

MEMO 4C - 4 / 83

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DATE : 09 Sept, 1998

To: Distribution

From: S. Mayev

Subject: New REACTION Quantity codes for Diction 36.

The following codes are proposed for inclusion in **dictionary 36**:

PAR/M-,SIG,G Cross Section for prompt discrete gamma-ray
production,
i.e. excluding formation via an isomeric level.
PAR/M+,SIG,G Cross Section for delayed discrete gamma-ray
production,
i.e. including formation via an isomeric level.

Reference: 1.

A.Meister, E.Wattecamp, A.J.Koning, A.Hogenbirk,
H.Gruppelaar.
Cross Sections of inelastic Neutron Scattering for
Palladium
Isotope Nuclei.
Conference on Nuclear Data for Science and Technology,
Trieste,Italy, 19-24 May 1997, Vol. 1, p. 587.

2. E-mail from A.Meister.

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> Cross section for inelastic neutron scattering to the second 2+
state
> (931keV) in Pd-108 and subsequent 931keV gamma-ray emission in
dependence

> on the neutron energy

>

Enl...Enu [MeV]	Cross Section [Barn]	-----
.70 .75	.00+/- .01	
.75 .80	.01+/- .01	
.80 .85	-.01+/- .01	
.85 .90	-.01+/- .01	
.90 .95	-.01+/- .01	
.95 1.00	.01+/- .01	
1.00 1.10	.03+/- .01	
1.10 1.20	.07+/- .01	
1.20 1.30	.08+/- .01	-----

>

Example: REACTION (46-PD-108(N,INL)46-PD-108,PAR/M-,SIG,G)

>

>

> Cross section for inelastic neutron scattering to the second 2+ state

> (931keV) in Pd-108 and subsequent 497keV gamma-ray emission in dependence

> on the neutron energy

>

Enl...Enu [MeV]	Cross Section [Barn]	-----
.70 .75	-.01+/- .01	
.75 .80	-.01+/- .01	
.80 .85	-.01+/- .01	
.85 .90	-.01+/- .01	
.90 .95	.00+/- .01	
.95 1.00	.05+/- .01	
1.00 1.10	.14+/- .02	
1.10 1.20	.21+/- .03	-----

>

Example: REACTION (46-PD-108(N,INL)46-PD-108,PAR/M+,SIG,G)

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Clearance: Vassily N. Manokhin.

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