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Abstract for an Invited Paper
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Elimination of the Supersolid State Through Crystal Annealing[1]

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We have employed the torsional oscillator technique in the study of the supersolid state of solid 4He. We find that the supersolid state is not a universal property of solid helium, but in certain cases can be reduced or even eliminated through an annealing of the sample. We have also studied the supersolid in a number of cells with differing geometries, including cylindrical, cubic, and annular geometries, in an attempt to examine the possible influence of geometry on the stability of the supersolid state.

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