

CSLM-2 Publications and Presentations

◆Publications

- D.J. Rowenhorst, J.P. Kuang, K. Thornton and P.W. Voorhees, “Three-dimensional analysis of particle coarsening in high volume fraction solid-liquid mixtures,” *Acta Mater.* 54, 2027-2039 (2006).
- D. Kammer and P.W. Voorhees, “The Morphological Evolution of Microstructures During Coarsening,” *Acta Mater.* 54 1549-1558 (2006).
- D. Kammer, R. Mendoza, and P.W. Voorhees, “Cylindrical Domain Formation in Topologically Complex Structures,” *Scripta Mater.* 55, 17-22 (2006) in viewpoint set no. 41 “3D Characterization and Analysis of Materials”.
- D. Kammer and P.W. Voorhees, “Microstructural Evolution of Dendritic Mixtures During Coarsening,” *Proc. 1st International Conference on Diffusion in Solid and Liquid*, 2005.
- D. Kammer and P.W. Voorhees, “The Morphological Evolution of Dendritic Microstructures During Coarsening,” *Acta Mater.* 54 1549-1558 (2006).
- D. J. Rowenhorst and P.W. Voorhees, “Measurements of the Grain Boundary Energy and Anisotropy in Tin,” *Metall. and Mater. Trans.*, 36A, 2127 (2005).
- J. Alkemper, R. Mendoza and P.W. Voorhees, “Morphological Evolution of Dendritic Microstructures,” *Advanced Eng. Mater.*, 4, 694-697 (2002).
- D. Rowenhorst, J. Alkemper and P.W. Voorhees, “Coarsening in Solid-Liquid Mixtures: A Summary of Results,” *Proceedings of the International Space Station Users Meeting*, 2001.
- J. Alkemper and P.W. Voorhees, “Quantitative Serial Sectioning Analysis,” *J. Microscopy*, 201, 1-8 (2000).
- V.A. Snyder, J. Alkemper and P.W. Voorhees, “Transient Ostwald Ripening and the Disagreement Between Steady-State Coarsening Theory and Experiment,” *Acta Mater.*, 49, 699-709 (2001).

◆Presentations

- “The Three-Dimensional Microstructure of Materials, The Evolution of Topologically Complex Structures, Coarsening of Dendritic Microstructures,” Van Horn Lecture Series, Case Western Reserve University, Cleveland OH, 4/05.
- “Three-Dimensional Phase Field Simulations and Microstructural Reconstructions of Systems Undergoing Coarsening,” *Microscopy and Microanalysis*, Honolulu HI, 8/05.

- “The Three-Dimensional Microstructure of Materials: Measurement and Analysis,” Microscopy and Microanalysis, Honolulu HI, 8/05.
- “Coarsening of Topologically Complex Systems: Experiments and Simulations, Computational Homology and Materials Science Workshop,” Georgia Tech, Atlanta GA, 2/06.
- “Phase Field Simulations of Microstructural Development: Topology and Topological Singularities,” TMS Annual meeting, San Antonio TX, 3/06.
- “The Three-Dimensional Microstructure of Materials: From Fuel Cells to Dendrites,” Congress Brasileiro de Engenharia e Ciência dos Materiais, Foz do Igauçu, Brazil 11/06 (plenary).