Abstract Submitted
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Dual Species Trapping by RF Field Structure NATHANIEL HICKS, University of Alaska Anchorage — A computational particle-in-cell study is performed in which the effects of RF trapping of a light species and consequent effects on accompanying heavier species in bulk plasma are explored. Electrode structures such as the RF quadrupole are simulated in 2-D, and parameters such as relative charge-to-mass ratios of the light and heavy species are investigated. Scaling to electron trapping and trapping dependences on species temperatures and RF parameters are investigated as well. The RF plasma sheath for this configuration is a topic of particular interest.

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