NANOBELTS AND NANORINGS OF (AlN)n: COMPARATIVE STUDY BY MEANS OF ATOMISTIC SIMULATIONS

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We present a study of the relative stability of (AlN)n nanobelts and nanorings, using an Interatomic Potential Energy Surface (IPES). The IPES is constructed using ab initio Perturbed Ion interatomic potentials.
We analyze the growth and stability of single- and multi-layer nanostructures, addressing the problem of the competition between different structural motifs and belt/ring growth orientation. The use of a semiclassical model will allow us to better understand the physical reasons behind the observed behavior.

References:

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