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72 reference(s) found :

Keynumber: 1998MA49

Reference: Nucl.Instrum.Methods Phys.Res. B139, 293 (1998)

Authors: T.K.Magagula, J.I.W.Watterson

Title: The Excitation of Isomeric States by Accelerator Neutrons from the ${}^7\text{Li}(p,n){}^7\text{Be}$ Reaction and Their Application in Selective Activation Analysis

Keyword abstract: NUCLEAR REACTIONS ${}^{197}\text{Au}(n,n'){}^{197m}\text{Au}$, ${}^{27}\text{Al}$, ${}^{28}\text{Si}(n,p)$, ${}^{27}\text{Al}(n,\gamma)$, E not given; measured relative yields vs neutron production reaction energy, target thickness. ${}^7\text{Li}(p,n)$, E=4-10 MeV; deduced neutron spectrum features.

Keynumber: 1997RO26

Reference: IEEE Trans.Instrum.Meas. 46, 560 (1997)

Authors: S.Rottger, A.Paul, U.Keyser

Title: Prompt (n, γ)-Spectrometry for the Isotopic Analysis of Silicon Crystals for the Avogadro Project

Keyword abstract: NUCLEAR REACTIONS ${}^1\text{H}$, ${}^{14}\text{N}$, 28 , ${}^{29}\text{Si}$, ${}^{56}\text{Fe}$, ${}^{27}\text{Al}$, ${}^{63}\text{Cu}(n,\gamma)$, E=thermal; measured E_γ , I_γ .

Keyword abstract: ATOMIC MASSES 1 , ${}^2\text{H}$, 14 , ${}^{15}\text{N}$, 28 , 29 , 30 , 31 , ${}^{32}\text{Si}$, 56 , ${}^{57}\text{Fe}$; measured neutron-induced γ spectra; deduced mass differences.

Keynumber: 1997GOZP

Reference: Proc.Seminar on Precise Measurement in Nuclear Spectroscopy, Sarov, September 1996, p.101 (1997)

Authors: V.M.Gorbachev, V.I.Nagorny, Yu.Ya.Nefedov, A.M.Shvetsov, M.S.Shvetsov, A.L.Shmarova, G.G.Farafontov

Title: Measurement of Gamma-Ray Production Cross Sections in (n, $x\gamma$) Reaction on Al and Fe for Testing Files of Estimated Data for $E_n = 14$ MeV

Keyword abstract: NUCLEAR REACTIONS ${}^{27}\text{Al}$, $\text{Fe}(n,\gamma)$, E=14 MeV; measured E_γ , I_γ , σ .

Keynumber: 1996KA26

Reference: Nucl.Instrum.Methods Phys.Res. A369, 648 (1996)

Authors: L.P.Kabina, I.A.Kondurov, P.A.Sushkov

Title: Energy Calibration Procedure for γ -Radiation and Conversion Electron Spectra using Level Scheme a priori Information

Keyword abstract: NUCLEAR REACTIONS ${}^{207}\text{Pb}$, ${}^{27}\text{Al}(n,\gamma)$, E=reactor; measured E_γ .

Keyword abstract: RADIOACTIVITY ${}^{28}\text{Al}(\beta^-)$ [from ${}^{27}\text{Al}(n,\gamma)$, E=reactor]; measured E_γ .

Keynumber: 1995NA31

Reference: J.Radioanal.Nucl.Chem. 200, 435 (1995)

Authors: S.S.Narkhede, Z.R.Turel

Title: Instrumental Neutron Activation Analysis of Al, V and Ti Employing ${}^{252}\text{Cf}$ as a Thermal Neutron Source

Keyword abstract: NUCLEAR REACTIONS ${}^{27}\text{Al}$, ${}^{51}\text{V}$, ${}^{50}\text{Ti}(n,\gamma)$, E=thermal; measured E_γ , I_γ ; deduced rapid element determination possibility in ores, alloys. Neutron from ${}^{252}\text{Cf}$ isotopic source.

Keynumber: [1991YU01](#)

Reference: Phys.Rev. C43, 2765 (1991)

Authors: Z.-S.Yuan, Y.-K.Ho

Title: Unified Formalism to Study Nonstatistical Effects in Radiative Capture Reactions

Keyword abstract: NUCLEAR REACTIONS ^{55}Mn , ^{89}Y , ^{208}Pb , $^{27}\text{Al}(n,\gamma)$, $E < 20$ MeV; calculated capture $\sigma(E)$. Unified formalism, nonstatistical effects.

Keynumber: 1990WA11

Reference: Nucl.Instrum.Methods Phys.Res. B45, 75 (1990)

Authors: J.I.W.Watterson, A.E.Pillay, P.Nailand

Title: Selective Activation Analysis with Ion-Beam-Tailored Neutron Spectra - A Comparison between the Reactions $^7\text{Li}(p,n)^7\text{Be}$ and $^9\text{Be}(p,n)^9\text{B}$

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, ^{27}Al , $^{28}\text{Si}(n,p)$, $^{197}\text{Au}(n,n')$, E

Keynumber: 1990KUZU

Reference: Program and Thesis, Proc.40th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Leningrad, p.49 (1990)

Authors: V.T.Kupryashkin, V.S.Oleinik, N.V.Strilchuk, A.I.Feoktistov, I.P.Shapovalova

Title: Measurement of Lifetimes of Highly-Excited States of ^{28}Al

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, $E=\text{thermal}$; measured DSA. ^{28}Al levels deduced $T_{1/2}$.

Keynumber: 1990KUZC

Reference: Proc.8th Seminar on Precise Measurements in Nucl.Spectrosc., Uzhgorod, p.85 (1990)

Authors: V.T.Kupryashkin, N.V.Strilchuk, A.I.Feoktistov, I.P.Shapovalova

Title: Measurements of Lifetime of High-Energy States Excited in (n,γ) Reaction on Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS ^{24}Mg , ^{27}Al , ^{31}P , 54 , $^{57}\text{Fe}(n,\gamma)$, $E=\text{thermal}$; measured DSA. ^{25}Mg , ^{28}Al , ^{32}P , 55 , ^{58}Fe levels deduced $T_{1/2}$. Enriched targets, NaI(Tl), hyperpure Ge detectors.

Keynumber: 1990KU22

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 54, 846 (1990); Bull.Acad.Sci.Ussr, Phys.Ser. 54, No.5, 29 (1990)

Authors: V.T.Kupryashkin, V.S.Oleinik, N.V.Strilchuk, A.I.Feoktistov, I.P.Shapovalova

Title: Determination of the Lifetime of the Highly Excited States of ^{28}Al

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma$, $I\gamma$, DSA. ^{28}Al levels deduced $T_{1/2}$.

Keynumber: 1989MIZL

Reference: Japan Atomic Energy Res.Inst.Tandem Linac VDG, Ann.Rept., 1988, p.180 (1989)

Authors: M.Mizumoto, K.Hasegawa, S.Chiba, M.Sugimoto, Y.Yamanouti, M.Igashira, T.Uchiyama, H.Kitazawa

Title: Gamma-Ray Production Cross Sections of Al, Si, Fe, Pb, and Bi at 10 and 11.5 MeV

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , Si, Fe, Pb, Bi $(n,n'\gamma)$, (n,γ) , $(n,p\gamma)$, $(n,\alpha\gamma)$, $E=10, 11.5$ MeV; measured $E\gamma$, $\sigma(E\gamma)$.

Keynumber: [1989HO09](#)

Reference: Phys.Rev. C39, 1691 (1989)

Authors: Y.-K.Ho, Z.-S.Yuan, Y.Mi

Title: Strong Nonstatistical Effects in Neutron Capture at the 2p Size Resonance Region

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , $^{28}\text{Si}(n,\gamma)$, $E=\text{thermal}-2\text{ MeV}$; calculated $\sigma(E)$; deduced nonstatistical fractions, reaction mechanisms.

Keynumber: 1989DU03

Reference: Nucl.Instrum.Methods Phys.Res. A278, 484 (1989)

Authors: P.Durner, T.von Egidy, F.J.Hartmann

Title: Neutron-Capture Gamma Rays below 40 keV

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{39}K , ^{51}V , ^{127}I , ^{133}Cs , ^{159}Tb , ^{165}Ho , ^{169}Tm , ^{175}Lu , ^{181}Ta , ^{191}Ir , ^{197}Au , $^{232}\text{Th}(n,\gamma)$, $E=\text{low}$; measured $E\gamma$, absolute $I\gamma$. ^{28}Al , ^{40}K , ^{52}V , ^{128}I , ^{134}Cs , ^{160}Tb , ^{166}Ho , ^{170}Tm , ^{176}Lu , ^{182}Ta , ^{192}Ir , ^{198}Au , ^{233}Th deduced transitions. Si-Li detector.

Keynumber: 1989CV01

Reference: Z.Phys. A332, 163 (1989)

Authors: F.Cvelbar, E.Betak

Title: Exciton Model Comparison of the Activation and the Integrated 14 MeV Neutron Radiative Capture Cross Sections

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{51}V , ^{45}Sc , ^{55}Mn , ^{127}I , ^{141}Pr , ^{208}Pb , ^{209}Bi (n,γ) , $E=14.1\text{ MeV}$; calculated $\sigma(E(\gamma))$. Exciton model.

Keynumber: 1988HO06

Reference: J.Phys.(London) G14, Supplement S207 (1988)

Authors: Y.K.Ho, C.Coceva

Title: Nucleon Effective Charge in E1 and E2 Radiative Transitions

Keyword abstract: NUCLEAR REACTIONS ^{25}Mg , ^{27}Al , $^{29}\text{Si}(n,\gamma)$, E not given; calculated E1 transition inhibition factors. ^{89}Y , 90 , ^{91}Zr , ^{93}Nb , 92 , 94 , 96 , ^{98}Mo , ^{136}Ba , ^{139}La , ^{141}Pr , 142 , 143 , 145 , 146 , ^{148}Nd , ^{154}Sm , ^{181}Ta , $^{184}\text{W}(n,\gamma)$, E not given; analyzed nonstatistical $\Gamma\gamma$ data; deduced neutron effective charge enhancement factor.

Keynumber: 1986MU05

Reference: Radiat.Eff. 94, 297 (1986)

Authors: S.F.Mughabghab

Title: Spin Dependence of the Coherent Scattering Lengths of ^{27}Al and Admixture of S- and D- Partial Waves

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(\text{polarized } n,\gamma)$, $E=\text{thermal}$; analyzed $\sigma(E)$; deduced spin-dependent interactions role. ^{28}Al deduced s-wave resonances.

Keynumber: [1986KR16](#)

Reference: Phys.Rev. C34, 2103 (1986)

Authors: B.Krusche, K.P.Lieb

Title: Dipole Transition Strengths and Level Densities $A \leq 80$ Odd-Odd Nuclei Obtained from Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{23}Na , ^{27}Al , ^{31}P , ^{35}Cl , 39 , ^{41}K , ^{45}Sc , ^{55}Mn , ^{59}Co , 63 , ^{65}Cu , ^{71}Ga , ^{75}As , $^{79}\text{Br}(n,\gamma)$, $E=\text{thermal}$; analyzed data. ^{20}F , ^{24}Na , ^{28}Al , ^{32}P , ^{36}Cl , 40 , ^{42}K , ^{46}Sc , ^{56}Mn , ^{60}Co , 64 , ^{66}Cu , ^{72}Ga , ^{76}As , ^{80}Br deduced primary E1, M1 transition strengths, level density parameters. Bethe, constant temperature Fermi gas models.

Keynumber: 1986HI05

Reference: J.Radioanal.Nucl.Chem. 105, 351 (1986)

Authors: P.Z.Hien, T.K.Mai, T.X.Quang, T.N.Thuy

Title: Determination of k_0 -Factors by Thermal Neutron Activation Technique

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{26}Mg , ^{51}V , ^{55}Mn , ^{56}Fe , ^{64}Ni , ^{59}Co , ^{63}Cu , ^{109}Ag , ^{196}Au , $^{202}\text{Hg}(n,\gamma)$, $E=\text{thermal}$; measured composite nuclear constant. Activation technique.

Keynumber: 1985VOZV

Reference: Proc.AIP Conf.Capture Gamma-Ray Spectroscopy and Related Topics, Knoxville, Tenn., (1984), S.Raman, Ed., AIP, New York, p.305 (1985)

Authors: T.von Egidy, P.Hungerford, H.H.Schmidt, H.J.Scheerer, A.N.Behkami, G.Hlawatsch, B.Krusche, K.P.Lieb, H.G.Borner, S.A.Kerr, K.Schreckenbach

Title: Structural and Statistical Aspects of Extensive Level Schemes from (n,γ) and Transfer Reactions

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{23}Na , ^{27}Al , ^{35}Cl , 39 , 40 , ^{41}K , ^{113}Cd , ^{133}Cs , ^{154}Sm , ^{153}Eu , ^{154}Gd , 160 , $^{162}\text{Dy}(n,\gamma)$, (n,e) , E not given; measured not given. ^{20}F , ^{24}Na , ^{28}Al , ^{36}Cl , 40 , 41 , ^{42}K , ^{114}Cd , ^{134}Cs , ^{155}Sm , ^{154}Eu , ^{155}Gd , 161 , ^{163}Dy deduced levels, γ -transition multipolarity, strength distribution.

Keynumber: 1985EL10

Reference: J.Phys.(London) D18, 1967 (1985)

Authors: T.Elnimr, F.A.El-Hussiny

Title: Further Work on the Use of $K(e,0)$ Factors as a Tool for a Critical Evaluation of Reactor Thermal and Epithermal (n,γ) Cross Sections and of Absolute Gamma Intensities

Keyword abstract: NUCLEAR REACTIONS Mg , ^{27}Al , Ca , ^{45}Sc , Fe , Ga , ^{75}As , S , Se , Br , Ru , Rh (n,γ) , $E=\text{thermal, epithermal}$; analyzed $(K(e,0))$ factors data; deduced reaction σ , absolute I_γ .

Keynumber: 1984WI15

Reference: Nucl.Sci.Eng. 88, 594 (1984)

Authors: K.Wisshak, F.Kappeler, G.Reffo

Title: The Capture Width of the 34.8-keV s-Wave Neutron Resonance in ^{27}Al

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,n)$, (n,γ) , $E=34.8\text{ keV}$; measured $\sigma(E_n)$, E_γ , I_γ . ^{28}Al deduced s-wave resonance capture Γ_γ .

Keynumber: 1984KAZH

Reference: Proc.5th Seminar on Precise Measurements in Nucl.Spectrosc., Vilnius, p.3 (1984)

Authors: L.P.Kabina, I.A.Kondurov, P.A.Sushkov

Title: Precise Determination of Gamma-Quantum and Level Energies of ^{28}Al Nucleus from $^{27}\text{Al}(n,\gamma)$ Reaction using Data of Several Measurements

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, $E=\text{thermal}$; measured E_γ . ^{28}Al deduced levels. Ge(Li) detectors.

Keynumber: 1983SA30

Reference: Aust.J.Phys. 36, 583 (1983)

Authors: D.G.Sargood

Title: Effect of Excited States on Thermonuclear Reaction Rates

Keyword abstract: NUCLEAR REACTIONS, ICPND 20 , 21 , ^{22}Ne , ^{23}Na , 24 , 25 , ^{26}Mg , ^{27}Al , 28 , 29 , ^{30}Si , ^{31}P , 32 , 33 , 34 , ^{36}S , 35 , ^{37}Cl , 36 , 38 , ^{40}Ar , 39 , 40 , ^{41}K , 40 , 42 , 43 , 44 , 46 , ^{48}Ca , ^{45}Sc , 46 , 47 , 48 , 49 , ^{50}Ti , 50 , ^{51}V , 50 , 52 , 53 , ^{54}Cr , ^{55}Mn , 54 , 56 , 57 , ^{58}Fe , ^{59}Co , 58 , 60 , 61 , 62 , ^{64}Ni , 63 , ^{65}Cu , 64 , 66 , $^{67}\text{Zn}(n,\gamma)$, (n,p) , (n,α) , (p,γ) , (p,n) , (p,α) , (α,γ) , (α,n) , (α,p) , $^{70}\text{Zn}(p,\gamma)$, (p,n) , (p,α) , (α,γ) , (α,n) , (α,p) , $E=\text{low}$;

compiled target thermal distribution energy state to ground state thermonuclear reaction rate of reaction σ vs temperature. Statistical model.

Keynumber: 1982SH27

Reference: Chin.J.Nucl.Phys. 4, 88 (1982)

Authors: Shi Zongren, Zeng Xiantang, Guo Taichang

Title: Direct Capture Mechanism of $^{27}\text{Al}(n,\gamma)$ Reaction at Thermal Energy

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$,E=thermal; measured $E\gamma$, $I\gamma$; deduced reaction mechanism. ^{28}Al levels deduced possible J, π .

Keynumber: 1982SC14

Reference: Phys.Rev. C25, 2888 (1982)

Authors: H.H.Schmidt, P.Hungerford, H.Daniel, T.von Egidy, S.A.Kerr, R.Brissot, G.Barreau, H.G.Borner, C.Hofmeyr, K.P.Lieb

Title: Levels and Gamma Energies of ^{28}Al Studied by Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$,E=thermal; measured $E\gamma$, $I\gamma$. ^{28}Al deduced levels,J, π ,neutron binding energy. Cystal spectrometer,Ge(Li) detector.

Keyword abstract: RADIOACTIVITY ^{28}Al [from $^{27}\text{Al}(n,\gamma)$,E=thermal]; measured $E\gamma$, $I\gamma$ following β -decay. ^{28}Si deduced transition energy. Crystal spectrometer,Ge(Li) detector.

Keynumber: 1980PIZN

Coden: CONF Kiev(Neutron Physics) Proc,Part3,P270,Pisanko

Keyword abstract: NUCLEAR REACTIONS $^{22,23}\text{Na}$, Mg , $^{24,25,26}\text{Mg}$, ^{27}Al , Si , $^{28,29,30}\text{Si}$, ^{31}P , S , $^{32,33,34}\text{S}$, Cl , $^{35,36,37}\text{Cl}$, Ar , $^{36,38,40}\text{Ar}$, K , $^{39,40,41}\text{K}$, Ca , $^{40,42,43,44,46,48}\text{Ca}$, $^{45,46}\text{Sc}$, Ti , $^{46,47,48,49,50}\text{Ti}$, V , $^{50,51}\text{V}$, Cr , $^{50,52,53,54}\text{Cr}$, Fe , $^{54,56,57,58}\text{Fe}$, ^{59}Co , Ni , $^{58,59,60,61,62,64}\text{Ni}$, Cu , $^{63,65}\text{Cu}$, Zn , $^{64,66,67,68,70}\text{Zn}$, Ga , $^{69,71}\text{Ga}(n,\gamma)$, (n,n), (n, α),E=thermal; evaluated σ ,radiative capture resonance integrals.

Keynumber: 1980IS02

Reference: Can.J.Phys. 58, 168 (1980)

Authors: M.A.Islam, T.J.Kennett, S.A.Kerr, W.V.Prestwich

Title: A Self-Consistent Set of Neutron Separation Energies

Keyword abstract: NUCLEAR REACTIONS ^1H , ^9Be , ^{14}N , $^{24,25}\text{Mg}$, ^{27}Al , $^{28,29}\text{Si}$, ^{32}S , ^{35}Cl , $^{40,44}\text{Ca}$, $^{47,48,49}\text{Ti}$, $^{50,52,53}\text{Cr}$, ^{55}Mn , $^{54,56,57}\text{Fe}(n,\gamma)$,E=thermal; measured $E\gamma$, $I\gamma$. ^2H , ^{10}Be , $^{25,26}\text{Mg}$, ^{28}Al , $^{29,30}\text{Si}$, ^{33}S , ^{36}Cl , $^{41,45}\text{Ca}$, $^{48,49,50}\text{Ti}$, $^{51,53,54}\text{Cr}$, ^{56}Mn , $^{55,57,58}\text{Fe}$ deduced Q,neutron binding energy.

Keynumber: 1980DE19

Reference: Nucl.Phys. A341, 21 (1980)

Authors: P.P.J.Delheij, A.Girgin, K.Abrahams, H.Postma, W.J.Huiskamp

Title: The $^{27}\text{Al}(n,\gamma)^{28}\text{Al}$ Reaction Studied with Polarized Neutrons and Polarized Aluminium Nuclei

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(\text{polarized } n,\gamma)$,E=0.017 eV; measured $I\gamma(\theta)$, γ -CP. ^{28}Al levels deduced J, δ . Natural polarized,unpolarized targets.

Keynumber: 1980AL19

Reference: J.Phys.(London) G6, 1173 (1980)

Authors: B.J.Allen, D.D.Cohen, F.Z.Company

Title: Radiative Widths of Neutron Scattering Resonances

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{24}Mg , ^{27}Al , ^{28}Si , ^{56}Fe , $^{207}\text{Pb}(n,\gamma)$, $E=20-80$ keV; measured $\sigma(E\gamma, E)$. ^{20}F , ^{25}Mg , ^{28}Al , ^{29}Si , ^{57}Fe , ^{208}Pb deduced resonances, $\Gamma_n, L, J, \pi, \Gamma\gamma$. Moxon-Rae detectors, Monte-Carlo analysis.

Keynumber: 1979SUZQ

Coden: CONF Riga,P48,Sushkov

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, $E=\text{thermal}$; analyzed $E\gamma$. ^{28}Al deduced levels.

Keynumber: 1979KAYU

Coden: CONF Riga,P511,Kabina

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , $^{123}\text{Sb}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma$. ^{28}Al deduced transitions.

Keynumber: 1979BUZS

Coden: REPT INDC(YUG)-6/L,Budnar

Keyword abstract: NUCLEAR REACTIONS Mg , ^{27}Al , Si , ^{31}P , S , Ca , ^{45}Sc , ^{51}V , Cr , ^{55}Mn , Fe , ^{59}Co , Cu , Se , Br , Sr , ^{89}Y , In , Sb , ^{127}I , Ba , ^{141}Pr , ^{165}Ho , ^{181}Ta , W , Tl , Pb , $^{209}\text{Bi}(n,\gamma)$, $E=14.6$ MeV; measured $\sigma(E\gamma)$.

Keynumber: 1979BR25

Reference: Nucl.Instrum.Methods 166, 243 (1979)

Authors: F.Braumandl, K.Schreckenbach, T.von Egidy

Title: Precision Measurements of Neutron Binding Energies of ^{28}Al , ^{92}Zr , ^{114}Cd , ^{165}Dy , ^{168}Er , ^{200}Hg and ^{239}U

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{91}Zr , ^{113}Cd , ^{164}Dy , ^{167}Er , ^{199}Hg , ^{238}U (n,γ), $E=\text{reactor}$; measured $E\gamma, I(\text{ce})$. ^{28}Al , ^{92}Zr , ^{114}Cd , ^{165}Dy , ^{168}Er , ^{200}Hg , ^{239}U deduced $B(n)$. Bent crystal Gams, pair, β -spectrometers.

Keynumber: 1978KEZW

Coden: CONF Brookhaven(Neutron Capt γ -Ray Spectr),Proc,P649,Kenny

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, $E=5.9$ keV; measured $\Gamma\gamma$. ^{28}Al resonance deduced π, p -wave character, γ -branching.

Keynumber: 1978KEZS

Coden: CONF BNL(Neutron Capt γ -Ray Spectr),Contrib,No40,Kenny

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, $E=5.904$ keV; measured $E\gamma, I\gamma$. ^{28}Al deduced $J, \pi, \Gamma\gamma, \gamma$ -branching.

Keynumber: 1978DEYX

Coden: CONF Brookhaven(Neutron Capt γ -Ray Spectr),Proc,P597,Delheij

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(\text{polarized } n,\gamma)$, $E=\text{thermal}$; measured γ -ray CP, $I\gamma(\theta), E\gamma$. ^{28}Al deduced levels, J, π, δ . Polarized, unpolarized target.

Keynumber: 1978DEYW

Coden: CONF BNL(Neutron Capt γ -Ray Spectr),Contrib,No22,Delheij

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(\text{polarized } n,\gamma)$, $E=\text{th}$; measured $E\gamma, \text{CP}\gamma, \sigma(\theta)$. ^{28}Al

levels deduced J. Evidence for M2,E1 mixing. Unpolarized,polarized targets.

Keynumber: 1977CL03

Reference: Phys.Lett. 71B, 10 (1977)

Authors: C.F.Clement, A.M.Lane, J.Kopecky

Title: Correlations in M1 Neutron Capture as Evidence for a Semi-Direct Mechanism

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{23}Na , ^{25}Mg , ^{27}Al , ^{29}Si , ^{31}P , 35 , ^{37}Cl , ^{39}K , ^{43}Ca (n, γ), (d,p); analyzed correlations between reaction types.

Keynumber: 1976MO29

Reference: Nucl.Sci.Eng. 61, 337 (1976)

Authors: G.L.Morgan, F.G.Perey

Title: Cross Sections for the Al(n,xn) and Al(n,x γ) Reactions between 1 and 20 MeV

Keyword abstract: NUCLEAR REACTIONS ^{27}Al (n,xn), (n, γ),E=1-20 MeV; measured σ (E).

Keynumber: 1975YOZW

Coden: REPT LA-UR-75-317,mf

Keyword abstract: NUCLEAR REACTIONS ^{14}N , ^{27}Al , ^{56}Fe ,Mo, ^{93}Nb , ^{181}Ta ,W, ^{238}U (n, γ),E=thermal,14 MeV; calculated σ .

Keynumber: 1975SI05

Reference: Phys.Rev. C11, 1117 (1975)

Authors: U.N.Singh, J.Rainwater, H.I.Liou, G.Hacken, J.B.Garg

Title: Neutron Resonance Spectroscopy: Aluminum

Keyword abstract: NUCLEAR REACTIONS ^{27}Al (n,n), (n, γ),E=4-420 keV; measured total σ (E), σ (E,E γ). ^{28}Al deduced resonances,J,L,n-width,S.

Keynumber: 1975ALZW

Coden: JOUR BAPSA 20 150 EB16

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{28}Si , ^{40}Ca , ^{48}Ti , ^{52}Cr , ^{90}Zr , ^{138}Ba (n, γ),E >2.5 keV; measured σ (E γ).

Keynumber: 1974RIZD

Coden: CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P151

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{50}Ti , ^{51}V , ^{103}Rh , ^{127}I , ^{139}La (n, γ),E=14.6 MeV; measured σ (E γ).

Keynumber: 1974RI14

Reference: Nucl.Sci.Eng. 55, 17 (1974)

Authors: F.Rigaud, M.G.Desthuilliers, G.Y.Petit, J.L.Irigaray, G.Longo, F.Saporetti

Title: Improved Activation Measurements of (n, γ) Cross Section for 14.6-MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{50}Ti , ^{51}V , ^{103}Rh , ^{127}I , ^{139}La (n, γ),E=14.6 MeV; measured σ .

Keynumber: 1974ISZX

Coden: THESIS DABBB 34B 5613

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{23}Na , ^{27}Al , ^{31}P , ^{35}Cl , ^{39}K (n, γ),E=thermal; measured E γ ,I γ . ^{20}F , ^{24}Na , ^{28}Al , ^{32}P , ^{36}Cl , ^{40}K deduced levels,Q, γ -multiplicity,level-width.

Keynumber: 1974CO23

Reference: Nucl.Instrum.Methods 116, 251 (1974)

Authors: A.H.Colenbrander, T.J.Kennett

Title: The Application of a Statistical Description for Complex Spectra to the (n, γ) Reaction

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{45}Sc , ^{55}Mn , ^{59}Co , ^{63}Cu , ^{75}As , ^{103}Rh , ^{109}Ag , ^{115}In , ^{133}Cs , ^{185}Re , ^{197}Au , $^{203}\text{Tl}(n,\gamma)$; measured $E\gamma, I\gamma$. ^{28}Al , ^{46}Sc , ^{56}Mn , ^{60}Co , ^{64}Cu , ^{76}As , ^{104}Rh , ^{110}Ag , ^{116}In , ^{134}Cs , ^{186}Re , ^{198}Au , ^{204}Tl deduced nuclear temperature, level densities.

Keynumber: 1972VOZM

Coden: REPT KFK-1676 P6

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , $^{57}\text{Fe}(n,\gamma)$; measured $\sigma(E)$, γ -production.

Keynumber: 1972ST04

Reference: Nucl.Phys. A181, 225 (1972)

Authors: F.Stecher-Rasmussen, K.Abrahams, J.Kopecky

Title: Circular Polarization of Neutron Capture γ -Rays from Al, Ar and Ca

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{40}Ar , ^{40}Ca , $^{44}\text{Ca}(polarized\ n,\gamma)$; $E=thermal$; measured γ -CP. ^{28}Al , ^{41}Ar , ^{41}Ca , ^{45}Ca levels deduced J,π . ^{28}Al transition deduced γ -mixing. Natural targets.

Keynumber: 1972HOYX

Coden: CONF Budapest, Contributions, P258, E Holub, 10/13/72

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{27}Al , ^{37}Cl , $^{51}\text{V}(n,\gamma)$, $E=14\text{ MeV}$; measured σ .

Keynumber: 1972CAYH

Coden: JOUR FZKAA 4 Suppl, 59

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{27}Al , ^{37}Cl , ^{55}Mn , ^{41}K , $^{127}\text{I}(n,\gamma)$, $E=14\text{ MeV}$; measured activation σ .

Keynumber: 1971SIZK

Coden: REPT BNL-50298, P47, 10/21/71

Keyword abstract: NUCLEAR REACTIONS ^{19}F , $^{27}\text{Al}(n,\gamma)$, $E < 300\text{ keV}$; measured σ . ^{20}F , ^{28}Al deduced resonances, J,π , level-width.

Keynumber: 1971RYZZ

Reference: Proc.Int.Conf.Chemical Nuclear Data, Measurements and Applications, Canterbury, England, M.L.Hurrell, Ed., Institution of Civil Engineers, London, p.139 (1971)

Authors: T.B.Ryves

Title: Thermal Neutron Capture Cross Section Measurements at the NPL

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{26}Mg , ^{27}Al , ^{30}Si , ^{37}Cl , ^{41}K , ^{50}Ti , ^{51}V , ^{58}Fe , ^{64}Ni , ^{63}Cu , ^{65}Cu , ^{69}Ga , ^{71}Ga , ^{75}As , ^{79}Br , ^{81}Br , ^{89}Y , ^{107}Ag , ^{109}Ag , ^{115}In , ^{121}Sb , ^{123}Sb , ^{127}I , ^{139}La , ^{151}Eu , ^{196}Pt , ^{198}Pt (n, γ), $E=thermal$; measured σ .

Keynumber: 1971RYZX

Coden: CONF Canterbury(Chem Nucl Data), P139, 12/10/72

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{26}Mg , ^{27}Al , ^{30}Si , ^{37}Cl , ^{41}K , ^{50}Ti , ^{51}V , ^{58}Fe , ^{64}Ni , ^{63}Cu , ^{65}Cu , ^{69}Ga , ^{71}Ga , ^{75}As , ^{79}Br , ^{81}Br , ^{89}Y , ^{107}Ag , ^{109}Ag , ^{115}In , ^{121}Sb , ^{123}Sb , ^{127}I , ^{139}La , ^{151}Eu , ^{196}Pt , ^{198}Pt (n, γ), $E=thermal$; measured σ ; deduced resonance integrals.

Keynumber: 1971RAZF

Reference: INR-1262 (1971)

Authors: W.Ratynski

Title: Circular Polarization of Gamma Rays

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , $^{69, 71}\text{Ga}$, $^{182, 183}\text{W}$, $^{186}\text{W}(n,\gamma)$, E=thermal; measured γ -polarization. ^{28}Al , $^{70, 72}\text{Ga}$, $^{183, 184, 187}\text{W}$ levels deduced J, π .

Keynumber: 1971LEZH

Coden: REPT INDC(SEC)-18/L,P18,12/30/71

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, measured E γ , I γ . ^{28}Al deduced levels, γ -branching.

Keynumber: 1970SP02

Reference: Nucl.Phys. A145, 449 (1970)

Authors: A.M.J.Spits, A.M.F. Op den Kamp, H.Gruppelaar

Title: Gamma Rays from Thermal-Neutron Capture in Natural and ^{28}Si Enriched Silicon

Keyword abstract: NUCLEAR REACTIONS $^{28, 29, 30}\text{Si}$, ^6Li , ^{14}N , ^{19}F , ^{27}Al , $^{54, 56}\text{Fe}$, $^{207}\text{Pb}(n,\gamma)$, E=thermal; $^{28}\text{Si}(n,n'\gamma)$, E=fast; measured E γ , I γ ; deduced Q. $^{29, 30, 31}\text{Si}$ deduced levels, γ -branching. Natural, ^{28}Si enriched targets, Ge(Li) detector.

Keynumber: 1970RY05

Reference: J.Nucl.Energy 24, 419 (1970)

Authors: T.B.Ryves, D.R.Perkins

Title: Thermal Neutron Capture Cross-Section Measurements for ^{23}Na , ^{27}Al , ^{37}Cl and ^{51}V

Keyword abstract: RADIOACTIVITY ^{28}Al , ^{52}V ; measured T $_{1/2}$.

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{27}Al , ^{37}Cl , $^{51}\text{V}(n,\gamma)$, E=thermal; measured σ .

Keynumber: 1970JAZN

Coden: REPT PH-7,J Jafar

Keyword abstract: NUCLEAR REACTIONS ^{20}Ne , ^{24}Mg , ^{30}Si , ^{32}S , ^{34}S , ^{36}Ar , ^{40}Ca , ^{27}Al (n, γ), E=thermal; surveyed, analyzed E γ , I γ data. ^{21}Ne , ^{25}Mg , ^{31}Si , $^{33, 35}\text{S}$, ^{37}Ar , ^{41}Ca , ^{28}Al deduced levels, γ -branching.

Keynumber: 1970CV01

Reference: Nucl.Phys. A158, 251 (1970)

Authors: F.Cvelbar, A.Hudoklin, M.Potokar

Title: Comparison between the Activation Cross Sections and Integrated Cross Sections for the Radiative Capture of 14 MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS Mg, ^{27}Al , Si, ^{31}P , ^{32}S , ^{40}Ca , ^{51}V , ^{52}Cr , ^{55}Mn , Fe, Cu, Br, Se, ^{115}In , ^{127}I , Ba(n, γ), E=14 MeV; measured $\sigma(E\gamma)$; deduced integrated σ .

Keynumber: 1970BO12

Reference: Nucl.Instrum.Methods 83, 29 (1970)

Authors: J.F.Boulter, W.V.Prestwich, B.Arad

Title: A Two Parameter Centroid Shift Method for Measuring Nuclear Lifetimes

Keyword abstract: RADIOACTIVITY ^{203}Hg ; measured $\beta\gamma$ -delay. ^{203}Tl level deduced T $_{1/2}$.

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, E=thermal; measured $\gamma\gamma$ -delay. ^{28}Al level deduced $T_{1/2}$.

Keynumber: 1969NI04

Reference: Can.J.Phys. 47, 953 (1969)

Authors: L.W.Nichol, A.H.Colenbrander, T.J.Kennett

Title: A Study of the $^{23}\text{Na}(n,\gamma)^{24}\text{Na}$ and $^{27}\text{Al}(n,\gamma)^{28}\text{Al}$ Reactions

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , $^{27}\text{Al}(n,\gamma)$, E=thermal; measured $E\gamma, I\gamma$; deduced Q. ^{24}Na , ^{28}Al deduced levels.

Keynumber: 1969KE15

Reference: Yadern.Fiz. 10, 907 (1969); Soviet J.Nucl.Phys. 10, 524 (1970)

Authors: J.Kecskemeti, D.Kiss

Title: Measurement of Average Multiplicity in (n,γ) Reactions Induced by Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{27}Al , ^{31}P , ^{32}S , ^{35}Cl , ^{48}Ti , ^{51}V , ^{53}Cr , ^{52}Cr , ^{55}Mn , ^{56}Fe , ^{59}Co , ^{60}Ni , Ni, Cu, ^{63}Cu , Ge, ^{73}Ge , ^{75}As , Se, Br, Sr, Zr, ^{93}Nb , Mo, ^{103}Rh , Ag (n,γ) E=thermal; measured average γ multiplicity.

Keynumber: 1969HOZY

Reference: Thesis, Technische Hogeschool, Delft (1969)

Authors: W.Hoekstra

Title: Gamma Rays from ^{28}Al , 186 , ^{188}Re , ^{233}Th and ^{233}Pa , Following Neutron Capture

Keyword abstract: RADIOACTIVITY ^{237}Np ; measured $E\alpha$, $E\gamma$, $I\gamma$, $I(\text{ce})$, $\alpha\gamma$ -, αce -coin. ^{233}Pa deduced levels.

Keyword abstract: NUCLEAR REACTIONS ^{35}Cl , ^{27}Al , 185 , ^{187}Re , $^{232}\text{Th}(n,\gamma)$, E = thermal; measured $E\gamma$, $I\gamma$; 185 , $^{187}\text{Re}(n,\gamma)$ deduced Q. ^{36}Cl , ^{28}Al , 186 , ^{188}Re , ^{233}Th , deduced levels. ^{233}Th [from $^{232}\text{Th}(n,\gamma)$]; measured $T_{1/2}$, $E\gamma, I\gamma$, $\gamma\gamma$ -coin. ^{233}Pa deduced levels. Ge(Li) detector.

Keynumber: 1969HO12

Reference: Phys.Rev. 178, 1746 (1969)

Authors: R.W.Hockenbury, Z.M.Bartolome, J.R.Tatarczuk, W.R.Moyer, R.C.Block

Title: Neutron Radiative Capture in Na, Al, Fe, and Ni from 1 to 200 keV

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{27}Al , 54 , 56 , 57 , ^{58}Fe , 58 , 60 , 61 , 62 , $^{64}\text{Ni}(n,\gamma)$, E=0.1-200 keV; measured $\sigma(E)$. ^{24}Na , ^{28}Al , 55 , 57 , 58 , ^{59}Fe , 59 , 61 , 62 , 63 , ^{65}Ni deduced resonance parameters.

Keynumber: 1969HA09

Reference: Nucl.Phys. A126, 392(1969)

Authors: R.Hardell, S.O.Idetjarn, H.Ahlgren

Title: Thermal-Neutron Capture Gamma Rays from the $^{27}\text{Al}(n,\gamma)^{28}\text{Al}$ Reaction

Keyword abstract: NUCLEAR REACTIONS $^{27}\text{Al}(n,\gamma)$, E=thermal; measured $E\gamma$, $I\gamma$; deduced Q. ^{28}Al deduced levels, γ -branching. Natural target.

Keynumber: 1969EI01

Reference: Z.Physik 219, 114 (1969)

Authors: J.Eichler

Title: Messung der Zirkularen Polarisation von γ -Strahlung nach Einfang Polarisierter Thermischer

Neutronen in Kernen

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{59}Co , Mo , $\text{Sm}(n, \gamma)$, $E=\text{thermal}$; measured circular polarization; ^{28}Al levels deduced γ -mixing. ^{60}Co , ^{96}Mo , ^{150}Sm levels, deduced J , π .

Keynumber: 1968KA33

Reference: Osterr.Akad.Wiss., Math.-Naturw.Kl., Anz. No.10, 1 (1968)

Authors: B.Karlik

Title: Messungeiniger Einfangsquerschnitte für schnelle Neutronen

Keyword abstract: NUCLEAR REACTIONS ^{26}Mg , ^{27}Al , ^{37}Cl , ^{51}V , ^{55}Mn , ^{65}Cu , ^{68}Zn , ^{75}As , ^{115}In , ^{127}I , $^{138}\text{Ba}(n, \gamma)$, $E=2.9\text{ MeV}$; measured σ .

Keynumber: 1968DI03

Reference: Nucl.Phys. A111, 360(1968)

Authors: H.Dinter

Title: Gammaspektren und Wirkungsquerschnitte beim Einfang von 14 MeV Neutronen in ^{27}Al und ^{127}I

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , $^{127}\text{I}(n, \gamma)$, $E=14\text{ MeV}$; measured $\sigma(E\gamma)$; deduced reaction mechanism. Natural targets.

Keynumber: 1968COZW

Coden: REPT UCRL-tr-10603, J Colditz, 1/3/73

Keyword abstract: NUCLEAR REACTIONS ^{26}Mg , ^{27}Al , ^{37}Cl , ^{51}V , ^{55}Mn , ^{65}Cu , ^{66}Zn , ^{75}As , ^{115}In , ^{127}I , $^{138}\text{Ba}(n, \gamma)$, $E=2.9\text{ MeV}$; measured σ .

Keynumber: 1967RA24

Reference: Proc.Intern.Conf.Atomic Masses, 3rd, Winnipeg, Canada, R.C.Barber, Ed., Univ.Manitoba Press, p.278(1967)

Authors: N.C.Rasmussen, V.J.Orphan, Y.Hukai

Title: Determination of (n, γ) Reaction Q Values from Capture γ -Ray Spectra

Keyword abstract: NUCLEAR REACTIONS ^6Li , ^7Li , ^9Be , ^{10}B , ^{12}C , ^{14}N , ^{19}F , ^{23}Na , ^{24}Mg , ^{25}Mg , ^{26}Mg , ^{27}Al , ^{28}Si , ^{31}P , ^{32}S , ^{35}Cl , ^{40}Ca , ^{45}Sc , ^{48}Ti , ^{51}V , ^{55}Mn , ^{54}Fe , ^{56}Fe , ^{59}Co , ^{58}Ni , ^{60}Ni , ^{63}Cu , ^{65}Cu , ^{66}Zn , ^{67}Zn , ^{73}Ge , ^{76}Se , ^{85}Rb , ^{87}Rb , ^{89}Y , ^{93}Nb , ^{103}Rh , ^{113}Cd , ^{123}Te , ^{133}Cs , ^{139}La , ^{141}Pr , ^{149}Sm , ^{153}Eu , ^{157}Gd , ^{159}Tb , ^{165}Ho , ^{167}Er , ^{169}Tm , ^{181}Ta , ^{182}W , ^{195}Pt , ^{197}Au , ^{199}Hg , ^{203}Tl , $^{207}\text{Pb}(n, \gamma)$, $E = \text{thermal}$; measured $E\gamma$; deduced Q. Natural targets.

Keynumber: 1967CS01

Reference: Nucl.Phys. A95, 229(1967)

Authors: J.Csikai, G.Peto, M.Buczko, Z.Miligy, N.A.Eissa

Title: Radiative Capture Cross Sections for 14.7 MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{30}Si , ^{31}P , ^{45}Sc , ^{48}Ca , ^{50}Ti , ^{51}V , ^{89}Y , ^{123}Sb , ^{139}La , $^{209}\text{Bi}(n, \gamma)$, $E = 14.7\text{ MeV}$; measured σ . ^{23}Na , ^{55}Mn , ^{103}Rh , ^{141}Pr , ^{165}Ho , $^{208}\text{Pb}(n, \gamma)$, $E = 13.4\text{-}15.0\text{ MeV}$; measured $\sigma(E)$. $^{103}\text{Rh}(n, \gamma)$, $E = 13.4\text{-}15.0\text{ MeV}$; measured $\sigma(g)/\sigma(M)$; deduced spin cutoff parameter. Enriched ^{30}Si , ^{48}Ca targets.

Keynumber: 1967BE36

Reference: Phys.Rev. 158, 1049(1967)

Authors: I.Bergqvist, J.A.Biggerstaff, J.H.Gibbons, W.M.Good

Title: Gamma Rays from keV Resonance Neutron Capture in Some (2s-1d)-Shell Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{23}Na , ^{24}Mg , ^{27}Al , ^{32}S , $^{35}\text{Cl}(n,\gamma)$, $E=20-120$ keV; measured $E\gamma, I\gamma$. ^{20}F , ^{24}Na , ^{25}Mg , ^{28}Al , ^{33}S , ^{36}Cl deduced resonances, level-width, J, π .
