

Dear Sergio,

First of all, I would like to apologize a long delay of the review process. That was just due to problems to obtain two experts reviews. The both reviewers suggest only a minor revision. Please, provide a revised version according to your plans.

As an editors, I have a one comment. Your additional videos are really interesting but could you add a brief description on experiment for each video.

Best wishes,
Jari Haapala

We added the following descriptions both in the repository and in the supplementary information data at the end of the manuscript:

movieS1_2D_cell.mp4: Movie of the growth of brinicles in a 2-D Hell_Shaw cell. Brine injection rate of 0.1 mL/s. The water freezes in all directions.

movieS2_3D_cell.mp4: Movie of the growth of brinicles in a 3-D Hell_Shaw cell. Brine injection rate of 0.1 mL/s. A tubular ice structure (brinicle) is formed.

movieS3_3D_Schlieren.mp4: Movie of the growth of brinicles in a 3-D Hell_Shaw cell using the Schlieren optics technique. Brine injection rate of 0.1 mL/s. Water, brine and ice flows can be seen. Brinicle grows until the freezing the bottom, then the flow stops.

movieS4_Baker.mp4: Movie of the growth of brinicles in a 3-D beaker reactor. Brine injection rate of 1 mL/s. The brine freezes the water creating a brinicle that grows downwards and sideways.

movieS5_3D_cell_0,1mls.mp4: Movie of the growth of brinicles in a 3-D Hell_Shaw cell. Brine injection rate of 0.1 mL/s. The water around the needle freezes and a brinicle starts to grow downwards. Lower speed and diameter than with higher flows.

movieS6_3D_cell_0,2mls.mp4: Movie of the growth of brinicles in a 3-D Hell_Shaw cell. Brine injection rate of 0.2 mL/s. The water around the needle freezes and a brinicle starts to grow downwards. Higher speed and diameter than with lower flows.