

その3

Proceedings of the International Conference Photonuclear Reactions and Applications,
March 26-30, 1973, Asilomar, Pacific Grove, California
(CONF-730301)

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表題の Proceedings を受取ったのは昨年9月である。遅まきではあるが簡単に紹介しておく。

Proceedings は全 1392 頁が二巻に別れた大冊である。 (r, n) のデータなども多いが、ここで内容に立入る余裕はないので、核データの立場から比較的関心の深そうなものの表題と著者を列挙しておく。

以下 [I] は Invited Paper, [C] は Contributed Paper を表わす。[C] は 2 頁までの Abstract である。

[I] Systematic Properties of the Giant Resonance:

Current Status, R.L.Bramblett, S.C.Fultz, and B.L.Berman

[C] Fast Neutron Capture Cross Sections for Silicon, B.J.Allen and R.L.Macklin

[C] The Role of Valence Neutron Transitions in the (r, n) and (n, r) Reactions, S.F.Mughabghab

[C] Investigation of the Reaction Mechanism of 108 Pd(n, r) 109 Pd, S.F.Mughabghab, W.R.Kane, and R.F.Casten

[C] Direct Capture Studies in 162 Dy(n, r), G.W.Cole, S.F.Mughabghab, and R.E.Chrien

[C] The Pb $^{207}(n, r)$ Pb 208 Cross Section at 24 keV Neutron Energy, O.A.Wasson and R.E.Chrien

[C] Gamma Ray Strength Function below 9 MeV in Pb Region, M.A.Lane, G.A.Bartholomew, E.D.Earle, A.J.Ferguson, and J.W.Knowles

[I] Application of Photofission for the Quantitative

Measurement of Nuclear Reactor Fuel Materials,

D.E.Rundquist

- (I) Use of a 10-MeV Linac for Radiography and Nuclear Materials Safeguards, D.Stegemann, J.Grondey, W.Krappel, E.Wattecamp
- (C) Intermediate Structure in the Photoneutron, Photofission and Photoabsorption Cross Sections of ^{238}U at the Fission Threshold, J.W.Knowles, O.Y.Mafra
- (C) Prompt and Delayed Neutrons from Low Energy Photoreactions Part II: Simultaneous Measurement of Prompt $\bar{\nu}$, Γ_n/Γ_f , and Delayed Neutrons per Fission for ^{232}Th , ^{235}U , ^{238}U , and ^{239}Pu for 8, 10, and 12 MeV Bremsstrahlung, J.T.Caldwell, G.M.Worth, E.J.Dowdy
- (C) A "Shelf" in the Subthreshold Photofission Cross Section, C.D.Bowman
- (I) Equations of Motion Theory of Photonuclear Reactions, D.J.Rowe
- (I) Neutron-Capture Gamma Rays, L.M.Bollinger
- (I) (r,n) and (r,r) Reactions below the Giant Resonance, A.M.Lane
- (I) Threshold Photoneutron Measurements, H.E.Jackson
- (I) Threshold Photofission: Theory and Experiment, J.R.Huizenga and H.C.Britt
- (C) Radiative Capture of Fast Neutrons by ^{40}Ca , I.Bergqvist, D.Drake, and D.K.McDaniels
- (C) Radiative Capture of Energetic Neutrons in ^{89}Y and ^{140}Ce , L.Nilsson, A.Lindholm, I.Bergqvist, B.Palsson, and J.Erihsson
- (C) Radiative Capture of Fast Neutrons by Deformed Nuclei, D.K.McDaniels, P.Varghese, I.Bergqvist, and D.Drake
- (C) (n,r) Reaction in the Giant Resonance Region, F.Rigaud,

J.L.Irigaray, G.Y.Petit, G.Longo, and F.Saporetti

(C) Photoneutron Production in Shields for Intense ($d-t$)

Neutron Sources, C.D.Bowman

(C) Photoneutron Cross Sections for ^{209}Bi , S.M.Kocimski and
B.C.Cook

(C) The Role of Simple Configurations in the γ -Decay of the
Capture State in the (n,γ) Reactions, V.A.Knat'ko and
E.A.Rudak

(C) About Anomalous Nature of γ -Rays Spectra from the (n,γ)
Reaction on Slow Neutrons with Nuclei $A \sim 200$, E.A.Rudak
and A.M.Khilmanovich

(C) Recent High-Resolution (γ,n) Measurements at Livermore,
B.L.Berman, R.A.Alvarez, D.D.Faul, F.H.Lewis, Jr.,
P.Meyer, and T.W.Phillips

(I) Photonuclear Reactions in Reactors, N.C.Francis, M.Lubert,
M.R.Mendelson, and R.C.Block

(I) Application of Photonuclear Physics, C.D.Bowman

(以上、かなり任意的抽出である)