

## The result of $^{48}\text{Ca} + ^{243}\text{Am}$ reaction on SHANS2

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Using the  $^{48}\text{Ca}$  beam provided by the CAFE2 at IMP, the experiment of  $^{48}\text{Ca} + ^{243}\text{Am}$  was performed at SHANS2. The  $\alpha$ -decay chains of the  $^{288}\text{Mc}$  and  $^{287}\text{Mc}$  were successfully observed in the experiment, and for the first time measured the last two chain members  $^{268}\text{Db}$  and  $^{264}\text{Lr}$ , during the beam-stopped period. Systematic measurements were performed on the production cross-section of  $^{288}\text{Mc}$ . Notably, the magnetic rigidity parameters used in the experiment differed from values reported in literature. This parameter is crucial for superheavy element synthesis and required special attention during the experiment.

## References

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