

Salt crystals grow legs

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Scientists have discovered that salt crystals can grow tiny legs to lift themselves away from certain hydrophobic surfaces. The researchers placed salt water droplets on silanised glass which is microscopically smooth. As the water evaporates, crystallites form at the water–air interface, sitting on their corners to minimise contact with the surface.

As the evaporation proceeds, a number of tiny crystalline legs grow on the bottom of the structure, which lifts the entire crystal off the surface. At higher temperatures, more legs grow – and faster.



Primary efflorescence showing the appearance of salt crystals emanating from concrete

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1. Give the chemical formula for common salt.
2. Describe the typical physical properties of salt.
3. Describe the structure and bonding of sodium chloride.



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