Tempering of Au nanoclusters: capturing the temperature-dependent competition among structural motifs

Manoj Settem,^a Riccardo Ferrando,^{*b} and Alberto Giacomello^{*a}

^a Dipartimento di Ingegneria Meccanica e Aerospaziale, Sapienza Università di Roma, via Eudossiana 18, 00184 Roma, Italy. E-mail: alberto.giacomello@uniroma1.it

^b Dipartimento di Fisica dell'Università di Genova and CNR-IMEM, via Dodecaneso 33, 16146 Genova, Italy. E-mail: ferrando@fisica.unige.it

Electronic Supplementary Information



Fig. S 1. PTMD simulations of Au₁₄₇ nanoclusters. Fraction of structures as a function of temperature for initial structure Dh (global minimum) at (a) 0.5 μ s and (b) 2.4 μ s. Fraction of structures as a function of temperature for initial structure twin at (c) 0.5 μ s and (d) 2.4 μ s. Fraction of structures as a function of temperature for initial structure random at (e) 0.6 μ s and (f) 2.4 μ s.

In the Fig. S1, we compare the results of PTMD simulations for three different initial structures: Dh (a,b), twin (c,d), and non-physical random (e,f). After a time of about 0.5 μ s to 0.6 μ s, there are differences between the three PTMD simulations. However, after 2.4 μ s, all the three simulation converge to the same structural distribution.