

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Electrodynamic friction of a charged particle passing a conducting plate YANG LI, Univ of Oklahoma, CASIMIR EFFECTS RESEARCH TEAM
— We investigate the friction acting on a charged particle moving parallel to an imperfect conductor slab described with the Drude model. In nonrelativistic and ultrarelativistic regimes, the properties of frictions due to the TE and TM modes are quite different. The velocity dependence of the friction is non-monotonic. The friction may be nonzero in the low-resistivity limit when the particle is moving with a high velocity. Other properties of the friction are also studied

Yang Li
Univ of Oklahoma

Date submitted: 10 Jan 2020

Electronic form version 1.4