

$^{238}\text{U}(^{70}\text{Zn},\text{X}\gamma)$ 2008Va08

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|-----------------|--|---------|---------------------|------------------------|
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2008Va08: E=460 MeV beam provided by LNL Tandem-ALPI accelerator. Detected charged particles with PRISMA magnetic spectrometer. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, (recoil) γ coin using CLARA array of 22 Clover Ge detectors with Compton-suppression. Gamma rays of 280, 377, 582 (doublet) and 1155 keV were seen in spectral figure 2 of **2008Va08**. The level scheme is adopted from **2000Ap02**. But the ordering of the $\gamma\gamma$ cascade is different in **2010St01**, which has been adopted in the ‘‘Adopted Levels, gammas’’ dataset. The 728 level is omitted as a result of rearrangement of γ -ray cascades.

 ^{58}Mn Levels

| E(level) | J^π [†] |
|----------|----------------------|
| 71 | 4 ⁺ |
| 448 | (5 ⁺) |
| 728 | |
| 1883 | (7) |
| 2465 | (8) |
| 3048 | (9) |

[†] From ‘Adopted Levels’.

 $\gamma(^{58}\text{Mn})$

| E_γ | $E_i(\text{level})$ | J_i^π | E_f | J_f^π | Comments |
|------------------|---------------------|-------------------|-------|-------------------|---|
| 280 | 728 | | 448 | (5 ⁺) | E_γ : γ placed from 1880 level in 2010St01 . |
| 377 | 448 | (5 ⁺) | 71 | 4 ⁺ | |
| 582 [†] | 2465 | (8) | 1883 | (7) | |
| 582 [†] | 3048 | (9) | 2465 | (8) | |
| 1155 | 1883 | (7) | 728 | | E_γ : γ placed from 1601 level in 2010St01 . |

[†] Multiply placed.

 $^{238}\text{U}(^{70}\text{Zn},\text{X}\gamma)$ 2008Va08Level Scheme