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## **Temperature-dependent Cluster Decay Half-lives**

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A temperature (T)- dependent universal decay law (UDL) of cluster decay is investigated by fitting the halflives calculated within the T-dependent Double Folding model (DFM), in which the temperature dependence of the effective potential is introduced through the charge and matter density distributions of the interacting nuclei, and the half-lives are calculated within a preformed cluster model. As a consequence of including the T dependence, the half-lives decrease with increasing temperature, which could be of interest for applications in astrophysics and heavy-ion collision.

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## **Please select: Experiment or Theory**

Theory

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