

Title: Determining structure, energetics and fragmentation behaviour of mass selected, singly charged, tin cluster anions and cations

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Abstract: We have used a combination of ion mobility spectrometry, trapped ion electron diffraction and density functional theory calculations (with genetic algorithms) to obtain electronic and geometric structural information on mass selected tin cluster ions ranging in size up to several tens of atoms. Results will be discussed in terms of previous knowledge and implications for tin cluster based materials.