Target isotope: $^{170}_{70}$Yb $I^{\pi}_{\circ} = 0^+$ *Abundance:* 3.04(15) % $S_{\rm p} = 4353.6(19)$ keV

$^{171}_{71}$Lu(p)

$E_\circ$ [keV]	$2J^\pi$	$\Gamma_{\rm p}$ [keV]	Γ [keV]	$K^\pi[Nn_{\rm z}\Lambda]$	$E^*_{\rm analog}$ [keV]	$S_{\rm pp}$	$S_{\rm dp}$	$E_{\rm cm}$ [keV]	E^* [keV]	Ref.	
10500(14)	1^-	7(2)	120(30)	$1^-[521]$	0.0	0.12	0.13	10439	14792(14)*	72Fo01	84Sh33
11470(20)	3^-	6(2)	130(30)	$1^-[510]$	995	0.06	0.09	11403	15757(20)*	72Fo01	
11527(20)	5^-			$1^-[510]$	1052			11460	15813(20)	72Fo01	
11619(20)	7^-			$1^-[510]$	1144			11551	15905(20)	72Fo01	
11803(20)	3^-			$3^-[512]$	1328			11734	16088(20)	72Fo01	
11870(20)	5^-			$3^-[512]$	1395			11801	16154(20)	72Fo01	
11961(20)	7^-			$3^-[512]$	1486			11891	16245(20)	72Fo01	

Additional data on this isotope can be found in [02Ba87].
* E^*=14853(14) keV and 15823(20) keV for these resonances are adopted in [92Sh08].
For all Lu-isotopes the parameter $K^\pi[Nn_{\rm z}\Lambda]$ is given [72Fo01]. It is a standard classification of the rotational bands in the deformed nuclei: K^π is the band head quantum number, Nillsen's orbitals are labelled by $[Nn_{\rm z}\Lambda]$ with N, $n_{\rm z}$ and Λ - standard notations of quantum numbers of the orbitals.

Target isotope: $^{172}_{70}$Yb $I^{\pi}_{\circ} = 0^+$ *Abundance:* 21.83(67) % $S_{\rm p} = 4914.4(16)$ keV

$^{173}_{71}$Lu(p)

$E_\circ$ [keV]	$2J^\pi$	$\Gamma_{\rm p}$ [keV]	Γ [keV]	$K^\pi[Nn_{\rm z}\Lambda]$	$E_{\rm cm}$ [keV]	$S_{\rm pp}$	E^* [keV]	Ref.
11739(20)	3^-	13(4)	150(30)	$1^-[510]$	11671	0.11	16586(20)	72Fo01
11787(20)	5			$1^-[510]$	11719		16633(20)	72Fo01
11888(20)	7^-			$1^-[510]$	11819		16734(20)	72Fo01
12008(20)	3^-			$3^-[512]$	11939		16853(20)	72Fo01
12072(20)	5^-			$3^-[512]$	12002		16917(20)	72Fo01
12165(20)	7^-			$3^-[512]$	12095		17009(20)	72Fo01

Target isotope: $^{174}_{70}$Yb $I^{\pi}_{\circ} = 0^+$ *Abundance:* 31.83(92) % $S_{\rm p} = 5510.0(13)$ keV

$^{175}_{71}$Lu(p)

$E_\circ$ [keV]	$2J^\pi$	$\Gamma_{\rm p}$ [keV]	Γ [keV]	$K^\pi[Nn_{\rm z}\Lambda]$	$S_{\rm pp}$	$E_{\rm cm}$ [keV]	E^* [keV]	Ref.
11678(20)	3^-	14(4)	150(30)	$1^-[510]$	0.14	11611	17121(20)	72Fo01
11726(20)	5^-			$1^-[510]$		11659	17169(20)	72Fo01
11820(20)	7^-			$1^-[510]$		11752	17262(20)	72Fo01
11935(20)	3^-			$3^-[512]$		11867	17377(20)	72Fo01
11994(20)	5^-			$3^-[512]$		11925	17435(20)	72Fo01
12080(20)	7^-			$3^-[512]$		12011	17521(20)	72Fo01
12478(20)	3^-			$3^-[501]$		12407	17917(20)	72Fo01
12491(20)	3^+			$1^+[651]$		12420	17930(20)	72Fo01
12537(20)	5^-			$3^-[501]$		12465	17975(20)	72Fo01

(continued) **$^{175}_{71}$Lu(p)**

$E_\circ$ [keV]	$2J^\pi$	Γ_p [keV]	Γ [keV]	$K^\pi[Nn_z\Lambda]$	S_{pp}	E_{cm} [keV]	E^* [keV]	Ref.
12546(20)	7^-			[503]		12474	17984(20)	72Fo01
12582(20)	5^+			1^+[651]		12510	18020(20)	72Fo01
12590(20)	7^+			1^+[651]		12518	18028(20)	72Fo01
12621(20)	7^-			3^-[501]		12549	18059(20)	72Fo01

Target isotope: $^{176}_{70}$Yb $I^\pi_\circ = 0^+$ *Abundance:* 12.76(41) % $S_p = 6183.7(16)$ keV **$^{177}_{71}$Lu(p)**

$E_\circ$ [keV]	$2J^\pi$	Γ_p [keV]	Γ [keV]	$K^\pi[Nn_z\Lambda]$	S_{pp}	E_{cm} [keV]	E^* [keV]	Ref.
11678(20)	3^-	15(4)	150(20)	1^-[510]	0.15	11612	17796(20)	72Fo01
11723(20)	5^-			1^-[510]		11657	17840(20)	72Fo01
11829(20)	7^-			1^-[510]		11762	17946(20)	72Fo01
12007(20)	3^-			3^-[512]		11939	18123(20)	72Fo01
12073(20)	5^-			3^-[512]		12005	18188(20)	72Fo01
12166(20)	7^-			3^-[512]		12097	18281(20)	72Fo01
12521(20)	7			[503]		12450	18634(20)	72Fo01
12680(20)	3^-	25(6)	160(30)	3^-[501]	0.15	12608	18792(20)	72Fo01
12746(20)	5^-			3^-[501]		12674	18858(20)	72Fo01
12866(20)	7^-			3^-[501]		12793	18977(20)	72Fo01