Visit the Isotope Explorer home page!

27 reference(s) found :

Keynumber: 2001VA11
Reference: Yad.Fiz. 64, No 2, 195 (2001); Phys.Atomic Nuclei 64, 153 (2001)
Authors: E.V.Vasilieva, A.M.Sukhovoj, V.A.Khitrov
Title: Direct Experimental Estimate of Parameters That Determine the Cascade Gamma Decay of Compound States of Heavy Nuclei
Keyword abstract: NUCLEAR REACTIONS ^{113}Cd, ^{123}Te, ^{127}I, ^{149}Sm, ^{155}Gd, ^{159}Tb, ^{169}Tm, ^{180}Hf, ^{189}Os, ^{191}Ir, ^{195}Pt, ^{199}Hg(n,γ),E=thermal; measured Eγ, 2-step photon cascades. ^{114}Cd, ^{124}Te, ^{128}I, ^{150}Sm, ^{156}Gd, ^{160}Tb, ^{170}Tm, ^{181}Hf, ^{190}Os, ^{192}Ir, ^{196}Pt, ^{200}Hg deduced level densities vs excitation energy, sum of radiative strengths for E1 and M1 transitions. Comparison with Statistical Model calculations.

Keynumber: 2001HAZT
Reference: INDC(CPR)-053/L, p.23 (2001)
Authors: Y.Han
Title: Calculation and Recommendation of n + $^{174,176\text{-}180,Nat}$Hf Reactions
Keyword abstract: NUCLEAR REACTIONS Hf, ^{174}, ^{176}, ^{177}, ^{178}, ^{179}, ^{180}Hf(n,n), (n,n'), (n,γ), (n,2n), (n,p),E <20 MeV; calculated σ. Comparisons with data.

Keynumber: 2001CH38
Reference: Nucl.Instrum.Methods Phys.Res. A462, 442 (2001)
Authors: H.-J.Cho, K.Kobayashi, S.Yamamoto, K.-W.Seo, H.Y.Hwang, S.K.Nha, S.K.Ko
Title: Measurement of Thermal Neutron Cross-Sections and Resonance Integrals for ^{164}Dy(n,γ)^{165}Dy and ^{180}Hf(n,γ)^{181}Hf Reactions
Keyword abstract: NUCLEAR REACTIONS ^{164}Dy, ^{180}Hf(n,γ),E=thermal; measured σ; deduced resonance integrals. Activation technique,comparisons with previous results.

Keynumber: 2000WAZW
Reference: INDC(CPR)-052/L, p.103 (2000)
Authors: T.Wang, T.Liu, J.Liu
Title: The Experimental Data Evaluation for Natural Hf and Its Isotopes
Keyword abstract: NUCLEAR REACTIONS ^{176}, ^{177}, ^{178}, ^{179}, ^{180}Hf(n,γ),E <3 MeV; Hf(n,γ), (n,X),E <20 MeV; compiled,evaluated σ.

Keynumber: 2000VA13
Reference: Fiz.Elem.Chastits At.Yadra 31, 350 (2000); Phys.Part.Nucl. 31, 170 (2000)
Authors: E.V.Vasileva, A.M.Sukhovoi, V.A.Khitrov
Title: Influence of the Structure of Excited States in Heavy Ions on the Process of Cascade γ-Decay at Energies below the Neutron Binding Energy
Keyword abstract: NUCLEAR REACTIONS ^{127}I, ^{155}, ^{157}Gd, ^{173}Yb, ^{180}Hf, ^{182}W, ^{189}Os, ^{197}Au (n,γ),E not given; analyzed level densities,dipole strength distributions,two-step cascade intensities following neutron capture; deduced structure effects.

Keynumber: 2000LIZU
Reference: INDC(CPR)-052/L, p.72 (2000)

Authors: J.Liu, T.Wang, T.Liu

Title: Progress on Theoretical Calculations of Neutron Induced Reaction on ^{174,176,178,180}Hf in the Energy Region from 0.01 MeV to 20 MeV

Keyword abstract: NUCLEAR REACTIONS ^{174}, ^{176}, ^{178}, ^{180}Hf(n,X), (n,p), (n,α), (n,γ),E <20 MeV; calculated σ. Comparisons with data.

Keynumber: 1999SU03

Reference: Yad.Fiz. 62, No 1, 24 (1999); Phys.Atomic Nuclei 62, 19 (1999)

Authors: A.M.Sukhovoi, V.A.Khitrov

Title: Experimental Estimate of the Density of Levels in a Heavy Nucleus That Are Excited in (n,γ) Reactions at Excitation Energies of 3 to 4 MeV

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd, ^{123}Te, ^{145}Nd, ^{149}Sm, ^{155}, ^{157}Gd, ^{162}, ^{163}, ^{164}Dy, ^{167}Er, ^{173}, ^{174}Yb, ^{177}, ^{178}, ^{180}Hf, ^{187}, ^{189}Os, ^{195}Pt, ^{199}Hg, ^{127}I, ^{159}Tb, ^{165}Ho, ^{169}Tm, ^{175}Lu, ^{181}Ta, ^{191}Ir, ^{197}Au, ^{124}Te, ^{182}, ^{185}W(n,γ),E=thermal; analyzed Iγ; deduced non-exponential level densities.

Keynumber: 1999BO14

Reference: Yad.Fiz. 62, No 5, 892 (1999); Phys.Atomic Nuclei 62, 832 (1999)

Authors: S.T.Boneva, E.V.Vasilieva, L.I.Simonova, V.A.Bondarenko, A.M.Sukhovoi, V.A.Khitrov

Title: (n,γ) Reactions in Heavy Nuclei: Manifestations of nuclear structure at excitation energies up to the neutron binding energy

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd, ^{123}, ^{124}Te, ^{127}I, ^{134}, ^{136}, ^{137}, ^{138}Ba, ^{139}La, ^{142}, ^{143}, ^{145}Nd, ^{149}Sm, ^{155}, ^{157}Gd, ^{159}Tb, ^{162}, ^{163}, ^{164}Dy, ^{165}Ho, ^{167}Er, ^{169}Tm, ^{173}, ^{174}, ^{176}Yb, ^{175}, ^{176}Lu, ^{177}, ^{178}, ^{179}, ^{180}Hf, ^{181}Ta, ^{182}, ^{186}W, ^{187}, ^{189}Os, ^{191}Ir, ^{195}Pt, ^{197}Au, ^{199}Hg(n,γ),E not given; analyzed two-photon γ cascade data; deduced structure effects.

Keynumber: 1997SU29

Reference: Bull.Rus.Acad.Sci.Phys. 61, 1611 (1997)

Authors: A.M.Sukhovoi, V.A.Khitrov

Title: Cascade Gamma Decay of the Compound State of Heavy Nucleus as Seen Experimentally

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd, ^{127}I, ^{123}Te, ^{134}, ^{136}, ^{137}, ^{138}Ba, ^{142}, ^{143}, ^{145}Nd, ^{149}Sm, ^{155}, ^{157}Gd, ^{159}Tb, ^{165}Ho, ^{162}, ^{163}, ^{164}Dy, ^{167}Er, ^{169}Tm, ^{173}, ^{174}, ^{176}Yb, ^{175}, ^{176}Lu, ^{177}, ^{178}, ^{179}, ^{180}Hf, ^{195}Pt, ^{199}Hg, ^{181}Ta, ^{182}, ^{186}W, ^{191}Ir, ^{197}Au(n,γ),E=thermal; analyzed γ spectra,γγ-coin. ^{114}Cd, ^{124}Te, ^{137}, ^{138}, ^{139}Ba, ^{146}Nd, ^{150}Sm, ^{156}, ^{158}Gd, ^{160}Tb, ^{164}Dy, ^{168}Er, ^{170}Tm, ^{174}Yb, ^{181}Hf, ^{196}Pt, ^{200}Hg, ^{182}Ta, ^{183}W, ^{192}Ir, ^{198}Au deduced two-quantum cascade intensities vs excitation energy,level density parameters,pairing features.

Keynumber: 1997KA47

Reference: J.Radioanal.Nucl.Chem. 215, 193 (1997)

Authors: S.I.Kafala, T.D.MacMahon, S.B.Borzakov

Title: Neutron Activation for Precise Nuclear Data

Keyword abstract: NUCLEAR REACTIONS ^{45}Sc, ^{50}Cr, ^{59}Co, ^{64}Zn, ^{75}As, ^{85}Rb, ^{113}In, ^{121}, ^{123}Sb, ^{130}Ba, ^{133}Cs, ^{139}La, ^{140}, ^{142}Ce, ^{146}Nd, ^{151}, ^{153}Eu, ^{152}Gd, ^{152}Sm, ^{159}Tb, ^{165}Ho, ^{174}Yb, ^{180}Hf, ^{181}Ta, ^{186}W, ^{232}Pa, ^{238}Np(n,γ),E=reactor; measured Eγ,Iγ; deduced capture σ,resonance integral,least-squares fit parameters. Multi-element standard.

Keynumber: 1997CHZZ

Reference: INDC(CPR)-042/L, p.13 (1997)

Authors: J.Chen, Z.Shi, G.Tang, G.Zhang, H.Lu, X.Han, X.Huang

Title: Activation Cross Section Measurement for the ^{180}Hf(n,γ)^{181}Hf Reaction

Keyword abstract: NUCLEAR REACTIONS ^{180}Hf(n,γ),E=0.52,2,2.5 MeV; measured σ. Activation method. Other results compared.

Keynumber: 1993BO27
Reference: Z.Phys. A346, 35 (1993)
Authors: S.T.Boneva, V.A.Khitrov, Yu.V.Kholnov, L.H.Khiem, P.D.Khang, Yu.P.Popov, A.M.Sukhovoj, V.A.Bondarenko, I.L.Kuvaga, P.T.Prokofev, G.L.Rezvaya, L.I.Simonova

Title: Experimental Estimates on Radiative Strength Function of Low-Energy γ-Quanta following Even-Odd Heavy Nuclei Decay

Keyword abstract: NUCLEAR REACTIONS ^{136}Ba, ^{180}Hf(n,γ),E=thermal; measured γγ-coin for two-step cascades. ^{137}Ba, ^{181}Hf deduced radiative strength function.

Keynumber: 1991BO56
Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 55, 2091 (1991); Bull.Acad.Sci.USSR, Phys.Ser. 55, No.11, 10 (1991)
Authors: V.A.Bondarenko, I.L.Kuvaga, L.H.Kkhem, Yu.P.Popov, P.T.Prokofev, G.L.Rezvaya, L.I.Simonova, A.M.Sukhovoi, D.K.Pham, V.A.Khitrov, Yu.V.Kholnov

Title: Intense Cascades of γ Transitions from Compound States of the ^{181}Hf Nucleus and Experimental Estimation of the Radiative Strength Function of Primary Transitions when E(γ) ≥ 0.5 MeV

Keyword abstract: NUCLEAR REACTIONS ^{180}Hf(n,γ),E=low; measured Eγ,Iγ,γγ-coin. ^{181}Hf deduced primary E1,M1 transition strength function.

Keynumber: 1985MA51
Reference: Yad.Fiz. 42, 369 (1985)
Authors: V.E.Marshalkin, V.Yu.Petrov, V.M.Povyshev, A.I.Shlyakhter

Title: Calculations of Neutron Acceleration, slowing down and Capture Cross Sections for ^{180m}Hf Isomer

Keyword abstract: NUCLEAR REACTIONS ^{180}Hf(n,n'), (n,γ),E=0.001-5 MeV; calculated isomer production σ(E),inelastic acceleration,slow down.

Keynumber: 1983YA06
Reference: J.Nucl.Sci.Technol.(Tokyo) 20, 722 (1983)
Authors: T.Yamamoto

Title: Evaluation of Neutron Capture Gamma-Ray Spectra in Hafnium and Tantalum

Keyword abstract: NUCLEAR REACTIONS ^{174}, ^{176}, ^{177}, ^{178}, ^{179}, ^{180}Hf, ^{181}Ta(n,γ),E=thermal; ^{181}Ta(n,γ),E=0.25,0.5 MeV; calculated capture Eγ,Iγ. ^{182}Ta, ^{175}, ^{177}, ^{178}, ^{179}, ^{180}, ^{181}Hf deduced level density parameters. Cascade model.

Keynumber: 1983AH01
Reference: Ann.Nucl.Energy 10, 41 (1983)
Authors: A.Ahmad

Title: Analysis and Evaluation of Thermal and Resonance Neutron Activation Data

Keyword abstract: NUCLEAR REACTIONS ^{45}Sc, ^{50}Ti, ^{50}Cr, ^{51}V, ^{55}Mn, ^{58}Fe, ^{59}Co, ^{74}Se, ^{85}Rb, ^{94}, ^{96}Zr, ^{123}Sb, ^{130}Ba, ^{133}Cs, ^{139}La, ^{140}Ce, ^{159}Tb, ^{180}Hf, ^{181}Ta, ^{197}Au(n,γ),E=thermal,epithermal; analyzed data. Generalized least-squares fit.

Keynumber: 1982BE47
Reference: Phys.Rev. C26, 1404 (1982)
Authors: H.Beer, R.L.Macklin
Title: ^{178}, ^{179}, ^{180}Hf and ^{180}Ta(n,γ) Cross Sections and Their Contribution to Stellar Nucleosynthesis
Keyword abstract: NUCLEAR REACTIONS ^{178}, ^{179}, ^{180}Hf(n,γ),E=2.6-2000 keV; measured σ(E); deduced ^{180}Ta s-,r-process nucleosynthesis. ^{180}Hf deduced parameters,strength functions,average level spacings,r-process abundance. ^{179}, ^{181}Hf deduced resonance parameters,strength functions,average level spacings. Maxwellian averaging procedure.

Keynumber: 1979AG02
Reference: J.Phys.Soc.Jpn. 46, 1 (1979)
Authors: H.M.Agrawal, M.L.Sehgal
Title: Statistical Theory Calculations of Neutron-Capture Cross-Sections at 24 keV
Keyword abstract: NUCLEAR REACTIONS ^{45}Sc, ^{55}Mn, ^{63}, ^{65}Cu, ^{69}, ^{71}Ga, ^{75}As, ^{79}, ^{81}Br, ^{80}Se, ^{85}, ^{87}Rb, ^{89}Y, ^{93}Nb, ^{96}Zr, ^{98}, ^{100}Mo, ^{107}, ^{109}Ag, ^{108}Pd, ^{114}Cd, ^{115}In, ^{127}I, ^{133}Cs, ^{138}Ba, ^{139}La, ^{140}, ^{142}Ce, ^{141}Pr, ^{152}, ^{154}Sm, ^{158}, ^{160}Gd, ^{164}Dy, ^{165}Ho, ^{170}Er, ^{175}Lu, ^{180}Hf, ^{181}Ta, ^{184}, ^{186}W, ^{185}, ^{187}Re, ^{197}Au, ^{202}Hg, ^{208}Pb, ^{209}Bi, ^{232}Th(n,γ),E=24 keV; calculated σ; deduced ratio of average Γγ to average level spacing. Margolis formula of statistical theory, low energy resonance parameters.

Keynumber: 1975MA19
Reference: Z.Phys. A272, 273 (1975)
Authors: W.Mannhart
Title: Messung von thermischen Aktivierungs-Wirkungsquerschnitten mit hoher Genauigkeit
Keyword abstract: NUCLEAR REACTIONS ^{45}Sc, ^{115}In, ^{139}La, ^{179}, ^{180}Hf(n,γ),E=thermal; measured σ(Eγ).

Keynumber: 1974SI11
Reference: Ann.Phys.(New York) 83, 355 (1974)
Authors: K.Siddappa, M.S.Murty, J.R.Rao
Title: Neutron Strength Functions of Nuclei in the Deformed Region
Keyword abstract: NUCLEAR REACTIONS ^{138}Ba, ^{140}, ^{142}Ce, ^{146}, ^{148}Nd, ^{152}, ^{154}Sm, ^{158}, ^{160}Gd, ^{159}Tb, ^{169}Tm, ^{170}Er, ^{174}, ^{176}Yb, ^{180}Hf, ^{181}Ta, ^{186}W, ^{190}, ^{192}Os, ^{197}Au, ^{202}Hg(n,γ),E=18-28 keV; measured σ; deduced p-wave strength functions.
Reference: Can.J.Phys. 52, 1160 (1974)
Authors: B.Singh, M.W.Johns
Title: Spin Determinations in Low Lying States of ^{151}Sm
Keyword abstract: RADIOACTIVITY ^{151}Pm; measured γγ(θ),Iγ. ^{151}Sm levels deduced J,π,γ-mixing,λ.

Keynumber: 1974ALYP
Coden: REPT BARC-770 P30
Keyword abstract: NUCLEAR REACTIONS ^{180}Hf, ^{203}Tl, ^{208}Pb, ^{209}Bi(n,α), (n,γ),E=thermal; measured σ(E,Eα)/σ(E,Eγ). ^{178m}, ^{178}Lu deduced isomeric cross-section ratio,J.

Keynumber: 1973SI45
Reference: Nuovo Cim. 18A, 48 (1973)
Authors: K.Siddappa, M.Sriramachandra Murty, J.Rama Rao

Title: Neutron Activation Cross-Sections in Rare Earths and Heavier Nuclei
Keyword abstract: NUCLEAR REACTIONS ^{138}Ba, ^{140}, ^{142}Ce, ^{146}, ^{148}Nd, ^{160}Gd, ^{165}Ho, ^{180}Hf, ^{181}Ta, ^{190}Os, ^{197}Au, ^{202}Hg(n,γ),E=23 keV; measured σ.

Keynumber: 1973AL06
Reference: Nucl.Phys. A205, 614 (1973)
Authors: J.Alam, M.L.Sehgal
Title: Study of (n,α) Reactions at Thermal Energies
Keyword abstract: NUCLEAR REACTIONS ^{180}Hf, ^{203}Tl, ^{208}Pb, ^{209}Bi(n,α), (n,γ),E=thermal; measured σ(n,α)/σ(n,γ).

Keynumber: 1972MOYY
Coden: REPT ZFK-243,P93
Keyword abstract: NUCLEAR REACTIONS ^{164}Dy, ^{166}, ^{168}, ^{170}Er, ^{168}, ^{170}Yb, ^{178}, ^{180}Hf, ^{182}, ^{184}W (n,γ); compiled n-resonance data, (n,γ) decay modes.

Keynumber: 1971KIZF
Coden: REPT KAPL-3944,G J Kirouac,3/23/72
Keyword abstract: NUCLEAR REACTIONS ^{176}, ^{177}, ^{178}, ^{179}, ^{180}Hf(n,γ),E=thermal; measured σ.

Keynumber: 1971AL22
Reference: Phys.Scr. 3, 105 (1971)
Authors: G.Alenius, S.E.Arnell, C.Schale, E.Wallander
Title: Low Spin States in ^{181}Hf from the Thermal Neutron Capture Reaction
Keyword abstract: NUCLEAR REACTIONS ^{180}Hf(n,γ),E=thermal; measured Eγ,Iγ; deduced Q. ^{181}Hf deduced levels,J,π,Nilsson assignments.

Keynumber: 1969RI13
Reference: Can.J.Phys. 47, 2031 (1969)
Authors: M.D.Ricabarra, R.Turjanski, G.H.Ricabarra
Title: Neutron Activation Resonance Integrals of ^{64}Zn, ^{68}Zn, ^{85}Rb, ^{100}Mo, ^{102}Ru, ^{113}In, ^{123}Sb, and ^{180}Hf
Keyword abstract: NUCLEAR REACTIONS ^{64}, ^{68}Zn, ^{85}Rb, ^{100}Mo, ^{102}Ru, ^{113}In, ^{123}Sb, ^{180}Hf(n,γ), E = resonance, thermal; measured activation resonance integral/thermal activation σ.
