

$^{208}\text{Pb}(^9\text{Be}, ^8\text{Be})$  1977St20

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Chen # and F. G. Kondev		NDS 126, 373 (2015)	30-Sep-2013

1977St20: E=50 MeV  $^9\text{Be}$  beam was produced from the Lawrence Berkeley Laboratory 88-inch cyclotron.  $^8\text{Be}$  particles were identified by detecting their decay  $\alpha$ -particles using phosphorus-diffused silicon twin transmission detectors and a surface-barrier silicon PSD, FWHM=450 keV. Measured  $\sigma(\theta)$ . Deduced levels, spectroscopic factors from DWBA analysis.

 $^{209}\text{Pb}$  Levels

E(level) <sup>†</sup>	S <sup>‡</sup>
0	1
779	1.50
1423 <sup>&amp;</sup>	1.19 <sup>#</sup>
1567	1.19 <sup>#</sup>
2032 <sup>b</sup>	0.88
2491 <sup>a</sup>	1.06 <sup>@</sup>
2538	1.06 <sup>@</sup>

<sup>†</sup> Rounded-off values from Adopted Levels.

<sup>‡</sup> Relative values normalized to S(g.s.)=1. Authors also give absolute values (S(g.s.)=0.16) extracted using S( $^9\text{Be}$ )=0.58, a theoretical value. The configurations are taken as known.

<sup>#</sup> 1.19 for the 1423+1567 keV levels.

<sup>@</sup> 1.06 for the 2491+2538 keV levels.

<sup>&</sup> Not resolved from strong 1567 keV level.

<sup>a</sup> Not resolved from strong 2538 keV level.

<sup>b</sup> Not resolved from strong 1567 and 2538 keV levels.