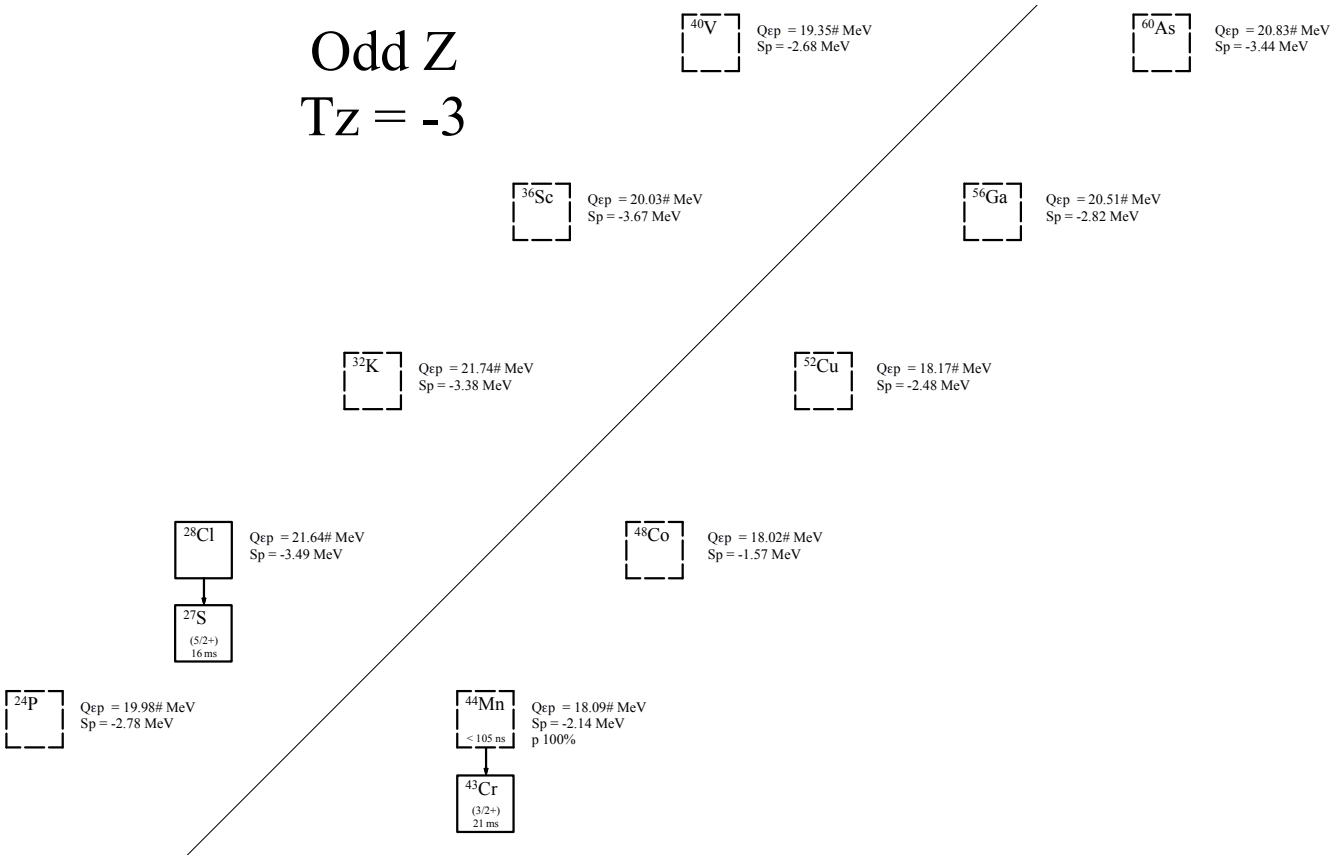

Fig. 1: Known experimental values for heavy particle emission of the odd Z T_z= -3 nuclei.

Last updated 3/17/23

Table 1
Observed and predicted β-delayed particle emission from the odd Z, T_z = -3 nuclei. Unless otherwise stated, all Q-values are taken from [2021Wa16] or deduced from values therein.

Nuclide	J^π	$T_{1/2}$	Q_ε	$Q_{\varepsilon p}$	$BR_{\beta p}$	$Q_{\varepsilon 2p}$	$Q_{\varepsilon 3p}$	$Q_{\varepsilon \alpha}$	Experimental
^{24}P			23.28(50)#	19.98(50)#		19.84(50)#	14.34(50)#		
^{28}Cl			24.20(53)#	21.64(50)#		20.83(50)#	15.32(50)#	15.10(50)#	
^{32}K			24.19(40)#	21.74(40)#		21.47(40)#	16.18(40)#	15.50(43)#	
^{36}Sc			22.60(20)#	20.03(30)#		19.95(30)#	15.29(30)#	15.93(30)#	
^{40}V			21.46(31)#	19.35(30)#		19.95(30)#	15.40(30)#	16.50(30)#	
^{44}Mn		$<$ 105 ns	20.88(30)#	18.09(30)#		17.99(30)#	14.24(30)#	14.03(31)#	[**1992Bo07**]
^{48}Co			19.74(51)#	18.02(66)#		16.62(50)#	11.75(50)#	12.73(50)#	
^{52}Cu			20.68(61)#	18.17(60)#		18.02(60)#	13.87(60)#	13.71(61)#	
^{56}Ga			21.55(64)#	20.51(52)#		20.86(50)#	16.95(50)#	16.30(51)#	
^{60}As			21.89(50)#	20.83(43)#		22.08(40)#	19.80(40)#	17.33(57)#	

Table 2
Particle emission from odd Z, T_z = -3 nuclei. Unless otherwise stated, all Q-values and separation energies are taken from [2021Wa16] or deduced from values therein.

Nuclide	S_p	BR_{1p}	S_{2p}	BR_{2p}	Q_α	Experimental
^{24}P	-2.78(71)#		-1.24(64)#			
^{28}Cl	-1.60(8)*	100%	-2.72(54)#		-8.18(71))#	[**2018Mu18**]
^{32}K	-3.38(45)#		-2.74(40)#		-8.71(64)#	
^{36}Sc	-3.67(36)#		-2.79(36)#		-8.26(50)#	
^{40}V	-2.68(36)#		-2.14(36)#		-6.11(42)#	
^{44}Mn	-2.14(36)#	100%**	-0.50(36)#		-7.43(42)#	[**1992Bo07**]
^{48}Co	-01.57(71)#		0.43(51)#		-8.16(58)#	
^{52}Cu	-2.48(78)#		-1.23(61)#		-6.03(78)#	
^{56}Ga	-3.14(64)#		-2.82(64)#		-4.39(78)#	
^{60}As	-3.44(57)#		-3.32(50)#		-4.23(64)#	

* from [2018Mu18], -3.49(30)# in [2021Wa16].
** Inferred from Half-life.

Table 3
direct proton emission from ^{28}Cl*, BR_p =100%.

E_{parent}	E_p(c.m.)	E_p(lab)	I_p(abs)	$E_{daughter}$(^{27}S)
0.0	1.60(8)	1.54(8)	100%	0.0
1.60	3.20(6)	3.09(6)	100%	0.0

* All values from [2018Mu18].

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