## **Production of Size-Selected Tin Nanoclusters for Device Applications**

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**Abstract :** This work reports on the fabrication of tin nanoclusters by sputtering and inert-gas condensation inside an ultrahigh vacuum compatible system. This technique allows to fine tune the size and yield of nanoclusters by controlling the nanocluster source parameters. The produced nanoclusters are deposited on SiO2/Si substrate with pre-formed electrical electrodes to produce a nanocluster device. Those devices can be potentially used for gas sensor applications.

 ${\bf Keywords:} \ {\rm tin,\ nanoclusters,\ inert-gas\ condensation,\ nanotechnology}$ 

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