

Abstract Submitted  
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**Emission spectra of electric propulsion thrusters**<sup>1</sup> TAYLOR MATLOCK, MIT, Cambridge, MA, OLEG BATISHCHEV, NU, Boston, MA — Accurate measurement of emission spectra of electric propulsion devices provides fast non-invasive way of operational regimes characterization and possible optimization. First, we present comparative spectra of three different thrusters [1] running on xenon propellant. Next, we analyze spectra of a versatile thruster running on noble and diatomic gases, to emphasize complex qualitative composition of the plasma exhaust.

[1] O. Batishchev and T. Matlock, Spectroscopic Characterization of the Electric Propulsion Thrusters, Final Report for the AFOSR grant FA9550-08-1-0223, -260p, 2010.

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