^{64}Ni(^{48}Ca,6n2pγ) 1988Ma38

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 108,2035 (2007)	30-Mar-2007

Additional information 1.
E(^{48}Ca)=200 MeV.
Two stacked ^{64}Ni self-supporting targets 0.5 mg/cm^2 thick.
Measured: γ with 20 Compton-suppressed Ge detectors (HERA array) 70 million events.
Deduced superdeformed band. From $\gamma\gamma$ spectra they conclude that the band feeds the yrast states at J=22; therefore, the bandhead is 24 ± 2.

^{104}Pd Levels

E(level)	J$^\pi$†	E(level)	J$^\pi$†	E(level)	J$^\pi$†	E(level)	J$^\pi$†
0	0$^+$	4635‡	12$^+$	11237‡	(24$^+$)	5793+x#	(32)
556‡	2$^+$	5432‡	14$^+$	12707‡	(26$^+$)	7556+x#	(34)
1324‡	4$^+$	6358‡	16$^+$	0+x#	(24)	9475+x#	(36)
2250‡	6$^+$	7422‡	18$^+$	1263+x#	(26)	11554+x#	(38)
3221‡	8$^+$	8616‡	(20$^+$)	2644+x#	(28)		
4023‡	10$^+$	9873‡	(22$^+$)	4155+x#	(30)		

† From Adopted Levels.
‡ Band(A): g.s. band.
# Band(B): superdeformed band.

γ(^{104}Pd)

E$_\gamma$	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	E$_\gamma$	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
556	100	556	2$^+$	0	0$^+$	1257	100	9873	(22$^+$)	8616	(20$^+$)
612	89 *9*	4635	12$^+$	4023	10$^+$	1263	27 *3*	1263+x	(26)	0+x	(24)
768	96 *10*	1324	4$^+$	556	2$^+$	1364		11237	(24$^+$)	9873	(22$^+$)
797	≤175†	5432	14$^+$	4635	12$^+$	1381	78 *8*	2644+x	(28)	1263+x	(26)
802	≤175†	4023	10$^+$	3221	8$^+$	1470		12707	(26$^+$)	11237	(24$^+$)
926‡	142‡ *14*	2250	6$^+$	1324	4$^+$	1511	93 *9*	4155+x	(30)	2644+x	(28)
926‡	142‡ *14*	6358	16$^+$	5432	14$^+$	1638	79 *8*	5793+x	(32)	4155+x	(30)
971	87 *9*	3221	8$^+$	2250	6$^+$	1763	92 *9*	7556+x	(34)	5793+x	(32)
1064	100	7422	18$^+$	6358	16$^+$	1919	78 *8*	9475+x	(36)	7556+x	(34)
1194	100	8616	(20$^+$)	7422	18$^+$	2079	64 *6*	11554+x	(38)	9475+x	(36)

† Iγ=175 *11* for 797γ+802γ.
‡ Multiply placed with intensity suitably divided.

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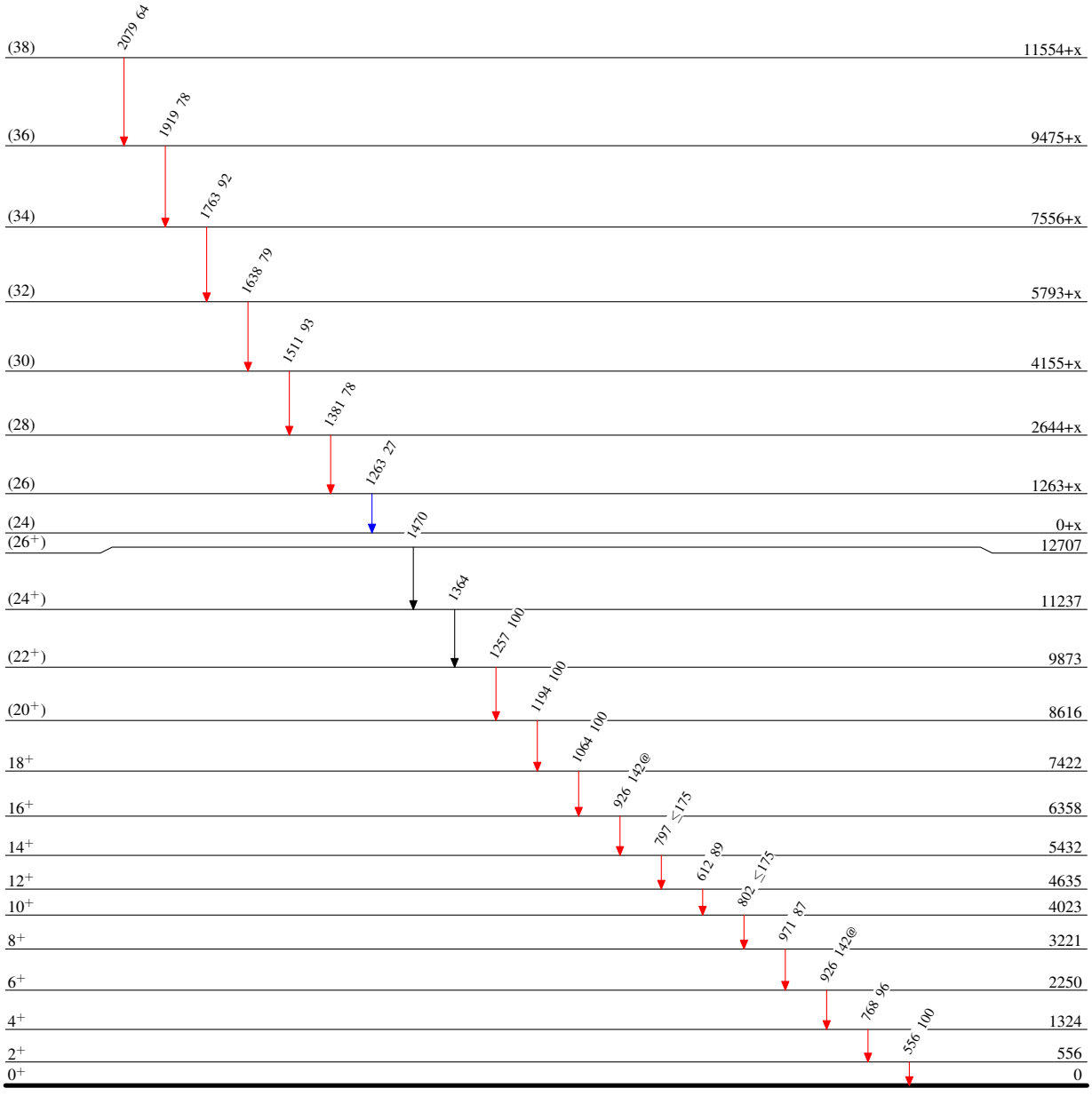
Level Scheme

Intensities: Type not specified
@ Multiply placed: intensity suitably divided

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$



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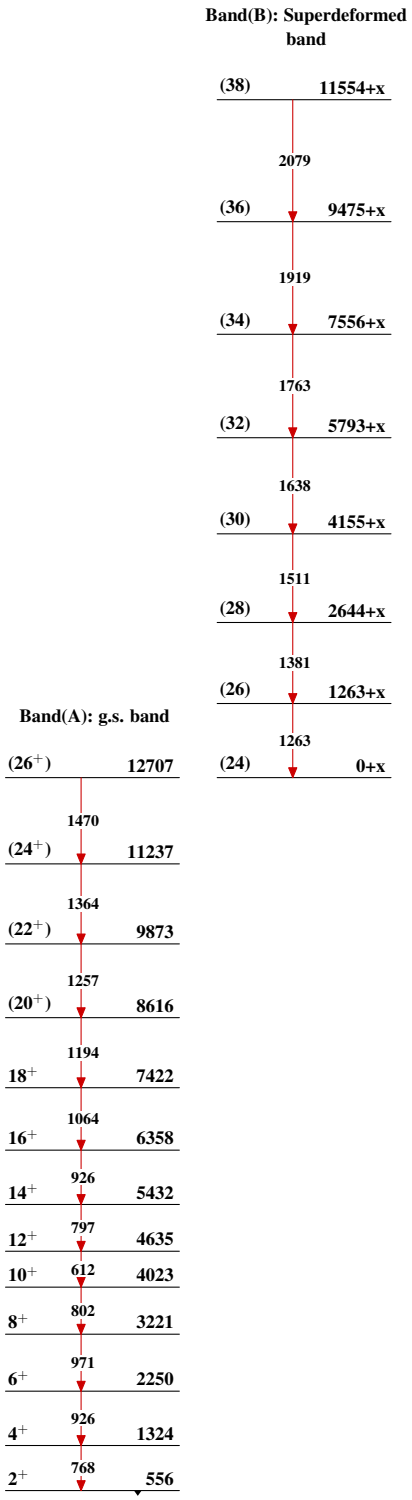

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