



BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.

Upton, Long Island, New York 11973

National Nuclear Data Center
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4C-1/180

DATE: July 30, 1986
TO: Distribution
FROM: V. McLane *VM*
SUBJECT: EXFOR Corrections and Requested Data Sets

Enclosed are corrections and requested data for Yb, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Pb, and Bi.

Charles L. Dunford
Charles L. Dunford

VM:a1

Distribution
V. Manokhin
J. J. Schmidt
N. Tubbs
NNDC (6)

cc. *Arcilla*
Kullen
Bandacias .
Goalo
Lamuel .
Lemuel .
Obamoto
Osomuewe
Schmidt
Schweser .
Seits .

Completeness Check References for Area 3

Z	A	Q	LAB	EN	RNGE	REFERENCE	DATE	AUTHOR
				EV				
TA	181	TOT	3 CAI	1.8-3	5.0+5	J AJN,9,155	7602	ADIB+
IR	193	NG	3 AEP	5.7+9		J CNP,7,93	8502	ZHU+
PT	198	NZN	3 IMP	1.5+7		J CNP,6,373	8411	YANG+

TRANS	0	860729	0	0
ENTRY	30378	850121	0	1
SUBENT	30378001	850121	0	1
BIB	12	21	0	2
TITLE	MEASUREMENT OF TOTAL CROSS-SECTION OF CD, AG, BI AND SR FOR THE NEUTRON ENERGIES BETWEEN 18.44 AND 21.95 MEV.			
AUTHOR	(R. MAGGI ORTEGA)			
INSTITUTE	(3MEXCNM)			
REFERENCE	THIS IS PRESENTED TO UNIVERSIDAD VERACRUZANA, JALAPA, FACULTAD DE CIENCIAS, MEXICO.			
MONITOR	(R, INIS-MF-1743, 7505) THESIS, IN SPANISH.			
FACILITY	ABSOLUTE, TRANSMISSION MEASUREMENT.			
INC-SOURCE	(VDGT) 12MEV TANDEM VAN DE GRAAFF ACCELERATOR, EN TYPE.			
METHOD	(D-T) T(D,N)HE-4 REACTION.			
DETECTOR	TRANSMISSION.			
	(HORBU) NE-450, HORNIAK DETECTOR, 1.5G ZN-S AND LOG OF LUCITE. EFFICIENCY IS APPROX. 5.5E-4/NEUTRON FOR (RA-BE) NEUTRON.			
	(LONGC) FOR NEUTRON-FLUX MONITORING, LONG BF-3 COUNTER WAS USED.			
PART-DET	(N) NEUTRONS.			
ERR-ANALYS	TOTAL ERRORS INCLUDING COUNTING STATISTICS, ERRORS FOR SCATTERED NEUTRON TO THE DETECTOR AND FOR MULTIPLE-SCATTERING OF NEUTRONS.			
HISTORY	(770215C) KO.			
ENDBIB	21	0	0	23
NOCOMMON	0	0	0	24
ENDSUBENT	24	0	0	25
SUBENT	30378004	850121	199999	1
BIB	2	7	4	2
REACTION	(83-BI-209(N, TOT), SIG)			
STATUS	(CURVE)			
	COMPILER'S NOTE =			
	NUMERICAL VALUES HAD BEEN REQUESTED FROM THE AUTHOR (75/06/13), BUT SO FAR NO ANSWER. THE VALUES OF ENERGY ARE GIVEN IN THE THESIS.			
	DATA READ FROM FIG. 4.2D OF THESIS.			
ENDBIB	7	0	0	10
NOCOMMON	0	0	0	11
DATA	3	11	0	12
EN	DATA	DATA-ERR	0	13
MEV	B	B	0	14
	1.8440E+01	7.0300E+00	8.0000E-01	15
	1.8800E+01	6.1500E+00	5.0000E-01	16
	1.9170E+01	5.2900E+00	5.5000E-01	17
	1.9520E+01	5.3500E+00	2.5000E-01	18
	1.9880E+01	5.0000E+00	3.5000E-01	19
	2.0230E+01	3.9200E+00	3.0000E-01	20
	2.0570E+01	5.0000E+00	2.5000E-01	21
	2.0900E+01	5.4200E+00	2.0000E-01	22
	2.1250E+01	5.7800E+00	2.0000E-01	23
	2.1610E+01	6.2300E+00	1.5000E-01	24
	2.1950E+01	6.3600E+00	1.5000E-01	25
ENDDATA	13	0	0	26
ENDSUBENT	25	0	0	26
ENTRY	30602	840912	499999	1
SUBENT	30602001	840912	30378999999999	1
BIB	18	28	0	1
TITLE	ACTIVATION CROSS-SECTIONS FOR BI-209(N,A)TL-206			
AUTHOR	REACTION			
INSTITUTE	(H.M. AGRAWAL, MOHD. WASIM, M. AFZAL ANSARI, M.L. SEHGAL)			
REFERENCE	(3INDNUA)			
	(J, ZP/A, 300, 313, 8105)			

data points off, please check

SAMPLE 1 8
MONITOR 1 9
MONIT-REF 1 10
FACILITY 1 11
INC-SOURCE 1 12
METHOD 1 13
INC-SPECT 1 14
DETECTOR 1 15
DECAY-DATA 1 16
CORRECTION 1 17
ERR-ANALYS 1 18
COMMENT 1 19
STATUS 1 20
HISTORY 1 21
ENDBIB 1 22
NOCOMMON 1 23
ENDSUBENT 1 24
SUBENT 1 25
BIB 1 26
REACTION 1 27
ENDBIB 1 28
NOCOMMON 1 29
DATA 1 30
EN 1 31
KEY 1 32
3.4000E+02 1 33
5.7500E+02 1 34
ENDDATA 1 35
ENDSUBENT 1 36
ENDENTRY 1 37
ENTRY 1 38
SUBENT 1 39
BIB 1 40
TITLE 1 41
AUTHOR 1 42
INSTITUTE 1 43
REFERENCE 1 44
COMMENT 1 45
SAMPLE 1 46
MONITOR 1 47
FACILITY 1 48
INC-SOURCE 1 49
METHOD 1 50

SPECTROGRAPHICALLY PURE BI203 POWDER SANDWICHED BETWEEN TWO THIN PIECES OF CELLOTAPE .6 CM IN DIAM. .2445 G/CM**2 THICKNESS.
(53-I-127(N,G)53-I-128,,SIG) FOR NEUTRON FLUX CALCUL.
(D.I.GARBER+R,BNL-325,76)
(VDG) I.I.T.KANPUR VAN DE GRAAFF GENERATOR
(P-T) PROTON ON TRITIUM
(ACTIV) ACTIVATION METHOD
LARGE ENERGY SPREAD OF THE NEUTRONS AS A RESULT OF CLOSE POSITION OF SAMPLE WITH RESPECT TO NEUTRON SOURCE
END WINDOW BETA-COUNTER
(81-TL-206-G,4.3MIN,B-) HALF-LIFE 4.3MIN WAS USED IN C.-S. DEDUCING
CORRECTIONS WERE MADE AT THE FINITE THICKNESS OF THE TARGET
THE WINDOW THICKNESS OF THE BETA-COUNTER THE OBTAINED RESULTS ARE IN CONTRADICTION WITH RESULTS FROM HAUSER-FESHBACH CALCULATIONS - SEE J.A.HOLMAS+ AT DATA NUCL.DATA TABLES 18,412(1976)
DATA WERE TAKEN FROM TABLE 1,Z.PHYS.A300,314(1981) (811021C) VP.
28 0
31 0
30602002 840912 1
(83-BI-209(N,A)81-TL-206-G,,SIG)
5 2
DATA MICRO-B DATA-ERR MONIT
MICRO-B MICRO-B B
1.5000E+02 1.2600E+00 1.8000E-01 1.7000E-01
2.3500E+02 1.5500E+00 2.3000E-01 1.2000E-01
4 0
10 0
2 1
30656 850701
30655001 850701
14 48
MEASUREMENTS OF THE INDUCED GAMMA RAY CROSS-SECTIONS BY 14.2 MEV NEUTRONS WITH FE,NI AND CU. (AND INCOMPLETE DATA FOR BI AND PB).
(SHI XIA-MIN,SHEN RONG-LIN,XING JIN-QIANG, SHEN RONG-LIN,DING DA-ZHAO)
(3CPRAEP)
(J,CNP,4,(2),120,0205) IN CHINESE. FULL AND DETAIL. NO DESCRIPTION OF BI AND PB.
(C,82ANTWER,,373,8209) NO PARTIAL X'TION. BI,PB ADDED.
===COMPILER'S NOTE ==
INCOMPLETE DATA OF BI AND PB ARE ALSO COMPILED, WHICH ARE NOT MENTIONED IN THE 1ST REFERENCE, BUT ARE THE RESULTS WITH THE SAME EXPERIMENTAL PROCEDURE.
NATURAL SAMPLE. PURE METALLIC DISK WITH DIAMETER OF 100 TO 130MM AND THICKNESS FROM 5 TO 15MM.
ABSOLUTE, N-FLUX WAS DETECTED BY ASSOCIATED PARTICLE-METHOD.
(CCM,3CPRAEP) 600 KEV COCKCROFT-WALTON ACCELERATOR.
(D-T) INCIDENT DEUTRON ENERGY OF 200KEV.
(TOF,ASSOP)
.TIME OF FLIGHT IS USED TO DISCRIMINATE BETWEEN THE SCATTERED NEUTRONS AND GAMMA-RAYS.

As mass decay included?

TRANS	860728	0	0	0
ENTRY	30119	850305	30119	0
SUBENT	30119001	850305	30119	0
BIB	9	16	1	1
TITLE	INFLUENCE OF DIRECT INELASTIC SCATTERING ON (N,2N)			
AUTHOR	(J.CSIKAI,G.PETO)			
INSTITUTE	(3HUNDEB)			
REFERENCE	(J.AHP,23,87,6705) TOTAL SIGMA,GRAPHS AND TABLES			
INC-SOURCE	(J.MFF,16,123,6802) THESIS CSIKAI, IN HUNG,GRAPHS, TABLES			
METHOD	H-3(D,N)HE-4 REACTION			
DETECTOR	(ACTIV)			
	(NAICR,GEMUC) NAI(TL) SCINTILLATION GAMMA SPECTROMETER			
	AS WELL AS GEIGER-MUELLER COUNTER CALIBRATED WITH			
	STANDARD SOURCES			
	(LONGC,SCIN) NEUTRON FLUX MONITORED WITH BF3 LONG-			
	COUNTER AND A PLASTIC SCINTILLATOR			
STATUS	DATA TAKEN FROM ACTA PHYS.HUNG 23 87 5/67			
HISTORY	TABLE 2.			
ENDBIB	(710225C)	16	0	1
COMMON	2	3	1	1
EN	EN-RSL	0	0	1
MEV	MEV	0	0	1
	1.4700E+01	3.0000E-01	0	1
ENDCOMMON	3	0	0	1
ENDSUBENT	23	0	0	1
SUBENT	30119009	840503	0	1
BIB	4	4	0	1
REACTION	(82-PB-204(N,INL)82-PB-204, SIG)			
MONITOR	(29-CU-65(N,2N)29-CU-64, SIG)			
PART-DET	(DG) DECAY GAMMAS OF 899+912 KEV			
SAMPLE	NATURAL ELEMENT			
ENDBIB	4	0	0	1
NOCOMMON	0	0	0	1
DATA	DATA-ERR	MONIT	0	1
DATA	MB	MB	0	1
MB	7.6500E+01	8.0000E+00	9.7000E+02	0
ENDDATA	3	0	0	1
ENDSUBENT	12	0	0	1
ENTRY	2	1	0	1
ENTRY	30322	850314	0	1
SUBENT	30322001	840530	0	1
BIB	18	58	0	1
TITLE	CROSS-SECTIONS OF 14 MEV NEUTRON REACTIONS PRODUCING			
AUTHOR	SHORT-LIVED NUCLIDES.			
INSTITUTE	(J.JANCZYSZYN,L.GORSKI)			
REFERENCE	(3POLITJ)			
	(J,JRC,14,201,73)			
	(J,CA,17,(3),703,72)EXP.DETAIL.			
	(J,RLR,8,363,7112) BRIEF DESCRIPTION OF EXPERIMENT.			
MONITOR	(29-CU-63(N,2N)29-CU-62, SIG)			
	NEUTRON FLUX WAS DETERMINED ON THE BASIS OF THE 'TEXAS			
	CONVENTION', R.L.HEATH, PROC. INTERN.CONF. MODERN TRENDS IN			
	ACTIVATION ANALYSIS, COLLEGE STATION, TEXAS, 1965, P.389.			
	*SPECIFICATION OF TEXAS CONVENTION,			
	THE EFFECTIVE FLUXES FOR SAMPLE ACTIVATIONS ARE TO BE			
	MEASURED BY EXPOSING HIGH-PURITY COPPER DISKS OF 0.25-			
	MM THICKNESS AND 1-CM AND/OR 2.5-CM DIA FOR 1 MIN TO			
	THE N-FLUX TO BE MEASURED. ---AND THE DISINTEGRATION			
	RATE OF CU-62 ACTIVITY IS DETERMINED. THEN THE FLUX IS			
	GIVEN IN DISINT./MIN/(GRAM OF COPPER).			
FACILITY	(CCW) NEUTRON GENERATOR. IN ORDER TO OBTAIN THE IRRADI-			

INC-SOURCE 1
 INC-SPECT 22
 METHOD 23
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 303229999999999
 Z999999999999999

ATION TIMES 0.1 TO 1 SEC. A DEFLECTING ELECTRODE WAS
 PLACED IN THE GENERATOR TUBE.
 (D-T) T(D,N) HE REACTION.
 14 MEV NEUTRONS, FLUX WAS 5.E+7 TO 2.E+8 N/CM2/SEC.
 (ACTIV) CYCLIC NEUTRON ACTIVATION METHOD WITH THE 0.2-
 SECOND FAST PNEUMATIC TUBE SYSTEM (MEAN VELOCITY, 30M/S)
 EACH SAMPLE WAS IRRADIATED FOR 3 HALF-LIVES OF THE
 INVESTIGATED NUCLIDE, AND THE COUNTING TIME WAS EQUAL
 TO THE IRRADIATION, UNLESS THE SHORTENING OF THE FORMER
 WAS NECESSARY TO AVOID THE 'LONG-LIVED' NUCLIDE DECAY.
 AFTER A PAUSE OF 5 TO 10 HALF-LIVES OF NUCLIDE, A 2ND
 MEASUREMENT WITH THE SAME COUNTING TIME AS THE 1ST ONE
 WAS FOLLOWED.
 (NAICR) NAI(TL) 3 * 3 INCH, WITH A 400-CHANNEL ANALYSER
 VICTOREEN ST 400 DM.
 (SCIN) SCINTILLATION COUNTER, HORNIAK NE 450, WITH A
 PHOTOMULTIPLIER EMI6097F FOR NEUTRON MONITORING.
 (DG,B+) DECAY GAMMAS OR DECAY BETA+.
 THE DEAD TIME OF THE MULTICHANNEL ANALYSER WAS CORRECT-
 ED.
 ANALYSIS WHEN THE SAME ISOMER ARRIVES FROM TWO DIFFERENT ISTOPES
 OF THE SAME ELEMENTS AS A RESULT OF THE (N,N') AND
 (N,2N) REACTIONS, THE WEIGHED MEAN CROSS-SECTION WAS
 CALCULATED, TAKING ISOTOPIC ABUNDANCES AS WEIGHTS.
 MAINLY TAKEN FROM THE TABLE OF ISOTOPES, LEDERER ET AL.,
 6TH ED., 1967.
 ERR-ANALYS TOTAL ERROR IS GIVEN. THE LARGE ERRORS FOR SOME OF
 CROSS-SECTIONS MAY PARTIALLY BE DUE TO INSTRUMENTAL
 IMPERFECTIONS AND TO THE FACT THAT THE CROSS-SECTION
 WAS NOT THE MAIN PURPOSE OF THIS FACILITY OF AUTOMATIC
 ACTIVATION ANALYSIS.
 COMMENT IN A FEW CASES THE CONVERSION COEFFICIENT IS NOT
 KNOWN, AND IS ASSUMED TO BE 0 WITH THE NUMBER OF
 QUANTA PER DISINTEGRATION TO BE 1.
 STATUS FROM TABLE 1 OF J.RADIOANAL.CHEM., 14(1973)201.
 HISTORY (APRVD) APPROVED BY JANCZYCZYN WITH NOTES, 29/04/76.
 (760203C) KO.
 (760519A) KO. -ADD 'APRVD', INF.ON HALF-LIFE OF IN-114M230322
 AND AUTHOR'S CORRECTION OF CE-140(N,2N) X-SECTION.-
 58 0
 59 3
 ENDBIB 1
 COMMON 3
 EN 3
 MEV 1.4000E+01
 ENDCOMMON 3
 ENDSUBENT 65
 SUBENT 30322020 840530
 BIB 3
 REACTION (82-PB-204(N,2N)82-PB-203-M*,SIG)
 HALF-LIFE (HL,82-PB-203-M1) = 6.1 SEC.
 SAMPLE PB-CL(2).
 ENDBIB 3
 NOCOMMON 0
 DATA 3
 DATA DATA-ERR HL
 MB MB SEC
 2.3000E+03 2.5000E+02 6.1000E+00
 ENDDATA 3
 ENDSUBENT 11
 ENDENTRY 2
 ENDTRANS 2

TRANS 860717
 ENTRY 850219
 SUBENT 850219
 BIB 32
 TITLE

30037 0 1
 30037 0 1
 30037 1 2
 30037 1 3
 30037 1 4
 30037 1 5
 30037 1 6
 30037 1 7
 30037 1 8
 30037 1 9
 30037 1 10
 30037 1 11
 30037 1 12
 30037 1 13
 30037 1 14
 30037 1 15
 30037 1 16
 30037 1 17
 30037 1 18
 30037 1 19
 30037 1 20
 30037 1 21
 30037 1 22
 30037 1 23
 30037 1 24
 30037 1 25
 30037 1 26
 30037 1 27
 30037 1 28
 30037 1 29
 30037 1 30
 30037 1 31
 30037 1 32
 30037 1 33
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 30037 1 35
 30037 1 36
 30037 199999
 29999999999999

NEUTRON TOTAL CROSS SECTION MEASUREMENTS BETWEEN 13.0 AND 16.2 MEV FOR THE FOLLOWING NUCLEI= 11-NA, 13-AL-027, 26-FE, 28-NI, 29-CU, 30-ZN, 38-SR, 40-ZR, 47-AG, 55-SN, 80-HG, 91-TL, 82-PB AND 83-BI-209
 (M. MAZARI, F. ALBA, V. SERMENT, A. FERNANDEZ, T. W. BONNER) (3MEXUWX)
 (C. 588ENEVA, 15, 28, 5809) EXPERIMENT DESCRIPTION, RESULTS FOR PA, FE, SR, ZR AND TL.
 (J. PR, 100, 972, 5511) SHORT ABSTRACT.
 (J. NMF, 4, 52, 5506) DESCRIPTION OF EXPERIMENT
 (J. AIF, 1, 69, 5506) DETAILED DESCRIPTION OF EXPERIMENT, GRAPHS FOR AL, FE, NI, CU, ZN, AG, SN, HG, PB AND BI. (55)
 (VDG) 2 MEV VAN DE GRAAFF ACCELERATOR.
 (D-T) NEUTRONS PRODUCED VIA T(D,N)HE-4 REACTION.
 VARIABLE NEUTRON ENERGY OBTAINED BY VARYING DEUTERON ENERGY AND OBSERVATION ANGLE WITH RESPECT TO DEUTERON BEAM. DETECTOR WAS A PLASTIC SCINTILLATOR BIASED SO AS NOT TO COUNT 3.1 MEV GAMMA RAYS FROM C-12(D,P)C-13 REACTION.
 (SCIN) PLASTIC SCINTILLATOR
 TRANSMISSION
 DISTANCE FROM TARGET TO DETECTOR WAS 40 CMS AND SAMPLES WERE PLACED MID-WAY BETWEEN TARGET AND DETECTOR.
 IN-SCATTERING CORRECTIONS WERE APPLIED ON THE BASIS OF DAY AND HENKEL THEORY (PHYS. REV., VOL. 92, P. 358 (1953)), USING THE FORMULA,
 $D-SIG/SIG = (D/L)^2 * ((K^2 + 1)^2)$
 WHERE D-SIG AND SIG ARE THE ERROR AND TOTAL CROSS SECTION RESPECTIVELY, D IS SAMPLE DIAMETER, L SAMPLE LENGTH, K THE WAVENUMBER, $R = 1.38 * (10EXP-13)^* F$, WHERE F IS THE CUBE-ROOT OF THE MASS-NUMBER, A.

EXP-YEAR
 FACILITY
 INC-SOURCE
 DETECTOR
 METHOD
 ENDBIB
 NOCOMMON
 ENDSUBENT
 ENDENTRY
 ENDTANS

*Trans reference in OROA for H2
 AIF, 1, 69, 55*

+TRANS	860721	0	0	0
ENTRY	30115	850305	0	1
SUBENT	30115001	850305	0	1
BIB	14	24	0	2
TITLE	SOME (N,P) REACTION CROSS-SECTIONS FOR 14.7MEV NEUTRONS			
AUTHOR	(J.CSIKAI,S.NAGY)			
INSTITUTE	(3HUNDEB)			
REFERENCE	(J,NP/A,91,222,6701) FULL INFORMATION, DATA TABLE			
	(J,MFF,16,123,6802) THESIS CSIKAI IN HUNG, TABLE			
	(J,AK,8,79,6606) ABSTRACT THESIS, DATA TABLE			
SAMPLE	SAMPLE THICKNESSES VARIED FROM 5 TO 20 MG/SQCM			
MONITOR	= STAND 1			
	(29-CU-63(N,2N)29-CU-62,,SIG)=			
	STAND 2			
INC-SOURCE	SAMPLE WAS PLACED BETWEEN TWO STANDARD FOILS			
METHOD	(D-T) D-T REACTION			
DETECTOR	(ACTIV) ACTIVATION			
	(GEMUC) MICA END-WINDOW GM COUNTER CALIBRATED WITH			
	STANDARD SOURCES			
PART-DET	(LONGC) BF3 LONG COUNTER USED AS FLUX MONITOR			
CORRECTION	(B-) DECAY BETA			
	ABSORPTION CORRECTIONS WERE CALCULATED ACCORDING TO			
ERR-ANALYS	BROVETTI ET AL, NUCL INSTR 14 302 (1962)			
STATUS	NO INFORMATION			
HISTORY	DATA FROM NUCL PHYS A91 222 1/67			
ENDBIB	(APRVD) APPROVED BY PETO (5/9/72)			
COMMON	(710111T) PREVIOUSLY DASTAR P-0005			
EN	24	0	0	27
MEV	3	3	0	28
	MONIT1	MONIT2	0	29
	MB	MB	0	30
	1.4700E+01	1.1500E+02	5.4100E+02	31
ENDCOMMON	3	0	0	32
ENDSUBENT	31	0	0	19999
SUBENT	30115011	840503	0	1
BIB	1	1	0	2
REACTION	(76-OS-190(N,P)75-RE-190,,SIG)			
ENDBIB	1	0	0	3
NOCOMMON	0	0	0	4
DATA	2	1	0	5
DATA	DATA-ERR			6
MB	MB			7
	2.0000E+00	5.0000E-01	0	8
ENDDATA	3	0	0	9
ENDSUBENT	9	0	0	10
ENDENTRY	2	1	0	11
ENTRY	30248	840510	0	12
SUBENT	30248001	840510	0	13
BIB	15	27	0	14
TITLE	P-WAVE NEUTRON CAPTURE IN HEAVY NUCLEI AT 25 KEV			
AUTHOR	(M.SRIRAMACHANDRA MURTY,K.SIDDAPPA,J.RAMA RAO)			
INSTITUTE	(3INDAUW)			
EXP-YEAR	(70)			15
SAMPLE	METAL POWDERS OR OXIDES WITH PURITY GREATER THAN 99.9			
	PERCENT KEPT IN CYLINDRICAL PERPEX TUBES 13 CM IN DIAM.			
MONITOR	(53-I-127(N,G)53-I-128,,SIG)			
MONIT-REF	(ROBERTSON,J,NP,71,417,6509)			
INC-SOURCE	(PHOTO) SB-BE PHOTONEUTRON SOURCE OF 20 CURIES.			
METHOD	(ACTIV) ACTIVATION METHOD PLUS ABSOLUTE GAMMA COUNTING			
	EFFECTIVE PHOTOPEAK AND TOTAL EFFICIENCIES OF DETECTOR			
	WERE DETERMINED EXPERIMENTALLY AND USED IN THE			
	EVALUATION OF THE CROSS SECTIONS			
DETECTOR	(SCIN) A 7FB HARSHAW WELL-TYPE NAI(TL) CRYSTAL.			

CORRECTION DETAILS NOT GIVEN
ERR-ANALYS DETAILS NOT GIVEN
COMMENT S-WAVE NEUTRON CONTRIBUTIONS WERE EVALUATED MAKING USE OF THE LOW ENERGY RESONANCE PARAMETERS AVAILABLE IN LITERATURE. P-WAVE CAPTURE CROSS SECTION OBTAINED BY SUBTRACTING S-WAVE CAPTURE CONTRIBUTION FROM THE MEASURED TOTAL CROSS SECTIONS.
STATUS DUE TO THE DISCREPANCY OF THE RESULTS PUBLISHED IN DIFFERENT SOURCES, THE MAIN REFERENCE(S) WHICH (ON COMPILER'S OPINION) CONTAINS THE FINAL DATA IS GIVEN IN EACH SUBENTRY
HISTORY (730626C) FM (831110A) ALTERED BY VP. SEE EXPLANATION UNDER STATUS
ENDBIB 27
COMMON 3
EN MB MONIT-ERR 3
KEY MB
2.5000E+01 8.3600E+02 2.6000E+01
ENDCOMMON 3
ENDSUBENT 34
ENDENTRY 1
ENTRY 30290 840517
SUBENT 30290001 840517
BIB 13 24
TITLE ACTIVATION CROSS-SECTIONS OF OSMIUM ISOTOPES WITH FAST NEUTRONS
AUTHOR (P.KOVACS, I.URAY)
INSTITUTE (3HUNDEB)
EXP-YEAR (74)
REFERENCE (W.URAY, 750409)
SAMPLE NATURAL OSMIUM TARGET
HALF-LIFE (HL1, 74-W-187-G) TAKEN FROM V.B.EWBANK, NUCL.DATA SHEETS 30290 B1/2(1966)23.
FACILITY (HL2, 76-OS-190-M1) TAKEN FROM G.SCHARFF-GOLDHABER ET AL. 30290
INC-SOURCE PHYS.REV.111(1958)913.
METHOD (D-T) T(D,N) ALPHA REACTION. THE NEUTRON YIELD WAS ABOUT 30290
DETECTOR (ACTIV) ACTIVATION METHOD
OF 3.5 KEV AT 661 KEV AND A 100 CM3 GE(LI) DETECTOR
WITH A RESOLUTION OF 2.5 KEV AT 1332 KEV. ENERGY CALIBRATION WAS PERFORMED WITH IAEA STANDARD SOURCES.
ERR-ANALYS NO INFORMATION
HISTORY (750505C) CA. (751127A) KO. MODIFICATION AFTER MEMO 4C-1/64(POINTER). 30290
NO ACTUAL CHANGE BUT MOVE THE STANDARDS TO EACH SUB-ENTRY AND CORRESPONDING MODIFICATIONS OF DATA SECTIONS 30290
ENDBIB 24
COMMON 5
EN EN-RSL HL1 HL2 HL2-ERR
MEV MIN MIN MIN
1.4700E+01 3.0000E-01 1.4280E+03 9.9000E+00 1.0000E-01
ENDCOMMON 3
ENDSUBENT 31
SUBENT 302900003 840517
BIB 3 10
REACTION (76-OS-184(N,2N)76-OS-183-G,,SIG)
PART-DET (DG) 381.8 KEV LINE WITH 87.8 GAMMA-RAYS PER 100 DECAYS 30290
MONITOR NAUK SSSR, SER.FIZ.34(1970)740.
(76-OS-190(N,A)74-W-187,,SIG)
THE 685.7 KEV LINE WITH 28.8 GAMMA-RAYS PER 100 DECAYS WAS USED. THE CROSS-SECTION NUMERICAL

Handwritten note:
This is a copy of the original document.

COMMENT

ENDBIB
 NOCOMMON
 DATA
 EN 10 0 0 1
 EV 3 DATA-ERR
 B
 2.5300E-02 2.2000E+01 5.0000E+00
 ENDDATA
 ENDSUBENT 3 0
 SUBENT 18 0
 BIB 30224024 849510 12
 REACTION
 ANALYSIS

THE NUCLEAR SCATTERING CROSS SECTION LISTED HERE IS NOT TO BE INTERPRETED AS THE POTENTIAL SCATTERING. INTERFERENCE WITH RESONANCE SCATTERING MAY GIVE SCATTERING LARGER OR SMALLER THAN THE POTENTIAL SCATTERING BY AN AMOUNT DEPENDENT ON THE PARAMETERS OF RESONANCES AND BOUND STATES, WHICH ARE NOW INSUFFICIENTLY WELL KNOWN.

30224 20 6
 30224 20 7
 30224 20 8
 30224 20 9
 30224 20 10
 30224 20 11
 30224 20 12
 30224 20 13
 30224 20 14
 30224 20 15
 30224 20 16
 30224 20 17
 30224 20 18
 30224 20 19
 30224 20999999
 30224 24 1
 30224 24 2
 30224 24 3
 30224 24 4
 30224 24 5
 30224 24 6
 30224 24 7
 30224 24 8
 30224 24 9
 30224 24 10
 30224 24 11
 30224 24 12
 30224 24 13
 30224 24 14
 30224 24 15
 30224 24 16
 30224 24 17
 30224 24 18
 30224 24 19
 30224 24 20
 30224 24 21
 3022499999999
 Z9999999999999

COMMENT

ENDBIB
 NOCOMMON
 DATA
 EN 12 0 0 1
 EV 3 DATA-ERR
 B
 2.5300E-02 8.0000E+00 2.0000E+00
 ENDDATA
 ENDSUBENT 3 0
 SUBENT 20 0
 BIB 4 1
 REACTION
 ANALYSIS

(71-LU-0(N, SCT), SIG)
 THERE IS NO PARAMAGNETIC CROSS SECTION, BECAUSE THE MAGNETIC MOMENT OF THE LU ION IS ZERO.
 AT THERMAL ENERGY THE TOTAL CROSS SECTION WAS USED TO DETERMINE THE NUCLEAR SCATTERING CROSS SECTION.
 THE NUCLEAR SCATTERING CROSS SECTION LISTED HERE IS NOT TO BE INTERPRETED AS THE POTENTIAL SCATTERING. INTERFERENCE WITH RESONANCE SCATTERING MAY GIVE SCATTERING LARGER OR SMALLER THAN THE POTENTIAL SCATTERING BY AN AMOUNT DEPENDENT ON THE PARAMETERS OF RESONANCES AND BOUND STATES, WHICH ARE NOW INSUFFICIENTLY WELL KNOWN.

30224 24 1
 30224 24 2
 30224 24 3
 30224 24 4
 30224 24 5
 30224 24 6
 30224 24 7
 30224 24 8
 30224 24 9
 30224 24 10
 30224 24 11
 30224 24 12
 30224 24 13
 30224 24 14
 30224 24 15
 30224 24 16
 30224 24 17
 30224 24 18
 30224 24 19
 30224 24 20
 30224 24 21
 3022499999999
 Z9999999999999

31254 0 1
 31254 0 1
 31254 1 1
 31254 1 2
 31254 1 3
 31254 1 4
 31254 1 5
 31254 1 6
 31254 1 7
 31254 1 8
 31254 1 9
 31254 199999
 31254 7 1
 31254 7 2
 31254 7 3
 31254 7 4
 31254 7 5
 31254 7 6
 31254 7 7
 31254 7 8
 31254 7 9
 31254 7 10
 31254 7 11
 31254 7 12
 31254 7 13
 31254 7 14
 31254 7 15
 31254 7 16
 31254 7 17
 31254 799999
 3125499999999
 Z9999999999999

+TRANS 860724
 ENTRY 851217
 SUBENT 851217
 BIB 5
 INSTITUTE
 REFERENCE (3INDMUA)
 AUTHOR (J,NP,69,158,65)
 TITLE (S.K.MANGAL,C.S.KHURANA)
 HISTORY ISOMERIC (N,2N)CROSS SECTION RATIOS AT 14.8 MEV.
 ENDBIB (771115T) CONVERTED FROM EXFOR 70254
 NOCOMMON 0
 ENDSUBENT 0
 SUBENT 8 0
 BIB 31254007 851217 4
 REACTION (79-AU-197(N,2N)79-AU-196-M⁺,SIG)
 STATUS (SCSRK)
 METHOD (ACTIV) ACTIVATION
 MONITOR (13-AL-27(N,P)12-MG-27,,SIG)
 ENDBIB 4 0
 COMMON 1 3
 HL
 HR
 1.0000E+01
 ENDCOMMON
 DATA 3 0
 EN 3 1
 MEV DATA DATA-ERR
 B B
 1.4800E+01 2.3000E-01 1.5000E-02
 ENDDATA 3 0
 ENDSUBENT 16 0
 ENDENTRY 2 1
 ENDTRANS 1 1

÷TRANS	Ø	86Ø71Ø	Ø	Ø
ENTRY	3Ø248	84Ø51Ø	Ø	Ø
SUBENT	3Ø248ØØ1	84Ø51Ø	Ø	Ø
BIB	15	27	Ø	Ø
TITLE	P-WAVE NEUTRON CAPTURE IN HEAVY NUCLEI AT 25 KEV			
AUTHOR	(M.SRIRAMACHANDRA MURTY,K.SIDDAPPA,J.RAMA RAO)			
INSTITUTE	(3INDAUV)			
EXP-YEAR	(7Ø)			
SAMPLE	METAL POWDERS OR OXIDES WITH PURITY GREATER THAN 99.9 PERCENT KEPT IN CYLINDRICAL PERPEX TUBES 13 CM IN DIAM.			
MONITOR	(53-I-127(N,G)53-I-128,,SIG)			
MONIT-REF	(,ROBERTSON,J,NP,71,417,65Ø9)			
INC-SOURCE	(PHOTO) SB-BE PHOTONEUTRON SOURCE OF 2Ø CURIES.			
METHOD	(ACTIV) ACTIVATION METHOD PLUS ABSOLUTE GAMMA COUNTING EFFECTIVE PHOTOPEAK AND TOTAL EFFICIENCIES OF DETECTOR WERE DETERMINED EXPERIMENTALLY AND USED IN THE EVALUATION OF THE CROSS SECTIONS			
DETECTOR	(SCIN) A 7F8 HARSHAW WELL-TYPE NAI(TL) CRYSTAL.			
CORRECTION	DETAILS NOT GIVEN			
ERR-ANALYS	DETAILS NOT GIVEN			
COMMENT	S-WAVE NEUTRON CONTRIBUTIONS WERE EVALUATED MAKING USE OF THE LOW ENERGY RESONANCE PARAMETERS AVAILABLE IN LITERATURE. P-WAVE CAPTURE CROSS SECTION OBTAINED BY SUBTRACTING S-WAVE CAPTURE CONTRIBUTION FROM THE MEASURED TOTAL CROSS SECTIONS.			
STATUS	DUE TO THE DISCREPANCY OF THE RESULTS PUBLISHED IN DIFFERENT SOURCES, THE MAIN REFERENCE(S) WHICH (ON COMPILER'S OPINION) CONTAINS THE FINAL DATA IS GIVEN IN EACH SUBENTRY			
HISTORY	(73ØØ26C) FM			
ENDBIB	Ø			
COMMON	Ø			
EN	3			
MONIT	MONIT-ERR			
MB	Ø			
KEY	Ø			
2.5ØØØE+Ø1	8.36ØØE+Ø2 2.6ØØØE+Ø1			
ENDCOMMON	Ø			
ENDSUBENT	Ø			
SUBENT	3Ø248Ø13 84Ø51Ø			
BIB	3			
REACTION	(77-IR-191(N,G)77-IR-192-M,,SIG)			
REFERENCE	(C,7ØMADURAI,2,29,7ØØ2)			
COMMENT	CALCULATED S-WAVE CONTRIBUTION = 1.ØØ2 B DEDUCED P-WAVE CROSS SECTION = 8.11Ø B			
ENDBIB	Ø			
NOCOMMON	Ø			
DATA	Ø			
DATA	Ø			
B	9.2ØØØE+ØØ 9.11ØØE-Ø1			
ENDDATA	Ø			
ENDSUBENT	Ø			
ENDENTRY	Ø			
ENTRY	Ø			
SUBENT	Ø			
BIB	Ø			
TITLE	Ø			
AUTHOR	Ø			
INSTITUTE	Ø			
EXP-YEAR	Ø			
REFERENCE	Ø			
SAMPLE	Ø			

*in this to be extractable data?
on half life given*

*References in OINDA for In. 11, 12
J. APP/16, 27, 28, 29*

CROSS-SECTIONS FOR FAST NEUTRON CAPTURE ON PD, CD AND IR3Ø482
(M.HERMAN,A.MARCINKOWSKI)
(3POLIBJ)
(77)
(P, INR-1773/I/PL/A, 17, 78Ø9)=(P, INDC(POL)-9, 17, 78Ø9))
(M, MARCINKOWSKI, 8ØØ128) REVISED DATA
(C, 79KNOX,, (CC1), 791Ø) CD (SE, OS) ONLY, NOT PD, IR.
NATURAL, HIGH PURITY.

EN MEV EN-RSL DATA DATA-ERR
MEV B PER-CENT
1.4800E+01 5.0000E-01 3.6700E-01 1.5000E+01
ENDDATA 3 0
ENDSUBENT 15 0
ENDENTRY 2 1
ENDTRANS 3 1

31247 22 13
31247 22 14
31247 22 15
31247 22 16
31247 22999999
31247999999999
Z9999999999999

+TRANS	Ø	86Ø71Ø	Ø	Ø
ENTRY	3Ø4ØØ	85Ø311	Ø	1
SUBENT	3Ø4ØØØØ1	85Ø121	Ø	1
BIB	13	48	Ø	2
TITLE	13	48	Ø	3
AUTHOR	AVERAGE CROSS SECTIONS FOR THE CF-252 NEUTRON SPECTRUM.			
INSTITUTE	I.(N,G),(N,P),(N,A) AND (N,2N) REACTIONS.			
SAMPLE	(J.CSIKAI,Z.DEZSO)			
MONITOR	(3HUNKOS)			
INC-SOURCE	NATURAL SAMPLES OF ABOUT 1 MM THICKNESS AND 1Ø MM DIA-			
INC-SPECT	METER, IN A CADMIUM BOX OF 1 MM.			
METHOD	(13-AL-27(N,A)11-NA-24,,SIG) AND,			
	(49-IN-115(N,INL)49-IN-115-M,,SIG)			
	FOR NEUTRON FLUX MEASUREMENT.			
	.DATA FOR HALF-LIFE, GAMMA ENERGY AND INTENSITY WERE			
	TAKEN FROM THE TABLE BY ERDTMANN AND SOYA, JUEL-1ØØ3-AC3Ø4ØØ			
	(1974).			
	(CF252)			
	MAXWELLIAN TEMPERATURE = 1.41 +- Ø.Ø2 MEV.			
	(ACTIV) ACTIVATION WITH FISSION NEUTRON SPECTRUM OF CF-3Ø4ØØ			
	252, IN SCATTERING FREE ARRANGEMENT. SEE DETAIL,			
	CS.M.BUCZKO,J.CSIKAI ET AL.,NUCL.INST.METH.134(176)1Ø13Ø4ØØ			
	AVERAGE CROSS-SECTIONS FOR THE UNMODERATED SPONTANEOUS			
	FISSION NEUTRON SPECTRUM OF CF-252 WERE MEASURED FOR			
	(N,G),(N,P),(N,A) AND (N,2N)			
	REACTIONS BY			
	ACTIVATION METHOD.			
	(SEE SUBENTRIES .ØØ3 TO .Ø13).			
DETECTOR	(GELI) GE(LI) DETECTOR CONNECTED TO A DIDAC-4ØØØ			
ERR-ANALYS	ANALYSER. THE EFFICIENCY-CURVE WAS MEASURED WITH			
COMMENT	RA-226 STANDARD OF THE SAME DIMENSION AS THE SAMPLE.			
	NO FURTHER INFORMATION.			
	COMPILER'S NOTE === THE AUTHOR PRESENTS ALSO THE			
	AVERAGED CROSS-SECTIONS FOR THE CF-252 NEUTRON			
	SPECTRUM TO THE PROC.OF AN EDUCATIONAL SEMINAR BY			
	IAEA, KARLSRUHE,14-18 APRIL 1975. HOWEVER THE VALUES			
	OF AU-197(N,2N), AL-27(N,P), AU-197(N,G) AND IN-115			
	(N,N') ARE DIFFERENT FROM THOSE IN THE ANNALS OF			
	NUCLEAR ENERGY,3(1976)527.			
	THIS IS UNDER INQUIRY TO THE AUTHOR, 77/Ø7.			
	AUTHOR'S COMMENT,77/Ø9/Ø2, === OLD DATA WERE RE-			
	INVESTIGATED USING MORE ADVANCED TECHNIQUE. THEREFORE			
	THE AUTHOR RECOMMENDS TO SUPERSEDE THE DATA IN THE			
	SEMINAR HELD IN KARLSRUHE,PAPER IAEA-SR-3/23 OF IAEA/			
	STI/PUB/418.			
	COMPILER'S NOTE === AVERAGE (N,F) CROSS-SECTIONS OF			
	U-238,PA-231 AND TH-232 BY THE SAME AUTHORS, ARE			
	COMPILED IN EXFOR 3Ø415, SEPARATELY.			
	(APRVD) APPROVED BY S.CSIKAI, 77/Ø9/Ø2 AND 78/12/Ø9.			
	(77Ø7Ø6C) KO.			
	(78Ø621A) KO.-CHANGE OF BIB-SECTION, AMENDMENTS OF SUB-			
	ENTRIES .ØØ2 TO .Ø12, ADDITION OF NEW SUBENTRIES .Ø13			
	TO .Ø43, AND .Ø44 TO .Ø53 (PRELIM.RESULTS).-			
	(79Ø928U) KO.-NEW REF.ADDED. NEW SUBENTRIES .Ø54-.Ø57.-			
ENDBIB	48	Ø	Ø	5Ø
NOCOMMON	Ø	Ø	Ø	51
ENDSUBENT	51	Ø	Ø	52
SUBENT	3Ø4ØØØØØ2	85Ø121	Ø	19999
BIB	6	3Ø	Ø	1
REACTION	(98-CF-252(Ø,F),,DE,N)			
REFERENCE	(C,77KIEV,3,32,77Ø4)			
	(J,ANE,3,527,7611) DETAIL OF CF-252 SPECTRUM.			
	THE TEMPERATURE WAS DETERMINED WITH THE MEASUREMENT OF			
	THE AGE OF EPITHERMAL NEUTRONS IN WATER AND WITH THE			
	RELATIONS BETWEEN AGE AND AVERAGE ENERGY.			
ANALYSIS	THE MAXWELLIAN TEMPERATURE FOR CF-252 NEUTRON SPECTRUM			

HAS BEEN REDUCED TO BE,
 $\tau = 1.41 \pm 0.02$ MEV, BETWEEN 2.5 AND 15 MEV,
 AND THE AGE OF CF-252 NEUTRONS TO GOLD RESONANCE
 ENERGY IS FOUND TO BE,
 29.6 ± 0.5 CM2.

THE MAXWELLIAN TEMPERATURES OBTAINED BY THE DIFFERENT
 REACTIONS ARE,
 1.44 \pm 0.02 FOR CU-63(N,2N)CU-62,
 1.42 \pm 0.01 FOR CO-59(N,2N)CO-58,
 1.41 \pm 0.04 FOR MN-55(N,2N)MN-54,
 1.39 \pm 0.01 FOR AU-197(N,2N)AU-196,
 1.42 \pm 0.03 FOR AL-27(N,P)MG-27,
 1.405 \pm 0.008 FOR AL-27(N,A)NA-24,
 1.40 \pm 0.03 FOR NI-58(N,P)CO-58,
 1.38 \pm 0.03 FOR ZN-64(N,P)CU-64.

AND THE EXCITATION FUNCTIONS USED FOR THE DETERMINATION OF
 THE MAXWELLIAN TEMPERATURE ARE TAKEN FROM
 Z. T. BOEDY, ATOMKI KOEZLEMENYEK16(1974)351,
 A. SCHEFF ET AL., EANDC-95 (U). (1974), AND
 W. G. CROSS AND H. ING, NUCL.SCI.ENGG.58(1975)377.
 (UNOBT)

STATUS
 ONLY THE MAXWELLIAN TEMPERATURE IS PRESENTED.
 (780621U) KO.-ADDED NEW REF.-

HISTORY
 ENDBIB 30
 NOCOMMON 0
 NODATA 0
 ENDSUBENT 34
 SUBENT 850121
 BIB 30400003
 5

REACTION
 (13-AL-27(N,A)11-NA-24,,SIG.,FIS)
 SUM OF AL-27(N,A)NA-24M AND AL-27(N,A)NA-24G.
 (C,77KIEV,3,32,7704)
 (J,ANE,3,527,7611) SAME RESULT.
 (11-NA-24-G,15.03HR,DG,1368.55,1.0)
 FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,
 KIEV,18-22 APR.1977,VOL3,P.32.
 (780621U) KO.-ADDED NEW REF.,OTHER MINOR CORRECTIONS.-

HISTORY
 ENDBIB 8
 NOCOMMON 0
 DATA 3
 EN-DUMMY 1
 MEV DATA-ERR
 MB

1.4100E+00 1.0800E+00 5.0000E-02
 ENDDATA 3
 ENDSUBENT 16
 SUBENT 30400004
 BIB 850121
 5

REACTION
 (13-AL-27(N,P)12-MG-27,,SIG.,FIS)
 (C,77KIEV,3,32,7704)
 (R,ZFK-376,44,7812) 7 GAUSSIG SYMP.NOV.1977,SAME RESULT30400
 (J,ANE,3,527,7611) SAME RESULT.
 (12-MG-27,9.48MIN,DG,843.76,0.720,DG,1014.4,0.280)
 FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,
 KIEV,18-22 APR.1977,VOL3,P.32.
 (780621U) KO.-ADDED NEW REF.,OTHER MINOR CORRECTIONS.-
 (790928U) KO.-NEW REF. ADDED.-

HISTORY
 ENDBIB 9
 NOCOMMON 0
 DATA 3
 EN-DUMMY 1
 MEV DATA-ERR
 MB

1.4100E+00 5.1100E+00 4.3000E-01
 ENDDATA 3
 ENDSUBENT 17

30400 2 10
 30400 2 11
 30400 2 12
 30400 2 13
 30400 2 14
 30400 2 15
 30400 2 16
 30400 2 17
 30400 2 18
 30400 2 19
 30400 2 20
 30400 2 21
 30400 2 22
 30400 2 23
 30400 2 24
 30400 2 25
 30400 2 26
 30400 2 27
 30400 2 28
 30400 2 29
 30400 2 30
 30400 2 31
 30400 2 32
 30400 2 33
 30400 2 34
 30400 2 35
 30400 299999
 30400 3 1
 30400 3 2
 30400 3 3
 30400 3 4
 30400 3 5
 30400 3 6
 30400 3 7
 30400 3 8
 30400 3 9
 30400 3 10
 30400 3 11
 30400 3 12
 30400 3 13
 30400 3 14
 30400 3 15
 30400 3 16
 30400 3 17
 30400 399999
 30400 4 1
 30400 4 2
 30400 4 3
 30400 4 4
 30400 4 5
 30400 4 6
 30400 4 7
 30400 4 8
 30400 4 9
 30400 4 10
 30400 4 11
 30400 4 12
 30400 4 13
 30400 4 14
 30400 4 15
 30400 4 16
 30400 4 17
 30400 4 18
 30400 499999

SUBENT	30400005	850121	5	30400	1
BIB	6	10	5	30400	2
REACTION	(25-MN-55(N,2N)25-MN-54,,SIG,,FIS)		5	30400	3
REFERENCE	(C,77KIEV,3,32,7704)		5	30400	4
	(J,ANE,3,527,7611) SAME RESULT.		5	30400	5
DECAY-DATA	(25-MN-54,312.2D,DG,834.8,0.9998)		5	30400	6
COMMENT	AVERAGE (N,2N) CROSS SECTION FOR CF-252 NEUTRON		5	30400	7
	SPECTRUM WAS CALCULATED WITH T=1.41 MEV AS MAXWELLIAN		5	30400	8
	TEMPERATURE. THE VALUE IS 0.598 MB.		5	30400	9
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		5	30400	10
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.		5	30400	11
ENDBIB	(780621U) KO.-ADDED NEW REF.,OTHER MINOR CORRECTIONS.-		5	30400	12
NOCOMMON	10	0	5	30400	13
DATA	0	0	5	30400	14
EN-DUMMY	3	DATA-ERR	5	30400	15
MEV	MB		5	30400	16
ENDDATA	1.4100E+00 5.8000E-01 1.4000E-01		5	30400	17
ENDSUBENT	3	0	5	30400	18
SUBENT	18	0	5	30400	19
BIB	30400006	850121	5	30400	20
	6	13	599999	30400	21
REACTION	(27-CO-59(N,2N)27-CO-58,,SIG,,FIS)		6	30400	22
REFERENCE	SUM OF CO-59(N,2N)CO-58M AND CO-59(N,2N)CO-58G.		6	30400	1
	(C,77KIEV,3,32,7704)		6	30400	2
DECAY-DATA	(J,ANE,3,527,7611) SAME RESULT.		6	30400	3
	(27-CO-58-G,71.3D,DG,810.6,0.9944)		6	30400	4
COMMENT	ISOMERIC STATE OF 9.0 HR HALF-LIFE, DECAYS AS ISOMERIC		6	30400	5
	TRANSITION.		6	30400	6
	AVERAGE (N,2N) CROSS SECTION FOR CF-252 NEUTRON		6	30400	7
	SPECTRUM WAS CALCULATED WITH T=1.41 MEV AS MAXWELLIAN		6	30400	8
	TEMPERATURE. THE VALUE IS 0.539 MB.		6	30400	9
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		6	30400	10
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.		6	30400	11
ENDBIB	(780621U) KO.-ADDED NEW REF.,OTHER MINOR CORRECTIONS.-		6	30400	12
NOCOMMON	13	0	6	30400	13
DATA	0	0	6	30400	14
EN-DUMMY	3	DATA-ERR	6	30400	15
MEV	MB		6	30400	16
ENDDATA	1.4100E+00 5.7000E-01 3.0000E-02		6	30400	17
ENDSUBENT	3	0	6	30400	18
SUBENT	21	0	6	30400	19
BIB	30400007	850121	6	30400	20
	6	14	699999	30400	21
REACTION	(28-NI-58(N,P)27-CO-58,,SIG,,FIS)		6	30400	22
REFERENCE	(C,77KIEV,3,32,7704)		7	30400	1
	(R,ZFK-376,44,7812) 7 GAUSSIG SYMP.NOV.1977,SAME RESULT		7	30400	2
DECAY-DATA	(J,ANE,3,527,7611) SLIGHTLY DIFFERENT RESULT.		7	30400	3
	(27-CO-58-G,71.3D,DG,810.6,0.9944)		7	30400	4
COMMENT	ISOMERIC STATE OF 9.0 HR HALF-LIFE, DECAYS AS ISOMERIC		7	30400	5
	TRANSITION.		7	30400	6
	TABLE 1 OF ANNALS OF NUCL.ENERGY,3(1976)527 GIVES		7	30400	7
	110.8+-4.7 MB AS NI-58(N,P)CO-58 CROSS-SECTION.		7	30400	8
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		7	30400	9
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.		7	30400	10
ENDBIB	(780621A) KO.-DATA CHANGED, NEW REF.ADDED,OTHER MINOR		7	30400	11
NOCOMMON	CORRECTIONS.-		7	30400	12
DATA	(790928U) KO.-NEW REF.ADDED.-		7	30400	13
EN-DUMMY	14	0	7	30400	14
MEV	0	0	7	30400	15
	3	DATA-ERR	7	30400	16
	MB		7	30400	17
	DATA		7	30400	18
	MB		7	30400	19
	DATA-ERR		7	30400	20
	MB		7	30400	21

1.4100E+00	1.1340E+02	4.8000E+00	7	22
ENDDATA			30400	7
ENDSUBENT			30400	7
SUBENT			30400	799999
BIB		850121	30400	8
REACTION	(29-CU-63(N,2N)29-CU-62,,SIG,,FIS)		30400	8
REFERENCE	(C,77KIEV,3,32,7704)		30400	8
	(J,ANE,3,527,7611) SAME RESULT.		30400	8
DECAY-DATA	(29-CU-62,9.73MIN,B+)		30400	8
COMMENT	ANNIHILATION RADIATION(511.0KEV, INTENSITY OF 1.96)		30400	8
	AVERAGE (N,2N) CROSS SECTION FOR CF-252 NEUTRON		30400	8
	SPECTRUM WAS CALCULATED WITH T=1.41 MEV AS MAXWELLIAN		30400	8
	TEMPERATURE. THE VALUE IS 0.250 MB.		30400	8
	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	8
	KIEV,18-22 APR.1977,VOL3,P.32.		30400	8
	(780621U) KO.-NEW REF.ADDED, OTHER MINOR CORRECTIONS.-		30400	8
STATUS			30400	8
HISTORY			30400	8
ENDBIB			30400	8
NOCOMMON			30400	8
DATA			30400	8
EN-DUMMY			30400	8
MEV			30400	8
1.4100E+00	3.0000E-01	2.7000E-02	30400	8
ENDDATA			30400	8
ENDSUBENT			30400	8
SUBENT			30400	8
BIB		850121	30400	8
REACTION	(30-ZN-64(N,P)29-CU-64,,SIG,,FIS)		30400	9
REFERENCE	(C,77KIEV,3,32,7704)		30400	9
	(R,ZFK-376,44,7812) 7 GAUSSIG SYMP.NOV.1977,SAME RESULT		30400	9
	(J,ANE,3,527,7611) SAME RESULT.		30400	9
DECAY-DATA	(29-CU-64,12.8HR,DG,1345.8,0.0048)		30400	9
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	9
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.		30400	9
	(780621U) KO.-NEW REF.ADDED, OTHER MINOR CORRECTIONS.-		30400	9
ENDBIB			30400	9
NOCOMMON			30400	9
DATA			30400	9
EN-DUMMY			30400	9
MEV			30400	9
1.4100E+00	4.6400E+01	2.3000E+00	30400	9
ENDDATA			30400	9
ENDSUBENT			30400	9
SUBENT			30400	9
BIB		850121	30400	9
REACTION	(49-IN-115(N,INL)49-IN-115-M,,SIG,,FIS)		30400	10
REFERENCE	(C,77KIEV,3,32,7704)		30400	10
	(J,ANE,3,527,7611) SAME RESULT.		30400	10
DECAY-DATA	(49-IN-115-M,4.5HR,DG,336.25,0.45)		30400	10
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	10
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.		30400	10
	(780621U) KO.-NEW REF.ADDED, OTHER MINOR CORRECTIONS.-		30400	10
ENDBIB			30400	10
NOCOMMON			30400	10
DATA			30400	10
EN-DUMMY			30400	10
MEV			30400	10
1.4100E+00	2.0340E+02	1.0700E+01	30400	10
ENDDATA			30400	10
ENDSUBENT			30400	10
SUBENT			30400	10
BIB		850121	30400	10
REACTION	(79-AU-197(N,2N)79-AU-196,,SIG,,FIS)		30400	11
	SUM OF AU-197(N,2N)AU-196M AND AU-197(N,2N)AU-196G.		30400	11

REFERENCE	(C,77KIEV,3,32,7704)	5
	(J,ANE,3,527,7611) SAME RESULT.	6
DECAY-DATA	(C,75KARLSR,,29,7504) PRELIMINARY RESULT.	7
	(79-AU-196-G,6.183D,DG,933.0,0.244,	8
	DG,355.7,0.936,	9
	DG,426.0,0.070)	10
COMMENT	ISOMERIC STATE, AU-196M, WITH 9.7HR HALF-LIFE, DECAYS	11
	AS ISOMERIC TRANSITION.	12
	AVERAGE (N,2N) CROSS SECTION FOR CF-252 NEUTRON	13
	SPECTRUM WAS CALCULATED WITH T=1.41 MEV AS MAXWELLIAN	14
	TEMPERATURE. THE VALUE IS 6.44 MB.	15
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,	16
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.	17
ENDBIB	(780621U) KO.-NEW REF.ADDED, OTHER MINOR CORRECTIONS.-	18
NOCOMMON	16 0	19
DATA	0 0	20
EN-DUMMY	3 DATA-ERR	21
MEV	MB	22
ENDDATA	1.4100E+00 5.8000E+00 2.9000E-01	23
ENDSUBENT	3 0	24
SUBENT	24 0	25
BIB	30400012 850121 8	119999
REACTION	(79-AU-197(N,G)79-AU-198,,SIG,,FIS)	1
REFERENCE	(C,77KIEV,3,32,7704)	2
	(J,ANE,3,527,7611) SAME RESULT.	3
DECAY-DATA	(C,75KARLSR,,29,7504) PRELIMINARY RESULT.	4
STATUS	(79-AU-198-G,2.697D,DG,411.8,0.9553)	5
	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,	6
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.	7
ENDBIB	(780621U) KO.-NEW REF ADDED, OTHER MINOR CORRECTIONS.	8
NOCOMMON	8 0	9
DATA	0 0	10
EN-DUMMY	3 DATA-ERR	11
MEV	MB	12
ENDDATA	1.4100E+00 1.1000E+02 5.0000E+00	13
ENDSUBENT	3 0	14
SUBENT	16 0	15
BIB	30400013 850121 10	16
REACTION	(7-N-14(N,2N)7-N-13,,SIG,,FIS)	17
REFERENCE	(C,77KIEV,3,32,7704)	18
DECAY-DATA	(7-N-13,9.97MIN,B+)	19
COMMENT	ANNIHILATION RADIATION(511.0KEV, INTENSITY OF 1.9962)	20
	AVERAGE (N,2N) CROSS SECTION FOR CF-252 NEUTRON	21
	SPECTRUM WAS CALCULATED WITH T=1.41 MEV AS MAXWELLIAN	22
	TEMPERATURE. THE VALUE IS 0.031 MB.	23
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,	24
HISTORY	KIEV,18-22 APR.1977,VOL3,P.32.	25
ENDBIB	(780621C) KO.-NEW SUBENTRY.-	26
NOCOMMON	10 0	27
DATA	0 0	28
EN-DUMMY	3 DATA-ERR	29
MEV	MB	30
ENDDATA	1.4100E+00 4.8000E-03 2.4000E-03	31
ENDSUBENT	3 0	32
SUBENT	18 0	33
BIB	30400014 850121 10	34
REACTION	(9-F-19(N,2N)9-F-18,,SIG,,FIS)	35
REFERENCE	(C,77KIEV,3,32,7704)	36

BIB	5	7	28	2
REACTION	(29-CU-65(N,G)29-CU-66,,SIG,,FIS)		30400	28
REFERENCE	(C,77KIEV,3,32,7704)		30400	28
	(C,75KARLSR,29,7504) PRELIMINARY RESULT.		30400	28
DECAY-DATA	(29-CU-66,5.1MIN,DG,1039.0,0.09)		30400	28
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	28
	KIEV,18-22 APR.1977,VOL3,P.32.		30400	28
HISTORY	(780621C) KO.-NEW SUBENTRY.-		30400	28
ENDBIB	7		30400	28
NOCOMMON	0		30400	28
DATA	3	DATA-ERR	30400	28
EN-DUMMY	MB		30400	28
MEV	1.4100E+00	8.0000E+00	1.2000E+00	15
ENDDATA	3		30400	28
ENDSUBENT	15		30400	28
SUBENT	30400029	850121	30400	28
BIB	6	11	30400	29
REACTION	(40-ZR-90(N,2N)40-ZR-89,,SIG,,FIS)		30400	29
REFERENCE	(C,77KIEV,3,32,7704)		30400	29
DECAY-DATA	(40-ZR-89-G,78.4HR,DG,909.1,0.990)		30400	29
	ISOMERIC STATE, ZR-89M, WITH 4.18MIN HALF-LIFE, DECAYS		30400	29
	AS 94 PERCENT ISOMERIC TRANSITION.		30400	29
COMMENT	AVERAGE (N,2N) CROSS SECTION FOR CF-252 NEUTRON		30400	29
	SPECTRUM WAS CALCULATED WITH T=1.41 MEV AS MAXWELLIAN		30400	29
	TEMPERATURE. THE VALUE IS 0.248 MB.		30400	29
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	29
	KIEV,18-22 APR.1977,VOL3,P.32.		30400	29
HISTORY	(780621C) KO.-NEW SUBENTRY.-		30400	29
ENDBIB	11		30400	29
NOCOMMON	0		30400	29
DATA	3	DATA-ERR	30400	29
EN-DUMMY	MB		30400	29
MEV	1.4100E+00	2.6700E-01	1.5000E-02	19
ENDDATA	3		30400	29
ENDSUBENT	19		30400	29
SUBENT	30400030	850121	30400	29
BIB	5	8	30400	30
REACTION	(40-ZR-90(N,P)39-Y-90-M,,SIG,,FIS)		30400	30
REFERENCE	(C,77KIEV,3,32,7704)		30400	30
	(R,ZFK-376,44,7812) 7 GAUSSIG SYMP.NOV.1977,SAME RESULT		30400	30
DECAY-DATA	(39-Y-90-M,3.19HR,DG,202.5,0.9550)		30400	30
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	30
	KIEV,18-22 APR.1977,VOL3,P.32.		30400	30
HISTORY	(780621C) KO.-NEW SUBENTRY.-		30400	30
	(790928U) KO.-NEW REF.ADDED.-		30400	30
ENDBIB	8		30400	30
NOCOMMON	0		30400	30
DATA	3	DATA-ERR	30400	30
EN-DUMMY	MB		30400	30
MEV	1.4100E+00	4.5000E-02	6.0000E-03	16
ENDDATA	3		30400	30
ENDSUBENT	16		30400	30
SUBENT	30400031	850121	30400	30
BIB	5	7	30400	31
REACTION	(40-ZR-94(N,G)40-ZR-95,,SIG,,FIS)		30400	31
REFERENCE	(C,77KIEV,3,32,7704)		30400	31
DECAY-DATA	(40-ZR-95,65.50,DG,724.2,0.430,		30400	31
	DG,756.7,0.546)		30400	31
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,		30400	31
	KIEV,18-22 APR.1977,VOL3,P.32.		30400	31
HISTORY	(780621C) KO.-NEW SUBENTRY.-		30400	31

EN-DUMMY	DATA	DATA-ERR	38	15
MEV	MB	MB	30400	16
1.4100E+00	2.6300E+01	1.3000E+00	30400	17
ENDDATA	3	0	30400	18
ENDSUBENT	17	0	30400	18
SUBENT	30400039	850121	30400	3899999
BIB	5	7	30400	39
REACTION	(42-MO-100(N,G)42-MO-101.,,SIG.,,FIS)		30400	39
REFERENCE	(C,77KIEV,3,32,7704)		30400	39
DECAY-DATA	(42-MO-101,14.6MIN,DG,192.0,0.25, DG,1012.4,0.25)		30400	39
STATUS	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS., KIEV,18-22 APR.1977,VOL3,P.32.		30400	39
HISTORY	(780621C) KO.-NEW SUBENTRY.-		30400	39
ENDBIB	7	0	30400	39
NOCOMMON	0	0	30400	39
DATA	3	1	30400	39
EN-DUMMY	DATA	DATA-ERR	38	15
MEV	MB	MB	30400	16
1.4100E+00	1.4850E+01	1.1100E+00	30400	16
ENDDATA	3	0	30400	16
ENDSUBENT	15	0	30400	16
SUBENT	30400040	850121	30400	3999999
BIB	5	10	30400	40
REACTION	1(49-IN-113(N,2N)49-IN-112-M,,SIG.,,FIS)		30400	40
REFERENCE	2(49-IN-113(N,2N)49-IN-112,,SIG.,,FIS)		30400	40
DECAY-DATA1	(49-IN-112-M,20.7MIN,B+)		30400	40
STATUS	ANNIHILATION RADIATION(511.0KEV,INTENSITY OF 0.43)		30400	40
HISTORY	2(49-IN-112-G,14.4MIN,B+,,B-)		30400	40
ENDBIB			30400	40
NOCOMMON			30400	40
DATA			30400	40
EN-DUMMY	DATA	1DATA-ERR	1DATA	2DATA-ERR
MEV	MB	MB	MB	MB
1.4100E+00	3.7500E+00	1.8500E+00	9.5000E+00	4.7500E+00
ENDDATA	3	0	0	0
ENDSUBENT	18	0	0	0
SUBENT	30400041	850121	0	0
BIB	5	7	0	0
REACTION	(49-IN-113(N,INL)49-IN-113-M,,SIG.,,FIS)		30400	41
REFERENCE	(C,77KIEV,3,32,7704)		30400	41
DECAY-DATA	(C,75KARLSR,,29,7504) PRELIMINARY RESULT.		30400	41
STATUS	(49-IN-113-M,1.66HR,DG,391.7,0.6410)		30400	41
HISTORY	FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS., KIEV,18-22 APR.1977,VOL3,P.32.		30400	41
ENDBIB	(780621C) KO.-NEW SUBENTRY.-		30400	41
NOCOMMON	7	0	30400	41
DATA	0	0	30400	41
EN-DUMMY	DATA	DATA-ERR	38	15
MEV	MB	MB	30400	16
1.4100E+00	1.7800E+02	7.6000E+00	30400	16
ENDDATA	3	0	30400	16
ENDSUBENT	15	0	30400	16
SUBENT	30400042	850121	30400	4199999
BIB	5	9	30400	42
REACTION	(49-IN-115(N,G)49-IN-116-M1,,SIG.,,FIS)		30400	42
REFERENCE	(C,77KIEV,3,32,7704)		30400	42
	(C,75KARLSR,,29,7504) PRELIMINARY RESULT.		30400	42

DECAY-DATA (49-IN-116-M1,54.MIN,DG,417.0,0.300,
 DG,1097.1,0.530,
 DG,1293.4,0.800)
 STATUS FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,
 KIEV,18-22 APR.1977,VOL3,P.32.
 (780621C) KO.-NEW SUBENTRY.-
 HISTORY ENDBIB 9 30400 42 6
 NOCOMMON 0 30400 42 7
 DATA 0 30400 42 8
 EN-DUMMY 1 30400 42 9
 MEV DATA DATA-ERR 10
 MB 0 30400 42 11
 ENDDATA 3 30400 42 12
 ENDSUBENT 17 30400 42 13
 SUBENT 30400043 850121 30400 42 14
 BIB 5 30400 42 15
 REACTION (73-TA-181(N,G)73-TA-182.,SIG.,FIS)
 SUM OF TA-181(N,G)TA-182M AND TA-181(N,G)TA-182G.
 REFERENCE (C,77KIEV,3,32,7704)
 DECAY-DATA (73-TA-182-G,115.0D,DG,1121.19,0.370,
 DG,1188.95,0.171,
 DG,1221.31,0.289)
 STATUS FROM TABLE 1 OF 4TH ALL UNION CONF.ON NEUTRON PHYS.,
 KIEV,18-22 APR.1977,VOL3,P.32.
 (780621C) KO.-NEW SUBENTRY.-
 HISTORY ENDBIB 9 30400 43 10
 NOCOMMON 0 30400 43 11
 DATA 3 30400 43 12
 EN-DUMMY 1 30400 43 13
 MEV DATA DATA-ERR 14
 MB 0 30400 43 15
 ENDDATA 3 30400 43 16
 ENDSUBENT 17 30400 43 17
 SUBENT 30400044 850311 30400 43 18
 BIB 5 30400 43 19
 REACTION (48-CD-116(N,G)48-CD-117.,SIG.,FIS)
 REFERENCE (C,75KARLSR.,29,7504) PRELIM.RESULT
 DECAY-DATA (48-CD-117-G,2.6HR,DG,1068.,,
 DG,1302.)
 STATUS (PRELM)
 FROM TABLE 1 OF PROC.EDUCATIONAL SEMINAR ON THE USE OF
 CF-252,KARLSRUHE,14-18 APR.1975,P.29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 HISTORY ENDBIB 8 30400 44 10
 NOCOMMON 0 30400 44 11
 DATA 3 30400 44 12
 EN-DUMMY 1 30400 44 13
 MEV DATA DATA-ERR 14
 MB 0 30400 44 15
 ENDDATA 3 30400 44 16
 ENDSUBENT 16 30400 44 17
 SUBENT 30400045 850311 30400 44 18
 BIB 5 30400 44 19
 REACTION ((48-CD-110(N,G)48-CD-111-M.,SIG.,FIS)+
 (48-CD-111(N,INL)48-CD-111-M.,SIG.,FIS))
 REFERENCE (C,75KARLSR.,29,7504) PRELIM.RESULT.
 DECAY-DATA (48-CD-111-M,49.MIN,DG,158.8.,
 DG,245.4)
 STATUS (PRELM)
 FROM TABLE 1 OF PROC.EDUCATIONAL SEMINAR ON THE USE OF
 CF-252,KARLSRUHE,14-18 APR.1975,P.29 (IAEA-SR-3/23)
 (780621C) KO.-SUBENTRY ADDED.-
 HISTORY ENDBIB 9 30400 45 10
 NOCOMMON 0 30400 45 11

DATA 3 1
 EN-DUMMY DATA DATA-ERR
 MEV MB MB
 1.4100E+00 2.0400E+02 7.0000E+00
 ENDDATA 3
 ENDSUBENT 17 0
 SUBENT 0
 BIB 30400046 850311
 REACTION 5 9
 ((29-CU-63(N,G)29-CU-64,,SIG,,FIS)+
 (29-CU-65(N,2N)29-CU-64,,SIG,,FIS))
 REFERENCE (C,75KARLSR,,29,7504) PRELIM.RESULT.
 DECAY-DATA (29-CU-64,12.8HR,AR,511.)
 STATUS (PRELM)

FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 (790929A) KO.-EN-DUMMY CORRECTED.-
 ENDBIB 9
 NOCOMMON 0
 DATA 0
 EN-DUMMY 3 DATA-ERR 1
 MEV MB
 1.4100E+00 1.7600E+01 1.4000E+00
 ENDDATA 3
 ENDSUBENT 17 0
 SUBENT 30400047 850311
 BIB 5 8
 REACTION (38-SR-84(N,G)38-SR-85-M,,SIG,,FIS)
 REFERENCE (C,75KARLSR,,29,7504) PRLIM.RESULT.
 DECAY-DATA (38-SR-85-M,70.MIN,DG,231.6)
 STATUS (PRELM)

FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 (790928A) KO.-EN-DUMMY CORRECTED.-
 ENDBIB 8
 NOCOMMON 0
 DATA 0
 EN-DUMMY 3 DATA-ERR 1
 MEV MB
 1.4100E+00 2.4200E+02 2.7000E+01
 ENDDATA 3
 ENDSUBENT 16 0
 SUBENT 30400048 850311
 BIB 5 9
 REACTION ((38-SR-86(N,G)38-SR-87-M,,SIG,,FIS)+
 (38-SR-87(N,INL)38-SR-87-M,,SIG,,FIS))
 REFERENCE (C,75KARLSR,,29,7504) PRELIM.RESULT.
 DECAY-DATA (38-SR-87-M,2.8HR,DG,388.5)
 STATUS (PRELM)

FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 (790929A) KO.-EN-DUMMY CORRECTED.-
 ENDBIB 9
 NOCOMMON 0
 DATA 0
 EN-DUMMY 3 DATA-ERR 1
 MEV MB
 1.4100E+00 1.8200E+02 2.2000E+01
 ENDDATA 3
 ENDSUBENT 17 0
 SUBENT 30400049 850311
 BIB 5 8

304000 45 14
 304000 45 15
 304000 45 16
 304000 45 17
 304000 45 18
 304000 4599999
 304000 46 1
 304000 46 2
 304000 46 3
 304000 46 4
 304000 46 5
 304000 46 6
 304000 46 7
 304000 46 8
 304000 46 9
 304000 46 10
 304000 46 11
 304000 46 12
 304000 46 13
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 304000 46 15
 304000 46 16
 304000 46 17
 304000 46 18
 304000 4699999
 304000 47 1
 304000 47 2
 304000 47 3
 304000 47 4
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 304000 47 6
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 304000 47 8
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 304000 47 10
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 304000 47 14
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 304000 48 11
 304000 48 12
 304000 48 13
 304000 48 14
 304000 48 15
 304000 48 16
 304000 48 17
 304000 48 18
 304000 4899999
 304000 49 1
 304000 49 2

REACTION (56-BA-138(N,G)56-BA-139,,SIG,,FIS)
 REFERENCE (C,75KARLSR,,29,7504) PRELIM.RESULT.
 DECAY-DATA (56-BA-139,83.MIN,DG,165.9)
 STATUS (PRELM)

HISTORY FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 (790929A) KO.-EN-DUMMY CORRECTED.-

ENDBIB	8	0			30400	49	10
NOCOMMON	0	0			30400	49	11
DATA	3	1			30400	49	12
EN-DUMMY			DATA-ERR		30400	49	13
MEV	MB				30400	49	14
	1.4100E+00	3.8000E+00	4.0000E-01		30400	49	15
ENDDATA	3	0			30400	49	16
ENDSUBENT	16	0			30400	49	17
SUBENT	304000050	850311			30400	4999999	1
BIB	5	9			30400	50	2

REACTION ((56-BA-134(N,G)56-BA-135-M,,SIG,,FIS)+
 (56-BA-135(N,INL)56-BA-135-M,,SIG,,FIS))
 REFERENCE (C,75KARLSR,,29,7504) PRELIM.RESULT.
 DECAY-DATA (56-BA-135-M,28.7HR,DG,268.1)
 STATUS (PRELM)

HISTORY FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 (790929A) KO.-EN-DUMMY CORRECTED.-

ENDBIB	9	0			30400	50	10
NOCOMMON	0	0			30400	50	11
DATA	3	1			30400	50	12
EN-DUMMY			DATA-ERR		30400	50	13
MEV	MB				30400	50	14
	1.4100E+00	2.5500E+02	2.8000E+01		30400	50	15
ENDDATA	3	0			30400	50	16
ENDSUBENT	17	0			30400	50	17
SUBENT	304000051	850311			30400	5099999	1
BIB	5	9			30400	51	2

REACTION ((56-BA-136(N,G)56-BA-137-M,,SIG,,FIS)+
 (56-BA-137(N,INL)56-BA-137-M,,SIG,,FIS))
 REFERENCE (C,75KARLSR,,29,7504) PRELIM.RESULT.
 DECAY-DATA (56-BA-137-M,2.6MIN,DG,661.6)
 STATUS (PRELM)

HISTORY FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-
 (790929A) KO.-EN-DUMMY CORRECTED.-

ENDBIB	9	0			30400	51	10
NOCOMMON	0	0			30400	51	11
DATA	3	1			30400	51	12
EN-DUMMY			DATA-ERR		30400	51	13
MEV	MB				30400	51	14
	1.4100E+00	2.9300E+02	2.9000E+01		30400	51	15
ENDDATA	3	0			30400	51	16
ENDSUBENT	17	0			30400	51	17
SUBENT	304000052	850311			30400	5199999	1
BIB	5	9			30400	52	2

REACTION ((80-HG-198(N,G)80-HG-199-M,,SIG,,FIS)+
 (80-HG-199(N,INL)80-HG-199-M,,SIG,,FIS))
 REFERENCE (C,75KARLSR,,29,7504) PRELIM.RESULT.
 DECAY-DATA (80-HG-199-M,42.MIN,DG,158.3)
 STATUS (PRELM)

HISTORY FROM TABLE 1 OF PROC. EDUCATIONAL SEMINAR ON THE USE OF
 CF-252, KARLSRUHE, 14-18 APR. 1975, P. 29 (IAEA-SR-3/23).
 (780621C) KO.-SUBENTRY ADDED.-

(790929A) KO.- EN-DUMMY CORRECTED.-

ENDBIB	9	30400	52	11
NOCOMMON	0	30400	52	12
DATA	0	30400	52	13
EN-DUMMY	3	30400	52	14
MEV	DATA-ERR	30400	52	15
	MB	30400	52	16
1.4100E+00	1.6800E+02	6.0000E+00	30400	17
ENDDATA	3	30400	52	18
ENDSUBENT	17	30400	52	19
SUBENT	30400053	850311	5299999	1
BIB	5	30400	53	2
REACTION	(82-PB-204(N,INL)82-PB-204-M,,SIG,,FIS)	30400	53	3
REFERENCE	(C,75KARLSR,,29,7504) PRELIM.RESULT.	30400	53	4
DECAY-DATA	(82-PB-204-M,67.MIN,DG,374.7,,	30400	53	5
	DG,898.9)	30400	53	6
STATUS	(PRELIM)	30400	53	7
	FROM TABLE 1 OF PROC.EDUCATIONAL SEMINAR ON THE USE OF	30400	53	8
	CF-252, KARLSRUHE,14-18 APR.1975,P.29 (IAEA-SR-3/23)	30400	53	9
HISTORY	(780521C) KO.-SUBENTRY ADDED.-	30400	53	10
	(790929A) KO.- EN-DUMMY CORRECTED.-	30400	53	11
ENDBIB	9	30400	53	12
NOCOMMON	0	30400	53	13
DATA	0	30400	53	14
EN-DUMMY	3	30400	53	15
MEV	DATA-ERR	30400	53	16
	MB	30400	53	17
1.4100E+00	2.0900E+01	1.2000E+00	30400	18
ENDDATA	3	30400	53	19
ENDSUBENT	17	30400	53	20
SUBENT	30400054	850121	5399999	1
BIB	5	30400	54	2
REACTION	(14-SI-28(N,P)13-AL-28,,SIG,,FIS)	30400	54	3
REFERENCE	(R,ZFK-376,44,7812) 7 GAUSSIG SYMP.NOV.1977.	30400	54	4
DECAY-DATA	(13-AL-28,2.246MIN,DG,1778.8,1.0)	30400	54	5
STATUS	FROM, TABLE I OF ZFK-376,P.44(1978)=' PROC. OF 7TH INT.	30400	54	6
	SYMP.ON THE INTERACTION OF FAST NEUTRONS WITH NUCLEI',	30400	54	7
	NOV.21-25, 1977 GAUSSIG(GDR) =.	30400	54	8
HISTORY	(790928C) KO.-NEW SUBENTRY.-	30400	54	9
ENDBIB	7	30400	54	10
NOCOMMON	0	30400	54	11
DATA	0	30400	54	12
EN-DUMMY	3	30400	54	13
MEV	DATA-ERR	30400	54	14
	MB	30400	54	15
1.4100E+00	9.6600E+00	5.5000E-01	30400	16
ENDDATA	3	30400	54	17
ENDSUBENT	15	30400	54	18
SUBENT	30400055	850121	5499999	1
BIB	5	30400	55	2
REACTION	(14-SI-29(N,P)13-AL-29,,SIG,,FIS)	30400	55	3
REFERENCE	(R,ZFK-376,44,7812) 7 GAUSSIG SYMP.NOV.1977.	30400	55	4
DECAY-DATA	(13-AL-29,6.6MIN,DG,1273.0,0.910)	30400	55	5
STATUS	FROM, TABLE I OF ZFK-376,P.44(1978)=' PROC. OF 7TH INT.	30400	55	6
	SYMP.ON THE INTERACTION OF FAST NEUTRONS WITH NUCLEI',	30400	55	7
	NOV.21-25, 1977 GAUSSIG(GDR) =.	30400	55	8
HISTORY	(790928C) KO.-NEW SUBENTRY.-	30400	55	9
ENDBIB	7	30400	55	10
NOCOMMON	0	30400	55	11
DATA	0	30400	55	12
EN-DUMMY	3	30400	55	13
MEV	DATA-ERR	30400	55	14
	MB	30400	55	15
1.4100E+00	1.7900E+00	7.9000E-01	30400	16
ENDDATA	3	30400	55	17
ENDSUBENT	15	30400	55	18
SUBENT	30400056	850121	5599999	1
BIB	5	30400	56	2

1.0000E+00	2.0000E+02	0	0	31	30641
ENDCOMMON	3	0	0	1	30641
ENDSUBENT	31	0	0	32	30641
SUBENT	30641002	840912		199999	
BIB	3			2	30641
REACTION	(13-AL-27(N,P)12-MG-27,,SIG,,FIS)			2	30641
DECAY-DATA	(12-MG-27,9.462MIN,DG,843.76,0.718)			3	30641
SAMPLE	METALLIC FOIL 0.2 MM IN THICKNESS			4	30641
ENDBIB	3	0	0	5	30641
NOCOMMON	0	0	0	6	30641
DATA	DATA-ERR	0	0	7	30641
DATA	PER-CENT	2	1	8	30641
MB	4.8400E+00	2.9000E+00	0	9	30641
ENDDATA	3	0	0	10	30641
ENDSUBENT	11	0	0	11	30641
SUBENT	30641003	840912		12	30641
BIB	3			299999	
REACTION	(14-SI-28(N,P)13-AL-28,,SIG,,FIS)			3	30641
DECAY-DATA	(13-AL-28,2.2405MIN,DG,1778.7,1.00)			2	30641
SAMPLE	POWDER ENCAPSULATED IN 30. MICRONS THICK POLYETHYLENE FOIL HAVING THE SAME SIZE AS THE METAL SAMPLE NATURAL MIXTURE OF ISOTOPES			3	30641
ENDBIB	5	0	0	4	30641
NOCOMMON	0	0	0	5	30641
DATA	DATA-ERR	2	1	6	30641
DATA	PER-CENT	3	0	7	30641
MB	7.1200E+00	3.3000E+00	0	8	30641
ENDDATA	3	0	0	9	30641
ENDSUBENT	13	0	0	10	30641
SUBENT	30641004	840912		11	30641
BIB	4			12	30641
REACTION	(16-S-32(N,P)15-P-32,,SIG,,FIS)			399999	
DECAY-DATA	(15-P-32,14.290,B)			4	30641
DETECTOR	(GEMUC) THE BETA-ACTIVITY OF THE SAMPLE WAS MEASURED BY AN END WINDOW GEIGER-MUELLER COUNTER			5	30641
SAMPLE	POWDER ENCAPSULATED IN 30. MICRONS THICK POLYETHYLENE FOIL HAVING THE SAME SIZE AS THE METAL SAMPLES.NATURAL MIXTURE OF ISOTOPES			6	30641
ENDBIB	7	0	0	7	30641
NOCOMMON	0	0	0	8	30641
DATA	DATA-ERR	2	1	9	30641
DATA	PER-CENT	3	0	10	30641
MB	6.8400E+01	5.0000E-01	0	11	30641
ENDDATA	3	0	0	12	30641
ENDSUBENT	15	0	0	13	30641
SUBENT	30641005	840912		14	30641
BIB	3			15	30641
REACTION	(22-TI-46(N,P)21-SC-46,,SIG,,FIS)			499999	
DECAY-DATA	(21-SC-46-G,83.83D,DG,889.25,0.99984)			5	30641
SAMPLE	METALLIC FOIL 0.2 MM IN THICKNESS FROM NATURAL TITANIUM			6	30641
ENDBIB	3	0	0	7	30641
NOCOMMON	0	0	0	8	30641
DATA	DATA-ERR	2	1	9	30641
DATA	PER-CENT	3	0	10	30641
MB	1.3600E+01	8.9000E+00	0	11	30641
ENDDATA	3	0	0	12	30641
ENDSUBENT	11	0	0	13	30641
SUBENT	30641006	840912		14	30641
BIB	3			599999	
REACTION	(22-TI-47(N,P)21-SC-47,,SIG,,FIS)			6	30641
				7	30641
				8	30641
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				99	30641
				100	30641

REACTION (38-SR-84(N,G)38-SR-85-M,,SIG,,FIS)	30641	11	3
DECAY-DATA (38-SR-85-M,67.3MIN,DG,231.68,0.845)	30641	11	4
SAMPLE POWDER ENCAPSULATED IN 30. MICRONS THICK POLYETHYLENE FOIL HAVING THE SAME SIZE AS THE METAL SAMPLE. NATURAL MIXTURE OF ISOTOPES	30641	11	5
ENDBIB	30641	11	6
NOCOMMON	30641	11	7
DATA	30641	11	8
DATA	30641	11	9
DATA-ERR	30641	11	10
PER-CENT	30641	11	11
MB	30641	11	12
3.5400E+01 6.5000E+00	30641	11	13
ENDDATA	30641	11	14
ENDSUBENT	30641	11	14
SUBENT	30641	11	14
BIB	30641	11	14
30641012 840912	30641	11	14
REACTION (41-NB-93(N,A)39-Y-90-M,,SIG,,FIS)	30641	12	1
DECAY-DATA (39-Y-90-M,3.19HR,DG,202.53,0.91, DG,479.51,0.975)	30641	12	2
SAMPLE METALIC FOIL 0.2 MM IN THICKNESS	30641	12	3
ENDBIB	30641	12	4
NOCOMMON	30641	12	5
DATA	30641	12	6
DATA	30641	12	7
DATA-ERR	30641	12	8
PER-CENT	30641	12	9
MB	30641	12	10
2.8000E-02 6.0000E+00	30641	12	11
ENDDATA	30641	12	12
ENDSUBENT	30641	12	13
SUBENT	30641	12	13
BIB	30641	12	13
30641013 840912	30641	12	13
REACTION (49-IN-113(N,INL)49-IN-113-M1,,SIG,,FIS)	30641	13	1
DECAY-DATA (49-IN-113-M1,99.48MIN,DG,391.7,0.649)	30641	13	2
SAMPLE METALIC FOIL 0.2 MM IN THICKNESS FROM NATURAL INDIUM	30641	13	3
ENDBIB	30641	13	4
NOCOMMON	30641	13	5
DATA	30641	13	6
DATA	30641	13	7
DATA-ERR	30641	13	8
PER-CENT	30641	13	9
MB	30641	13	10
1.6430E+02 1.1000E+00	30641	13	11
ENDDATA	30641	13	11
ENDSUBENT	30641	13	12
SUBENT	30641	13	12
BIB	30641	13	12
30641014 840912	30641	13	12
REACTION (73-TA-181(N,G)73-TA-182,,SIG,,FIS)	30641	14	1
DECAY-DATA (73-TA-182-G,114.41D,DG,1121.28,0.3530, DG,1221.42,0.2717)	30641	14	2
SAMPLE METALIC FOIL 0.2 MM IN THICKNESS FROM NATURAL TANTALUM	30641	14	3
ENDBIB	30641	14	4
NOCOMMON	30641	14	5
DATA	30641	14	6
DATA	30641	14	7
DATA-ERR	30641	14	8
PER-CENT	30641	14	9
MB	30641	14	10
8.9250E+01 1.2000E+00	30641	14	11
ENDDATA	30641	14	12
ENDSUBENT	30641	14	13
SUBENT	30641	14	13
BIB	30641	14	13
30641015 840912	30641	14	13
REACTION (79-AU-197(N,G)79-AU-198,,SIG,,FIS)	30641	15	1
DECAY-DATA (79-AU-198-G,2.696D,DG,411.80,0.95404)	30641	15	2
SAMPLE METALIC FOIL 0.2 MM IN THICKNESS	30641	15	3
ENDBIB	30641	15	4
NOCOMMON	30641	15	5
DATA	30641	15	6
DATA	30641	15	7
DATA-ERR	30641	15	8
PER-CENT	30641	15	9
MB	30641	15	10

7.7000E+01 1.0000E-01
ENDDATA 3
ENDSUBENT 11
ENDENTRY 16
ENDTRANS 2

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30641 15 11
30641 15 12
30641 1599999
3064199999999
Z9999999999999

INSTITUTE REFERENCE	(3INDAUW)	1	30605	6
	(J,ANE,8,(6),283,8106)	1	30605	7
	(C,7SCALCUTTA,2,(18B),31,7512) THE SAME RESULTS	1	30605	8
	FOR TA-181(N,A)LU-178-M AND PB-208(N,P). THE RESULTS	1	30605	9
	OF MEASUREMENTS FOR SM-144(N,2N)SM-143-G,TA-181(N,2N)	1	30605	10
SAMPLE	TA-180-M, PB-206(N,3N)PB-204-M ARE GIVEN	1	30605	11
	SPECURE METALLIC POWDERS IN THE CASE OF TA AND MF	1	30605	12
	AND OXIDES OF GD, YB, PB WITH PURITY MORE THEN 99.9P.C.	1	30605	13
	WERE THOROUGHLY MIXED WITH ALUMINIUM POWDER. DISCS	1	30605	14
	OF 3.3CM DIAM. AND 1.0R 2.MM THICKNESS	1	30605	15
FACILITY	(CCW) 600.KEV COCROFT-WALTON ACCEL.OF ANDHRA UNIV.	1	30605	16
INC-SOURCE	(D-T) DEUTERON ON TRITIUM	1	30605	17
METHOD	(ACTIV) ACTIVATION METHOD	1	30605	18
DETECTOR	(GELI) CALIBRATED USING STANDARD RADIOACTIVE SOURCES	1	30605	19
	SE-75,BA-133,EU-152.SELF-ABSORPTION AND SCATTERING	1	30605	20
	OF GAMMA-RAYS WERE TAKEN INTO ACCOUNT.	1	30605	21
INC-SPECT	ENERGY SPREAD MAINLY CONNECTED WITH GEOMETRY GEOMETRY	1	30605	22
	OF EXPERIMENT	1	30605	23
ERR-ANALYS	(DATA-ERR) ARE THE ROOT-MEAN-SQUARE ERRORS AND ARE	1	30605	24
	COMPOSED OF THE FOLLOWING	1	30605	25
	THE ERROR IN THE RELATIVE PHOTOPEAK EFFICIENCY	1	30605	26
	OF THE DETECTOR, ABOUT 3.PER-CENT	1	30605	27
	THE ERROR IN THE PHOTOPEAK AREA WHICH WAS THE	1	30605	28
	STANDARD DEVIATION IN COUNTING STATISTICS	1	30605	29
	THE ERROR IN THE MONITOR CROSS-SECTION ABSOLUTE	1	30605	30
	GAMMA-RAY ABUNDANCE AND HALF-LIFE	1	30605	31
	THE ERRORS IN WEIGHING AND MIXING OF THE SAMPLE,	1	30605	32
	DURATION OF BOMBARDMENT AND TRANSPORT OF IRRADIATED	1	30605	33
	SAMPLE WERE NEGLIGIBLE	1	30605	34
	(MONIT-ERR) SEE RELEV. MONIT-REFERENCE	1	30605	35
CORRECTION	SEE EXPLANATION UNDER DETECTOR	1	30605	36
STATUS	DATA WERE TAKEN FROM TABLE 1,PAGE 284, ANN.OF NUCL.EN,	1	30605	37
	VOL.8,NUMB.6(1981)	1	30605	38
	(811022C) VP.	1	30605	39
HISTORY		0	30605	40
ENDBIB		3	30605	41
COMMON			30605	42
EN			30605	43
MEV			30605	44
	1.4200E+01 2.0000E-01	0	30605	45
ENDCOMMON		0	19999	
ENDSUBENT		0	5	
SUBENT	30605005	840912	5	
BIB		5	5	
REACTION	(73-TA-181(N,A)71-LU-178-M1,,SIG)	2	30605	2
DECAY-DATA	(71-LU-178-M1,20.MIN,DG,213.,0.796)	3	30605	3
MONITOR	(13-AL-27(N,P)12-MG-27,,SIG) OWN VALUE OF AUTHORS	4	30605	4
	WAS USED	5	30605	5
DECAY-MON	(12-MG-27,9.5MIN,DG)	6	30605	6
ENDBIB		0	30605	7
NOCOMMON		0	30605	8
DATA		0	30605	9
DATA		1	30605	10
DATA	DATA-ERR MONIT MONIT-ERR		30605	11
MB	MB MB		30605	12
	1.8000E+00 3.0000E-01 7.2000E+01 5.0000E+00		30605	13
ENDDATA		0	30605	14
ENDSUBENT		0	59999	
ENDENTRY		1	30637	1
ENTRY	30637 850305		30637	1
SUBENT	30637001 850305		30637	1
BIB		15	30637	1
TITLE	MEASUREMENT OF CROSS SECTIONS FOR THE (N,2N) REACTION	3	30637	3
	OF MN-55, NI-58, CO-59, NB-93, TA-181 AND AU-197	4	30637	4
	(LU HAN-LIN, HUANG JIAN-ZHOU, FAN PEI-GUO, CUI YUN-FENG,	5	30637	5
AUTHOR	ZHAO WEN-RONG)	6	30637	6

INSTITUTE (3CPRAEP) 7
 REFERENCE (R,IAEA-NDS-30637,8207) 8
 SAMPLE DIAMETER 1-2 CM, THICKNESS 0.02-1 MM 9
 MONITOR (13-AL-27(N,A)11-NA-24,,SIG) AT E(N)=14.61 MEV. 10
 FACILITY (26-FE-56(N,P)25-MN-56,,SIG) AT E(N)=14.61 MEV. 11
 (CCW,3CPRAEP) 600 KEV COCKCROFT-WALTON ACCELERATOR 12
 (VDG,3CPRAEP) 2.5 MEV VAN DE GRAAFF ACCELERATOR 13
 INC-SOURCE (D-T) 14
 METHOD (ACTIV) 15
 PART-DET (DG) 16
 DETECTOR (GELI) 136 CM3 GE(LI) DETECTOR. 17
 (NAICR) NAI DETECTOR. 18
 CORRECTION CORRECTIONS WERE MADE FOR 19
 .SELF-ABSORPTION IN THE SAMPLES 20
 .COINCIDENCE EFFECTS IN THE DETECTORS 21
 ERR-ANALYS (ERR-T) TOTAL ERROR (3.5 TO 5 PERCENT, EXCEPT FOR 79-AU-30637 22
 197(N,3N)79-AU-195), INCLUDING UNCERTAINTIES DUE TO 23
 .STANDARD CROSS SECTION ADOPTED 24
 .ABSOLUTE ACTIVITY DETERMINATION 25
 .NEUTRON ANGULAR DISTRIBUTION 26
 .STATISTICS OF THE ACTIVITY MEASUREMENT 27
 .NEUTRON ABSORPTION AND SCATTERING 28
 .AND OTHERS NOT SPECIFIED 29
 STATUS DATA FROM IAEA-NDS-30637(1982), TABLE 3. 30
 HISTORY (821020C) DG. 31
 (850215U) OS. COUNTRY CODE CORRECTED. 32
 ENDBIB 30 33
 COMMON 5 34
 EN-NRM MONIT1 MB MONIT1-ERR MONIT2 MB MONIT2-ERR 35
 MEV 1.4610E+01 1.1750E+02 2.9000E+00 1.0800E+02 2.7000E+00 36
 ENDCOMMON 3 37
 ENDSUBENT 37 38
 SUBENT 30637006 840912 39
 BIB 4 40
 REACTION (73-TA-181(N,2N)73-TA-180-M,,SIG) 41
 EXP-YEAR (81) 42
 DECAY-DATA (73-TA-180-M,8.152HR,DG,93.3.0.0184, 43
 DG,103.6,0.00793) 44
 ENDBIB 4 45
 NOCOMMON 0 46
 DATA 4 33 47
 EN-RSL DATA ERR-T 48
 MEV MB MB 49
 1.2320E+01 2.2000E-01 1.3180E+03 6.2000E+01 50
 1.2370E+01 2.7000E-01 1.2640E+03 5.9000E+01 51
 1.2490E+01 2.8000E-01 1.3190E+03 6.2000E+01 52
 1.2870E+01 2.9000E-01 1.3440E+03 6.3000E+01 53
 1.2960E+01 3.1000E-01 1.2930E+03 6.1000E+01 54
 1.3010E+01 2.3000E-01 1.3350E+03 6.3000E+01 55
 1.3540E+01 1.1000E-01 1.3240E+03 4.9000E+01 56
 1.3670E+01 3.1000E-01 1.3230E+03 6.2000E+01 57
 1.3790E+01 1.0000E-01 1.3200E+03 4.9000E+01 58
 1.3970E+01 3.7000E-01 1.3090E+03 6.1000E+01 59
 1.4040E+01 3.8000E-01 1.3090E+03 6.1000E+01 60
 1.4160E+01 3.2000E-01 1.3070E+03 6.1000E+01 61
 1.4470E+01 1.3000E-01 1.2720E+03 4.7000E+01 62
 1.4610E+01 1.0000E-01 1.2690E+03 4.6000E+01 63
 1.4750E+01 1.5000E-01 1.2700E+03 4.7000E+01 64
 1.5090E+01 3.3000E-01 1.2120E+03 5.7000E+01 65
 1.5350E+01 4.0000E-01 1.1940E+03 5.6000E+01 66
 1.5560E+01 3.4000E-01 1.2150E+03 5.7000E+01 67
 1.5660E+01 3.5000E-01 1.1950E+03 5.6000E+01 68
 1.5920E+01 4.2000E-01 1.1450E+03 5.4000E+01 69
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1.6020E+01 3.4000E-01 1.1350E+03 5.3000E+01
1.6100E+01 4.3000E-01 1.0970E+03 5.1000E+01
1.6460E+01 3.4000E-01 1.0000E+03 4.7000E+01
1.6630E+01 3.3000E-01 9.9500E+02 4.7000E+01
1.6950E+01 4.1000E-01 9.0400E+02 4.2000E+01
1.7120E+01 2.8000E-01 8.5400E+02 4.0000E+01
1.7250E+01 3.8000E-01 8.0100E+02 3.8000E+01
1.7300E+01 2.6000E-01 8.2800E+02 3.9000E+01
1.7430E+01 2.4000E-01 7.6200E+02 3.6000E+01
1.7560E+01 2.2000E-01 7.4500E+02 3.5000E+01
1.7760E+01 2.9000E-01 7.0000E+02 3.3000E+01
1.8000E+01 2.7000E-01 6.1900E+02 2.9000E+01
1.8250E+01 2.1000E-01 5.9200E+02 2.8000E+01

ENDDATA 35
ENDSUBENT 44
ENDENTRY 2
ENDTRANS 5

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30637 6 43
30637 6 44
30637 6 45
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Z99999999999999

+TRANS 060711 850305
 ENTRY 30637 850305
 SUBENT 30637001 850305
 BIB 15 30
 TITLE MEASUREMENT OF CROSS SECTIONS FOR THE (N,2N) REACTION
 OF MN-55, NI-58, CO-59, NB-93, TA-181 AND AU-197
 AUTHOR (LU HAN-LIN, HUANG JIAN-ZHOU, FAN PEI-GUO, CUI YUN-FENG,
 ZHAO WEN-RONG)
 INSTITUTE (3CPRAEP)
 REFERENCE (R, IAEA-NDS-30637, 8207)
 SAMPLE DIAMETER 1-2 CM, THICKNESS 0.02-1 MM
 MONITOR (13-AL-27(N,A), 11-NA-24, SIG) AT E(N)=14.61 MEV.
 (26-FE-56(N,P), 25-MN-56, SIG) AT E(N)=14.61 MEV.
 FACILITY (CCW, 3CPRAEP) 600 KEV COCKCROFT-WALTON ACCELERATOR
 (VDG, 3CPRAEP) 2.5 MEV VAN DE GRAAFF ACCELERATOR
 INC-SOURCE (D-T)
 METHOD (ACTIV)
 PART-PET (DG)
 DETECTOR (GELI) 136 CM3 GELI) DETECTOR.
 (NAICR) NAI DETECTOR.
 CORRECTION CORRECTIONS WERE MADE FOR
 .SELF-ABSORPTION IN THE SAMPLES.
 .COINCIDENCE EFFECTS IN THE DETECTORS
 .197(N,3N)79-AU-195), INCLUDING UNCERTAINTIES DUE TO
 .STANDARD CROSS SECTION ADOPTED
 .ABSOLUTE ACTIVITY DETERMINATION
 .NEUTRON ANGULAR DISTRIBUTION
 .STATISTICS OF THE ACTIVITY MEASUREMENT
 .NEUTRON ABSORPTION AND SCATTERING
 .AND OTHERS NOT SPECIFIED

ERR-ANALYS (ERR-T) TOTAL ERROR (3.5 TO 5 PERCENT, EXCEPT FOR 79-AU-30637
 (821020C) DG.
 (850215U) OS. COUNTRY CODE CORRECTED.
 STATUS DATA FROM IAEA-NDS-30637(1982), TABLE 3.
 HISTORY (850215U) OS. COUNTRY CODE CORRECTED.
 ENDBIB 30
 COMMON 5
 EN-NRM MONIT1 MONIT1-ERR MONIT2 MONIT2-ERR
 MEV MB MB MB MB MB
 1.4610E+01 1.1750E+02 2.9000E+00 1.0800E+02 2.7000E+00
 ENDCOMMON 3
 ENDSUBENT 37
 SUBENT 30637002 840912 3
 BIB 3
 REACTION (25-MN-55(N,2N)25-MN-54, SIG)
 EXP-YEAR (80)
 DECAY-DATA (25-MN-54, 312.5D, DG, 834.8, 0.9998)
 ENDBIB 0
 NCOMMON 0
 DATA 4 15
 EN EN-RSL DATA ENR-T
 EN MEV MB MB
 1.2370E+01 2.0000E-01 4.9900E+02 2.3000E+01
 1.3150E+01 3.0000E-01 6.1400E+02 2.3000E+01
 1.3520E+01 1.6000E-01 6.7200E+02 2.6000E+01
 1.3800E+01 1.3000E-01 7.0300E+02 2.8000E+01
 1.4290E+01 3.5000E-01 7.9200E+02 4.1000E+01
 1.4440E+01 1.5000E-01 8.1800E+02 3.2000E+01
 1.4610E+01 2.0000E-01 8.2500E+02 2.9000E+01
 1.4730E+01 2.1000E-01 8.2600E+02 3.2000E+01
 1.4850E+01 2.5000E-01 8.4300E+02 3.0000E+01
 1.4900E+01 2.5000E-01 8.5300E+02 3.4000E+01
 1.4980E+01 2.5000E-01 8.6400E+02 3.4000E+01
 1.5640E+01 5.0000E-01 8.9600E+02 4.8000E+01
 1.69550E+01 5.0000E-01 9.0700E+02 4.7000E+01

30637 0 1
 30637 1 1
 30637 1 2
 30637 1 3
 30637 1 4
 30637 1 5
 30637 1 6
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 30637 2 21
 30637 2 22
 30637 2 23

1.7910E+01	4.0000E-01	8.9800E+02	4.7000E+01	30637	2	24
1.8260E+01	2.3000E-01	8.9400E+02	4.6000E+01	30637	2	25
ENDDATA	17	0	0	30637	2	26
ENDSUBENT	25	0	0	30637	299999	
SUBENT	30637003	840912		30637	3	1
BIB	3	3		30637	3	2
REACTION	(28-NI-58(N,2N)28-NI-57, SIG)			30637	3	3
EXP-YEAR	(77)			30637	3	4
DECAY-DATA	(28-NI-57,36.HR,DG,1377.6,0.86)			30637	3	5
ENDBIB	0	0		30637	3	6
NOCOMMON	0	0		30637	3	7
DATA	4	13		30637	3	8
EN	EN-RSL	DATA	ERR-T	30637	3	9
MEV	MEV	MB	MB	30637	3	10
1.2730E+01	2.9000E-01	3.5000E+00	5.0000E-01	30637	3	11
1.2850E+01	2.1000E-01	3.6000E+00	4.0000E-01	30637	3	12
1.3640E+01	3.1000E-01	1.6400E+01	1.3000E+00	30637	3	13
1.3680E+01	3.5000E-01	1.8700E+01	9.0000E-01	30637	3	14
1.4610E+01	2.0000E-01	3.6900E+01	1.3000E+00	30637	3	15
1.5680E+01	3.6000E-01	5.6300E+01	3.0000E+00	30637	3	16
1.6050E+01	4.3000E-01	5.9800E+01	2.2000E+00	30637	3	17
1.6630E+01	3.3000E-01	6.4800E+01	2.4000E+00	30637	3	18
1.7180E+01	3.8000E-01	6.8300E+01	2.5000E+00	30637	3	19
1.7380E+01	2.6000E-01	6.9700E+01	2.6000E+00	30637	3	20
1.7540E+01	2.6000E-01	7.2800E+01	2.7000E+00	30637	3	21
1.7970E+01	2.7000E-01	7.1000E+01	2.7000E+00	30637	3	22
1.8260E+01	2.1000E-01	7.5800E+01	2.9000E+00	30637	3	23
ENDDATA	15	0	0	30637	3	24
ENDSUBENT	23	0	0	30637	399999	
SUBENT	30637004	840912		30637	4	1
BIB	3	3		30637	4	2
REACTION	(27-CO-59(N,2N)27-CO-58, SIG)			30637	4	3
EXP-YEAR	(81)			30637	4	4
DECAY-DATA	(27-CO-58-G,71.3D,DG,810.8,0.9949)			30637	4	5
ENDBIB	3	0		30637	4	6
NOCOMMON	0	0		30637	4	7
DATA	4	20		30637	4	8
EN	EN-RSL	DATA	ERR-T	30637	4	9
MEV	MEV	MB	MB	30637	4	10
1.2450E+01	1.5000E-01	4.4000E+02	2.0000E+01	30637	4	11
1.2810E+01	2.9000E-01	5.1200E+02	2.4000E+01	30637	4	12
1.2880E+01	2.1000E-01	5.8000E+02	2.7000E+01	30637	4	13
1.3350E+01	2.7000E-01	6.1200E+02	2.8000E+01	30637	4	14
1.3650E+01	3.1000E-01	7.0200E+02	3.2000E+01	30637	4	15
1.3690E+01	3.5000E-01	6.8200E+02	3.1000E+01	30637	4	16
1.3890E+01	1.0000E-01	6.6000E+02	2.4000E+01	30637	4	17
1.4080E+01	1.0000E-01	7.2300E+02	2.8000E+01	30637	4	18
1.4170E+01	3.2000E-01	7.7500E+02	3.6000E+01	30637	4	19
1.4380E+01	1.5000E-01	7.7800E+02	2.8000E+01	30637	4	20
1.4610E+01	2.5000E-01	7.9800E+02	2.9000E+01	30637	4	21
1.4770E+01	2.5000E-01	7.9800E+02	2.9000E+01	30637	4	22
1.4830E+01	2.6000E-01	8.1700E+02	2.9000E+01	30637	4	23
1.5090E+01	3.4000E-01	8.1900E+02	3.8000E+01	30637	4	24
1.5690E+01	4.0000E-01	8.6600E+02	4.0000E+01	30637	4	25
1.6090E+01	3.3000E-01	8.5900E+02	4.0000E+01	30637	4	26
1.6630E+01	3.8000E-01	8.8500E+02	4.1000E+01	30637	4	27
1.7290E+01	3.8000E-01	9.0000E+02	4.1000E+01	30637	4	28
1.7550E+01	2.2000E-01	9.0000E+02	4.1000E+01	30637	4	29
1.8260E+01	2.1000E-01	9.0000E+02	4.1000E+01	30637	4	30
ENDDATA	22	0	0	30637	4	31
ENDSUBENT	30	0	0	30637	499999	
SUBENT	30637005	840912		30637	5	1
BIB	3	4		30637	5	2
REACTION	(41-NB-93(N,2N)41-NB-92-M, SIG)			30637	5	3

