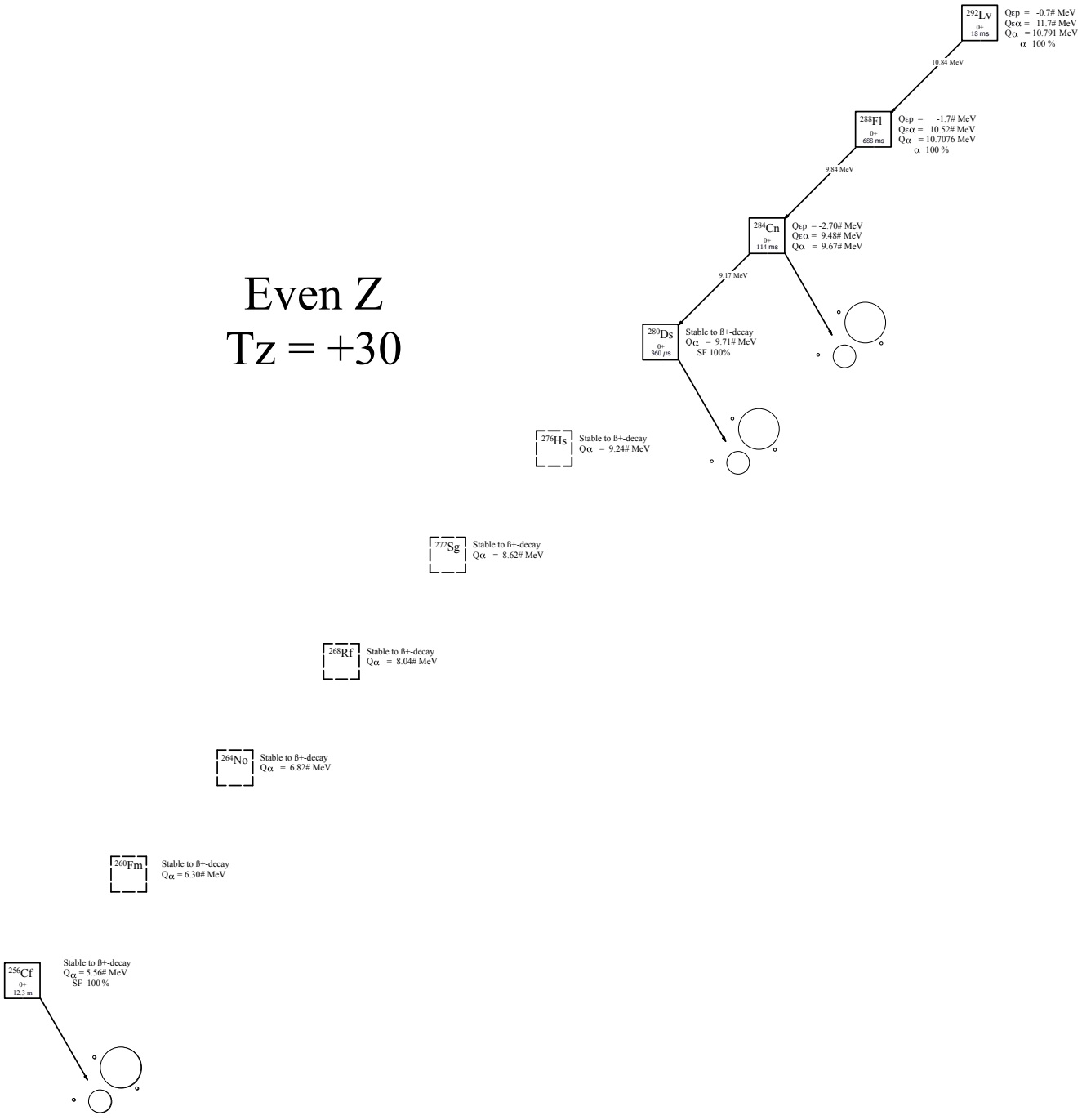

Fig. 1: Known experimental values for heavy particle emission of the even-Z T_z= +30 nuclei.

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Table 1
Observed and predicted β-delayed particle emission from the even-Z, T_z = +30 nuclei. Unless otherwise stated, all Q-values are taken from [2021Wa16] or deduced from values therein.

Nuclide	J^π	$T_{1/2}$	Q_ε	Q_{β^-}	$Q_{\beta^- \alpha}$	Experimental
^{256}Cf	0^+	12.3(12) m		-0.14(33)#	——	[**1980Ho04**]
^{260}Fm				-0.78(54)#	——	
^{264}No				-1.36(73)#	——	
^{268}Rf				-1.58(85)#	——	
^{272}Sg				-2.27(87)#	——	
				$Q_{\varepsilon p}$	$Q_{\varepsilon \alpha}$	
^{276}Hs			-0.77(94)#	——	——	
^{280}Ds	0^+	$0.36^{+1.72}_{-0.16}$ ms	-0.19(96)#	——	——	[**2021Sa01**]
^{284}Cn	0^+	114^{+17}_{-11} ms*	0.45(91)#	-2.70(91)#	9.48(97)#	[**2021Sa01, 2011Og07**]
^{288}Fl	0^+	688^{+170}_{-110} ms**	1.0(10)#	-1.7(10)#	10.52(91)#	[**2021Sa01, 2011Og07**]
^{292}Lv	0^+	18^{+16}_{-6} ms	1.5(10)#	-0.7(10)#	11.7(10)#	[**2011Og07**]

* Weighted average of 121^{+20}_{-13} ms [2021Sa01] and 97^{+31}_{-19} ms [2011Og07].
** Weighted average of 650^{+120}_{-80} ms [2021Sa01] and 800^{+270}_{-160} ms [2011Og07].

Table 2
Particle separation, Q-values, and measured values for direct particle emission of the even-Z, T_z = +30 nuclei. Unless otherwise stated, all S and Q-values are taken from [2021Wa16] or deduced from values therein.

Nuclide	S_p	Q_α	BR_α	BR_{SF}	Experimental
^{256}Cf		5.56(10)#		100%	[**1980Ho04**]
^{260}Fm		6.30(30)#			
^{264}No		6.82(40)#			
^{268}Rf		8.04(30)#			
^{272}Sg		8.62(20)#			
^{276}Hs	4.88(94)#	9.24(20)#			
^{280}Ds	4.5(1)#	9.71(20)#		100%	[**2023Sa03, 2021Sa01**, 1999OgZW]
^{284}Cn	4.3(10)#	9.67(15)#	2%	98%	[**2023Sa03, 2021Sa01, 2017Ka66, 2011Og07**, 2014MoZV, 2014MoZU, 2010Du06, 2005Og03, 2005OgZZ, 2002Og03, 2002Og09, 2003Og13, 2002Og03, 2002Og13, 2001Og01, 2001Og06, 2001Og11, 2002OgZY, 2000Og05, 2000Og07, 2000OgZS]
^{288}Fl	3.8(10)#	10.076(12)	100%	$\leq$2%	[**2023Sa03, 2021Sa01, 2017Ka66, 2011Og07**, 2014MoZV, 2014MoZU, 2010Du06, 2010Ei01, 2005Og03, 2005OgZZ, 2002Og03, 2002Og09, 2003Og13, 2002Og03, 2002Og13, 2001Og01, 2001Og06, 2001Og11, 2002OgZY, 2000Og05, 2000Og07, 2000OgZS]
^{292}Lv	3.3(11)#	10.791(12)	100%		[**2017Ka66, 2011Og07**, 2014MoZV, 2014MoZU, 2005Og03, 2005OgZZ, 2002Og03, 2002Og09, 2003Og13,2002Og03, 2002Og13, 2001Og01, 2001Og06, 2001Og11,2002OgZY, 2000Og05, 2000Og07, 2000OgZS]

Table 3
direct α emission from ^{284}Cn*, $J^\pi = 0^+$, $T_{1/2} = 114^{+17}_{-11}$ ms**, BR_α = 2%***.

E_α(c.m.)	E_α(lab)	I_α(abs)	J^π_f	$E_{daughter}$(^{280}Ds)	coincident γ-rays (keV)	HF
9.30(5)	9.17(5)	100%	0^+			

* All values from [2017Ka66], except where noted
** Weighted average of 121^{+20}_{-13} ms [2021Sa01] and 97^{+31}_{-19} ms [2011Og07].
*** [2023Sa03].

Table 4
direct α emission from ^{288}Fl*, $J^\pi = 0^+$, $T_{1/2} = 688^{+170}_{-110}$ ms**, BR_α = 100%.

E_α(c.m.)	E_α(lab)	I_α(abs)	J^π_f	$E_{daughter}$(^{284}Cn)	coincident γ-rays (keV)	HF
9.98(5)	9.84(5)	100%	0^+			

* All values from [2017Ka66], except where noted

** Weighted average of 650^{+120}_{-80} ms [2021Sa01] and 800^{+270}_{-160} ms [2011Og07].

Table 5
direct α emission from ^{292}Lv*, $J^{\pi} = 0^{+}$, $T_{1/2} = 18^{+16}_{-6}$ ms, $BR_{\alpha} = 100\%$.

E_{α}(c.m.)	E_{α}(lab)	I_{α}(abs)	J^{π}_{f}	$E_{daughter}$(^{288}Fl)	coincident γ-rays (keV)	HF
11.00(8)	10.84(8)	100%	0^{+}			

* All values from [2011Og07].

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