonance in Mass 24 Isobars*

R. J. Peterson, F. E. Cecil, R. A. Ristinen, E. R. Flynn, N. Stein, J. D. Sherman, Phys. Rev. C14, 868 (1976).

Nuclear Reactions: ^{24}Mg(^{3}He,t), E=38.6 MeV; measured σ(Et, θ). ^{24}Mg(^{3}He,^{3}He'), E=41.2 MeV; measured σ(E(^{3}He'),θ). ^{24}Mg(t,^{3}He), E=24 MeV; measured σ(E(^{3}He),θ). ^{24}Na, ^{24}Mg, ^{24}Al deduced levels, T.

76Pe11 *Spin and Parity Assignments in ^{38}K via the (d, α) Reaction Near 0^0*

D. T. Petty, P. G. Ikossi, J. A. Kuehner, J. Szucs, Phys. Rev. C14, 908 (1976).

Nuclear Reactions: ^{40}Ca(polarized d,α), E=7.5, 7.75, 8.0 MeV; measured A(θ), $\theta=20^0$. ^{38}K levels deduced J, π.

76Pe12 *Cross Sections for Production of Stable and Long-Lived Nuclides by High Energy Spallation of Iron; Cosmic Ray Implications*

C. Perrin, Phys. Rev. C14, 1108 (1976).

Nuclear Reactions: Fe(p,X), E=0.6, 21 GeV; measured σ for production of stable, long-lived isotopes of Be, Sc, Cr, V, Mn, Co, Na; deduced cosmic ray abundances.

76Pe13 *Dynamical Effects in Interactions of Complex Nuclei*

V. P. Permyakov, H. Schulz, Yad. Fiz. 24, 313 (1976); Sov. J. Nucl. Phys. 24, 163 (1977).

Nuclear Reactions: ^{208}Pb, ^{146}Nd, ^{152}Sm(^{16}O,X), ^{208}Pb, ^{232}Th(^{84}Kr,X); calculated Coulomb barrier.

76Pe14 *Relative Yields of Xenon Isotopes in the Photofission of ^{237}Np and ^{235}U*

K. A. Petrzhak, E. V. Platygina, Y. A. Solovev, V. F. Teplykh, At. Energ. 41, 44 (1976); Sov. At. Energy 41, 654 (1976).

Nuclear Reactions: ^{237}Np, ^{235}U(γ,F), E 20 MeV bremsstrahlung; measured relative yields of ^{131}, ^{132}, ^{134}, ^{136}Xe.

76PeZM

Thesis: DABBB 36B 5116, Peng

Nuclear Reactions: ^{24}Mg, ^{28}Si(^{16}O,^{12}C), E=36-53 MeV; measured $\sigma(E,\theta)$.

76PeZN

Report: COO-535-763, P109,Peterson

Nuclear Reactions: ^{6}, ^{7}Li, ^{12}, ^{13}C, Si, Fe(π^+, π^+), (π^+,$\pi^{+\prime}$), E=50 MeV; measured σ.

76PeZO

Report: COO-535-763, P57,Peterson

Nuclear Reactions: ^{28}Si(^{3}He,t), E=38.5 MeV; measured σ(Et, θ). ^{28}P deduced levels, L.

76PeZP *Oxygen on Silicon Elastic Scattering*

J. F. Petersen, J. L. Artz, D. Dehnhard, S. Kubono, D. A. Lewis, T. K. Li, D. J. Weber, Bull. Am. Phys. Soc. 21, No. 8, 1006, ED13 (1976)

Nuclear Reactions: ^{28}, ^{29}, ^{30}Si(^{16}O,^{16}O), (^{17}O,^{17}O), (^{18}O,^{18}O), E=50 MeV; measured $\sigma(\theta)$.

76PeZR

Journal: PHCAA 32 27 CA3

Nuclear Reactions: ^{40}Ca(polarized d,α), E=7.5, 7.75, 8.0 MeV; measured $\sigma(E\alpha)$, A.

76PeZS *Tensor Analyzing Power Measurements in the ^{40}Ca(d(pol), α)^{38}K Reaction at 0^{0}*

D. T. Petty, P. G. Ikossi, J. A. Kuehner, J. Szucs, Bull. Am. Phys. Soc. 21, No. 5, 788, CA3 (1976)

Nuclear Reactions: ^{40}Ca(polarized d,α), E=7.5, 7.75, 8.0 MeV; measured σ(Eα,θ), A(θ). ^{38}K levels deduced J.

76PeZT *Multistep Processes and Limits on Isoscalar E5 and E6 Strength in ^{24}Mg*

R. J. Peterson, F. E. Cecil, Bull. Am. Phys. Soc. 21, No. 4, 663, JH8 (1976)

Nuclear Reactions: ^{24}Mg(^{3}He,^{3}He'), E=41 MeV; measured σ(E(^{3}He'),θ); deduced reaction mechanism.

76PeZU

Report: CNEA-NT 3/76, P40

Radioactivity: ^{90}Kr; measured Eγ, Iγ, βγ-coin, γγ-coin, $T_{1/2}$; deduced Q, ICC, log ft. ^{90}Rb deduced levels, J, π, λ. ^{90}, ^{90m}Rb; measured $T_{1/2}$.

76PeZV *Dynamical Effects at Complex Nucleus Interaction*

V. P. Permyakov, H. Schultz, JINR-P4-9465 (1976).

Nuclear Reactions: ^{146}Nd, ^{152}Sm, ^{208}Pb(^{16}O,^{16}O), ^{232}Th, ^{208}Pb(^{84}Kr,^{84}Kr); calculated Coulomb barrier.

76PeZW *Decay of ^{197}Ir*

R. F. Petry, D. S. Shirk, J. C. Hill, Bull. Amer. Phys. Soc. 21, 558, DG4 (1976); Priv. Comm. (June 1976).

Radioactivity: ^{197m}, ^{197}Ir; measured Eγ, Iγ. ^{197}, ^{197m}Pt deduced transitions. No data.

76PeZY *Inelastic ^{18}O Scattering on ^{54}Fe*

J. F. Petersen, D. A. Lewis, H. P. Morsch, Bull. Am. Phys. Soc. 21, No. 4, 555, DE13 (1976)

Radioactivity: ^{19}O; measured $\beta\gamma(\theta,H,t)$. ^{19}F deduced quadrupole frequency.

Nuclear Reactions: $^{54}Fe(^{18}O,^{18}O')$, E=50 MeV; measured $\sigma(\theta)$ to levels in ^{54}Fe.

76Pf01 *Elektromagnetische Kernradien der stabilen Argon-Isotope*

H. -J. Pfeiffer, H. Daniel, Nucl. Phys. A264, 498 (1976).

Atomic Physics: esic-Atoms ^{36}, ^{38}, ^{40}Ar; measured muonic X-rays; deduced rms nuclear radii, model-independent radii. Muonic atoms.

76Pf02 *Die Bestimmung der Wirkungsquerschnitte verschiedener (n,p)- und (n,α)-Reaktionen*

G. Pfrepper, C. Raitschev, Radiochim. Acta 23, 127 (1976).

Nuclear Reactions: ^{28}Si, ^{64}Zn, ^{65}Cu, ^{66}Zn(n,p), ^{30}Si, ^{31}P(n,α), E=fission spectrum; measured σ.

76Pf03 *Zur Bestimmung des Wirkungsquerschnittes der Reaktion ^{81}Br(n,p)^{81m}Se fur Spaltneutronen*

G. Pfrepper, C. Raitschev, M. Michailow, Radiochim. Acta 23, 55 (1976).

Nuclear Reactions: ^{81}Br(n,p), E=reactor spectrum; measured activation σ for ^{81m}Se.

76Ph01 *Investigation of the Quadrupole Deformation of ^{11}B by Means of 30 MeV Polarized Proton Inelastic Scattering*

D. -L. Pham, J. Phys. (Paris), Lett. 37, L-67 (1976).

Nuclear Reactions: ^{11}B(polarized p,p'), E=30 MeV; analyzed σ(Ep', θ), A(θ). ^{11}B deduced quadrupole deformation β_2.

76PhZY

Report: ISN-76-01, p31,Pham

Nuclear Reactions: ^{11}B(polarized p,p'), E=30.3 MeV; analyzed σ(Ep', θ), A(θ). ^{11}B deduced β_2.

76PhZZ *Neutron Total Cross Section for ^{3}H*

T. W. Phillips, B. L. Berman, W. A. Barletta, J. D. Seagrave, Bull. Am. Phys. Soc. 21, No. 4, 534, BF9 (1976)

Nuclear Reactions: ^{3}H(n,X), E=0.05-50 keV; measured total σ(E).

76Pi01 *Perturbative Approximations to the Effective Interaction: Comparisons with Exact Results for Large Matrices*

S. Pittel, C. M. Vincent, J. D. Vergados, Phys. Rev. C13, 412 (1976).

Nuclear Structure: ^{18}O; calculated perturbative approximations to the effective interaction. Pade approximants.

76Pi02 *On the Energy-Dependence of Background-Resonance Interference Effects in Knockout Reactions*

S. Pittel, Phys. Lett. 61B, 324 (1976).

Nuclear Reactions: ^{12}C(p,2p), E=0.2-1.0 GeV; calculated missing-energy spectra.

76Pi03 *$vi_{13/2}$ and $vh_{9/2}$ Isomers in Odd-A Pt Nuclei*

M. Piiparinen, S. K. Saha, P. J. Daly, C. L. Dors, F. M. Bernthal, T. L. Khoo, Phys. Rev. C13, 2208 (1976).

Nuclear Reactions: ^{186}, ^{188}, ^{190}, ^{192}Os(α, 3nγ), E=30-50 MeV; measured σ(E,Eγ,θ), $\gamma\gamma$-coin, $\gamma\gamma$(t). ^{187}, ^{189}, ^{191}Pt deduced levels, J, π, $T_{1/2}$, λ.

76Pi04 *Level Structure of ^{149}Nd (I). The ^{148}Nd(n, γ) Reaction*

J. A. Pinston, R. Roussille, H. Borner, H. R. Koch, Nucl. Phys. A264, 1 (1976).

Nuclear Reactions: ^{148}Nd(n,γ), E=th; measured Eγ, Iγ, γγ-coin. ^{149}Nd deduced levels, J, π, neutron binding energy. Enriched target. Bent crystal, Ge(Li) spectrometers.

76Pi05 *High-Spin States in ^{59}Ni*

M. Pichevar, J. Delaunay, B. Delaunay, H. J. Kim, Y. El Masri, J. Vervier, Nucl. Phys. A264, 132 (1976).

Nuclear Reactions: ^{50}Cr(^{12}C,n2pγ), E=26-58 MeV; ^{56}Fe(α, nγ), E=10, 15, 22.5 MeV; measured σ(E,Eγ, θ), $\gamma\gamma$-coin. ^{59}Ni deduced levels, J, mixing ratios. Enriched ^{50}Cr target.

76Pi06 *The Level Structure of ^{191}Pt from the Decay of 3.2 h ^{191}Au*

M. Piiparinen, S. K. Saha, P. J. Daly, T. L. Khoo, C. L. Dors, F. M. Bernthal, Nucl. Phys. A265, 253 (1976).

Radioactivity: ^{191}Au [from ^{191}Ir(α,4n)]; measured Eγ, Iγ, $\gamma\gamma$-coin. ^{191}Pt deduced levels, J, π, ICC. Enriched target, Ge(Li) detectors.

76Pi07 *Evidence for an Octupole Rotational Band in ^{74}Se*

R. B. Piercey, A. V. Ramayya, R. M. Ronningen, J. H. Hamilton, R. L. Robinson, H. J. Kim, Phys. Rev. Lett. 37, 496 (1976).

Nuclear Reactions: ^{60}Ni(^{16}O,2nγ), E=45 MeV; ^{64}Ni(^{12}C, 2nγ); measured σ(Eγ,θ), DSA, $\gamma\gamma$-coin. ^{74}Se deduced levels, K, J, π, $T_{1/2}$, B(E2), β.

76Pi08 *Theoretical Investigations of Double Internal Bremsstrahlung in Electron Capture*

K. Pisk, A. Ljubicic, B. A. Logan, Nucl. Phys. A267, 77 (1976).

Radioactivity: ^{37}Ar; calculated $\gamma\gamma(\theta)$, energy distribution of γ emitted in double internal bremsstrahlung EC.

76Pi09 *Alpha-Transfer Reactions in Light Nuclei. I. An Exact-Finite-Range Coupled-Channels Analysis*

D. J. Pisano, Phys. Rev. C14, 468 (1976).

Nuclear Reactions: ^{24}Mg(^{3}He,^{7}Be), E=25.5 MeV; calculated σ(E(^{7}Be),θ). Finite-range, fixed-range DWBA, CCBA.

76Pi10 *Alpha-Transfer Reactions in Light Nuclei. II. (^{3}He, ^{7}Be) Pickup Reaction*

D. J. Pisano, P. D. Parker, Phys. Rev. C14, 475 (1976).

Nuclear Reactions: ^{16}O, ^{24}Mg(^{3}He,^{7}Be), E=25.5 MeV; ^{12}C(^{3}He,^{7}Be), E=25.5, 27.0, 29.0 MeV; measured σ(E(^{7}Be),θ); deduced reaction mechanism. ^{20}Ne levels deduced S. Hauser-Feshbach, CCBA analysis.

76Pi11 *Bounds on the Rate of $^{1}H(p,e^{+}\nu)^{2}H$ in Impulse Approximation*

H. S. Picker, M. I. Haftel, Phys. Rev. C14, 1293 (1976).

Nuclear Reactions: $^{1}H(p,e^{+}\nu)$; calculated bounds on rate. Impulse approximation.

76Pi12 *Excitation of the Giant Dipole Resonance in $^{12}C(\pi, \pi')^{12}C^*$*

H. J. Pirner, Phys. Rev. C14, 1665 (1976).

Nuclear Reactions: $^{12}C(\pi,\pi')$, E=180 MeV; calculated $\sigma(E)$ to giant resonance in ^{12}C. Glauber theory.

76Pi13 *Rotational States in ^{151}Nd Populated Through Thermal Neutron Capture*

J. A. Pinston, R. Roussille, H. Borner, W. F. Davidson, P. Jeuch, H. R. Koch, K. Schreckenbach, D. Heck, Nucl. Phys. A270, 61 (1976).

Nuclear Reactions: ^{150}Nd(n,γ), E=th; measured Eγ, Iγ, E(ce), I(ce). ^{151}Nd deduced levels, J, π, neutron binding energy. Enriched target. Bent crystal, Ge(Li), electron spectrometers.

76Pi14 *A Method for Estimating the Singular Part of the Effective Shell-Model Interaction and its Influence on Perturbation Theory*

S. Pittel, Nucl. Phys. A271, 62 (1976).

Nuclear Structure: ^{18}O; calculated intruder state singularities.

76Pi15 *The γ-Decay of Excited States of ^{141}Ce Observed in the ^{140}Ce(d,pγ) Reaction*

K. Pingel, W. Dunnweber, E. Grosse, P. Von Brentano, Nucl. Phys. A273, 112 (1976).

Nuclear Reactions: ^{140}Ce(d,pγ), E=8 MeV; measured pγ-coin, Eγ, Iγ. ^{141}Ce deduced levels, J, π, γ-branching. Natural target.

76Pi16 *Study of States in ^{19}F and ^{20}Ne via the (^{13}C,^{9}Be) α-Transfer Reaction*

A. A. Pilt, D. J. Millener, H. Bradlow, O. Dietzsch, P. S. Fisher, W. J. Naude, W. D. M. Rae, D. Sinclair, Nucl. Phys. A273, 189 (1976).

Nuclear Reactions: ^{15}N, $^{16}O(^{13}C,^{9}Be)$, E=105 MeV; measured $\sigma(E,\theta)$. ^{19}F, ^{20}Ne deduced levels, relative spectroscopic amplitudes, suggested J, π values. Enriched gas targets. Shell-model calculation.

76Pi17 *Dispersive Treatment of Low-Energy Pion-Nucleus Forward Elastic Scattering*

H. Pilkuhn, N. Zovko, H. G. Schaile, Z. Phys. A279, 283 (1976).

Nuclear Reactions: ^{4}He, ^{6}, ^{7}Li, ^{9}Be, ^{12}C(π, π); calculated scattering amplitudes.

76Pi18 *The g-Factor of the 659 keV Level in ^{117}In*

R. G. Pillay, S. H. Devare, P. N. Tandon, Pramana 7, 190 (1976).

Radioactivity: ^{117}Cd; measured $\gamma\gamma(\theta,H,t)$. ^{117}In level deduced g, $T_{1/2}$.

76PiZI

Conference proceedings: Lowell(Interactions of Neutrons), CONF-760715-P2,Vol2 P1300

Nuclear Reactions: ^{146}, ^{148}, ^{150}Nd(n,γ), E=th; measured γ, ce spectra. ^{147}, ^{149}, ^{151}Nd deduced levels.

76PiZJ

Conference proceedings: Dubna(Selected Topics in Nucl Structure)Vol1, P196

Nuclear Reactions: $^{16}O(^{60}Ni,2p\gamma)$, $^{12}C(^{64}Ni, 2n\gamma)$; measured $\gamma\gamma$-coin, $\gamma(\theta)$, Doppler broadened lineshapes. ^{74}Se deduced levels, $T_{1/2}$.

76PiZK

Conference proceedings: Dubna(Selected Topics in Nucl Structure)Vol1, P61

Nuclear Reactions: ^{146}, ^{148}, ^{150}Nd(n,γ), E=th; measured γ, ce spectra. ^{147}, ^{149}, ^{151}Nd deduced levels, K.

76PiZL

Conference proceedings: Dubna(Selected Topics in Nucl Structure)Vol1, P56

Nuclear Reactions: ^{88}Sr(p,γ), E=2.8-3.8 MeV; measured Eγ, Iγ. ^{89}Y deduced levels, J, π.

76PiZM *Average Resonance Spectroscopy in ^{87}Y Nucleus*

J. Piotrowski, G. Szeflinska, Z. Szeflinski, Z. Wilhelmi, Proc. Int. Conf. Selected Topics in Nucl. Struct., Dubna, Vol. 1, p. 55 (1976); JINR-D-9682 (1976)

Nuclear Reactions: ^{86}Sr(p,γ), E=2.8-3.8 MeV; measured Eγ, Iγ. ^{87}Y deduced levels, J, π.

76PiZN *Average Resonance Spectroscopy in ^{85}Y Nucleus*

J. Piotrowski, G. Szeflinska, Z. Szeflinski, Z. Wilhelmi, Proc. Intern. Conf. Selected Topics in Nucl. Struct., Dubna (1976), Vol. 1, p. 54 (1976).

Nuclear Reactions: ^{84}Sr(p,γ), E=2.8-3.8 MeV; measured Eγ, Iγ. ^{85}Y deduced levels, J, π.

76PiZP

Journal: PHCAA 32 13 BA2

Nuclear Reactions: ^{3}He(^{3}He,d); measured σ(Ed).

76PiZR

Report: ORNL-5137, P79

Nuclear Reactions: ^{60}Ni(^{16}O,2pγ); measured $\gamma\gamma$-coin, $\gamma(\theta)$, Doppler broadened lineshape. ^{74}Se deduced levels, K, J, π, $T_{1/2}$.

76PiZS *Nouvelle Confirmation de la Measure de Deutons a Haute Energie dans la Reaction $^{3}He + ^{3}He$*

R. Pigeon, M. Irshad, R. J. Slobodrian, Bull. Am. Phys. Soc. 21, No. 5, 774, BA2 (1976)

Nuclear Reactions: ^{3}He(^{3}He,d), ^{2}H(^{3}He,p); measured σ.

76PiZU

Report: JINR-P15-9455, J Piotrouski

Nuclear Reactions: ^{89}Y(p,γ), E=2.2-3.4 MeV; measured σ(E, Eγ). ^{90}Zr deduced resonances, levels, J, π.

76PiZY

Report: MSUCL-206, M Piiparinen

Radioactivity: ^{191}Au [from ^{191}Ir(α,4n)]; measured Eγ, Iγ, γγ-coin, γγ(t); deduced ICC, log ft. ^{191}Pt deduced levels, J, π, $T_{1/2}$.

76PiZZ

Report: MSUCL-204, M Piiparinen

Nuclear Reactions: ^{186}, ^{188}, ^{190}, ^{192}Os(α, 3nγ), E=30-50 MeV; measured σ(E,Eγ,θ), $\gamma\gamma$-coin, γ(t). ^{187}, ^{189}, ^{191}Pt deduced levels, J, π, $T_{1/2}$. Enriched targets.

76Pl01 *A Study of the Neutron-Proton Final State Interaction in Proton-Induced Deuteron Breakup*

R. Plasek, V. Valkovic, G. C. Phillips, Nucl. Phys. A256, 189 (1976).

Nuclear Reactions: ^{2}H(p,2p), (p,pn), E=8-12 MeV; measured σ(E;Ep, En,θp,θn).

76Pl02 *Model-Independent Information on α + d Clustering in ^{6}Li*

G. R. Plattner, M. Bornand, K. Alder, Phys. Lett. 61B, 21 (1976).

Nuclear Structure: ^{6}Li; calculated α-d coupling constant.

76Pl03 *On the Mechanism of the $^{24}Mg(\alpha,p)^{27}Al$ and $^{24}Mg(\alpha,\alpha)^{24}Mg$ Reactions*

J. Ploskonka, K. Grotowski, A. Kapuscik, A. Strzalkowski, L. Zybert, R. Zybert, Acta Phys. Pol. B7, 289 (1976).

Nuclear Reactions: $^{24}Mg(\alpha,p)$, (α,α), E=23.05-28.55 MeV; measured $\sigma(E)$ to levels in ^{24}Mg, ^{27}Al.

76Pl04 *Fission Cross Section of Neptunium-237 from 3 eV to 2 MeV*

S. Plattard, J. Blons, D. Paya, Nucl. Sci. Eng. 61, 477 (1976).

Nuclear Reactions: ^{237}Np(n,F), E=3 eV-2 MeV; measured σ(E). ^{238}Np deduced resonances, resonance parameters.

76Pl05 *Number of 59.5 keV-Photons Per Decay of ^{241}Am*

J. Plch, J. Zderadicka, L. Kokta, Czech. J. Phys. 26B, 1344 (1976).

Radioactivity: ^{241}Am; measured γ-emission rate, activity; deduced absolute Iγ for 59.5-keV transition.

76Pl06 *Acceleration of ^{48}Ca Ions and New Possibilities of Synthesizing Superheavy Elements*

A. A. Pleve, At. Energ. 40, 440 (1976); Sov. At. Energy 40, 528 (1976).

Nuclear Reactions: ^{206}, ^{207}, ^{208}Pb(^{48}Ca,X), E 255 MeV; measured σ for production of ^{252}No.

76PlZU

Report: CEA-N-1875, P77,Plattard

Nuclear Reactions: ^{237}Np(n,F), E=9.1-2 MeV; measured σ(E).

76PlZW

Report: ORNL-5137, P32

Nuclear Reactions: Ni(^{20}Ne,F), E=160 MeV; measured σ.

76PlZX

Report: ORNL-5137, P31

Nuclear Reactions: ^{133}Cs(^{20}Ne,X), E=165 MeV; ^{141}Pr(^{12}C, X), E=120 MeV; measured evaporation residues.

76PlZZ

Report: ORNL-5111, P68

Nuclear Reactions: ^{107}Ag, ^{133}Cs(^{20}Ne,F), ^{141}Pr(^{12}C, F); measured σ.

76Po01 *Ground-State Occupancies and Effective Interactions in s-d Shell Nuclei*

V. Potbhare, S. P. Pandya, Nucl. Phys. A256, 253 (1976).

Nuclear Structure: ^{20}, ^{21}, ^{22}Ne, ^{23}Na, ^{24}, ^{25}, ^{26}Mg, ^{27}Al, ^{28}, ^{29}, ^{30}Si, ^{31}P, ^{32}, ^{33}, ^{34}S, ^{35}Cl, ^{36}Ar; calculated ground-state occupancies.

76Po02 *Elastic Scattering of Lithium by ^{9}Be, ^{10}B, ^{12}C, ^{13}C, ^{16}O, and ^{28}Si from 4 to 63 MeV*

J. E. Poling, E. Norbeck, R. R. Carlson, Phys. Rev. C13, 648 (1976).

Nuclear Reactions: ^{10}B, ^{12}, ^{13}C, ^{16}O, ^{28}Si(^{6}Li, ^{6}Li), ^{12}, ^{13}C, ^{16}O(^{7}Li, ^{7}Li), E=4-13 MeV; measured $\sigma(E,\theta)$; deduced optical potential.

76Po03 *Heavy-Ion Fusion-Evaporation Reactions: High Spin States in ^{43}Ca and ^{43}Sc*

A. R. Poletti, E. K. Warburton, J. W. Olness, J. J. Kolata, P. Gorodetzky, Phys. Rev. C13, 1180 (1976).

Nuclear Reactions: ^{27}Al(^{19}F,n2pγ), (^{19}F,2pγ), (^{19}F,2nγ), (^{19}F,αγ), (^{19}F, 2nαγ), ^{27}Al(^{19}F,n3pγ), (^{19}F, pαγ), (^{19}F,npαγ), (^{19}F,2pαγ), (^{19}F,2αγ), ^{27}Al(^{19}F,n2αγ), (^{19}F,p2αγ), (^{19}F,2nαγ), (^{19}F, 2npγ), (^{19}F,npγ), E=40 MeV; measured σ(Eγ, θ), γγ-coin, recoil distance, polarization. ^{43}Ca, ^{43}Sc deduced levels, J, π, λ, δ, $T_{1/2}$. ^{40}, ^{44}Ca, ^{44}Sc levels deduced $T_{1/2}$, λ. ^{40}, ^{41}K, ^{38}, ^{40}Ar, ^{41}, ^{42}Ca calculated yrast levels.

76Po04 *Internal Bremsstrahlung Spectra of the Allowed Beta Emitters ^{32}P, ^{35}S and ^{45}Ca*

M. S. Powar, M. Singh, J. Phys. (London) G2, 43 (1976).

Radioactivity: ^{32}P, ^{35}S, ^{45}Ca; measured IB spectra.

76Po05 *Muonic X-Ray Study of the Charge Distribution of ^{165}Ho*

R. J. Powers, F. Boehm, P. Vogel, A. Zehnder, T. King, A. R. Kunselman, P. Roberson, P. Martin, G. H. Miller, R. E. Welsh, D. A. Jenkins, Nucl. Phys. A262, 493 (1976).

Atomic Physics: +165}Ho(μ^-,X-ray); measured E(X-ray), I(X-ray). ^{165}Ho deduced quadrupole moment, hexadecapole moment, nuclear charge distribution.

Nuclear Moments: +165}Ho; measured muonic X-rays, quadrupole moment, hexadecapole moment, nuclear charge distribution.

76Po06 *Cross Sections for the $^{7}Li(p,n)^{7}Be$ Reaction between 4.2 and 26 MeV*

C. H. Poppe, J. D. Anderson, J. C. Davis, S. M. Grimes, C. Wong, Phys. Rev. C14, 438 (1976).

Nuclear Reactions: ^{7}Li(p,n), E=4.2-26 MeV; measured $\sigma(E,\theta)$ to ^{7}Be ground state, first excited state; $\theta=3.5^{0}$-159^{0}.

76Po07 *The Importance of Inelastic Effects in the Transition of $7/2^+$-Level at 16.1 MeV in the Reaction $^{26}Mg(^3He, \alpha)^{25}Mg$*

F. Porto, S. Sambataro, Lett. Nuovo Cim. 17, 176 (1976).

Nuclear Reactions: $^{26}Mg(^3He,\alpha)$, E=10, 11, 15 MeV; calculated $\sigma(E\alpha,\theta)$. ^{25}Mg levels deduced S.

76Po08 *Determination of the Half-Life of ^{238}Pu*

V. G. Polyukhov, G. A. Timofeev, P. A. Privalova, V. Y. Gabeskiriya, A. P. Chetverikov, At. Energ. 40, 61 (1976); Sov. At. Energy 40, 66 (1976).

Radioactivity: ^{238}Pu; measured $T_{1/2}$.

76Po09 *Multiplicity of Prompt Neutrons in Spontaneous Fission of ^{238}U*

A. G. Popeko, V. I. Smirnov, G. M. Ter-Akopyan, B. V. Fefilov, L. P. Chelnokov, Yad. Fiz. 24, 473 (1976); Sov. J. Nucl. Phys. 24, 245 (1976).

Radioactivity: Fission ^{238}U(SF); calculated prompt neutron multiplicity.

76Po10 *Photon Yield and Energy in Internal Bremsstrahlung*

M. S. Powar, M. Singh, Curr. Sci. (India) 45, 131 (1976).

Radioactivity: ^{32}P, ^{35}S, ^{45}Ca, ^{90}Y, ^{204}Tl; measured γ-yield, IBS.

76Po11 *Investigation of Conversion Electrons in Fission of ^{235}U by Thermal Neutrons*

L. A. Popeko, G. A. Petrov, Y. P. Rudnev, E. F. Kochubey, Yad. Fiz. 24, 1081 (1976); Sov. J. Nucl. Phys. 24, 567 (1976).

Nuclear Reactions: ^{235}U(n,F), E=th; measured ce-spectrum, ce(t). ^{98}Zr level deduced $T_{1/2}$.

76Po12 *Discussion of Various Methods of Calculating of Inertial Mass Parameters in Adiabatic Approximation*

K. Pomorski, Acta Phys. Pol. B7, 595 (1977).

Nuclear Structure: ^{240}Pu; calculated inertial mass parameters.

76PoZQ

Conference proceedings: Baku p462

Nuclear Reactions: ^{235}U(n,F), E=thermal; measured ce-delay, E(ce), I(ce); deduced E0-transition.

76PoZR

Conference proceedings: Baku p433

Nuclear Reactions: ^{65}Cu(e,e'), E=120, 207 MeV; measured $\sigma(\theta)$; deduced form factors, model parameters. ^{65}Cu deduced levels, configurations. Born approximation, Helm model.

76PoZS *Gamma-Rays from the Decay of ^{93m}Tc*

Yu. N. Podkopaev, P. P. Zarubin, V. F. Kobelev, V. Yu. Padalko, Yu. V. Khrisanfov, Program and Theses, Proc. 26th Ann. Conf. Nucl. Spectrosc. Struc. At. Nuclei, Baku, p. 68 (1976).

Radioactivity: ^{93m}Tc[from ^{92}Mo(d,n)]; measured Eγ, Iγ. ^{93}Mo deduced transitions.

76PoZT

W. L. Posthumus, J. Konijn, H. P. Geerke, J. L. Maarleveld, K. E. G. Lobner, Priv. Comm. (November 1976).

76PoZU

Conference proceedings: Cargese, Corsica(Nuclei Far from Stability),Abstr A45

Radioactivity: ^{107}Sn; measured $T_{1/2}$, Eγ, Iγ, γγ-coin.

Nuclear Reactions: ^{108}Cd(p,2nγ), E=20 MeV; measured σ(E,Eγ), γγ-coin. ^{107}Ag(α,2nγ); measured Eγ, Iγ, I(ce), γγ-coin, σ(E,Eγ,θ). ^{109}In deduced levels, K, J, π, γ-branching.

76PoZV

A. W. Potempa, Priv. Comm. (1976).

Radioactivity: ^{157}Tm, ^{158}, ^{159}Yb; measured $T_{1/2}$, Eγ. ^{157}Er, ^{159}, ^{160}Yb deduced transitions.

76PoZW *Level Scheme of ^{66}Ga, ^{68}Ga*

C. Pomar, M. A. J. Mariscotti, P. Kleinheinz, R. M. Lieder, O. W. B. Schult, CNEA-NT 3/76, p. 23 (1976).

Nuclear Reactions: ^{64}, ^{66}Zn(α,npγ), E=30-50 MeV; measured σ(E,Eγ,θ,t), $\gamma\gamma$-coin. ^{66}, ^{68}Ga deduced levels, $T_{1/2}$, J.

76PoZX

J. K. Poggenburg, Priv. Comm. (May 1976).

Radioactivity: ^{67}Ga; measured Iγ.

76PoZY

Thesis: DABBB 36B 4045

Nuclear Reactions: ^{10}B, ^{12}, ^{13}C, ^{16}O, ^{28}Si(^{6}Li, ^{6}Li), ^{12}C(^{7}Li,^{7}Li), E=3.0-13.0 MeV; measured $\sigma(E,\theta)$.

76Pr01 *Gamma-Ray Spectroscopy Studies of the Lower Excited States of ^{53}V*

J. G. Pronko, T. T. Bardin, J. A. Becker, Phys. Rev. C13, 608 (1976).

Nuclear Reactions: $^{51}V(t,p\gamma)$, E=2.9 MeV; measured $p\gamma(t)$, DSA, $E\gamma$. ^{53}V deduced levels, J, π, $T_{1/2}$, δ, γ-branching.

76Pr02 *Internal Bremsstrahlung Spectra from ^{185}W and ^{32}P*

R. Prasad Babu, K. Narasimha Murty, V. A. Narasimha Murty, Phys. Rev. C13, 1267 (1976).

Radioactivity: ^{185}W, ^{32}P; measured IBS.

76Pr03 *Low-Intensity Transition in the Decay of ^{175}Hf*

W. W. Pratt, Phys. Rev. C13, 2591 (1976).

Radioactivity: ^{175}Hf [from ^{174}Hf(n,γ)]; measured Eγ, Iγ. ^{175}Lu deduced transition. Ge(Li) detector.

76Pr04 *Polarization in n-d Scattering at 14.2 MeV*

M. Preiswerk, R. Casparis, B. T. Leemann, H. Rudin, R. Wagner, P. Zupranski, Nucl. Phys. A263, 276 (1976).

Nuclear Reactions: ^{2}H(polarized n,n), E=14.2 MeV; measured angular distribution of analyzing power.

76Pr05 *Internal Bremsstrahlung Spectral Shapes of ^{45}Ca and ^{35}S*

R. Prasad Babu, K. Narasimha Murty, V. A. Narasimha Murty, J. Phys. (London) G2, 331 (1976).

Radioactivity: ^{45}Ca, ^{35}S; measured IBS. NaI(Tl) spectrometer.

76Pr06 *Inner Bremsstrahlung Following the ^{169}Er Beta Decay*

R. Prasad Babu, K. N. Murty, V. A. N. Murty, J. Phys. Soc. Jap. 40, 629 (1976).

Radioactivity: ^{169}Er; measured IB spectrum, 50-290 keV.

76Pr07 *Phenomenological Renormalization of Free Nucleon-Nucleon Interaction*

M. Prakash, Y. R. Waghmare, I. Mehrotra, Z. Phys. A278, 155 (1976).

Nuclear Structure: ^{6}Li, ^{18}F, ^{18}O, ^{42}Sc, ^{42}Ca, ^{58}Ni, ^{92}Zr; calculated levels.

76Pr08 γ *Rays from the Reactions in* ^{19}F *for Neutrons of Energy 16-22 MeV*

G. A. Prokopets, B. Holmqvist, A. V. Murzin, Yad. Fiz. 23, 935 (1976); Sov. J. Nucl. Phys. 23, 492 (1977).

Nuclear Reactions: $^{19}F(n,\gamma)$, E=7-22 MeV; measured $\sigma(E,E\gamma)$. $^{19}F(n,2n)$, (n,d), (n,n') deduced σ, reaction mechanism.

76Pr09 *A New Approach to Antisymmetrization and Rearrangement in Nucleus-Nucleus Collisions*

K. Pruess, P. Lichtner, Nucl. Phys. A269, 252 (1976).

Nuclear Reactions: ^{40}Ca, ^{16}O(^{16}O,X), ^{40}Ca(^{40}Ca, X); calculated two center shell model description of nucleus-nucleus collisions.

76Pr10 *Rotational Flow for the Spectra of Deformed Even-Even Nuclei Using an Anisotropic Harmonic Oscillator Force*

V. R. Prakash, Can. J. Phys. 54, 1884 (1976).

Nuclear Structure: ^{150}Nd, ^{152}, ^{154}Sm, ^{154}, ^{156}, ^{158}, ^{160}Gd, ^{156}, ^{158}, ^{160}, ^{162}, ^{164}Dy, ^{158}, ^{160}, ^{162}, ^{164}, ^{166}, ^{168}, ^{170}Er, ^{162}, ^{164}, ^{166}, ^{168}, ^{170}, ^{172}, ^{174}, ^{176}Yb, ^{166}, ^{168}, ^{170}, ^{172}, ^{174}, ^{176}, ^{178}, ^{180}Hf, ^{172}, ^{174}, ^{176}, ^{178}, ^{180}, ^{182}, ^{184}, ^{186}W, ^{178}, ^{180}, ^{182}, ^{184}, ^{186}, ^{188}, ^{190}Os; calculated rotational flow, β.

76Pr11 *The Deuteron D-State and the $\pi^+ + d \rightarrow p + p$ Reaction*

B. M. Preedom, C. W. Darden, R. D. Edge, T. Marks, M. J. Saltmarsh, K. Gabathuler, E. E. Gross, C. A. Ludemann, P. Y. Bertin, M. Blecher, K. Gotow, J. Alster, R. L. Burman, J. P. Perroud, R. P. Redwine, B. Goplen, W. R. Gibbs, E. L. Lomon, Phys. Lett. 65B, 31 (1976).

Nuclear Reactions: ^{2}H(π^+,2p), E=40, 50, 60 MeV; measured $\sigma(\theta)$; deduced deuteron d-state probability.

76Pr12 *Excitation Functions of High-Energy α-Particle Induced Nuclear Reactions on Aluminum and Magnesium: Production of ^{28}Mg*

H. J. Probst, S. M. Qaim, R. Weinreich, Int. J. Appl. Radiat. Isotop. 27, 431 (1976).

Nuclear Reactions: ^{27}Al(α,3p), (α,^{7}Be), (α,3n4p), (α,5n4p), (α,n2p), (α,2p), (α,n3p), ^{26}Mg(α, p), (α,2p), E ≤ 156 MeV; measured σ(E), σ for production of ^{28}Mg.

76Pr13 *Spin of the 1251 keV Level in ^{97}Nb*

D. K. Priyadarsini, D. L. Sastry, B. Vema Reddy, M. Srinivasa Rao, B. R. Sastry, V. Seshagiri Rao, Curr. Sci. (India) 45, 657 (1976).

Radioactivity: ^{97}Zr; measured $\beta\gamma(\theta)$. ^{97}Nb level deduced J, π.

76Pr14 *Spin Flip Probability for 6.9-MeV Protons Scattered Inelastically by ^{24}Mg*

V. S. Prokopenko, V. D. Sklyarenko, N. M. Tkach, V. K. Chernievskii, A. V. Shustov, Izv. Akad. Nauk SSSR, Ser. Fiz. 40, 1289 (1976); Bull. Acad. Sci. USSR, Phys. Ser. 40, No. 6, 158 (1976).

Nuclear Reactions: ^{24}Mg(p,p'γ), E=6.9 MeV; measured σ(Ep', Eγ,θ).

76Pr15 *Deformed Negative Parity States in ^{42}Ca*

H. G. Price, G. D. Jones, P. R. G. Lornie, M. R. Nixon, P. J. Nolan, P. J. Twin, J. Phys. (London) G2, L177 (1976).

Nuclear Reactions: ^{39}K(α,pγ), E=9.5, 11.5 MeV; measured σ(Eγ), polarization, DSA, recoil distance. ^{42}Ca levels deduced J, π, $T_{1/2}$, δ. Separated isotope target.

76Pr16 γ-*Quanta Which Develop as a Result of Inelastic Interaction of Neutrons with* ^{59}*Co Nuclei*

G. A. Prokopetz, A. V. Murzin, Izv. Akad. Nauk SSSR, Ser. Fiz. 40, 2256 (1976); Bull. Acad. Sci. USSR, Phys. Ser. 40, No. 10, 200 (1976).

Nuclear Reactions: ^{59}Co(n,n'γ), (n,Xγ), E=16.2-21.8 MeV; measured Eγ, Iγ(En), σ(E) for γ-production. ^{58}Co deduced levels, γ-branching.

76Pr17 *The First-Forbidden 1.98 MeV Beta Decay in Rhenium-188*

D. K. Priyadarsini, D. L. Sastry, B. V. Reddy, M. L. N. Raju, Indian J. Phys. 50, 942 (1976).

Radioactivity: ^{188}Re; calculated nuclear matrix elements.

76Pr18 *Spin of the 920 keV Level in ^{99}Tc*

D. K. Priyadarsini, D. L. Sastry, B. R. Sastry, Indian J. Phys. 50, 746 (1976).

Radioactivity: ^{99}Mo; measured Eγ, Iγ, γγ(θ). ^{99}Tc level deduced δ, quadrupole moment, J, π.

76PrZN

Journal: PPSSA 19B 43, Prabhakara

Nuclear Reactions: ^{51}V(p,γ), E=910, 1210, 1559, 1566 keV; measured nothing. ^{52}Cr resonance deduced J, π.

76PrZO

Journal: PPSSA 19B 298, Prasad

Radioactivity: ^{75}Se; measured Eγ, Iγ, sum-coin.

76PrZP

Journal: PPSSA 19B 47, Prasad

Nuclear Reactions: ^{28}Si(α,$\alpha'\gamma$), E=15.0-16.2 MeV; measured $\alpha'\gamma(\theta)$, σ(E).

76PrZQ

Report: COO-535-763, P84,Prull

Nuclear Reactions: ^{103}Rh(α,nγ), E=17 MeV; measured $\gamma\gamma$-coin. ^{106}Ag deduced transitions.

76PrZR

Report: ZfK-315, P36,Prade

Nuclear Reactions: ^{141}Pr(α,2nγ), E=23, 25, 27 MeV; measured σ(Eγ,θ), $\gamma\gamma$-coin. ^{143}Pm deduced levels, K, J, π.

76PrZS

Conference proceedings: Baku p161

Nuclear Reactions: ^{24}Mg(p,p'γ), E=6.9 MeV; measured spin-flip probability(θ). NaI(Tl), Si(Li) detectors.

76PrZT

Conference proceedings: Baku p51

Nuclear Reactions: ^{19}F(n,n'), (n,2n), (n,d), E=16-22 MeV; measured $\sigma(E;E\gamma)$. Time-of-flight method, Ge(Li) detectors.

76PrZU

Conference proceedings: Baku p50

Nuclear Reactions: ^{59}Co(n,n'), (n,np), (n,2n), E=7.0, 16.2, 18.1, 19.3, 20. 5, 21.8 MeV; measured $\sigma(E;E\gamma)$.

76PrZV *Nuclear Levels of ^{152}Eu from Proton Inelastic Scattering*

I. O. Proctor, D. W. Heikkinen, G. L. Struble, R. G. Lanier, Bull. Amer. Phys. Soc. 21, No. 8, 984, CC1 (1976)

Nuclear Reactions: ^{152}Eu(p,p), (p,p'), E=12 MeV; measured $\sigma(\theta)$. ^{152}Eu deduced levels, K, J, π.

76PrZW

Report: CNEA-NT 3/76, P75

Radioactivity: ^{141}Ba; measured Eγ, Iγ, γγ-coin, I(ce); deduced ICC. ^{141}La deduced levels, λ.

76PrZX *Delayed Neutrons from the A=141 Chain and Identification of γ-Ray Transitions in the A=143 Chain*

A. N. Proto, D. Otero, CNEA-NT-3/76, p. 50 (1976).

Radioactivity: ^{141}Xe; measured delayed neutrons. ^{143}Xe; measured $T_{1/2}$. ^{143}Xe, ^{143}Cs, ^{143}La; measured Eγ.

76Ps01 *Measurement of the Energy Dependence of eta ^{233}U in the 0.02-1-eV Region*

V. A. Pshenichnyi, A. I. Blanovskii, N. L. Gnidak, E. A. Pavlenko, At. Energ. 40, 76 (1976); Sov. At. Energy 40, 89 (1976).

Nuclear Reactions: ^{233}U(n,ν), E=0.02-1 eV; measured neutron multiplicity.

76Pu01 *Accurate Determination of M1-E2 Mixing Ratio and Nuclear Structure Parameter of the 39.58 keV Transition in ^{129}Xe*

V. S. Puri, H. S. Sahota, C. S. Khurana, Curr. Sci. (India) 45, 16 (1976).

Nuclear Structure: ^{129}Xe; analyzed data, deduced δ.

76PuZX

Journal: PPSSA 19B 283, Puri

Radioactivity: ^{75}Se, ^{133}Ba; measured $\gamma\gamma(\theta)$. ^{75}As, ^{133}Cs transitions deduced δ.

76PuZY *^{90}Zr(^{7}Li,^{6}Li)^{91}Zr Reaction at 34 MeV*

R. J. Puigh, K. W. Kemper, Bull. Am. Phys. Soc. 21, No. 4, 554, DE7 (1976)

Nuclear Reactions: ^{90}Zr(^{7}Li,^{6}Li), E=34 MeV; measured $\sigma(\theta)$.

76PuZZ

Report: KVI Annual, P1

Nuclear Reactions: ^{90}Zr(α,α), E $\leq$ 100 MeV; calculated potential.

76PyZZ

Conference proceedings: Dubna(Selected Topics in Nucl Structure)Vol1, P122

Nuclear Reactions: ^{116}, ^{118}, ^{120}Sn(γ,X); calculated σ.