

# Accepted Manuscript

## Equilibrium Shapes of Coherent Precipitates Near a Surface

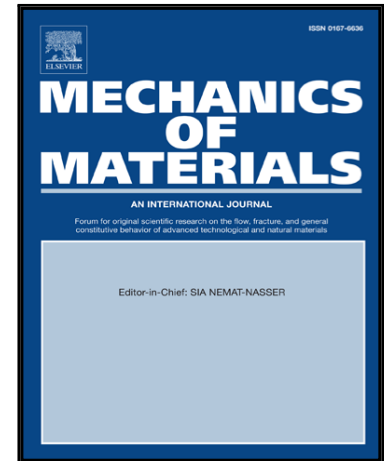
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**Highlights**

- The square-to-rectangle shape transition of a strained precipitate is analyzed
- The effects of anisotropic misfit strain and matrix surface are considered
- Far from the surface, the square shape is favored
- Near a matrix free-surface, the precipitate aligns perpendicular to it
- Near an interface with a stiffer solid, the precipitate aligns parallel to it

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