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Shape Templating Effects Among Growing Anisotropic Particles ASHOUTOSH PANDAY, Department of Chemical Engineering, University of Massachusetts, Amherst, MA 01003, SAMUEL GIDO — This study illustrates an orientational templating mechanism by which anisotropic grain shape coupled with sporadic nucleation generates orientational correlations. A modeling and simulation study indicated that despite the randomness of nucleation and growth, such particles tend to align laterally to each other which leads to an azimuthal inter-grain orientational correlation among such particles. The simulation results agree with crystallization studies on small molecule crystals as well as experimental observation of inter-lamellar correlations in block copolymers.

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