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STUDY OF SPACECRAFT SURFACE CHARGING WITH DIFFERENT SECONDARY ELECTRON  
EMISSION OF DIELECTRIC

**Abstract**

A PIC(particle-in- cell) model is applied to investigate the surface potential with different secondary electron emission (SEE) of dielectric, and the surface potential is measured under 20-30 keV electron irradiation with the fluence of  $1\text{nA}/\text{cm}^2$ . The results indicate that the surface potential depends on the SEE of dielectric strongly. Furthermore, the surface potential is observed to be larger at higher projectile energy.