

# Notes for my thesis

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February 28, 2020

## Cd-113

The isomer  $^{113m}\text{Cd}$  mainly undergoes  $\beta$ -decay to the ground state of  $^{113}\text{In}$  with a 99.86% branching ratio, with the other 0.14% corresponding to an internal  $\gamma$ -ray transition to the  $^{113}\text{Cd}$  ground state with an energy of 263.59 keV [1].

## References

- [1] T. Hayakawa, T. Shizuma, S. Chiba, T. Kajino, Y. Hatsukawa, N. Iwamoto, N. Shinohara, and H. Harada, “NEUTRON CAPTURE CROSS SECTION TO  $^{113}\text{Cd}$  ISOMER AND  $s$ -PROCESS CONTRIBUTION TO RARE  $p$ -NUCLIDE  $^{115}\text{Sn}$ ,” *The Astrophysical Journal*, vol. 707, pp. 859–865, Dec. 2009.
- [2] N. Warr, S. Drissi, P. Garrett, J. Jolie, J. Kern, S. Mannanal, J.-L. Schenker, and J.-P. Vorlet, “Study of  $^{113}\text{Cd}$  by the  $^{110}\text{Pd}(\alpha, n\gamma)$  reaction,” *Nuclear Physics A*, vol. 620, pp. 127–150, July 1997.