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## Measurement of Cr and Ti fluxes and sub-iron/iron flux ratios with CALET on the International Space Station

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The analysis of cosmic ray nuclei provides critical insights for a theoretical understanding of the acceleration and propagation mechanisms of charged particles in our Galaxy. A unique source of information on the average path length that cosmic rays travel before reaching Earth can be provided by the elements lying just below iron in the periodic table (sub-iron). These elements are believed to be produced by the spallation of heavier nuclei as they propagate in the interstellar medium. The Calorimetric Electron Telescope (CALET), which has been operational on the International Space Station since 2015, has collected a substantial dataset comprising cosmic-ray (CR) iron and sub-iron events across a broad energy spectrum. In this contribution we present the measurements of the energy dependence of the titanium and chromium fluxes in cosmic rays, as their flux ratios to iron, in the energy interval from 10 GeV/n to 250 GeV/n. The measurements, based on data collected during eight years of operation, are reported with significantly enhanced precision compared to existing measurements, including a detailed assessment of systematic uncertainties. In addition to the sub-iron fluxes, an update of CALET's analysis of the iron flux has been carried out up to 1.6 TeV/n.

### Collaboration(s)

CALET

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