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Prediction of alloy precipitate shapes from first principles

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. 61.66.Dk
. 71.15.Mb
. 81.30.Mh

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A1− B ⇌ A3B A
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3 5
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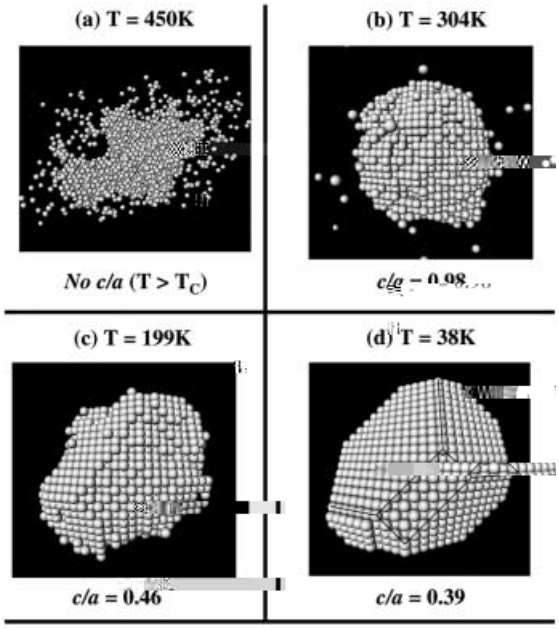

0 . 1 , — vs. . — . — . 0.0 0 24825 2175— . — . — . 0 — 0 . , — — . — — . 0 (c/a) — . — - 0 (— c/a) . .

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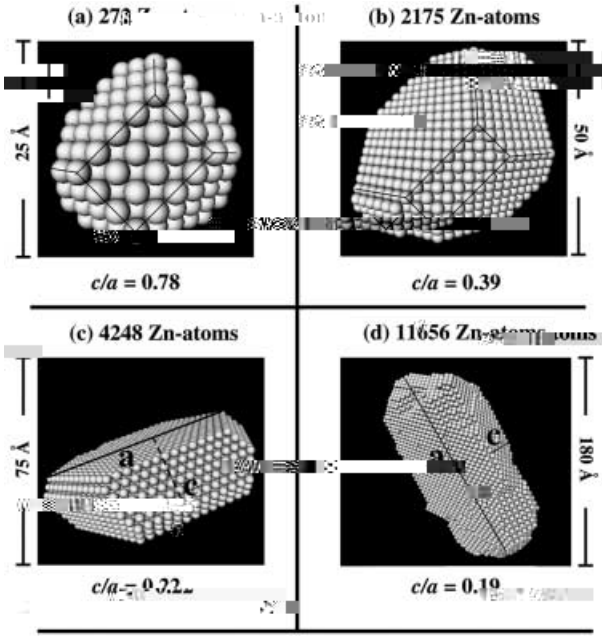
(b) 2175 Zn-atoms
25 Å
50 Å
c/a = 0.78
c/a = 0.39
(c) 4248 Zn-atoms
75 Å
180 Å
a
c
c/a = 0.19

Mean precipitate radius r_m [

A Zn c/