

## Model calculation of grain growth in a liquid matrix

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The behavior of grain growth is highly dependent on the interface morphologies. Normal grain growth has been observed for rounded (atomically rough) interfaces and abnormal grain growth or grain growth inhibition for angular (atomically faceted) interfaces. There are critical parameters such as step free energy and temperature that affect interface structure. As the step free energy decreases, the shape of a grain changes angular to spherical. In addition, the step free energy is a function of temperature. In this presentation, the effect of step free energy and temperature along with liquid volume fraction on the grain growth behavior will be discussed.