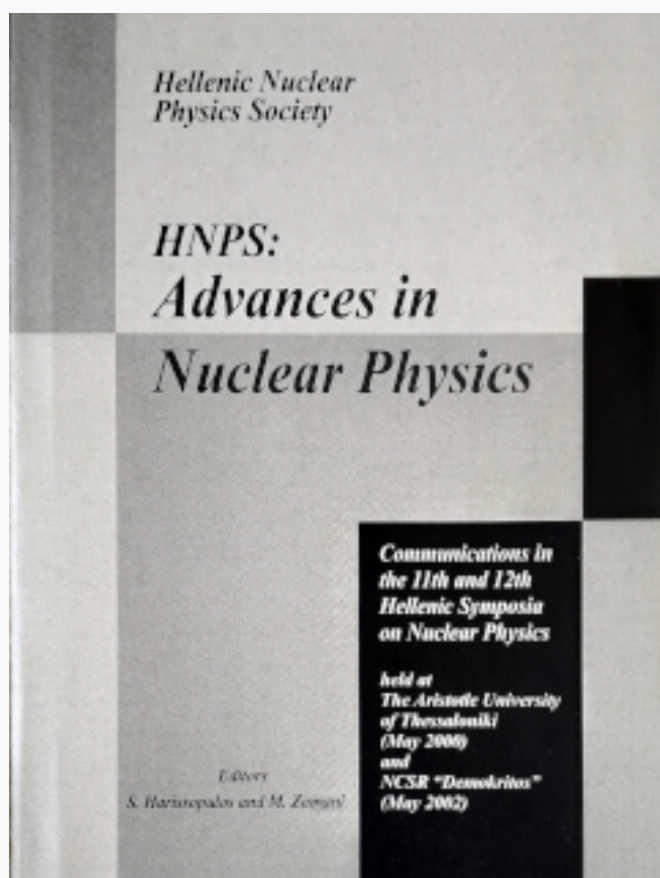


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# Cross sections of proton capture reactions of Sr isotopes <sup>1</sup>

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Cross section measurements of the proton capture reactions of the <sup>86</sup>Sr, <sup>87</sup>Sr and <sup>88</sup>Sr isotopes were carried out at energies  $E_p=1.4-5$  MeV. At  $E_p \leq 3.5$  MeV an array of 4 HPGe detectors with 100% relative efficiency shielded with BGO scintillators for Compton background suppression was used, whereas at  $E_p \geq 3.5$  MeV, the measurements were performed by means of one HPGe detector of 80% relative efficiency. For the <sup>87</sup>Sr(p, $\gamma$ )<sup>88</sup>Y and <sup>88</sup>Sr(p, $\gamma$ )<sup>89</sup>Y reactions total cross sections ranging from 0.5  $\mu$ b–5 mb were found. The data analysis of the <sup>86</sup>Sr(p, $\gamma$ )<sup>87</sup>Y reaction is in progress. Cross sections have also been calculated by means of the statistical model code MOST. A very good agreement between the experimental data and the theoretical predictions has been found.

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