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| Title: | Kinetics of Phase Segregation and Domain Growth in Binary Alloys |
| Authors: | Gupta, Narayan Prasad |
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| Abstract: | <p>A homogeneous AB binary mixture at high temperatures T segregates into A-rich and B-rich domains when quenched below the critical temperature T_c. Understanding phase segregation is essential because of the wide range of industrial applications, from metallurgy to material science to device applications. Theoretical models and computational simulations have been extensively used to study phase segregation in bulk binary mixtures in the past few decades. This project aims to study the kinetics of phase segregation and domain growth in binary alloys. Using the Monte Carlo method, we want to understand the domain kinetics. Further, we will characterize the domain morphology using numerical tools.</p> |
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