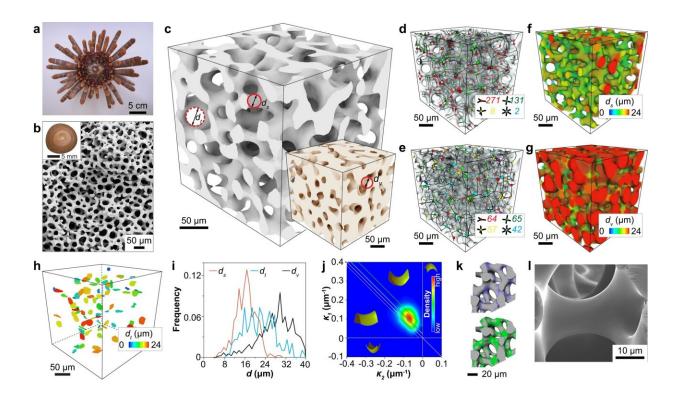


Looking to sea urchins for stronger ceramic foams

October 28 2022



Echinoderm stereom as a bicontinuous cellular solid. **a** Photograph of a ventral-viewed sea urchin H. mamillatus. **b** SEM image of the stereom structure. Inset, optical image of the transverse cross section of a spine. **c** μ -CT reconstructions of stereom and the corresponding void structure (inset). d_s , d_v , and d_t represent the thicknesses (diameters) of stereom, void structure, and throats, respectively. **d**, **e** 3D cellular network of stereom and the corresponding void structure with node types colored by their connectivities. **f**, **g** The thickness distributions of stereom (d_s) and the corresponding void structure (d_v) . **h** 3D rendering of small throats (d_t)



Citation: Looking to sea urchins for stronger ceramic foams (2022, October 28) retrieved 25 April 2024 from https://phys.org/news/2022-10-sea-urchins-stronger-ceramic-foams.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.