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**121 reference(s) found :**

**Keynumber:** 2001GRZX

**Reference:** INDC(CCP)-430, p.7 (2001)

**Authors:** Yu.V.Grigoriev, V.V.Sinitisa, S.B.Borzakov, G.L.Ilchev, H.Faikov-Stanczyk, Ts.Ts.Pantelev, N.B.Yaneva

**Title:** Study of Neutron Cross-Sections and the  $\alpha = \sigma\gamma/\sigma_f$  Value for U-235 in the 1meV-2 eV Energy Range

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E < 2$  eV; measured  $E\gamma, I\gamma$ ; deduced ratio of capture to fission  $\sigma$ . Comparisons with previous results.

**Keynumber:** 1999HO33

**Reference:** Pure Appl.Chem. 71, 2309 (1999)

**Authors:** N.E.Holden

**Title:** Temperature Dependence of the Westcott g-Factor for Neutron Reactions in Activation Analysis (Technical Report)

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{113}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{135}\text{Xe}$ ,  $^{148}\text{Pm}$ ,  $^{149}$ ,  $^{151}\text{Sm}$ ,  $^{151}$ ,  $^{152}$ ,  $^{153}$ ,  $^{154}$ ,  $^{155}\text{Eu}$ ,  $^{155}$ ,  $^{157}\text{Gd}$ ,  $^{164}\text{Dy}$ ,  $^{175}$ ,  $^{176}\text{Lu}$ ,  $^{177}\text{Hf}$ ,  $^{182}\text{Ta}$ ,  $^{185}$ ,  $^{187}\text{Re}$ ,  $^{197}\text{Au}$ ,  $^{231}$ ,  $^{233}\text{Pa}$ ,  $^{235}$ ,  $^{238}\text{U}$   $(n,\gamma)$ ,  $E=\text{low}$ ; calculated Westcott g-factors vs temperature.

**Keynumber:** 1999CAZV

**Reference:** INDC(CPR)-048/L, p.16 (1999)

**Authors:** C.Cai, Q.Shen, B.Yu

**Title:** Calculations of Complete Data for  $n + ^{235}\text{U}$  in the Energy Region 0.001  $\vartheta$  20 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,n)$ ,  $(n,n')$ ,  $(n,F)$ ,  $(n,\gamma)$ ,  $(n,2n)$ ,  $E=0.001-20$  MeV; calculated  $\sigma$ , elastic scattering  $\sigma(\theta)$ , neutron energy distributions following inelastic scattering, fission, 2-neutron evaporation. coupled-channel calculations. Comparison to data.

**Keynumber:** 1999BOZS

**Reference:** Proc.7th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, p.158 (1999)

**Authors:** S.B.Borzakov, H.Faikow-Stanczyk, Ts.Ts.Pantelev, L.Panteleva, Yu.V.Grigoriev, L.M.Smotritsky

**Title:** Study of the Gamma-Ray Spectra from Thermal Neutron Radiative Capture by Sn-117 and U-235

**Keyword abstract:** NUCLEAR REACTIONS  $^{117}\text{Sn}$ ,  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I\gamma$ ; deduced ratio of capture vs fission  $\sigma$ .

**Keynumber:** 1989MO21

**Reference:** Nucl.Phys. A502, 443c (1989)

**Authors:** M.S.Moore, L.C.Leal, G.de Saussure, R.B.Perez, N.M.Larson

**Title:** Resonance Structure in the Fission of  $(^{235}\text{U} + n)$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,F)$ ,  $(n,\gamma)$ ,  $(n,n)$ ,  $E=\text{low, resonance}$ ; analyzed data. R-matrix, Pattenden-Postma constraints.

**Keynumber:** 1989DE37

**Reference:** Nucl.Sci.Eng. 103, 109 (1989)

**Authors:** G.de Saussure, L.C.Leal, R.B.Perez, N.M.Larson, M.S.Moore

**Title:** A New Resonance Region Evaluation of Neutron Cross Sections for  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,F)$ ,  $(n,\gamma)$ ,  $E \leq 110$  eV; calculated fission, capture  $\sigma$  (E).

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**Keynumber:** 1988FIZS

**Reference:** INDC(CCP)-294/G, p.56 (1988)

**Authors:** A.A.Filatenkov, M.V.Blinov, S.V.Chuvaev, V.M.Saidgareev

**Title:**  $\gamma$ -Quanta Production Cross Section from the Interaction of 3 MeV Neutrons with  $^{232}\text{Th}$ ,  $^{235}\text{U}$  and  $^{238}\text{U}$  Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{232}\text{Th}$ ,  $^{235}$ ,  $^{238}\text{U}(n,\gamma)$ ,  $E=3$  MeV; measured  $E\gamma$ ,  $I\gamma$ , production  $\sigma$  following fission fragment decay.  $^{84}\text{Se}$ ,  $^{87}\text{Br}$ ,  $^{88}$ ,  $^{90}\text{Kr}$ ,  $^{92}$ ,  $^{94}$ ,  $^{95}$ ,  $^{96}\text{Sr}$ ,  $^{98}$ ,  $^{100}\text{Zr}$ ,  $^{102}\text{Mo}$ ,  $^{134}\text{Te}$ ,  $^{140}$ ,  $^{138}\text{Xe}$ ,  $^{142}\text{Ba}$  deduced transitions.

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**Keynumber:** 1988BA73

**Reference:** Yad.Fiz. 48, 940 (1988)

**Authors:** A.L.Barabanov, D.P.Grechukhin

**Title:** Simultaneous Measurement in Polarization Experiment of the Resonance Spin and of K Distribution in this Resonance by Prompt-Fission-Neutron Yield

**Keyword abstract:** NUCLEAR REACTIONS  $^{237}\text{Np}$ ,  $^{233}$ ,  $^{235}\text{U}(\text{polarized } n,\gamma)$ ,  $E$  not given; calculated prompt  $\sigma(\theta_n)$  following fission. Polarized targets.

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**Keynumber:** 1988AD11

**Reference:** At.Energ. 65, 434 (1988); Sov.At.Energy 65, 1022 (1988)

**Authors:** Yu.V.Adamchuk, M.A.Voskanyan, G.Georgiev, A.L.Kovtun, G.V.Muradyan, N.Stancheva, N.Chikov, N.Yaneva, Yu.G.Shchepkin

**Title:** Measuring of  $^{235}\text{U}$   $\alpha$  Values at a Thermal Point

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E=\text{thermal}$ ; measured capture  $\gamma$ -spectra, fission neutron spectra; deduced  $\alpha$ -parameter.

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**Keynumber:** 1987PA31

**Reference:** Ann.Nucl.Energy 14, 623 (1987)

**Authors:** R.Paviotti Corcuera, M.De Moraes

**Title:** Validation of Actinide Nuclear Data from ENDF/B-V, INDL/A-83 and JENDL-2

**Keyword abstract:** NUCLEAR REACTIONS  $^{232}\text{Th}$ ,  $^{233}\text{Pa}$ ,  $^{233}$ ,  $^{234}$ ,  $^{235}$ ,  $^{236}$ ,  $^{238}\text{U}$ ,  $^{237}\text{Np}$ ,  $^{239}$ ,  $^{240}$ ,  $^{241}$ ,  $^{242}\text{Pu}$ ,  $^{241}$ ,  $^{242g}$ ,  $^{242m}$ ,  $^{243}\text{Am}$ ,  $^{242}$ ,  $^{243}$ ,  $^{244}$ ,  $^{245}$ ,  $^{246}$ ,  $^{247}\text{Cm}(n,n)$ ,  $(n,\gamma)$ ,  $(n,F)$ ,  $E=\text{fission spectrum}$ ; compiled, evaluated resonance integrals, average fission  $\sigma$ .

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**Keynumber:** 1987BEZS

**Reference:** JUL-Spez-403, p.45 (1987)

**Authors:** H.Bechteler, H.Faissner, H.Seyfarth, R.Yogeshwar

**Title:** Average E1, M1, E2 and M2 Mixture of the  $\gamma$  Radiation Emitted After Thermal Neutron Capture in  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{thermal}$ ; analyzed data; deduced  $\gamma$ -multipolarity, admixture.

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**Keynumber:** 1986SU17

**Reference:** Radiat.Eff. 95, 137 (1986)

**Authors:** Z.Su, X.Shi, C.Li, Y.Zhuang

**Title:** The Statistical Theory of Compound Nucleus Reaction and Nuclear Data Calculations

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ ,  $^{238}$ U,  $^{239}$ ,  $^{240}$ Pu,Hf,Zr,Cr(n,n), (n,n'), (n, $\gamma$ ),E=0.001-5 MeV; calculated  $\sigma(E,\theta)$ ,spectrum. Statistical theory.

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**Keynumber:** 1986GO34

**Reference:** At.Energ. 61, 456 (1986); Sov.At.Energy 61, 1061 (1986)

**Authors:** R.K.Goncharov, A.V.Zvonarev, V.I.Ivanov, Yu.A.Kazansky, B.V.Koloskov, M.N.Nikolaev, V.B.Pavlovich, B.A.Petrukhin, M.Yu.Semenov, N.V.Skorikov, E.Ya.Smetanin, A.M.Tsibulya, V.S.Shkolnik

**Title:** Comparison of  $^{235}$ U and  $^{239}$ Pu Alpha Values Obtained by Analysis of Irradiated BN-350 Reactor Fuel and by Calculation

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ U,  $^{239}$ Pu(n, $\gamma$ ), (n,F),E=fast; measured capture,fission  $\sigma$  ratio. Comparison with theory.

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**Keynumber:** 1985AD06

**Reference:** Nucl.Instrum.Methods 236, 105 (1985)

**Authors:** Yu.V.Adamchuk, A.L.Kovtun, G.V.Muradyan, Yu.G.Shchepkin, G.Georgiev, N.Kalinkova, E.Moravska, N.Stancheva, N.Tchikov, N.Janeva

**Title:** A Spectrometer for Measurement of the Neutron Capture Gamma Multiplicity at a Stationary Research Reactor

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ U(n, $\gamma$ ), (n,F),E=0.025 eV; measured capture to fission ratio, $\gamma$ -multiplicity. 4  $\pi$  geometry,multi-sectional NaI(Tl) scintillation detector.

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**Keynumber:** 1984MO12

**Reference:** Phys.Rev. C30, 214 (1984)

**Authors:** M.S.Moore, L.Calabretta, F.Corvi, H.Weigmann

**Title:** Analysis of Intermediate Structure in the Fission and Capture Cross Sections of ( $^{235}$ U+n)

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ U(n,F), (n, $\gamma$ ),E=2-32 keV; analyzed fission to capture  $\sigma(E)$  ratio; deduced intermediate structure role.

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**Keynumber:** 1984GU10

**Reference:** Phys.Rev. C30, 395 (1984)

**Authors:** R.K.Gupta, D.R.Saroha

**Title:** Hypothesis of Unchanged Charge Density and the Fragmentation Theory of Nuclear Fission

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ U(n, $\gamma$ ),E=thermal; calculated fission fragment charge dispersion; deduced deviation from unchanged charge density hypothesis.

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**Keynumber:** 1984ADZU

**Reference:** Proc.Conf.Neutron Physics, Kiev, Vol.2, p.137 (1984)

**Authors:** Yu.V.Adamchuk, M.A.Voskanyan, G.V.Muradyan, P.Yu.Simonov, Yu.G.Shchepkin

**Title:**

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ U(n, $\gamma$ ), (n,F),E=3.61,4.85,6.39,7.08,8.78,9.28,11.66,12.39,14.02,15.4,16.08,18.05,19.3,21.07,32.07 eV;  $^{239}$ Pu (n, $\gamma$ ), (n,F),E=7.82,10.93,11.89,14.31,14.68,17.66,22.29,26.24,44.48,52.6,55.63,57.44,65.71,74.05,74.95,106.6 eV; measured absolute capture,fission  $\sigma$  ratio. Tof technique,multiplicity spectrometric method.

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**Keynumber:** 1984AD12

**Reference:** At.Energ. 57, 251 (1984); Sov.At.Energy 57, 705 (1984)

**Authors:** Yu.V.Adamchuk, M.A.Voskanyan, G.V.Muradyan, P.Yu.Simonov, Yu.G.Shchepkin

**Title:** Measurement of the  $\alpha$  Value at  $^{235}\text{U}$  Resonances

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E=\text{resonance}$ ; measured fission to capture  $\sigma$  ratio. Activation technique, high precision multiplicity spectrometer.

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**Keynumber:** 1981SU10

**Reference:** Chin.J.Nucl.Phys. 3, 97 (1981)

**Authors:** Su Zongdi, Ma Zhongyu, Zhou Chunmei, Ding Xunliang, Lu Zhongdao, Ding Dazhao

**Title:** The Measurements, Evaluations and the Theoretical Analyses of the Cross Sections for the Neutron Radiative Capture Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}, ^{236}, ^{238}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $E \approx 0.001-10$  MeV;  $^{238}, ^{240}\text{Pu}(n,\gamma)$ ,  $E \approx 0.001-0.3$  MeV;  $^{233}\text{U}(n,\gamma)$ ,  $E \approx 0.002-1$  MeV; measured  $\sigma(E)$ .  $^{234}, ^{236}, ^{237}, ^{239}\text{U}$ ,  $^{239}, ^{240}, ^{241}\text{Pu}$  deduced neutron binding energy, average level widths. Statistical, direct semi-direct models.

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**Keynumber:** 1980MUZN

**Coden:** CONF Kiev(Neutron Physics) Proc, Part2, P119, Muradyan

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E=0.1-30$  keV; measured absolute capture, fission  $\sigma(E)$  ratio. Tof, multiplicity spectrometry method.

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**Keynumber:** 1980BE54

**Reference:** At.Energ. 49, 239 (1980); Sov.At.Energy 49, 690 (1981)

**Authors:** V.M.Bezotosnyi, V.M.Gorbachev, M.S.Shvetsov, L.M.Surov

**Title:** Group and Total Cross Sections of Formation of  $\gamma$ -Ray Quanta upon the Interaction of 14-MeV Neutrons with Various Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $\text{Cu}$ ,  $^{235}, ^{238}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $E=14$  MeV; measured total  $\sigma(E)$ ; deduced dependence on mass number.

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**Keynumber:** 1979MUZS

**Reference:** Bull.Am.Phys.Soc. 24, No.7, 876, EB6 (1979)

**Authors:** G.V.Muradyan, Yu.G.Shchepkin, Yu.V.Adamchuk, M.A.Voskanyan

**Title:** The Measurement of Absolute Value  $\alpha$  of U-235 within the Range of Neutron Energy of 0.1-30 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E=0.1-30$  keV; measured  $\sigma(n,\gamma)/\sigma(n,F)$ .

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**Keynumber:** 1979MAZJ

**Reference:** Bull.Am.Phys.Soc. 24, No.7, 883, FC11 (1979)

**Authors:** H.Matsunobu, Y.Kanda, M.Kawai, T.Murata, Y.Kikuchi

**Title:** Simultaneous Evaluation of Nuclear Data for Heavy Nuclides

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}, ^{238}\text{U}$ ,  $^{239}, ^{240}, ^{241}\text{Pu}(n,X)$ ,  $(n,\gamma)$ ,  $(n,n')$ ,  $(n,F)$ ,  $E=100$  eV-20 MeV; evaluated  $\sigma$ ; deduced optical model parameters. Optical, statistical model analysis.

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**Keynumber:** 1979HA54

**Reference:** Nucl.Sci.Eng. 72, 35 (1979)

**Authors:** L.F.Hansen, C.Wong, T.T.Komoto, B.A.Pohl, E.Goldberg, R.J.Howerton, W.M.Webster

**Title:** Neutron and Gamma-Ray Spectra from  $^{232}\text{Th}$ ,  $^{235}\text{U}$ ,  $^{238}\text{U}$ , and  $^{239}\text{Pu}$  after Bombardment with 14-MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{232}\text{Th}$ ,  $^{235}, ^{238}\text{U}$ ,  $^{239}\text{Pu}(n,n)$ ,  $(n,\gamma)$ ,  $E=14$  MeV; measured

$\sigma(E_n, E_\gamma)$ . Leakage spectra from pulsed spheres, tof, electron recoil technique.

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**Keynumber:** 1979BE26

**Reference:** Phys.Rev. C20, 201 (1979)

**Authors:** H.Beer, F.Kappeler

**Title:** Capture-to-Fission Ratio of  $^{235}\text{U}$  in the Neutron Range from 10 to 500 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,F)$ ,  $(n,\gamma)$ ,  $E=10\text{-}500$  keV; measured ratio of  $\sigma$ ; deduced average level spacing, energy difference between first, second well of double-humped fission barrier. Enriched target, tof technique.

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**Keynumber:** 1978ZA10

**Reference:** Yad.Fiz. 27, 1534 (1978); Sov.J.Nucl.Phys. 27, 808 (1978)

**Authors:** D.F.Zaretskii, V.K.Sirotkin

**Title:** Total Radiative Widths of Neutron Resonances

**Keyword abstract:** NUCLEAR REACTIONS  $^{35}\text{Cl}$ ,  $^{55}\text{Mn}$ ,  $^{68}\text{Zn}$ ,  $^{78}\text{Se}$ ,  $^{88}\text{Sr}$ ,  $^{96}\text{Mo}$ ,  $^{107}\text{Ag}$ ,  $^{116}\text{Sn}$ ,  $^{129}\text{I}$ ,  $^{143}\text{Nd}$ ,  $^{149}\text{Sm}$ ,  $^{161}\text{Dy}$ ,  $^{169}\text{Tm}$ ,  $^{179}\text{Hf}$ ,  $^{191}\text{Ir}$ ,  $^{199}\text{Hg}$ ,  $^{203}\text{Tl}$ ,  $^{235}$ ,  $^{238}\text{U}$ ,  $^{243}\text{Am}(n,\gamma)$ ; calculated total  $\Gamma_\gamma$  assuming dipole transitions.

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**Keynumber:** 1978SE14

**Reference:** Nucl.Sci.Eng. 67, 221 (1978)

**Authors:** M.Segev

**Title:** Improved Resonance Formulas for Cross Sections of Fissile Elements

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=0\text{-}1.2, 12\text{-}13.2$  eV;  $^{239}\text{Pu}(n,\gamma)$ ,  $E=0\text{-}6, 10\text{-}70$  eV; calculated  $\sigma$ . Adler-Adler formulas derived from R-matrix formalism, Reich-Moore-Adler-Adler conversion inaccuracies removed.

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**Keynumber:** 1978PR09

**Reference:** At.Energ. 45, 230 (1978); Sov.At.Energ. 45, 923 (1979)

**Authors:** V.S.Prokopenko, V.Y.Gabeskiriya, A.V.Inchagov, Y.B.Novikov, V.M.Prokopev, V.V.Tikhomirov, A.P.Chetverikov

**Title:** Measurement of  $\alpha$  Values of  $^{235}\text{U}$ ,  $^{238}\text{U}$ , and  $^{239}\text{U}$  in Active Zone of BOR-60 Reactor

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ ,  $^{238}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $(n,F)$ ,  $E=\text{fast reactor spectrum}$ ; measured capture to fission  $\sigma$  ratio.

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**Keynumber:** 1978KOZE

**Coden:** REPT INDC(CCP)-111/U,p31,Konshin

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,X)$ ,  $(n,\gamma)$ ,  $(n,F)$ ,  $(n,n')$ ,  $E=0.0001\text{-}15$  MeV; analyzed data; calculated total, fission,  $(n,\gamma)$ ,  $(n,n')$   $\sigma, \sigma(\theta)$ ; deduced nuclear constants.

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**Keynumber:** 1978KOZD

**Coden:** REPT INDC(CCP)-111/U,p33,Konshin

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E < 140$  eV; analyzed  $\sigma$  data.  $^{236}\text{U}$  deduced resonance parameters. Adler-Adler formalism.

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**Keynumber:** 1978CLZU

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No19,Clark

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{th}$ ; measured  $I_\gamma, I(\text{ce})$ .  $^{236}\text{U}$  levels deduced decay scheme of 4- isomer, anomalous ICC. Inner-shell vacancy detector.

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**Keynumber:** 1978CLZR

**Reference:** Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy and Related Topics, 3rd, Brookhaven (1978), R.E.Chrien, W.R.Kane Eds., Plenum Press, New York, p.585 (1979)

**Authors:** D.D.Clark, J.R.Boyce, E.T.Cassel, S.C.McGuire

**Title:** Low-Lying Levels of  $^{236}\text{U}$  from Investigation of the  $K\pi = 4^-$  Two-Quasineutron Isomer in (n, $\gamma$ ) and (n,e) Experiments

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma), E=\text{thermal}$ ; measured  $E\gamma, I\gamma, E(K \text{ X-ray})$ .  $^{236}\text{U}$  deduced levels,  $\delta, J, \pi$ .

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**Keynumber:** 1978BOZX

**Coden:** JOUR BAPSA 23 92 JE14 Boyce

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ; measured  $\gamma$ -,ce-spectra.  $^{236}\text{U}$  deduced levels,  $K, J, \pi, T_{1/2}$ .

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**Keynumber:** 1978BEYU

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No11,Bendt

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}, ^{235}\text{U}, ^{239}\text{Pu}(n,\gamma), E=\text{th}$ ; measured  $\gamma$ -spectra; deduced  $\sigma(E)$ , multiplicity of photons per absorbed neutron, average photon energy, photon energy released by fission products.

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**Keynumber:** 1978BEXX

**Coden:** REPT NEANDC(E)-192U,P19,Beer

**Keyword abstract:** NUCLEAR REACTIONS, Fission  $^{235}\text{U}(n,\gamma), (n,F), E=10-500 \text{ keV}$ ; measured  $\sigma$  (capture)/ $\sigma$ (fission).

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**Keynumber:** 1978BEXS

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr),Proc,P558,Bendt

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}, ^{235}\text{U}, ^{239}\text{Pu}(n,\gamma), E=\text{thermal}$ ; measured  $\sigma$ .

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**Keynumber:** 1977CHYA

**Coden:** REPT BARC-936,Chatterjee

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,n')$ , (n, $\gamma$ ),  $E=0-16 \text{ MeV}$ ; calculated  $\sigma(E)$  for fission isomers. Statistical model.

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**Keynumber:** 1977BEZW

**Coden:** REPT KFK-2504,P18,Beer

**Keyword abstract:** NUCLEAR REACTIONS, Fission  $^{235}\text{U}(n,\gamma), (n,F), E=10-500 \text{ keV}$ ; measured capture to fission ratio of  $\sigma$ .

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**Keynumber:** 1977BEYG

**Coden:** REPT UCID-17442,Behrens

**Keyword abstract:** NUCLEAR REACTIONS  $^{232}\text{Th}, ^{235}\text{U}(n,\gamma), E=0.7-30 \text{ MeV}$ ; measured  $\sigma$   $^{232}\text{Th}$  relative to  $^{235}\text{U}$ .

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**Keynumber:** 1976GW01

**Reference:** Nucl.Sci.Eng. 59, 79 (1976)

**Authors:** R.Gwin, E.G.Silver, R.W.Ingle, H.Weaver

**Title:** Measurement of the Neutron Capture and Fission Cross Sections of  $^{239}\text{Pu}$  And  $^{235}\text{U}$ , 0.02 eV to 200 keV, the Neutron Capture Cross Sections of  $^{197}\text{Au}$ , 10 to 50 keV, and Neutron Fission Cross Sections of  $^{233}\text{U}$ , 5 to 200 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $(n,F)$ ,  $E=0.02$  eV-200 keV;  $^{197}\text{Au}(n,\gamma)$ ,  $E=10$ -50 keV;  $^{233}\text{U}(n,F)$ ,  $E=5$ -200 keV; measured  $\sigma(E)$ .

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**Keynumber:** 1976GA29

**Reference:** Yad.Fiz. 24, 880 (1976); Sov.J.Nucl.Phys. 24, 460 (1976)

**Authors:** Y.P.Gangrskii, A.Lajtai, B.N.Markov

**Title:** Study of the  $\gamma$ -Ray Spectra Emitted in Formation of the Spontaneously Fissile Isomer  $^{236}\text{U}$  in the  $(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{th}$ ; measured  $\gamma$ -spectrum from  $^{236\text{m}}\text{U}$  (SF), fragment  $\gamma$ -coin.

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**Keynumber:** 1976BL12

**Reference:** Nucl.Sci.Eng. 61, 471 (1976)

**Authors:** H.Bluhm, C.S.Yen

**Title:** Measurement of the Ratio of Fission to Capture Neutron Cross Sections in Uranium-235 in the 200-eV to 15-keV Energy Range

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,F)$ ,  $(n,\gamma)$ ,  $E=0.2$ -15 keV; measured fission  $\sigma(E)$ /capture  $\sigma(E)$ .

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**Keynumber:** 1976AN11

**Reference:** Nucl.Phys. A269, 338 (1976)

**Authors:** V.Andersen, C.J.Christensen, J.Borggreen

**Title:** The Shape Isomer in  $^{236}\text{U}$  Populated by Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{th}$ ; measured ce X-coin, fragment delay; obtained isomeric/prompt fission ratio.  $^{236\text{m}}\text{U}$  shape isomer deduced  $\gamma/F$  branching ratio.

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**Keynumber:** 1975WEZA

**Reference:** Proc.Int.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 2nd, Petten, The Netherlands, K.Abrahams, F.Stecher-Rasmussen, P.Van Assche, Eds., Reactor Centrum Nederland, p.749 (1975)

**Authors:** C.Weitkamp, P.Matussek, H.Ottmar

**Title:** Nondestructive Nuclear Fuel Assay by Neutron Capture Gamma-Ray Spectrometry

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}$ ,  $^{238}\text{U}$ ,  $^{238}$ ,  $^{239}$ ,  $^{240}$ ,  $^{241}\text{Pu}(n,\gamma)$ ,  $E=\text{th}$ ;  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $E=2$  keV; measured  $E\gamma$ ,  $I\gamma$ .  $^{236}$ ,  $^{239}\text{U}$ ,  $^{239}$ ,  $^{240}$ ,  $^{241}$ ,  $^{242}\text{Pu}$  deduced transitions.

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**Keynumber:** 1975OTZX

**Reference:** Proc.Int.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 2nd, Petten, The Netherlands (1974), K.Abrahams, F.Stecher-Rasmussen, P.Van Assche, Eds., Reactor Centrum Nederland, p.658 (1975)

**Authors:** H.Ottmar, P.Matussek, I.Piper

**Title:** Radiative Capture of Thermal and Epithermal Neutrons in  $^{235}\text{U}$

**Keyword abstract:** RADIOACTIVITY  $^{240}\text{Pu}$ ; measured  $E\gamma$ ,  $I\gamma$ .  $^{236}\text{U}$  deduced levels.

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{236}\text{U}$  deduced levels,  $J, \pi$ .

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**Keynumber:** 1975LOZT

**Reference:** Proc.Int.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 2nd, Petten, The Netherlands (1974), K.Abrahams, F.Stecher-Rasmussen, P.Van Assche, Eds., Reactor Centrum Nederland, p.665 (1975)

**Authors:** K.E.G.Lobner, D.Harrach, E.Konecny, N.Nenoff, H.J.Specht, J.Weber

**Title:** Gamma-Ray Transitions Preceding Isomeric Fission in  $^{236}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , E=thermal; measured fragment  $\gamma(t)$ .  $^{236}\text{U}$  deduced levels.

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**Keynumber:** 1975KO11

**Reference:** At.Energ. 38, 82 (1975)

**Authors:** V.N.Kononov, E.D.Poletayev, B.D.Yurlov

**Title:** The Measurement of Alpha, Neutron Fission and Capture Cross Sections for Uranium-235 and Plutonium-239 for Neutron Energies from 10 to 80 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\alpha)$ , (n,F), (n, $\gamma$ ), E=10-80 keV; measured  $\sigma$ .

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**Keynumber:** 1975GAZG

**Coden:** REPT JINR-P3-9274, Y P Gangrsky

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ; measured  $\gamma$ -fission-coin for  $^{236}\text{U}(\text{SF})$  isomer.

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**Keynumber:** 1975DRZX

**Coden:** REPT LA-UR-75-484 P B4

**Keyword abstract:** NUCLEAR REACTIONS Mg,Al,Cr,Fe,Ni,Cu,Mo,Nb,Ta,Pt,  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ; measured  $\gamma$  yields.

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**Keynumber:** 1974WEZH

**Coden:** CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P277

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{238}\text{Pu}$ ,  $^{239}\text{Pu}$ ,  $^{240}\text{Pu}$ ,  $^{241}\text{Pu}(n,\gamma)$ , E=thermal;  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ , E=2 keV; measured  $E\gamma$ ,  $I\gamma$ .

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**Keynumber:** 1974RE02

**Reference:** Nucl.Phys. A218, 84 (1974)

**Authors:** E.R.Reddingius, H.Postma, C.E.Olsen, D.C.Rorer, V.L.Sailor

**Title:** Spins of Low-Energy Neutron Resonances in  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{polarized } n,\gamma)$ , (n,F), E=0.1-15 eV, polarized nuclei; measured transmission polarized neutrons;  $^{236}\text{U}$  resonances deduced J, sign  $\mu$ .

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**Keynumber:** 1974OTZY

**Coden:** CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P417

**Keyword abstract:** RADIOACTIVITY  $^{240}\text{Pu}$ ; measured  $E\gamma$ ,  $I\gamma$ .  $^{236}\text{U}$  deduced levels.

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , E=thermal, 2 keV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{236}\text{U}$  deduced levels, J,  $\pi$ , neutron binding energy.

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**Keynumber:** 1974FU10

**Reference:** Lett.Nuovo Cim. 9, 682 (1974)

**Authors:** A.Fubini

**Title:** Competition between Neutron Emission and Fission for  $^{234}\text{U}$ ,  $^{236}\text{U}$ ,  $^{240}\text{Pu}$  And  $^{242}\text{Pu}$  Compound



## Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}, ^{235}\text{U}$ ,  $^{239}, ^{241}\text{Pu}(n,\gamma)$ ,  $(n,n')$ ,  $(n,n'F)$ ,  $(n,2n)$ ,  $(n,F)$ ,  $E=1-10$  MeV; calculated n-width/F-width.

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**Keynumber:** 1974BY03

**Reference:** At.Energ. 37, 337 (1974); Sov.At.Energy 37, 1073 (1975)

**Authors:** M.V.Bychkov, A.V.Skobakarev, A.P.Malykhin, I.V.Zhuk, Y.I.Churkin, O.I.Yaroshevich

**Title:** Measurement of Ratio of Effective Cross Sections of Capture in  $^{238}\text{U}$  and Fission of  $^{235}\text{U}$  in a Fast-Thermal Critical Assembly

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $^{238}\text{U}(n,F)$ ,  $E=\text{thermal}$ ; measured relative  $\sigma$ .

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**Keynumber:** 1973ZE05

**Reference:** Yad.Fiz. 18, 34 (1973); Sov.J.Nucl.Phys. 18, 18 (1974)

**Authors:** Zen Chang Bom, A.Lajtai, A.A.Omelyanenko, T.T.Panteleev, S.M.Polikanov, Y.V.Ryabov, Tang San Khak

**Title:** Search for a Spontaneously Fissioning Isomer Nucleus  $\text{U}^{236\text{m}}$  in the Reaction  $\text{U}^{235}(n,\gamma)$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E$  approx 60 keV; measured  $\sigma$  for SF isomer.  $^{236}\text{U}$  deduced no SF isomer.

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**Keynumber:** 1973VA30

**Reference:** Yad.Fiz. 18, 492 (1973); Sov.J.Nucl.Phys. 18, 253 (1974)

**Authors:** G.V.Valskii, O.M.Mrachkovskii, G.A.Petrov, Y.S.Pleva

**Title:** Probability of Formation of Spontaneously Fissioning Isomer States Following Thermal Neutron Capture by  $\text{U}^{235}$  and  $\text{Pu}^{239}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ; measured  $\sigma(\text{isomer})$ .

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**Keynumber:** 1973UNZZ

**Coden:** JOUR BAPSA 18 627 EK5

**Keyword abstract:** RADIOACTIVITY,Fission  $^{246}, ^{248}\text{Cm}$ ,  $^{250}, ^{252}\text{Cf}(\text{SF})$ ; measured fragment yields.

**Keyword abstract:** NUCLEAR REACTIONS  $^{229}\text{Th}$ ,  $^{235}\text{U}$ ,  $^{245}\text{Cm}$ ,  $^{249}\text{Cf}$ ,  $^{254}\text{Es}(n,\gamma)$ .

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**Keynumber:** 1973SP04

**Reference:** Nuovo Cim. 13A, 373 (1973)

**Authors:** D.Sperber

**Title:** Statistical Theory of Isomer Ratios for Shape (Fission) Isomers in  $(n,\gamma)$  Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}, ^{235}\text{U}$ ,  $^{239}\text{Pu}$ ,  $^{241}\text{Am}(n,\gamma)$ ; calculated isomer ratios.

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**Keynumber:** 1973SCYB

**Coden:** REPT INDC(SEC)-36/L P5

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,F\gamma)$ ; measured  $E\gamma, I\gamma$ .  $^{236}\text{U}$  deduced level,  $J, \pi$ .

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**Keynumber:** 1973SC31

**Reference:** Atomkernenergie 21, 136 (1973)

**Authors:** W.J.Schindler, C.M.Fleck

**Title:** Measurements of Low Energy Gamma Rays Following Thermal Neutron Capture in  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $I\gamma, E\gamma, \gamma\gamma$ -coin.  $^{236}\text{U}$  levels deduced  $J, \pi$ , transitions.

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**Keynumber:** 1973PLZY

**Coden:** JOUR BAPSA 18 626 EK4

**Keyword abstract:** RADIOACTIVITY,Fission  $^{252}\text{Cf}(\text{SF})$ ; measured  $E\gamma, I\gamma$ .

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}, ^{235}\text{U}, ^{239}\text{Pu}(\text{n},\gamma)$ .

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**Keynumber:** 1973MAYH

**Coden:** REPT EANDC(E)157-U,P14

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{n},\gamma)$ ; measured  $E\gamma$ .  $^{236}\text{U}$  deduced S-width.

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**Keynumber:** 1973GWZZ

**Coden:** REPT ORNL-4902 Vol2 P6

**Keyword abstract:** NUCLEAR REACTIONS  $^{239}\text{Pu}, ^{235}\text{U}(\text{n},\gamma), (\text{n},\text{F}), ^{197}\text{Au}(\text{n},\gamma), ^{233}\text{U}(\text{n},\text{F})$ ; measured  $\sigma(\text{E})$ .

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**Keynumber:** 1973GR20

**Reference:** Phys.Rev. C8, 781 (1973)

**Authors:** R.G.Graves, R.E.Chrien, D.I.Garber, G.W.Cole, O.A.Wasson

**Title:**  $\gamma$  Rays Following Neutron Capture in  $^{235}\text{U}$  and the Spins of  $^{235}\text{U}$  Resonances

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{n},\gamma), (\text{n},\text{F}), E=\text{slow}$ ; measured  $E\gamma, I\gamma$ . Deduced J,  $^{235}\text{U}$  resonances 0-30 eV.  $^{236}\text{U}$  deduced levels to 1300 keV, delayed-, prompt-fission  $\gamma$ -rays.

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**Keynumber:** 1973GEYW

**Coden:** REPT INDC(SEC)-35/L P8

**Keyword abstract:** NUCLEAR REACTIONS,Fission  $^{233}, ^{235}\text{U}(\text{n},\text{F}), (\text{n},\gamma)$ ; calculated  $\sigma$ .

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**Keynumber:** 1973FOYS

**Coden:** REPT KDK-2 P56

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{n},\gamma)$ ; measured  $I(\text{ce}), E\gamma$ .  $^{236}\text{U}$  deduced levels.

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**Keynumber:** 1973DRZZ

**Coden:** JOUR BAPSA 18 592 DE12

**Keyword abstract:** RADIOACTIVITY,Fission  $^{259}\text{104}(\text{SF})$ ; measured  $T_{1/2}$ , fission branching.

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{n},\gamma)$ ; measured  $I\gamma$ .

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**Keynumber:** 1973DE15

**Reference:** Phys.Rev. C7, 2018 (1973)

**Authors:** G.de Saussure, R.B.Perez, W.Kolar

**Title:** Multilevel Analyses of the  $^{235}\text{U}$  Fission and Capture Cross Sections

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{n},\text{F}), (\text{n},\gamma)$ ; measured nothing. Deduced resonance level-width.

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**Keynumber:** 1973CO06

**Reference:** Nucl.Phys. A203, 145 (1973)

**Authors:** F.Corvi, M.Stefanon, C.Coceva, P.Giacobbe

**Title:** Low-Energy  $\gamma$ -Rays and Spins of  $^{235}\text{U}$  Neutron Resonances

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(\text{n},\gamma), (\text{n},\text{F}), E=1.5-58$  eV; measured  $E\gamma, I\gamma$ .  $^{236}\text{U}$

deduced resonances, J. Enriched target.

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**Keynumber:** 1973BAUS

**Coden:** REPT LF-42 P5

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ; measured  $E\gamma, E(\text{ce})$ .  $^{236}\text{U}$  levels deduced J,  $\pi$ .

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**Keynumber:** 1972SMZQ

**Coden:** JOUR TANSAS 15 No1 P478, J R Smith, 7/3/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,X)$ ,  $(n,F)$ ,  $E=1-82$  eV; analyzed,  $\sigma(E)$ ; deduced resonance integrals.

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**Keynumber:** 1972PEZS

**Coden:** JOUR TANSAS 15 No1 P476, R B Perez, 7/3/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,F)$ ,  $(n,\gamma)$ ,  $E < 60$  eV; analyzed  $\sigma(E)$ .  $^{236}\text{U}$  deduced resonance parameters.

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**Keynumber:** 1972PEZI

**Coden:** REPT ORNL-TM-3696, 3/20/73

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,F)$ ,  $(n,\gamma)$ ,  $E=8$  eV-10 keV; measured  $\sigma(E), \alpha(E)$ .

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**Keynumber:** 1972MAYR

**Reference:** Contrib. Conf. on Nucl. Structure Study with Neutrons, Budapest, p.84 (1972)

**Authors:** P. Matussek, H. Ottmar, I. Piper, C. Weitkamp, H. Woda

**Title:** Measurement of Gamma-Ray Spectra from Thermal Neutron Interaction with  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I\gamma, \gamma\gamma\text{-coin}$ .  $^{236}\text{U}$  deduced transitions.

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**Keynumber:** 1972KOZS

**Coden:** REPT INDC(CCP)-21/L, V N Kononou, 5/24/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $(n,F)$ ,  $E=0.01-1$  MeV; measured  $\alpha(E)$ .

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**Keynumber:** 1972HAZG

**Coden:** REPT 1972 Annual, Tech Univ Munchen, P107

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ; measured  $I(\text{ce})$ .

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**Keynumber:** 1972FOZJ

**Coden:** CONF Budapest, Contributions, P6, 10/11/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , measured  $I\gamma, E(\text{ce}), I(\text{ce})$ .  $^{236}\text{U}$  deduced levels, ICC, J,  $\pi$ .

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**Keynumber:** 1972FOYY

**Coden:** REPT LF-39, B Fogelberg (CRL)

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I(\text{ce}), I\gamma$ . Deduced ICC.  $^{236}\text{U}$  deduced levels,  $\gamma$ -mixing.

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**Keynumber:** 1972DV01

**Reference:** At. Energ. 33, 577 (1972); Sov. At. Energy 33, 666 (1973)

**Authors:** V.G. Dvukhsherstnov, Y.A. Kazanski, V.M. Furmanov

**Title:** Measurements of  $\alpha$  for  $U^{235}$  and  $Pu^{239}$  at 2 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U$ ,  $^{239}Pu(n,F)$ ,  $(n,\gamma)$ ,  $E=2$  keV; measured ratio  $\sigma(n\gamma)/\sigma(nf)$ .

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**Keynumber:** 1972COZC

**Coden:** CONF Aix-En-Provence(Nucl Physics),Vol2,P20,8/17/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U(n,\gamma)$ , measured  $I\gamma$ .  $^{236}U$  deduced resonances,J.

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**Keynumber:** 1972BAZB

**Reference:** NP-19337, p.6 (1972)

**Authors:** A.Backlin, B.Fogelberg, G.Hedin, T.Nagarajan

**Title:**  $(n,\gamma)$  Spectroscopy

**Keyword abstract:** RADIOACTIVITY  $^{122,124}In$ ,  $^{119,121,123}Cd$ ,  $^{119}Ag$ ,  $^{191}Pt$ ,  $^{185,186,188}Ir$ ,  $^{186}Re$ ;  $^{122,124}Sn$ ,  $^{119,121,123}In$ ,  $^{191}Ir$ ,  $^{185,186,188}Os$  deduced levels.

**Keyword abstract:** NUCLEAR REACTIONS  $^{155,157}Gd$ ,  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ ;  $^{156,158}Gd$ ,  $^{236}U$ ,  $^{240}Pu$  deduced levels.

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**Keynumber:** 1972BAWY

**Coden:** REPT KFK-1563,R E Bandl,7/27/72

**Keyword abstract:** NUCLEAR REACTIONS,Fission  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ ,  $(n,F)$ ,  $E=8-60$  keV; measured  $\sigma$  ratio  $\alpha(E)$ .

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**Keynumber:** 1972BA69

**Reference:** Nucl.Sci.Eng. 48, 324 (1972)

**Authors:** R.E.Bandl, H.Miessner, F.H.Frohner

**Title:** A Measurement of the Capture-to-Fission Cross Section Ratios of Uranium-235 and Plutonium-239 with a New Technique

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ ,  $(n,F)$ ,  $E=8-60$  keV; measured  $\sigma$  ratio  $\alpha(E)$ .

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**Keynumber:** 1971YU04

**Reference:** At.Energ. 31, 628 (1971); Sov.At.Energy 31, 1418 (1972)

**Authors:** L.N.Yurova, A.V.Bushuev, V.G.Bortsov, V.M.Duvanov, A.F.Kozhin

**Title:** Reduction of Systematic Errors in Measurement of Ratio  $\delta(c)^{238}/\delta(f)^{235}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235,238}U(n,\gamma)$ ,  $(n,F)$ ,  $E=thermal$ ; measured  $\sigma$  ratio.

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**Keynumber:** 1971VOZT

**Coden:** CONF CONF-710301(Knoxville),Vol2,p591,11/2/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U(n,\gamma)$ ,  $(n,F)$ ,  $E=5-50$  keV, 130 keV; measured capture/fission  $\sigma$  ratio.

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**Keynumber:** 1971SIZG

**Coden:** CONF CONF-710301(Knoxville),Vol2,P728,11/2/71

**Keyword abstract:** RADIOACTIVITY  $^{102}Rh$ ,  $^{134}La$ ; measured  $\gamma\gamma(\theta)$ .  $^{102}Ru$ ,  $^{134}Ba$  deduced levels,J, $\pi$ , $\gamma$ -mixing.

**Keyword abstract:** NUCLEAR REACTIONS  $^{235,238}U(n,\gamma)$ ,  $(n,F)$ ,  $E < 100$  keV; measured  $\sigma(E)$ ,  $\alpha(E)$  for  $^{235}U$ .

**Keynumber:** 1971RY02

**Reference:** Yad.Fiz. 13, 1039 (1971); Sov.J.Nucl.Phys. 13, 596 (1971)

**Authors:** Y.V.Ryabov, Y.I.Fenin

**Title:** Strength Functions for s and p Neutrons in  $U^{235}$  and  $Pu^{239}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ , (n,F),E=0.1-30 keV; measured  $\sigma$  ratio, (E).  $^{236}U$ ,  $^{240}Pu$  deduced strength functions.

**Keynumber:** 1971RY01

**Reference:** Yad.Fiz. 13, 457 (1971); Sov.J.Nucl.Phys. 13, 255 (1971)

**Authors:** Y.V.Ryabov, S.D.Sik, N.Chikov, N.Yaneva

**Title:** Parameters of the Neutron Resonances of  $U^{233}$ ,  $U^{235}$ , and  $Pu^{239}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}U$ ,  $^{235}U$ ,  $^{239}Pu(n,X)$ ,  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ , (n,F),E=resonance; measured  $\sigma(nT)(E)$ ,  $\sigma(E)$ .  $^{234}$ ,  $^{236}U$ ,  $^{240}Pu$  deduced resonances, level-width.

**Keynumber:** 1971PEZN

**Coden:** REPT ORNL-4705,P10

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U(n,\gamma)$ , (n,F),E <100 keV; measured  $\sigma(E)$ ,  $\alpha$ .

**Keynumber:** 1971NAZP

**Coden:** REPT INDC(JAP) 10E,P12,3/6/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U(n,\gamma)$ , (n,F),E= pile; measured  $\alpha$ .

**Keynumber:** 1971KU13

**Reference:** At.Energ. 30, 258 (1971); Sov.J.At.Energy 30, 315 (1971)

**Authors:** M.A.Kurov, Y.V.Ryabov, So Tong Sik, N.Chikov

**Title:** Measurement of the Ratio ( $\alpha$ ) between the Cross Sections for Radiative Capture and Fission, for  $U^{235}$  and  $Pu^{239}$  for Neutron Energies below 30 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ , (n,F),E <30 keV; measured  $\alpha(E)$ .

**Keynumber:** 1971KOZD

**Coden:** REPT INDC(CCP)-21/L,6/9/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ , (n,F),E=0.01-1 MeV; measured  $\sigma$  ratio  $\alpha(E)$ .

**Keynumber:** 1971HUZO

**Coden:** JOUR TANSU 14 No1,P419,Y Hukai

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}U$ ,  $^{239}Pu(n,\gamma)$ , (n,X),E=thermal; measured  $E\gamma$ ,  $I\gamma$ .  $^{236}U$ ,  $^{240}Pu$  deduced transitions.

**Keynumber:** 1971HEZN

**Coden:** REPT ANL-7791, R R Heinrich,11/8/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}$ ,  $^{235}$ ,  $^{238}U$ ,  $^{239}$ ,  $^{240}$ ,  $^{242}Pu(n,\gamma)$ , (n,F),E = reactor spectrum; measured  $\sigma$ ,  $\alpha$  vs position.

**Keynumber:** 1971HEYZ

**Coden:** REPT ANL-7791,R Heinrich,10/11/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}$ ,  $^{235}$ ,  $^{238}U$ ,  $^{239}$ ,  $^{240}$ ,  $^{242}Pu(n,\gamma)$ , (n,F), measured  $\sigma$ ,  $\sigma$

ratio vs position in EBR-2.  
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**Keynumber:** 1971GWZY

**Coden:** REPT ORNL-4705,P5

**Keyword abstract:** NUCLEAR REACTIONS  $^{239}\text{Pu}$ ,  $^{235}\text{U}(n,\gamma)$ , (n,F),E=0.02 eV - 400 keV; measured capture/fission ratio.  
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**Keynumber:** 1971GRZT

**Coden:** JOUR BAPSA 16 496

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,E=resonance; measured  $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin.  
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**Keynumber:** 1971GRYS

**Coden:** JOUR BAPSA 16 1181,R G Graves,10/29/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , (n,F),E=epithermal; measured  $E\gamma$ , $I\gamma$ .  $^{236}\text{U}$  deduced resonances,J, $\pi$ .  
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**Keynumber:** 1971DUZL

**Coden:** JOUR TANSAS 14 No2 P816,N D Dudley,7/3/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}\text{U}$ ,  $^{235}\text{U}$ ,  $^{238}\text{U}$ ,  $^{239}\text{Pu}$ ,  $^{240}\text{Pu}$ ,  $^{242}\text{Pu}(n,\gamma)$ , (n,F), measured integral  $\alpha$ .  
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**Keynumber:** 1971DEZL

**Coden:** REPT ORNL-4705,P16

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , (n,F),E <60 eV; measured  $\sigma(E)$ .  $^{236}\text{U}$  deduced resonances,level-width,Reich-Moore,Kapur-Peierls resonance parameters.  
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**Keynumber:** 1971DEXP

**Coden:** REPT AAEC/TM 595,9/12/72,NDP

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , (n,F),E <100 keV; measured  $\sigma(E)$ , $\sigma$  ratio  $\alpha$  (E).  
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**Keyword abstract:** NUCLEAR STRUCTURE  $^{252}\text{Cf}$ ; calculated  $^1, ^2, ^3\text{H}$ ,  $^6, ^8\text{He}$  energy spectra.  
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**Keynumber:** 1971DEXO

**Coden:** REPT ANL-7830,A De Volpi,9/27/72

**Keyword abstract:** NUCLEAR REACTIONS,Fission  $^{239}\text{Pu}$ ,  $^{252}\text{Cf}$ ,  $^{233}\text{U}$ ,  $^{235}\text{U}(n,F)$ , (n, $\gamma$ ), (n,X), (n,n),E=2200 M/S; analyzed evaluated  $\sigma$ , $v$ , $\alpha$ .  $^{233}\text{U}$ ,  $^{234}\text{U}$  reevaluated  $T_{1/2}$ .  
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**Keynumber:** 1971CHZM

**Coden:** CONF CONF-710301(Knoxville),Vol2,P792,11/2/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,E <12 eV; measured  $\sigma(E;E\gamma)$ ,Q for  $^{235}\text{U}$ ,  $^{236}\text{U}$ ,  $^{240}\text{Pu}$  deduced levels,J, $\pi$ .  
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**Keynumber:** 1971CHYR

**Coden:** REPT NCSAC-42,P48,R Chrien,5/19/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , measured  $\sigma(E;E\gamma)$ .  $^{236}\text{U}$  deduced resonances,levels,J, $\pi$ .  
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**Keynumber:** 1971CHXQ

**Coden:** REPT FEI-292,2/14/73

**Keyword abstract:** NUCLEAR REACTIONS  $^{107}, ^{109}\text{Ag}, ^{197}\text{Au}, ^{232}\text{Th}, ^{238}\text{U}, ^{235}\text{U}, ^{239}\text{Pu}(n,\gamma), ^{235}\text{U}, ^{239}\text{Pu}(n,F), E < 100 \text{ keV}$ ; measured  $\sigma(E), \alpha(E)$ .

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**Keynumber:** 1971BOZL

**Coden:** REPT ORNL-4691, R S Booth,9/10/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}, ^{238}\text{U}(n,F), (n,X), (n,\gamma), E < 15 \text{ MeV}$ ; measured  $E\gamma, I\gamma$ .

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**Keynumber:** 1971BOYK

**Coden:** CONF Canterbury(Chem Nucl Data),P155,12/10/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}, ^{238}\text{U}, ^{239}, ^{240}, ^{241}\text{Pu}(n,\gamma), E = \text{fast reactor spectrum}$ ; measured  $\sigma, \alpha$ .

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**Keynumber:** 1971BAYG

**Coden:** CONF CONF-710301(Knoxville),Vol1,P273,11/2/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}, ^{239}\text{Pu}(n,\gamma), (n,F), E = 8-60 \text{ keV}$ ; measured  $\sigma$  ratio (E).

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**Keynumber:** 1971BAWY

**Coden:** REPT KFK-1457,R E Bandl

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}, ^{239}\text{Pu}(n,\gamma), (n,F)$ ; measured  $\sigma$  ratio.

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**Keynumber:** 1970KAZU

**Reference:** Bull.Am.Phys.Soc. 15, No.6, 807, EE14 (1970)

**Authors:** W.R.Kane

**Title:** Gamma Rays from Low Energy Neutron Resonances in  $\text{U}^{235}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma), E = \text{resonance}$ ; measured  $E\gamma, I\gamma, \gamma\gamma\text{-coin}$ ; deduced Q,  $^{236}\text{U}$  resonances deduced J.

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**Keynumber:** 1970KAZT

**Coden:** REPT NCSAC-33 P28

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma), E = \text{resonance}$ ; measured  $E\gamma, I\gamma$ ; deduced Q,  $^{236}\text{U}$  deduced resonances, J,  $\pi$ , levels.

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**Keynumber:** 1970KA22

**Reference:** Phys.Rev.Lett. 25, 953 (1970)

**Authors:** W.R.Kane

**Title:**  $\gamma$  Rays from Resonance Neutron Capture in  $\text{U}^{235}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma), E = 1.135, 2.040, 4.845, 6.39 \text{ eV}$ ; measured  $E\gamma, I\gamma$ ; deduced Q,  $^{236}\text{U}$  deduced resonances, levels, J,  $\pi, \gamma$ -branching.

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**Keynumber:** 1970JUZZ

**Reference:** NCSAC-33, p.152 (1970)

**Authors:** E.T.Jurney

**Title:** High Energy Gamma Rays from Thermal Irradiation of  $^{235}\text{U}$  and  $^{239}\text{Pu}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}, ^{239}\text{Pu}(n,\gamma), E = \text{thermal}$ ; measured  $E\gamma, I\gamma$ ; deduced Q,  $^{236}\text{U}, ^{240}\text{Pu}$  deduced levels, J,  $\pi$ .

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**Keynumber:** 1970EL03

**Reference:** Nucl.Phys. A148, 337 (1970)

**Authors:** A.J.Elwyn, A.T.G.Ferguson

**Title:** Short-Lived Fission Isomers from Neutron Studies

**Keyword abstract:** NUCLEAR REACTIONS  $^{233}, ^{234}, ^{235}, ^{238}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $E=0.55, 2.2$  MeV; measured  $\sigma$  for SF-isomer production; deduced isomeric  $\sigma$  ratios.  $^{234}, ^{235}, ^{236}, ^{239}\text{U}$ ,  $^{240}\text{Pu}$  deduced SF-isomers,  $T_{1/2}$ .

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**Keynumber:** 1970CHZZ

**Reference:** Bull.Amer.Phys.Soc. 15, No.1, 87, GD14 (1970)

**Authors:** R.E.Chrien, S.Bokharee, J.B.Garg, O.A.Wasson

**Title:** Gamma Rays Following Resonant Neutron Capture in  $^{239}\text{Pu}$  and  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $E = \text{epithermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced  $Q$ .  $^{240}\text{Pu}$  deduced transitions.

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**Keynumber:** 1970CHZO

**Reference:** NCSAC-33, p.24 (1970)

**Authors:** R.E.Chrien, O.A.Wasson, G.Cole, R.G.Graves, M.R.Bhat, S.F.Mughabghab, S.Dritsa, F.Becvar, R.Moreh, P.Liaud

**Title:** Low Energy  $\gamma$ -Rays from Thermal and Resonance Capture in  $^{239}\text{Pu}$  and  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{239}\text{Pu}(n,\gamma)$ ,  $E=\text{thermal, resonance}$ ; measured  $E\gamma, I\gamma$ .  $^{240}\text{Pu}$  deduced transitions.

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**Keynumber:** 1969WE06

**Reference:** Nucl.Phys. A134, 535 (1969)

**Authors:** H.Weigmann, J.Winter, M.Heske

**Title:** Prompt  $\gamma$ -Rays from Neutron Interaction in  $^{235}\text{U}$  and Resonance Spin Assignments

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ ,  $(n,F)$ ,  $E = 6-40$  eV; measured prompt  $\gamma$ -ray,  $E\gamma$ ,  $I\gamma$ .  $^{236}\text{U}$  deduced resonances,  $J$ .

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**Keynumber:** 1969VO17

**Reference:** Yadern.Fiz. 9, 303 (1969); Soviet J.Nucl.Phys. 9, 179 (1969)

**Authors:** P.E.Vorotnikov

**Title:** Excitation-Energy Dependence of the Level Densities of Heavy Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{229}, ^{232}\text{Th}$ ,  $^{231}, ^{233}\text{Pa}$ ,  $^{232}, ^{233}, ^{234}, ^{235}, ^{236}, ^{238}\text{U}$ ,  $^{237}\text{Np}$ ,  $^{238}, ^{239}, ^{240}, ^{241}\text{Pu}$ ,  $^{241}, ^{242}, ^{243}\text{Am}$ ,  $^{244}\text{Cm}(n,X)$ ,  $(n,\gamma)$ ,  $E < 500$  eV; calculated dependence of level density on excitation energy.

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**Keynumber:** 1969TA04

**Reference:** Phys.Rev. 177, 1805 (1969)

**Authors:** W.L.Talbert, Jr., A.B.Tucker, G.M.Day

**Title:** Delayed Neutron Emission in the Decays of Short-Lived Separated Isotopes of Gaseous Fission Products

**Keyword abstract:** NUCLEAR REACTIONS, Fission  $^{235}\text{U}(n,\gamma)$ ,  $E=\text{reactor spectrum}$ ; measured delayed neutron yields for  $^{92}, ^{93}\text{Kr}$ ,  $^{92}, ^{93}\text{Rb}$ ,  $^{141}, ^{142}\text{Xe}$ ,  $^{141}, ^{142}\text{Cs}$ ; deduced delayed neutron emission probabilities.



**Keyword abstract:** NUCLEAR REACTIONS, Fission  $^{235}\text{U}(n,\gamma)$ , E=reactor spectrum; measured delayed neutron yields for  $^{92}, ^{93}\text{Kr}$ ,  $^{92}, ^{93}\text{Rb}$ ,  $^{141}, ^{142}\text{Xe}$ ,  $^{141}, ^{142}\text{Cs}$ ; deduced delayed neutron emission probabilities.

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**Keynumber:** 1969KAZW

**Reference:** Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy, Studsvik, Intern.At.En.Agency, Vienna, p.105 (1969)

**Authors:** W.R.Kane, D.Gardner, T.Brown, A.Kevey, E.der Mateosian, G.T.Emery, W.Gelletly, M.A.J.Mariscotti, I.Schroder

**Title:** Studies of the  $(n,\gamma)$  Reaction with a Neutron Monochromator

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , E=4.845 eV resonance; measured  $E\gamma$ ,  $I\gamma$ ; deduced Q,  $^{236}\text{U}$  deduced levels.

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**Keynumber:** 1969BAZW

**Reference:** Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy, Studsvik, Intern.At.En.Agency, Vienna, p.141 (1969)

**Authors:** A.Backlin, B.Fogelberg, E.Falkstrom-Lund

**Title:** Conversion Electrons and Gamma Rays from Neutron Capture in  $^{235}\text{U}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{235}\text{U}(n,\gamma)$ , E not given; measured  $E(\text{ce})$ ,  $I(\text{ce})$ ,  $I\gamma$ .  $^{236}\text{U}$  deduced transitions.