

CAMT Seminar

“Charged particle dynamics in capacitively coupled
radiofrequency discharges
driven by complex waveforms”

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Date: November 22, 2022 (Tue) 14:00-15:00

Location: Main Conference Room (1st floor), Bldg. A12
Center for Atomic and Molecular Technologies (CAMT)
(A12 棟 1 階会議室) & Webex Link (hybrid)

Abstract:

Capacitively coupled plasmas (CCP) have been used for various surface modification applications for several decades. Depending on the choice of the gases and the operating conditions the fluxes and energy distributions of the ions (and radicals) bombarding the surfaces can be adjusted over wide domains. Charged particle dynamics largely influences basic plasma characteristics in these radio frequency (RF) plasma sources. The application of multi-frequency RF excitation in CCPs is shown to allow generating a high flux of energetic electrons at times of sheath collapse, which have the potential to neutralise positive surface charges deposited within nanoscale structures in semiconducting wafers.

(Host: Satoshi Hamaguchi Ext:7913)