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**43 reference(s) found :**

**Keynumber:** 1995MO40

**Reference:** Aust.J.Phys. 48, 125 (1995)

**Authors:** A.J.Morton, D.G.Sargood

**Title:** Thermonuclear Reactions Rates for Reactions Leading to N = 28 Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{44, 46}\text{K}$ ,  $^{46, 47, 48}\text{Ca}$ ,  $^{45, 47, 48, 49, 50}\text{Sc}$ ,  $^{46, 47, 48, 49, 50}\text{Ti}$ ,  $^{47, 48, 49, 50, 51}\text{V}$ ,  $^{48, 49, 50, 51, 52}\text{Cr}$ ,  $^{51, 52, 53}\text{Mn}$ ,  $^{52, 53, 54}\text{Fe}$ ,  $^{55}\text{Co}(n,\gamma)$ ,  $(n,p)$ ,  $(n,\alpha)$ ,  $(p,\gamma)$ ,  $(p,n)$ ,  $(p,\alpha)$ ,  $(\alpha,\gamma)$ ,  $(\alpha,n)$ ,  $(\alpha,p)$ , E not given;  $^{56}\text{Ni}(n,\gamma)$ ,  $(n,p)$ ,  $(n,\alpha)$ ,  $(\alpha,\gamma)$ ,  $(\alpha,n)$ ,  $(\alpha,p)$ , E not given;  $^{46}\text{Ar}$ ,  $^{45, 47}\text{K}$   $(p,\gamma)$ ,  $(p,n)$ ,  $(p,\alpha)$ ,  $(\alpha,\gamma)$ ,  $(\alpha,n)$ ,  $(\alpha,p)$ , E not given; calculated stellar reaction rates vs temperature. Statistical model calculations, optical-model potential.

**Keynumber:** 1990KUZT

**Reference:** Program and Thesis, Proc.40th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Leningrad, p.55 (1990)

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

**Title:** Lifetimes of  $^{55}\text{Fe}$  Levels Excited in  $(n,\gamma)$  Reaction on Thermal Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ , E=thermal; measured DSA.  $^{55}\text{Fe}$  levels deduced  $T_{1/2}$ . Enriched target, NaI(Tl), hyperpure Ge detectors.

**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  $(n,\gamma)$  Reaction on Thermal Neutrons

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

**Keynumber:** 1990KU26

**Reference:** Izv.Akad.Nauk SSSR, Ser.Fiz. 54, 2145 (1990); Bull.Acad.Sci.USSR, Phys.Ser. 54, No.11, 60 (1990)

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

**Title:** Lifetimes of  $^{55}\text{Fe}$  Levels Excited in the  $(n\gamma)$ -Reaction Induced by Thermal Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin, DSA.  $^{55}\text{Fe}$  levels deduced  $T_{1/2}$ .

**Keynumber:** 1987MA14

**Reference:** Nucl.Phys. A465, 413 (1987)

**Authors:** J.P.Mason

**Title:** Neutron Capture Gamma-Rays from the Low-Lying Resonances of  $^{54}\text{Fe}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ , E  $\approx$  resonance; measured  $E\gamma$ ,  $I\gamma$ , capture yield vs E.  $^{55}\text{Fe}$  deduced resonances,  $\Gamma\gamma$ , relative  $I\gamma$ ,  $J, \pi$ . Tof. Valence model.

**Keynumber:** 1986GU18

**Reference:** Ann.Nucl.Energy 13, 601 (1986)

**Authors:** P.T.Guenther, D.L.Smith, A.B.Smith, J.F.Whalen

**Title:** Total, Scattering and  $\gamma$ -Ray-Production Cross Sections for Few-MeV Neutrons on  $^{54}\text{Fe}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,n)$ ,  $(n,n')$ ,  $(n,\gamma)$ ,  $E=0.5-4$  MeV; measured total, reaction,  $\gamma$  production  $\sigma(E)$ ,  $\sigma(\theta)$ ,  $E\gamma$ .  $^{54}\text{Fe}$  deduced levels,  $\gamma$ -branching,  $J, \pi$ . Enriched target, tof. Spherical optical model.

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**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  $^{20, 21, 22}\text{Ne}$ ,  $^{23}\text{Na}$ ,  $^{24, 25, 26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28, 29, 30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32, 33, 34, 36}\text{S}$ ,  $^{35, 37}\text{Cl}$ ,  $^{36, 38, 40}\text{Ar}$ ,  $^{39, 40, 41}\text{K}$ ,  $^{40, 42, 43, 44, 46, 48}\text{Ca}$ ,  $^{45}\text{Sc}$ ,  $^{46, 47, 48, 49, 50}\text{Ti}$ ,  $^{50, 51}\text{V}$ ,  $^{50, 52, 53, 54}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{54, 56, 57, 58}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{58, 60, 61, 62, 64}\text{Ni}$ ,  $^{63, 65}\text{Cu}$ ,  $^{64, 66, 67}\text{Zn}(n,\gamma)$ ,  $(n,p)$ ,  $(n,\alpha)$ ,  $(p,\gamma)$ ,  $(p,n)$ ,  $(p,\alpha)$ ,  $(\alpha,\gamma)$ ,  $(\alpha,n)$ ,  $(\alpha,p)$ ,  $^{70}\text{Zn}(p,\gamma)$ ,  $(p,n)$ ,  $(p,\alpha)$ ,  $(\alpha,\gamma)$ ,  $(\alpha,n)$ ,  $(\alpha,p)$ ,  $E=\text{low}$ ; compiled target thermal distribution energy state to ground state thermonuclear reaction rate of reaction  $\sigma$  vs temperature. Statistical model.

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**Keynumber:** 1983BRZZ

**Reference:** NEANDC(E)-242U, Vol.III, p.15 (1983)

**Authors:** A.Brusegan, F.Corvi, G.Rohr, R.Shelley, T.van der Veen, C.Van der Vorst, B.J.Allan

**Title:**  $^{54}\text{Fe}$  Neutron Capture Cross Section

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ ,  $E=0.3-500$  keV; measured  $\sigma(\text{capture})$  vs  $E$ .  $^{55}\text{Fe}$  deduced resonances,  $J, \pi$ , absolute  $\gamma$ -transition strengths.

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**Keynumber:** 1982RA32

**Reference:** Indian J.Pure Appl.Phys. 20, 627 (1982)

**Authors:** S.K.Rathi, V.P.Varshney, H.M.Agrawal

**Title:** Calculations of Neutron Capture Cross-Sections for some Nuclei using Bilpuch Formula

**Keyword abstract:** NUCLEAR REACTIONS  $^{40, 43}\text{Ca}$ ,  $^{52, 53}\text{Cr}$ ,  $^{54, 56}\text{Fe}$ ,  $^{88}\text{Sr}$ ,  $^{90, 91, 92, 94}\text{Zr}$ ,  $^{93}\text{Nb}$ ,  $^{92, 94, 95, 96, 97, 98, 100}\text{Mo}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}\text{Ce}$ ,  $^{203}\text{Tl}(n,\gamma)$ ,  $E=24$  keV; calculated  $\sigma(\text{capture})$ . Experimental parameters, Bilpuch formula.

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**Keynumber:** 1982KN01

**Reference:** Izv.Akad.Nauk SSSR, Ser.Fiz. 46, 187 (1982)

**Authors:** V.A.Knatko, E.A.Shimanovich

**Title:** Correlation Width Analysis for the Reaction  $^{54}\text{Fe}(n,\gamma)^{55}\text{Fe}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ ,  $E=\text{low}$ ; analyzed s-wave resonance data.  $^{55}\text{Fe}$  resonances deduced  $\langle \Gamma\gamma \rangle$  channel correlation coefficient. Statistical model.

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**Keynumber:** 1980RA08

**Reference:** Phys.Rev. C22, 328 (1980)

**Authors:** S.Raman, G.G.Slaughter, J.C.Wells, Jr., B.J.Allen

**Title:** Valence Neutron Capture  $\gamma$ -Ray Spectrum in  $^{54}\text{Fe}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ ,  $E=1-18$  keV; measured  $E\gamma, I\gamma$ .  $^{55}\text{Fe}$  deduced resonances, levels,  $J, \pi$ , neutron separation energy. Enriched target, Ge(Li) detector. Valence model.

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**Keynumber:** 1980PIZN

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

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

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**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 <sup>1</sup>H, <sup>9</sup>Be, <sup>14</sup>N, <sup>24, 25</sup>Mg, <sup>27</sup>Al, <sup>28, 29</sup>Si, <sup>32</sup>S, <sup>35</sup>Cl, <sup>40, 44</sup>Ca, <sup>47, 48, 49</sup>Ti, <sup>50, 52, 53</sup>Cr, <sup>55</sup>Mn, <sup>54, 56, 57</sup>Fe(n,γ), E=thermal; measured E<sub>γ</sub>, I<sub>γ</sub>. <sup>2</sup>H, <sup>10</sup>Be, <sup>25, 26</sup>Mg, <sup>28</sup>Al, <sup>29, 30</sup>Si, <sup>33</sup>S, <sup>36</sup>Cl, <sup>41, 45</sup>Ca, <sup>48, 49, 50</sup>Ti, <sup>51, 53, 54</sup>Cr, <sup>56</sup>Mn, <sup>55, 57, 58</sup>Fe deduced Q, neutron binding energy.

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**Keynumber:** 1979RAZT

**Reference:** Bull.Am.Phys.Soc. 24, No.4, 631, EM7 (1979)

**Authors:** S.Raman, J.C.Wells, Jr., G.G.Slaughter

**Title:** Valence Neutron Capture in <sup>54</sup>Fe

**Keyword abstract:** NUCLEAR REACTIONS <sup>54</sup>Fe(n,γ), E=7.76-14.4 keV; measured E<sub>γ</sub>, I<sub>γ</sub>. <sup>55</sup>Fe deduced resonance.

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**Keynumber:** 1979BRZN

**Reference:** Bull.Am.Phys.Soc. 24, No.7, 867, BB8 (1979)

**Authors:** A.Brusegan, F.Corvi, G.Rohr, R.Shelley, T.Van der Veen

**Title:** Neutron Capture Cross Section Measurements of Fe-54 and Fe-56

**Keyword abstract:** NUCLEAR REACTIONS <sup>54, 56</sup>Fe(n,γ), E=0.5-600 keV; measured σ.

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**Keynumber:** 1978ALZK

**Coden:** CONF Brookhaven(Neutron Capt γ-Ray Spectr), Proc, P535, Allen

**Keyword abstract:** NUCLEAR REACTIONS <sup>40</sup>Ca, <sup>45</sup>Sc, <sup>54, 56, 57</sup>Fe(n,γ), E=thermal; calculated radiative widths, variances. Statistical, valence, door-way models.

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**Keynumber:** 1978ALYZ

**Coden:** CONF BNL(Neutron Capt γ-Ray Spectr), Contrib, No5, Allen

**Keyword abstract:** NUCLEAR REACTIONS <sup>40</sup>Ca, <sup>45</sup>Sc, <sup>54, 56, 57</sup>Fe(n,γ); calculated L=0,1 radiative widths. <sup>55</sup>Fe deduced dominance of valence effects. <sup>41</sup>Ca, <sup>46</sup>Sc, <sup>57, 58</sup>Fe deduced evidence for doorway components.

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**Keynumber:** 1978AL05

**Reference:** Phys.Lett. 72B, 323 (1978)

**Authors:** B.J.Allen, A.R.de L.Musgrove, W.K.Bertram

**Title:** Resonance and Background Interference in <sup>54</sup>Fe Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS <sup>54</sup>Fe(n,γ); calculated valence σ.

-----  
**Keynumber:** 1977RI14

**Reference:** Nucl.Instrum.Methods 144, 323 (1977)

**Authors:** M.Riihonen, J.Keinonen

**Title:** Measurements of Absolute Resonance Strengths in (p, $\gamma$ ) Reactions on Rare or Gaseous Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{20, 21, 22}\text{Ne}$ ,  $^{54, 56, 57, 58}\text{Fe}(n,\gamma)$ ; measured yields.  $^{55, 57, 58, 59}\text{Co}$  deduced resonance strength.

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**Keynumber:** 1977AL12

**Reference:** Nucl.Phys. A283, 37 (1977)

**Authors:** B.J.Allen, A.R.de L.Musgrove, J.W.Boldeman, R.L.Macklin

**Title:** Valence Neutron Capture in  $^{54}\text{Fe}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}(n,\gamma)$ ,E=2.5-500 keV; measured  $\sigma(E,E\gamma)$ .  $^{55}\text{Fe}$  deduced resonance parameters,correlation coefficient,valence capture.  $^6\text{Li}(n,\alpha)$  monitor. Enriched target.

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**Keynumber:** 1975MUZX

**Coden:** JOUR BAPSA 20 168 HB20

**Keyword abstract:** NUCLEAR REACTIONS  $^{38}\text{Ar}$ ,  $^{54}\text{Fe}(n,\gamma)$ ,E=thermal; calculated  $\sigma$ .

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**Keynumber:** 1975BE07

**Reference:** Nucl.Phys. A240, 29 (1975)

**Authors:** H.Beer, R.R.Spencer

**Title:** keV Neutron Radiative Capture and Total Cross Section of  $^{50, 52, 53}\text{Cr}$ ,  $^{54, 57}\text{Fe}$ , and  $^{62, 64}\text{Ni}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{50, 52, 53}\text{Cr}$ ,  $^{54, 57}\text{Fe}$ ,  $^{62, 64}\text{Ni}(n,\gamma)$ ,E=5-200 keV;  $^{50, 52}\text{Cr}$ ,  $^{54}\text{Fe}$ ,  $^{62, 64}\text{Ni}(n,t)$ ,E=10-300 keV; measured  $\sigma(E,E\gamma)$ , $\sigma(E,Et)$ .  $^{51, 53, 54}\text{Cr}$ ,  $^{55, 58}\text{Fe}$ ,  $^{63, 65}\text{Ni}$  deduced resonances,J,L,n-width, $\gamma$ -width. Enriched targets.

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**Keynumber:** 1974PAZO

**Coden:** REPT USNDC-11 P221

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}$ ,  $^{61}\text{Ni}(n,X)$ , (n, $\gamma$ ),E=15-100 keV; measured  $\sigma$ .

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**Keynumber:** 1974PAZM

**Coden:** REPT COO-3058-50 P5

**Keyword abstract:** NUCLEAR REACTIONS  $^{54, 58}\text{Fe}$ ,  $^{61}\text{Ni}(n,\gamma)$ , (n,X),E=15-100 keV; measured  $\sigma$ ,total  $\sigma$ .

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**Keynumber:** 1974BEXF

**Coden:** REPT KFK-2063,CRL

**Keyword abstract:** NUCLEAR REACTIONS  $^{50, 52, 53}\text{Cr}$ ,  $^{54, 57}\text{Fe}$ ,  $^{62, 64}\text{Ni}(n,\gamma)$ ,E <300 keV; measured  $\sigma(E,E\gamma)$ .  $^{51, 53, 54}\text{Cr}$ ,  $^{55, 58}\text{Fe}$ ,  $^{63, 65}\text{Ni}$  deduced resonances.

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**Keynumber:** 1973KNZZ

**Coden:** REPT COO-3058-34 P3 (CRL)

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}$ ,  $^{61}\text{Ni}(n,\gamma)$ ,E=10-200 keV; measured  $\sigma(E)$ .  $^{62}\text{Ni}$  deduced resonances.

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**Keynumber:** 1973BEWY

**Coden:** REPT EANDC(E)157-U,P1

**Keyword abstract:** NUCLEAR REACTIONS  $^{54, 57}\text{Fe}$ ,  $^{50, 52, 53}\text{Cr}$ ,  $^{62, 64}\text{Ni}(n,\gamma)$ ,E=5-200 keV; measured  $\sigma$ .

**Keynumber:** 1972KOZJ

**Coden:** CONF Budapest,Contributions,P234,J Kopecky,10/13/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}, ^{52}\text{Cr}$ ,  $^{54}\text{Fe}$ ,  $^{60}, ^{62}\text{Ni}(n,\gamma)$ ; measured  $\gamma$ -CP.  $^{51}, ^{53}\text{Cr}$ ,  $^{55}\text{Fe}$ ,  $^{61}, ^{63}\text{Ni}$  levels deduced L(n),J.

**Keynumber:** 1972KO15

**Reference:** Nucl.Phys. A188, 535 (1972)

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

**Title:** Study of the (n, $\gamma$ ) Reaction in the Mass Region A = 50 - 63

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}\text{Cr}$ ,  $^{52}\text{Cr}$ ,  $^{54}\text{Fe}$ ,  $^{60}\text{Ni}$ ,  $^{62}\text{Ni}(\text{polarized } n,\gamma)$ ;E= thermal; measured  $E\gamma, I\gamma, \gamma$ -CP; deduced Q.  $^{51}\text{Cr}$ ,  $^{53}\text{Cr}$ ,  $^{55}\text{Fe}$ ,  $^{61}\text{Ni}$ ,  $^{63}\text{Ni}$  levels deduced J. Enriched targets.

**Keynumber:** 1972KN03

**Reference:** Nucl.Phys. A194, 458 (1972)

**Authors:** V.A.Knatko, E.A.Rudak

**Title:** Phonon-Particle Doorway States in (n, $\gamma$ ) Reactions on Nuclei with N = 28 and N = 82

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}\text{Ti}$ ,  $^{52}\text{Cr}$ ,  $^{54}\text{Fe}$ ,  $^{138}\text{Ba}$ ,  $^{140}\text{Ce}$ ,  $^{142}\text{Nd}(n,\gamma)$ ,E=thermal; analyzed  $\sigma(E\gamma)$ .  $^{51}\text{Ti}$ ,  $^{53}\text{Cr}$ ,  $^{55}\text{Fe}$ ,  $^{139}\text{Ba}$ ,  $^{141}\text{Ce}$ ,  $^{143}\text{Nd}$  calculated levels,wave functions,B(E1); analyzed phonon-particle doorway states.

**Keynumber:** 1972KN02

**Reference:** Yad.Fiz. 15, 1132 (1972); Sov.J.Nucl.Phys. 15, 626 (1972)

**Authors:** V.A.Knatko, E.A.Rudak

**Title:** Doorway States of 'Phonon + Particle' Type in (n, $\gamma$ ) Reactions with N = 28 and N = 82 Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}\text{Ti}$ ,  $^{52}\text{Cr}$ ,  $^{54}\text{Fe}$ ,  $^{138}\text{Ba}$ ,  $^{140}\text{Ce}$ ,  $^{142}\text{Nd}(n,\gamma)$ ,E=thermal; calculated E1  $I\gamma$ .  $^{51}\text{Ti}$ ,  $^{53}\text{Cr}$ ,  $^{55}\text{Fe}$ ,  $^{139}\text{Ba}$ ,  $^{141}\text{Ce}$ ,  $^{143}\text{Nd}$  analyzed E1 transitions,doorway states.

**Keynumber:** 1972HOYH

**Coden:** REPT COO-3058-27,P14

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}$ ,  $^{58}\text{Fe}$ ,  $^{61}, ^{64}\text{Ni}(n,X)$ , (n, $\gamma$ ),E=0.1-35 keV; measured  $\sigma(E), \sigma(nT)(E)$ .  $^{55}, ^{59}\text{Fe}$ ,  $^{62}, ^{65}\text{Ni}$  deduced resonances.

**Keynumber:** 1972BEVV

**Coden:** REPT KFK-1676 P3

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}, ^{52}, ^{53}\text{Cr}$ ,  $^{54}, ^{57}\text{Fe}$ ,  $^{62}, ^{64}\text{Ni}(n,\gamma)$ ; measured  $\sigma(E)$ .

**Keynumber:** 1971WHZV

**Coden:** REPT ORNL-TM-3442,J E White,10/11/71

**Keyword abstract:** NUCLEAR REACTIONS Fe,  $^{54}, ^{56}\text{Fe}(n,\gamma)$ ,E <10 MeV; calculated  $\sigma(E;E\gamma)$ .  $^{55}, ^{57}\text{Fe}$  calculated levels,J, $\pi$ , $\gamma$ -branching.

**Keynumber:** 1971KOZI

**Coden:** JOUR NTNAA 37 396,J Kopecky

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}, ^{52}\text{Cr}$ ,  $^{54}, ^{57}\text{Fe}$ ,  $^{60}, ^{62}\text{Ni}(n,\gamma)$ ,E=thermal; measured  $\gamma$ -CP,Q, $E\gamma, I\gamma$ .  $^{51}, ^{53}\text{Cr}$ ,  $^{55}, ^{58}\text{Fe}$ ,  $^{61}, ^{63}\text{Ni}$  deduced levels,J, $\pi$ .

**Keynumber:** 1971BIZV

**Coden:** REPT ORNL-TM-3379, J R Bird,9/14/71

**Keyword abstract:** NUCLEAR REACTIONS F,Na,Mg,Al,S, <sup>35</sup>Cl,K,Ca, <sup>40</sup>, <sup>42</sup>, <sup>44</sup>Ca,Ti,V,Fe, <sup>54</sup>, <sup>56</sup>Fe,Ni, <sup>58</sup>, <sup>60</sup>Ni, <sup>63</sup>Cu,Zn(n,γ),E=10-100 keV; measured Eγ,Iγ. 9 inx 12 in NaI detector.

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**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 <sup>28</sup>Si Enriched Silicon

**Keyword abstract:** NUCLEAR REACTIONS <sup>28</sup>, <sup>29</sup>, <sup>30</sup>Si, <sup>6</sup>Li, <sup>14</sup>N, <sup>19</sup>F, <sup>27</sup>Al, <sup>54</sup>, <sup>56</sup>Fe, <sup>207</sup>Pb(n,γ), E=thermal; <sup>28</sup>Si(n,n'γ), E=fast; measured Eγ, Iγ; deduced Q. <sup>29</sup>, <sup>30</sup>, <sup>31</sup>Si deduced levels, γ-branching. Natural, <sup>28</sup>Si enriched targets, Ge(Li) detector.

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**Keynumber:** 1970BRZJ

**Coden:** REPT FEI-205,D Broder,5/29/72

**Keyword abstract:** NUCLEAR REACTIONS <sup>50</sup>, <sup>52</sup>, <sup>53</sup>Cr, <sup>54</sup>, <sup>56</sup>Fe(n,γ); measured Eγ,Iγ. <sup>51</sup>, <sup>53</sup>, <sup>54</sup>Cr deduced levels,γ-branching.

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**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 <sup>23</sup>Na, <sup>27</sup>Al, <sup>54</sup>, <sup>56</sup>, <sup>57</sup>, <sup>58</sup>Fe, <sup>58</sup>, <sup>60</sup>, <sup>61</sup>, <sup>62</sup>, <sup>64</sup>Ni(n,γ), E=0.1-200 keV; measured σ(E). <sup>24</sup>Na, <sup>28</sup>Al, <sup>55</sup>, <sup>57</sup>, <sup>58</sup>, <sup>59</sup>Fe, <sup>59</sup>, <sup>61</sup>, <sup>62</sup>, <sup>63</sup>, <sup>65</sup>Ni deduced resonance parameters.

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**Keynumber:** 1968BI06

**Reference:** Nucl.Phys. A120, 113 (1968)

**Authors:** J.R.Bird

**Title:** keV Neutron Capture in Iron

**Keyword abstract:** NUCLEAR REACTIONS <sup>54</sup>Fe, <sup>56</sup>Fe(n,γ) E=15-80 keV, measured σ(E; Eγ). <sup>55</sup>Fe, <sup>57</sup>Fe deduced levels, resonances. Natural, enriched targets.

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

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**Keynumber:** 1965FI04

**Reference:** Nucl.Phys. 73, 312 (1965)

**Authors:** E.I.Firsov, N.G.Loskutova, E.A.Rudak

**Title:** Spectrum of γ-Rays from the <sup>54</sup>Fe(n,γ)<sup>55</sup>Fe Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}\text{Fe}$ ,  $^{56}\text{Fe}(n,\gamma)$ ,  $E = \text{thermal}$ ; measured  $\sigma(E\gamma)$ .  $^{55}\text{Fe}$  deduced levels. Enriched  $^{54}\text{Fe}$  target.

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**Keynumber:** 1964GR36

**Reference:** Nucl.Phys. 58, 465(1964)

**Authors:** L.V.Groshev, A.M.Demidov, G.A.Kotelnikov, V.N.Lutsenko

**Title:** Spectrum of  $\gamma$ -Rays from the  $\text{Fe}^{56}(n,\gamma)\text{Fe}^{57}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}$ ,  $^{56}$ ,  $^{57}\text{Fe}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $Q$ .  $^{57}\text{Fe}$  deduced levels,  $J$ ,  $\pi$ . Natural target.