^{231}Ra $Z = 88$ $N = 143$ adopted link ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 1757.411 (0.011) MeV
Qbeta- = 2.454 (0.017) MeV

	Energy	T	J+	J-	J-other		T1/2	
S-alpha= -2.906 (0.018)								
231RA 1				0.000	(5/2+)	1	104 S	1
231RA 2				0.046	(7/2+)	2		
231RA 3				0.066	(1/2+)	3	53 US	AP
231RA 4				0.088	(3/2+)	4		
231RA 5				0.095	(5/2-)	5	4.72 NS	6
231RA 6				0.286	(5/2+)	6		
231RA 7				0.397	(3/2+)	7		
231RA 8				0.455		8		
231RA 9				0.459	(-)	9	15 PS	LE
231RA 10				0.503		10		
231RA 11				0.511	(1/2+,3/2+)	11		
231RA 12				0.520	(1/2-)	12	92 PS	5
231RA 13				0.605		13		
231RA 14				0.621		14	12.5 PS	LE
231RA 15				0.647		15		
231RA 16				0.741		16		
231RA 17				0.751		17		
231RA 18				0.761		18		
231RA 19				0.773		19		
231RA 20				0.796		20		
231RA 21				0.835		21		
231RA 22				0.929		22		
231RA 23				0.932		23		
231RA 24				0.944		24		
231RA 25				0.971		25		
231RA 26				1.139		26		
231RA 27				1.634		27		
231RA 28				1.693		28		
231RA 29				1.718		29		
231RA 30				1.730		30		
231RA 31				1.774		31		
S-p = 8.559 (0.013)								
S-n = 4.371 (0.015)								
S-2p = 15.724 (0.017)								

```
S-2n   =  10.488 ( 0.019)----------------------------------------------------------------
S-alpha=  -2.906 ( 0.018)----------------------------------------------------------------

S+p       =  -6.351 ( 0.017)
S+n       =  -5.791 ( 0.015)
S+2p      = -14.063 ( 0.011)
S+2n      = -10.025 ( 0.014)
S+alpha   =   3.376 ( 0.017)

gap p     =   2.208 ( 0.022)
gap n     =  -1.420 ( 0.021)
gap 2p    =   1.661 ( 0.021)
gap 2n    =   0.463 ( 0.024)
gap alpha =   0.471 ( 0.025)
```