

LIFETIMES OF ^{32}P LEVELS

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Mean lifetimes of 22 bound levels and upper lifetime limits of four more levels in ^{32}P below an excitation energy of 6.4 MeV were deduced from the Doppler-shift attenuation of γ rays produced in the inverse reaction $^2\text{H}(^{31}\text{P},\text{p}\gamma)$. Of these 26 levels, the lifetimes of six levels are reported here for the first time. The low-lying portion of the level scheme, the level lifetimes and the γ -ray branchings and reduced transition probabilities have been compared with shell-model predictions. The overall agreement is reasonably good.

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