

Abstract Submitted
for the DPP08 Meeting of
The American Physical Society

A comparative study of total electron scattering cross sections of plasma processing gasses at intermediate electron energies
PRASANGA PALIHAWADANA, GILBERTO VILLELA, WICKRAMASINGHE ARIYASINGHE, Baylor University — A comparison is made between the total electron cross sections (TCS) of Tetrafluoromethane (CF_4), Trifluoromethane (CHF_3), Hexafluoroethane (C_2F_6), and Octafluorocyclobutane (C_4F_8) available in the literature and those recently measured in this laboratory using the linear transmission technique. The present measurements are about 0-20% higher than those in the literature. An empirical formula developed to predict the TCS of plasma processing gases, as a function of incident electron energy, will be presented.

Prasanga Palihawadana
Baylor University

Date submitted: 15 Sep 2008

Electronic form version 1.4