

# Nuclear Reaction Data on Ti Isotopes

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- We present a new evaluation of nuclear reaction data on Ti isotopes,  $Ti^{46-50}$ .
- We used the Hauser-Feshbach reaction code, GNASH, for the threshold reactions and CoH for the total and capture cross sections.
- In adjusting the level density and the pre-equilibrium parameters for the GNASH calculation, we took into account the LANSCE/GEANIE experiment on  $Ti^{48}$  reaction cross sections.
- We also investigated the resolved resonance parameters in the energy region below several hundred keV. We adopted the parameters from the Mughabghab's 2006 compilation with some adjustments.
- This new evaluation was tested over several hard-spectrum criticality experiments that involve Ti as a reflector or moderator.