Table 11.2: Pd/D(H)/Li System. Neutron Density n_n and Relations between the Numbers N_x of Event x Obtained by Theoretical Analysis of Experimental Data on TNCF Model ($N_Q \equiv Q$(MeV)/5 (MeV)). Typical value of the surface vs. volume ratio S/V(cm^{-1}) of the sample is tabulated, also.

Authors	System	S/V cm^{-1}	Measured Quantities	n_n cm^{-3}	Other Results (Remarks)
Fleischmann et al.[1)]	Pd/D/Li	6 ~40	Q, t, n $N_t/N_n \sim 4\times 10^7$ $N_Q/N_t \sim 0.25$	$\sim 10^9$	(Q=10W/cm^3) $N_t/N_n \sim 10^6$ $N_Q/N_t = 1.0$
Morrey et al.[1−4)]	Pd/D/Li	20	Q, ^{4}He ^{4}He in $\ell \leq 25\mu$m	4.8 $\times 10^8$	$N_Q/N_{He} \sim 5.4$ (If 3% ^{4}He in Pd)
Roulette[1‴)]	Pd/D/Li	63	Q	$\sim 10^{12}$	
Storms[4)]	Pd/D/Li	9	t(1.8$\times 10^2$Bq/mℓ)	2.2$\times 10^7$	(τ=250h)
Storms[4′)]	Pd/D/Li	22	Q (Q_{max}=7W)	5.5$\times 10^{10}$	(τ=120h)
Takahashi et al.[5′)]	Pd/D/Li	2.7	t, n $N_t/N_n \sim 6.7\times 10^4$	3$\times 10^5$	$N_t/N_n \sim$ 5.3$\times 10^5$
Miles et al.[18′)]	Pd/D/Li	5	Q, ^{4}He (N_Q/N_{He}=1~10)	$\sim 10^{10}$	$N_Q/N_{He} \sim 5$
Okamoto et al.[12′)]	Pd/D/Li	23	Q, NT$_D$ $\ell_0 \sim 1$ μm	$\sim 10^{10}$	$N_Q/N_{NT} \sim 1.4$ (^{27}Al$\to^{28}$Si)
Oya[12−5)]	Pd/D/Li	41	Q, γ spectrum	3.0$\times 10^9$	(with^{252}Cf)
Arata. et al.[14)]	Pd/D/Li	7.5 $\times 10^4$	Q, ^{4}He ($10^{20} \sim 10^{21}$ cm^{-3}) $N_Q/N_{He} \sim 6$	$\sim 10^{12}$	(Assume t channeling in Pd wall)
McKubre[3)]	Pd/D/Li	125	Q (& Formula)	$\sim 10^{10}$	Qualit.explan.
Passell[3‴)]	Pd/D/Li	400	NT$_D$	1.1$\times 10^9$	N_{NT}/N_Q=2
Cravens[24″)]	Pd/H/Li	4000	Q (Q_{out}/Q_{in}=3.8)	8.5$\times 10^9$	(If PdD exists)
Bockris[43)]	Pd/D/Li	5.3	t,^{4}He;$N_t/N_{He} \sim 240$	3.2$\times 10^6$	$N_t/N_{He} \sim 8$
Lipson[15−4)]	Pd/D/Na	200	γ (E_γ=6.25MeV)	4$\times 10^5$	If effic. =1%
Will[45)]	Pd/D$_2$SO$_4$	21	t(1.8$\times 10^5$/cm^{2}s)	3.5$\times 10^7$	(If $\ell_0 \sim 10\mu$m)
Cellucci et al.[51″)]	Pd/D/Li	40	Q, ^{4}He N_Q/N_{He}=1~5	2.2$\times 10^9$	(IfQ=5W) N_Q/N_{He}=1
Celani[32‴)]	Pd/D/Li	400	Q (Q_{max}=7 W)	1.0$\times 10^{12}$	(If200%output)
Ota[53)]	Pd/D/Li	10	Q (113%)	3.5$\times 10^{10}$	(τ=220 h)
Gozzi[51″)]	Pd/D/Li	14	Q, t, ^{4}He	$\sim 10^{11}$	($\tau \sim 10^3$h)
Bush[27′)]	Ag/PdD/Li	2000	Q (Q_{max}=6W)	1.1$\times 10^9$	(τ=54d,Film)
Mizuno [26−4)]	Pd/D/Li (If Cr in Pd)	3.4	Q, NT$_D$ $\ell \leq 2$ μm	2.6$\times 10^8$	τ=30d,Pd 1cm$\phi\times$10cm
Iwamura[17)]	PdD$_x$	20	n (400/s),t	3.9 $\times 10^8$	4.4 $\times 10^6 t$/s
Itoh[17′)]	PdD$_x$	13.3	n (22/m),t	8.7 $\times 10^7$	7.3 $\times 10^{10} t$/s
Itoh[17″)]	PdD$_x$	13.3	n (2.1 $\times 10^3$/s)	3.9 $\times 10^8$	
Iwamura [17‴)]	PdD$_x$	20	Q (4 W) NT$_F$(Ti, Cr etc.)	3.3 $\times 10^{10}$	(NT$_F$? unexplained)
Miley[65)]	Pd/H/Li	150	NT$_F$(Ni,Zn,$\cdots\cdots$)	4.5 $\times 10^{12}$	
Dash[59)]	Pd/D,H$_2$SO$_4$	57	Q, NT$_D$	$\sim 10^{12}$	Pt$\to$Au
Kozima[203)]	Pd/D,H/Li	200	n (2.5$\times 10^{-4}$/s)	2.5 $\times 10^2$	Effic. =0.44%

Table 11.3: Ni/H/K System and Others. Neutron Density n_n and Relations between the Numbers N_x of Event x Obtained by Theoretical Analysis of Experimental Data on TNCF Model ($N_Q \equiv Q$(MeV)/5 (MeV)). Typical value of the surface vs. volume ratio S/V(cm^{-1}) of the sample is tabulated, also.

Authors	System	S/V cm^{-1}	Measured Quantities	n_n cm^{-3}	Other Results (Remarks)
Jones[2)]	Ti/D/Li	8.1	n (2.45 MeV)	3.1×10^{11}	
Mills[25)]	Ni/H/K	160	Q (0.13 W)	3.4×10^{10}	
Bush[27′)]	Ni/H/K Ni/H/Na	~160 ~160	NT$_D$(Ca) NT$_D$(Mg)	5.3×10^{10} 5.3×10^{11}	N_Q/N_{NT}~3.5 (^{40}K$_T$=0)
Bush[27″)]	Ni/H/Rb	~10^4	NT$_D$(Sr)	1.6×10^7	N_Q/N_{NT}~3
Savva-timova[34″)]	Pd/D$_2$	100	NT$_D$(Ag)	9×10^{10}	
Alekseev[44′)]	Mo/D$_2$	4.1	t (~10^7/s)	1.8×10^7	(If MoD)
Romoda-nov[44‴)]	TiC/D	4.1	t (~10^6/s)	~10^6	(D/Ti~ 0.5assumed)
Reifensch-weiler[38′)]	TiT$_{0.0035}$	7×10^5	β decay reduction	1.1×10^9	(T=0~450°C)
Dufour[7)]	Pd,SS/D$_2$ Pd,SS/H$_2$	48	Q, t, n	9.2×10^{11} 4.0×10^9	(D(H)/Pd~1 is assumed)
Claytor[9)]	Pd/D$_2$	400	t (12.5 nCi/h)	1.6×10^{13}	(If D/Pd~0.5)
Srinivasan[16)]	Ti/D$_2$	1500	t (t/d ~10^{-5})	1.9×10^8	(Aged plate)
De Ninno[6′)]	Ti/D$_2$	440	n , t	1.2×10^6	(D/Ti=1,1w)
Focardi[23)]	Ni/H$_2$	8.2	Q	3.0×10^{12}	(IfN_p=10^{21})
Oriani[52)]	SrCeO$_3$/D$_2$	22	Q ~ 0.7W	4.0×10^{10}	V=0.31cm^3
Notoya[35″)]	Ni/D,H/K	3.4 $\times10^4$	Q (0.9 W), t	2.4×10^{13}	(If 1/2 t is in liquid)
Notoya[35−4)]	Ni/D,H/K	same	NT$_D$(Ca)	1.4×10^9	(Sintered Ni)
Yamada[54)]	Pd/D$_2$	185	n , NT$_D$(C)	2.0×10^{12}	
Cuevas[55)]	TiD$_{1.5}$	134	n (102 n /s)	5.4×10^{11}	
Niedra[56)]	Ni/H/K	80	Q (11.4 W)	1.4×10^9	5km×0.5mmϕ
Ohmori[22″)]	Au/H/K	200	Q, NT$_F$(Fe)	~10^{11}	(Au plate)
Li[57)]	Pd/D$_2$	185	Q	1.6×10^{12}	(Pd wire)
Qiao[57′)]	Pd/H$_2$	185	NT$_F$(Zn)	3.8×10^{10}	(40%NTin 1y)
Bressani[58′)]	Ti/D$_2$	$\leq 10^3$?	n (ε)	$10^5 - 10^6$	(Ti shaving)
Miley[65′)]	Ni/H/Li	50	NT$_D$(Fe,Cr,$\cdots$)	1.7×10^{12}	