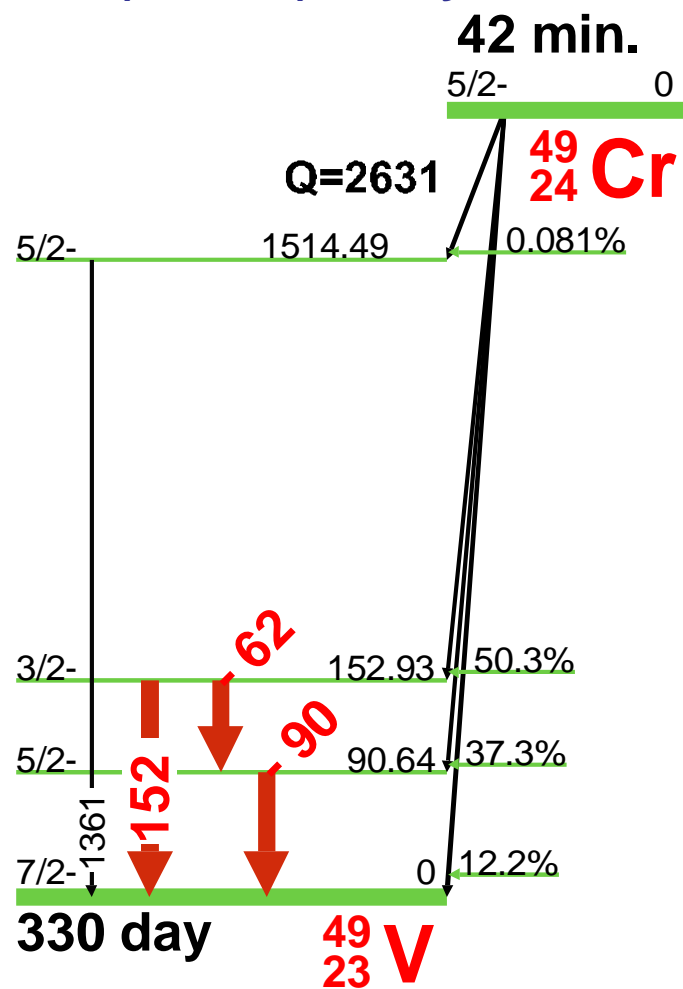


<sup>49</sup>Cr(42 min.) Decay Scheme



**GAMMA-RAY ENERGIES AND INTENSITIES**

Nuclide: <sup>49</sup>Cr Half Life: 42.3(1) min.  
Detector: 4.55 cm<sup>2</sup> x 8 mm Ge(Li) Method of Production: <sup>50</sup>Cr( $\gamma$ ,n)

|      | E $_{\gamma}$ (keV) | $\sigma$ E $_{\gamma}$ | I $_{\gamma}$ (rel) | I $_{\gamma}$ (%) | $\sigma$ I $_{\gamma}$ | S |
|------|---------------------|------------------------|---------------------|-------------------|------------------------|---|
|      | 62.289              | 0.002                  | 26.6                | 16.4              | 0.6                    | 1 |
|      | 90.639              | 0.002                  | 100                 | 53.2              | 1.9                    | 1 |
|      | 152.928             | 0.002                  | 58.9                | 30.3              | 1.1                    | 1 |
| Ann. | 511.006             |                        |                     | 183               | 4                      | 1 |
|      | 595.3               |                        |                     | 0.0003            |                        | 4 |
|      | 657.5               |                        |                     | 0.0003            |                        | 4 |
|      | 1021.3              |                        |                     | 0.0011            |                        | 4 |
|      | 1027.2              | 1.2                    |                     | 0.0001            |                        | 4 |
|      | 1064.60             | 0.20                   |                     |                   |                        | 4 |
|      | 1155.30             | 0.20                   |                     | 0.0001            |                        | 4 |
|      | 1361.61             | 0.07                   |                     | 0.045             | 0.005                  | 4 |
|      | 1384.               |                        |                     |                   |                        | 4 |
|      | 1423.3              | 0.3                    |                     | 0.010             | 0.003                  | 4 |
|      | 1433.               |                        |                     |                   |                        | 4 |
|      | 1449.               |                        |                     |                   |                        | 4 |
|      | 1508.30             | 0.20                   |                     | 0.008             | 0.003                  | 4 |
|      | 1514.10             | 0.20                   |                     | 0.026             | 0.003                  | 4 |
|      | 1570.60             | 0.20                   |                     | 0.020             | 0.003                  | 4 |
|      | 2091.1              | 0.7                    |                     | 0.0004            | 0.0001                 | 4 |
|      | 2143.7              | 0.6                    |                     | 0.0009            | 0.0001                 | 4 |
|      | 2183.0              | 1.0                    |                     |                   |                        | 4 |
|      | 2218.6              | 1.0                    |                     | 0.0002            | 0.0001                 | 4 |
|      | 2236.2              | 1.0                    |                     | 0.0002            | 0.0001                 | 4 |

E $_{\gamma}$ ,  $\sigma$ E $_{\gamma}$ , I $_{\gamma}$ ,  $\sigma$ I $_{\gamma}$  - 1998 ENSDF Data

