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# Freeze-Cast Alumina Pore Networks: Effects of Processing Parameters in Steady-State Solidification Regimes of Aqueous Slurries

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## Abstract

Aqueous alumina slurries with varying solids loading and particle size were freeze-cast under seven freezing conditions to investigate the influence of these on pore network characteristics including pore size and geometric specific surface area. Slurry temperatures were recorded *in situ* to determine freezing front position and velocity during solidification, which were then analyzed via regression and modeled using solidification theory. Classic mathematical models

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