

$^{12}\text{C}(^{86}\text{Kr},\text{X}\gamma)$ 2013St05

| Type | Author | History | Citation | Literature Cutoff Date |
|-----------------|---------------------------------|---------|-------------------|------------------------|
| Full Evaluation | T. D. Johnson and W. D. Kulp(a) | | NDS 129, 1 (2015) | 27-Jul-2015 |

E=2.85/u MeV from the UNILAC accelerator of the GSI Helmholtzzentrum fuer Schwerionenforschung. The target consisted of a layer of 0.33 mg/cm² ^{nat}C followed by 10.9 mg/cm² ^{nat}Gd, 1.7 mg/cm² ^{nat}Ta, and 6.82 mg/cm² ^{nat}Cu. The goal of the experiment was to Coulomb excite ⁸⁶Kr and ⁹⁰Sr. However, ⁸⁷Rb was also produced, the authors assume by a proton pickup from ¹²C.

 ^{87}Rb Levels

| E(level) [†] | J ^π [‡] | T _{1/2} | Comments |
|-----------------------|-----------------------------|------------------|-------------------------------|
| 0 | 3/2 ⁻ | | |
| 402.586 10 | 5/2 ⁻ | | |
| 845.44 4 | 1/2 ⁻ | 101 fs +9-11 | T _{1/2} : From DSAM. |
| 1349.36 10 | | | |
| 1577.9 3 | 9/2 ⁺ | | |

[†] From Adopted Levels.

[‡] From Adopted Levels.

 $\gamma(^{87}\text{Rb})$

| E _γ [†] | E _i (level) | J _i ^π | E _f | J _f ^π |
|-----------------------------|------------------------|-----------------------------|----------------|-----------------------------|
| 402.6 | 402.586 | 5/2 ⁻ | 0 | 3/2 ⁻ |
| 845.4 | 845.44 | 1/2 ⁻ | 0 | 3/2 ⁻ |
| 946.7 | 1349.36 | | 402.586 | 5/2 ⁻ |
| 1175.3 3 | 1577.9 | 9/2 ⁺ | 402.586 | 5/2 ⁻ |

[†] As given by 2013St05.

$^{12}\text{C}(^{86}\text{Kr},\text{X}\gamma)$ 2013St05Level Scheme