Diffusion-limited aggregation and dendritic growth

Diffusion-limited aggregation is a general class of behavior that underlies many phenomena characterized by dendritic growth, such as growth of frost on a windowpane, lightning and sparks, and urban growth. Particles of a given “resource” (molecules, individuals, units of heat) diffuse freely until they are captured by—and contribute to the growth of—a static structure.

Diffusion-limited aggregation; very shallow third dimension