

Supporting Information

for Adv. Sci., DOI: 10.1002/advs.202000108

Helical Microstructures of the Mineralized Coralline Red Algae Determine Their Mechanical Properties

Nuphar Bianco-Stein, Iryna Polishchuk, Gabriel Seiden, Julie Villanova, Alexander Rack, Paul Zaslansky,* and Boaz Pokroy*

Supporting Information

Helical Microstructure of Mineralized Tissue in Coralline Red Algae Determines their Mechanical Properties

Nuphar Bianco-Stein, Iryna Polishchuk, Gabriel Seiden, Julie Villanova, Alexander Rack, Paul Zaslansky, Boaz Pokroy*

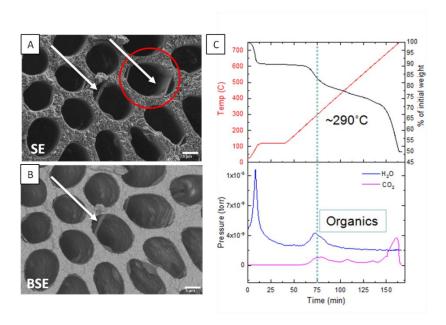


Figure S1. Characterization of the organic phase a) Secondary electron image of a cross section of *Jania* sp. at higher magnification. b) Back-scattered electron image of the area shown in (A), indicating the presence of at least two different phases. c) Coupled TGA-MS.

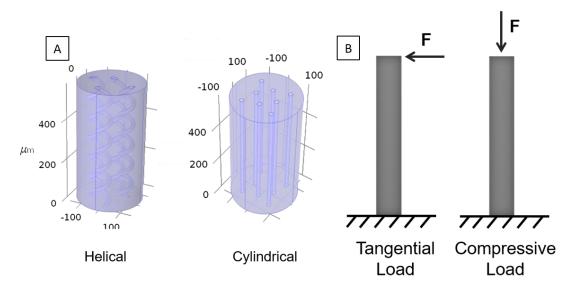


Figure S2. a) Models studied with finite element analysis. b) Modes of load used for the analysis.

Movie S1. Cross section of *Jania* sp. imaged at ID19 of the ESRF using X-ray microtomography along $75\mu m$ of the alga displaying its helical pores.