

P01 Elemental Abundances of Huge Solar Flares Measured with Suzaku's XIS

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We present elemental abundances for ~10 huge solar flares with GOES classes larger than $\sim X3.0$, by using Earth albedo data acquired with the X-ray Imaging Spectrometer (XIS) onboard Suzaku between 2005 and 2015. The albedo spectra with the XIS successfully resolved K shell line emission from Mg, Si, S, Ca, and Fe, allowing us to measure their relative abundances. Our preliminary analyses indicate that the Ca abundance is generally enhanced compared with the other elements, which is consistent with a recent study using the Solar Assembly for X-rays on the Mercury MESSENGER spacecraft (Dennis et al. 2015). We also present flare-to-flare variations of elemental abundances. Finally, we briefly discuss future prospects for HXMT and XRISM.

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