Accepted Manuscript

Multiphase mean curvature flows with high mobility contrasts: A phase-field approach, with applications to nanowires

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 PII:
 S0021-9991(18)30142-6

 DOI:
 https://doi.org/10.1016/j.jcp.2018.02.051

 Reference:
 YJCPH 7890

To appear in: Journal of Computational Physics



Received date:15 September 2017Revised date:26 February 2018Accepted date:27 February 2018

Please cite this article in press as: E. Bretin et al., Multiphase mean curvature flows with high mobility contrasts: A phase-field approach, with applications to nanowires, *J. Comput. Phys.* (2018), https://doi.org/10.1016/j.jcp.2018.02.051

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Highlights

- Mean curvature flow of multiphase systems is approximated.
- A new phase field approach is introduced.
- Degenerate mobilities and inhomogeneous surface tensions are considered.
- Convergence to the sharp limit flow is studied.
- A stable and efficient numerical implementation is proposed.
- Consistent simulations of multiple droplets wetting and nanowires growth are shown.

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