

## Abstract template for ISSPIC XVIII

### Melting Dynamics of Core-Shell Ni-Ag Nanoalloys

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Molecular dynamics simulations at constant temperature are performed to investigate melting-like transition in core-shell ordering  $\text{Ni}_n\text{Ag}_m$  ( $n+m=55, 147, 309, 561$ ) nanoalloys using a Gupta potential. The caloric curves and Lindemann parameters are calculated to get the phase changes of nanoalloys. For all the core-shell nanoalloys studied, their geometric shape and chemical ordering are preserved well before the complete melting transition occurs and their premelting corresponds to the surface melting.

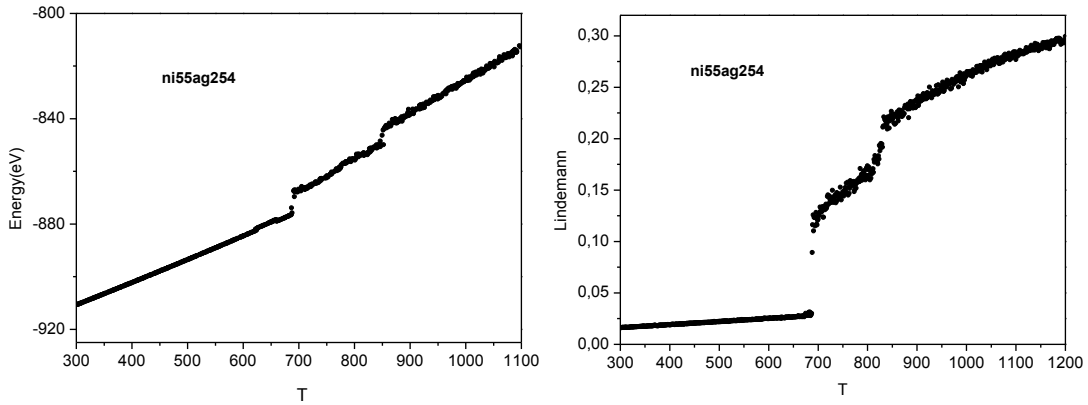


Figure 1: The caloric curve and Lindemann parameter of  $\text{Ni}_{55}\text{Ag}_{254}$  nanoalloys.