Abstract Submitted
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Effect of impedance matching on dust clusters in a vertical rf plasma ANDREW KURTZ, TERRENCE SHERIDAN, None — We study properties of a radio-frequency (rf) plasma discharge created between vertical parallel plates, one conducting and one glass. Different discharge modes are selected by varying the impedance matching between the rf amplifier and the plasma. Hexagonal nuts placed on either end of the interstitial space between the plates create a potential well which can confine dust particles. Due to the relatively small spacing between plates, dust particles form vertical "molecules" of two particles bound together by the ion wake force. Results for systems of interacting molecules will be presented..

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None

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