

${}^{208}\text{Pb}({}^{19}\text{C}, {}^{19}\text{C})$ [1999Na27](#)

<u>Type</u>	<u>Author</u>	<u>History</u>	<u>Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	J. H. Kelley, G. C. Sheu		ENSDF	23-March-2017

[1999Na27](#): The Coulomb dissociation of 67 MeV/nucleon ${}^{19}\text{C}$ on ${}^{208}\text{Pb}$ was measured in a study of the low-lying E1 strength distribution at the RIKEN/RIPS facility. Complete kinematics of the ${}^{18}\text{C}+n$ dissociation products were measured and analyzed. The Coulomb dissociation cross section 1.19 b *ll* was deduced after subtraction the nuclear component (obtained from a ${}^{12}\text{C}$ target) from the total cross section obtained with the Pb target. This corresponds to an E1 strength of $0.71 \text{ e}^2\text{fm}^2$. Analysis of the ${}^{18}\text{C}+n$ distributions indicates $S_n=530 \text{ keV}$ *l30*, and gives a clear indication of $J^\pi=1/2^+$ for the ground state (compared to $5/2^+$ suggested in other analyses).

See also analysis in ([2000Ba24](#), [2004Su23](#), [2004Ta31](#), [2005Na09](#)).

 ${}^{19}\text{C}$ Levels

<u>E(level)</u>	<u>J^π</u>
0	$1/2^+$