

$^{92}\text{Mo}(^{27}\text{Al},\text{p}2\text{n}\gamma)$ 1988JaZZ,1985JaZZ

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 111, 717 (2010)	1-Dec-2009

$E(^{27}\text{Al})=11-115$ MeV.

Measured: γ , $\gamma\gamma$, $\gamma(\theta)$, Ge and NaI detectors.

Yrast band and side band followed up to spin 18.

Preliminary report, details not given (1987JaZZ) ($\gamma\gamma$ coincidence spectra and ^{116}Xe levels shown).

 ^{116}Xe Levels

E(level)	J^π [†]	E(level)	J^π [†]	E(level)	J^π [†]	E(level)	J^π [†]
0	0 ⁺	2209.3 [‡] 6	8 ⁺	3682.5 [‡] 7	(12 ⁺)	6016.1 8	(19 ⁻)
393.0 [‡] 3	2 ⁺	2444.1 [#] 6	(7 ⁻)	4362.6 [#] 7	(13 ⁻)	6195.1 [‡] 9	(18 ⁺)
916.8 [‡] 5	4 ⁺	2930.4 [‡] 7	(10 ⁺)	4465.0 [‡] 8	(14 ⁺)		
1531.9 [‡] 5	6 ⁺	2980.4 [‡] 6	(9 ⁻)	5162.5 [#] 8	(15 ⁻)		
1979.3 [#] 5	(9 ⁻)	3626.2 [#] 7	(11 ⁻)	5300.3 [‡] 9	(16 ⁺)		

[†] From 1988JaZZ.

[‡] Band(A): yrast band.

[#] Band(B): side band.

 $\gamma(^{116}\text{Xe})$

E_γ	I_γ [‡]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	Comments
393.0 3	100	393.0	2 ⁺	0	0 ⁺	E2	Mult.: $A_2=0.26$ 2 \$ $A_4=-0.02$ 3.
464.6 3	3 1	2444.1	(7 ⁻)	1979.3 (9 ⁻)		E2	Mult.: $A_2=0.22$ 14 \$ $A_4=-0.23$ 12.
523.8 3	87 3	916.8	4 ⁺	393.0 2 ⁺		E2	Mult.: $A_2=0.32$ \$ $A_4=-0.08$.
536.3 5	16 2	2980.4	(9 ⁻)	2444.1 (7 ⁻)			
615.4 3	76 3	1531.9	6 ⁺	916.8 4 ⁺		E2	Mult.: $A_2=0.26$ 2 \$ $A_4=-0.08$ 3.
645.8 3	19 2	3626.2	(11 ⁻)	2980.4 (9 ⁻)			
677.3 3	52 3	2209.3	8 ⁺	1531.9 6 ⁺			
721.1 3	43 3	2930.4	(10 ⁺)	2209.3 8 ⁺			
736.4 5	14 2	4362.6	(13 ⁻)	3626.2 (11 ⁻)			
752.1 3	30 3	3682.5	(12 ⁺)	2930.4 (10 ⁺)			
771.1 5	7 2	2980.4	(9 ⁻)	2209.3 8 ⁺			
782.5 3	16 2	4465.0	(14 ⁺)	3682.5 (12 ⁺)			
799.9 5	6 2	5162.5	(15 ⁻)	4362.6 (13 ⁻)			
835.3 3	10 2	5300.3	(16 ⁺)	4465.0 (14 ⁺)			
853.6 [#]		6016.1	(19 ⁻)	5162.5 (15 ⁻)			
894.8 3	3 1	6195.1	(18 ⁺)	5300.3 (16 ⁺)			
911.5 3	19 2	2444.1	(7 ⁻)	1531.9 6 ⁺			
1062.2 5	6 1	1979.3	(9 ⁻)	916.8 4 ⁺			

[†] From $\gamma(\theta)$ (1988JaZZ).

[‡] From coincidence data normalized to 393 γ (1988JaZZ), data from spectrum at E=115 MeV.

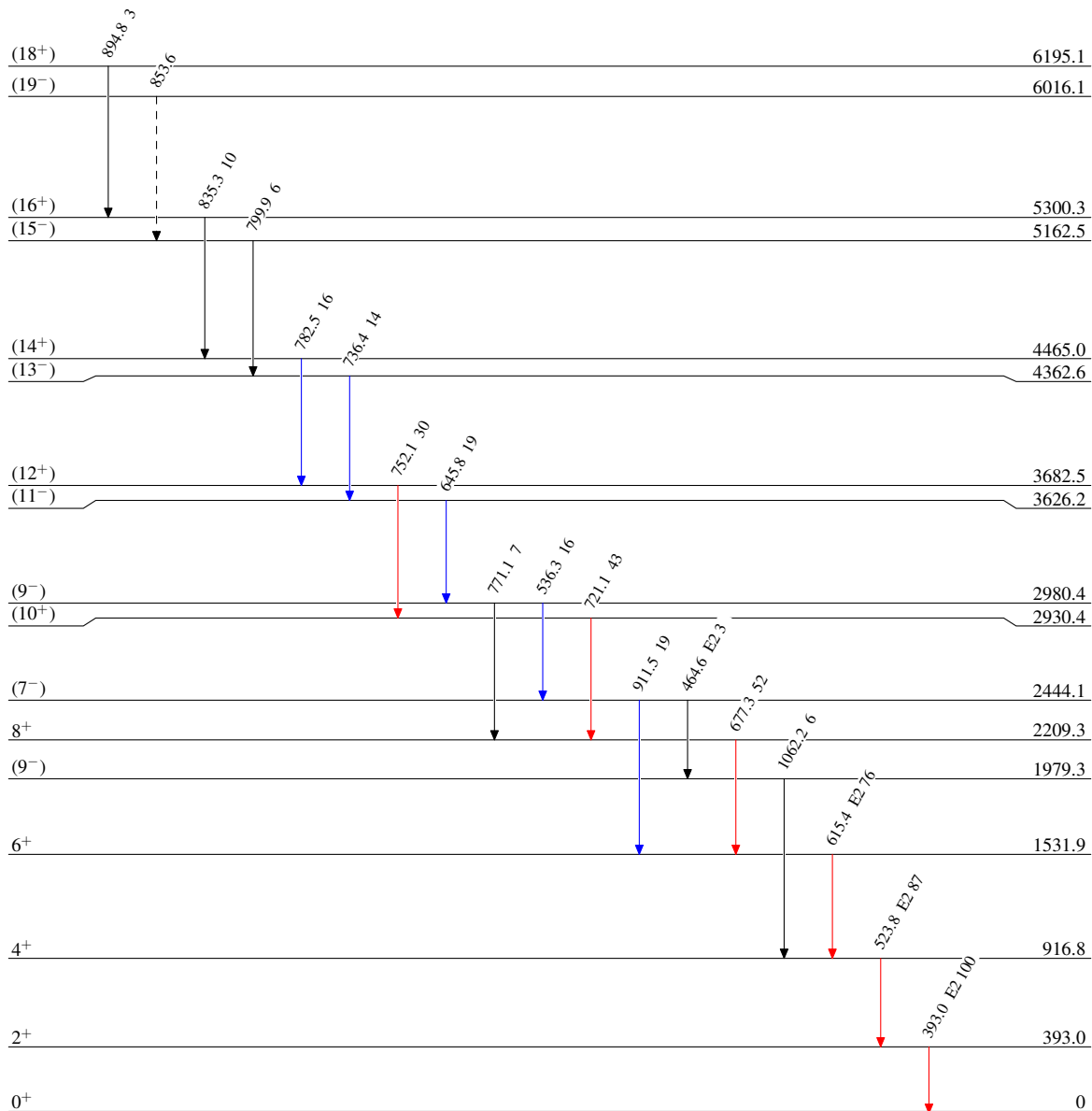
[#] Placement of transition in the level scheme is uncertain.

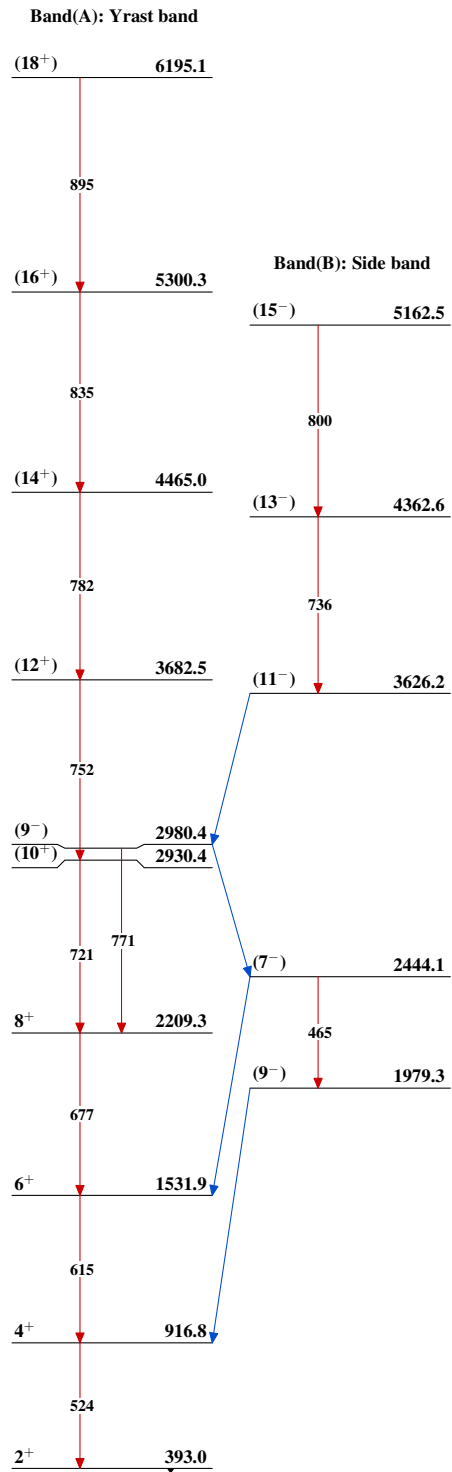
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Legend

Level Scheme
Intensities: Relative I_γ

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - - -→ γ Decay (Uncertain)

 $^{116}_{54}\text{Xe}_{62}$

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