Abstract Submitted
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**Fourier Transform Infrared Spectroscopy of Trifluoroiodomethane ICP Discharge**[1] CASSIUS FAGIOLI, DAVID URRABAZO, MATTHEW GOECKNER, University Of Texas at Dallas — Trifluoroiodomethane (CF3I) is an experimental gas that currently is being considered for semiconductor etching. We will report the breakdown characteristics of CF3I in an ICP plasma. In this study, the gas chemistry was examined through the use of Fourier transform infrared (FTIR) spectroscopy. This allowed us to identify the fraction of CF3I remaining in the discharge as well as some of the daughter species produced. Our results indicate that the major multi-atomic species found in the system include Tetrafluoromethane (CF4) and Trifluoromethyl (CF3). Mass balance examination also suggests the creation of atomic and molecular Iodide.

[1]Applied Materials

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