

Astrophysical S-factor and (α , n) cross section measurements on Sr isotopes

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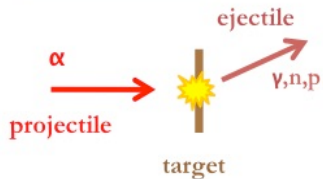
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Experimental Setup

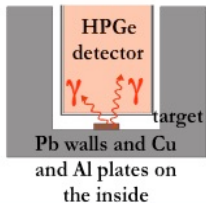
Activation experiments

I. Activation



Bucharest 9MV TANDEM Accelerator

II. Counting



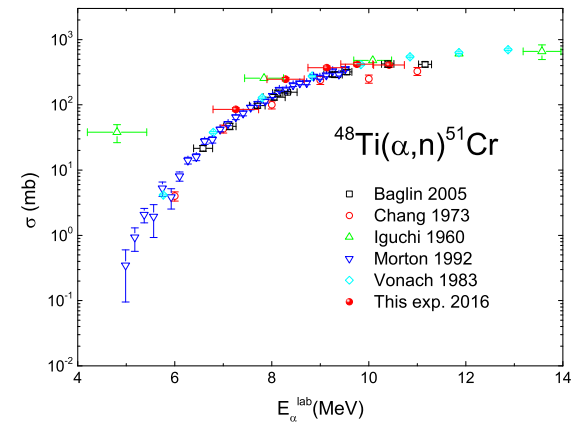
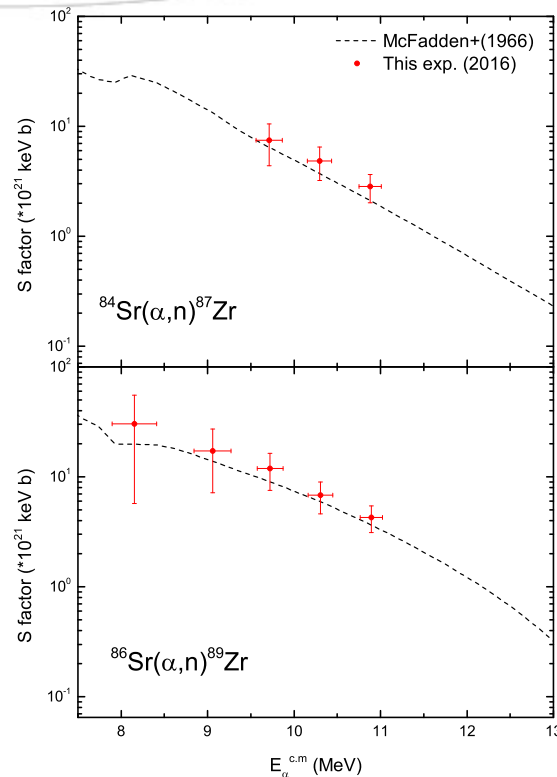
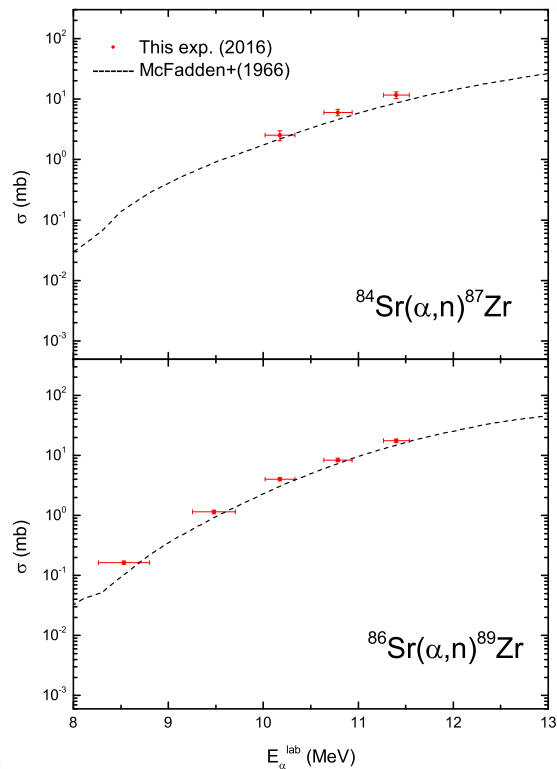
Counting setup at Bucharest, IFIN-HH, Romania



- 2 HPGe detectors (relative efficiency of 55 %)
- Passive lead shielding
- Close detection geometry
- > the summing corrections were performed using the Monte Carlo simulation code GESPECORE

- 5 Stacks (SrF_2 on Al backing/Ti/Al)
- Faraday Cup (guard ring -300V)
- 5 α -beam energies
- TRIM Simulations
- Thickness (Weighing+ α transmission measurements)
- α source: mixture of ^{241}Am & ^{244}Cm
- Totally depleted silicon detector

Experimental Results



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