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 $^{52}\text{Cr}({}^{12}\text{C}, {}^{12}\text{C}'), ({}^{13}\text{C}, {}^{13}\text{C}')$     **[1979Fu01](#),[1979Po16](#),[1976Le12](#)**

| Type            | Author               | History | Citation            | Literature Cutoff Date |
|-----------------|----------------------|---------|---------------------|------------------------|
| Full Evaluation | Yang Dong, Huo Junde |         | NDS 128, 185 (2015) | 10-Jul-2015            |

**1979Fu01:** ( ${}^{13}\text{C}, {}^{13}\text{C}'$ ), E=105 MeV, measured  $\sigma(\theta)$ , a triple detector telescope comprising two  $\Delta\text{E}$  detectors of thickness  $28.7 \mu\text{m}$  and  $27.8 \mu\text{m}$ , and a stopping detector (E) of thickness  $900 \mu\text{m}$ , an anticoincidence detector mounted behind the E-detector, DWBA analysis.

**1979Po16** and **1976Le12**: ( ${}^{12}\text{C}, {}^{12}\text{C}'$ ), ( ${}^{13}\text{C}, {}^{13}\text{C}'$ ), E=16-32 MeV, 18-35 MeV, respectively, measured  $\sigma(\theta)$ , a double focusing magnetic spectrometer with a silicon position sensitive detector at the focal plane, DWBA analysis.

All data are from [1979Fu01](#), except as noted.

 $^{52}\text{Cr}$  Levels

| E(level)           | Comments  |
|--------------------|---|
| 0.0                |   |
| $1.43 \times 10^3$ | $\beta_2 = 0.18$ 4 ( <a href="#">1979Fu01</a> ) with B(E2) taken as 0.063 (insensitive to actual value within 20%). $\beta_2 = 0.25$ (ion-ion nuclear potential) ( <a href="#">1979Po16</a> ) with B(E2)=0.061 5. |
| $4.56 \times 10^3$ |   |