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Elemental mapping of the Moon by XRS onboard SELENE

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Major elemental composition of lunar surface is quantitatively determinable by remote x-ray fluorescence spectrometry. We have planned a global elemental mapping except for polar regions with the XRS instrument onboard the SELENE orbiter. XRS is based on the charge-coupled deveices with high energy resolution, ultra-thin beryllium window of 100cm2 detection area, and 3.5deg FOV. We simulated the XRS observation along the polar orbit of 100km altitude and discuss the achievable spatial resolution.