

Supporting Information

Formation Mechanism of the Twinned β -Form Anhydrous Guanine Platelets in the Scallop Eyes

Dongmei Guo,^a Yiqun Liu,^b Xiubin Hou,^a Xubo Wang,^c Chenge Fan,^c Lixia Bao,^d Xinpeng He,^b Hongmei Zhang,^b Yurong Ma^{*a}

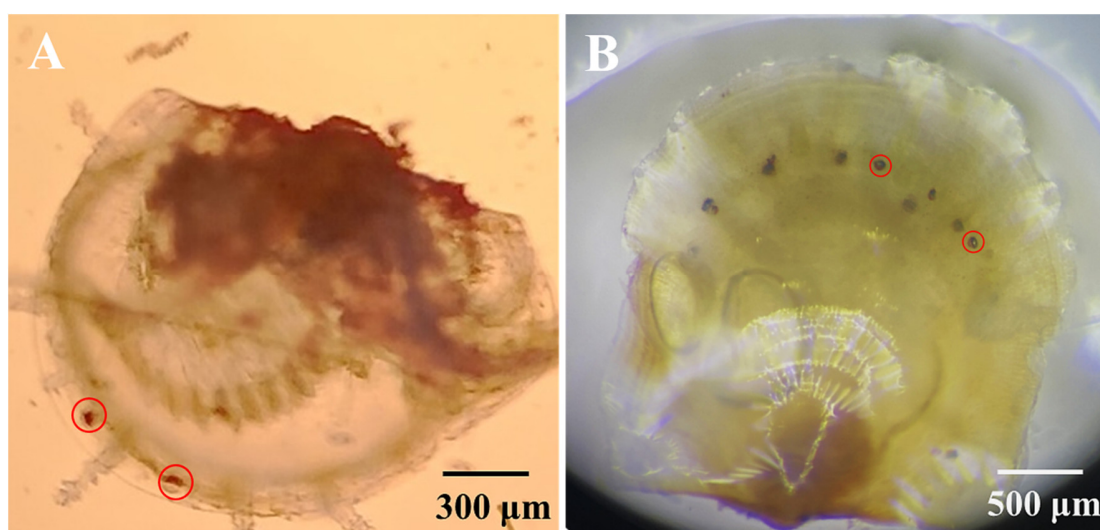


Figure S1. Photographs of juvenile scallops. (A) 1.5 mm juvenile scallop. (B) 2.5 mm juvenile scallop. The eyes were marked with red circles. White reflections could be seen in the eyes of 2.5 mm juvenile scallop.

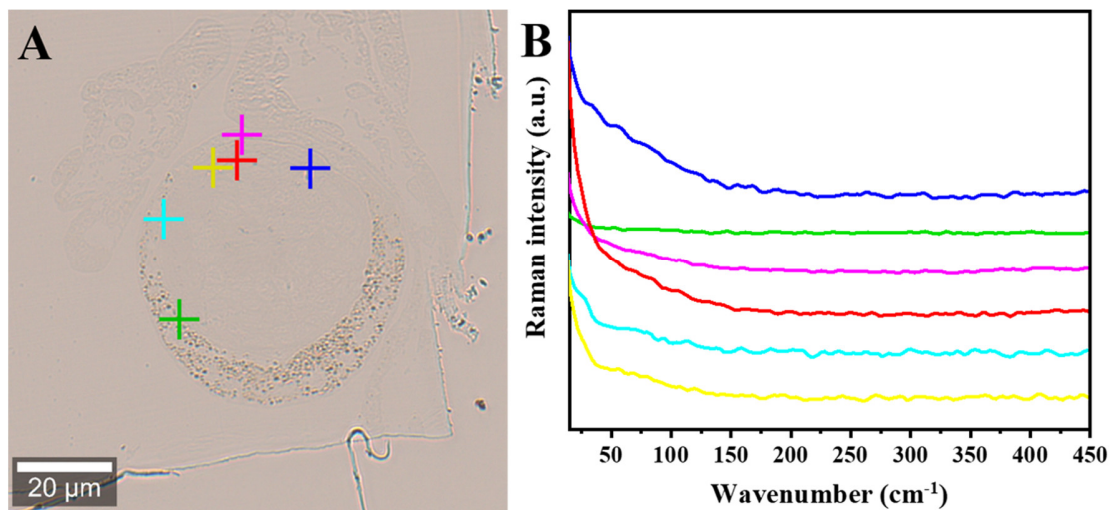


Figure S2. Optical microscopy image of the eyes of 1.5 mm juvenile scallop (A) and corresponding low-wavenumber Raman spectra (B).

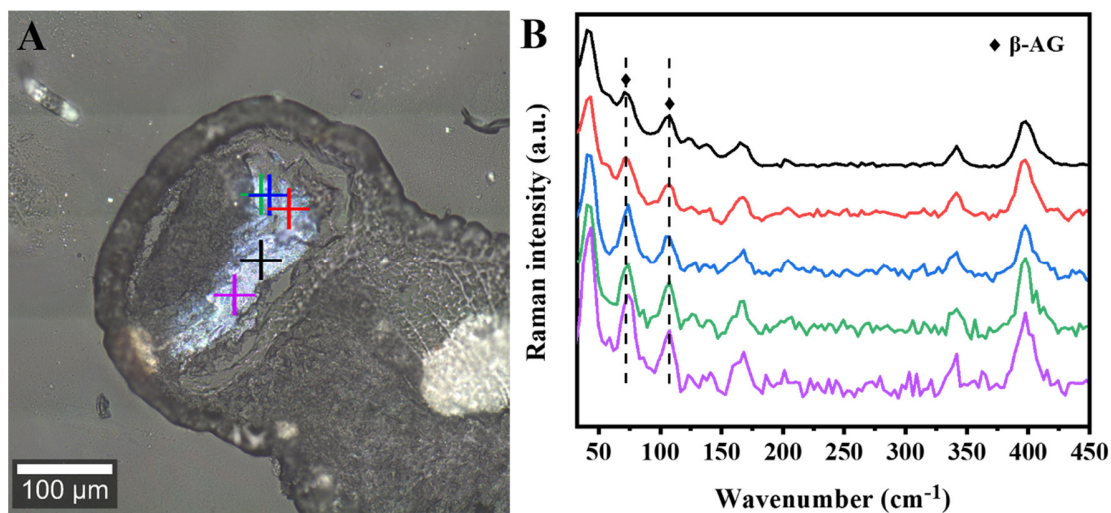


Figure S3. Optical microscopy image of the eyes of adult scallop (A) and corresponding low-wavenumber Raman spectra (B). All the characteristic peaks in the spectra are assigned to $\beta\text{-AG}$. The thickness of the slice samples of the biogenic samples was 5 μm , and the slices were placed on the slide.

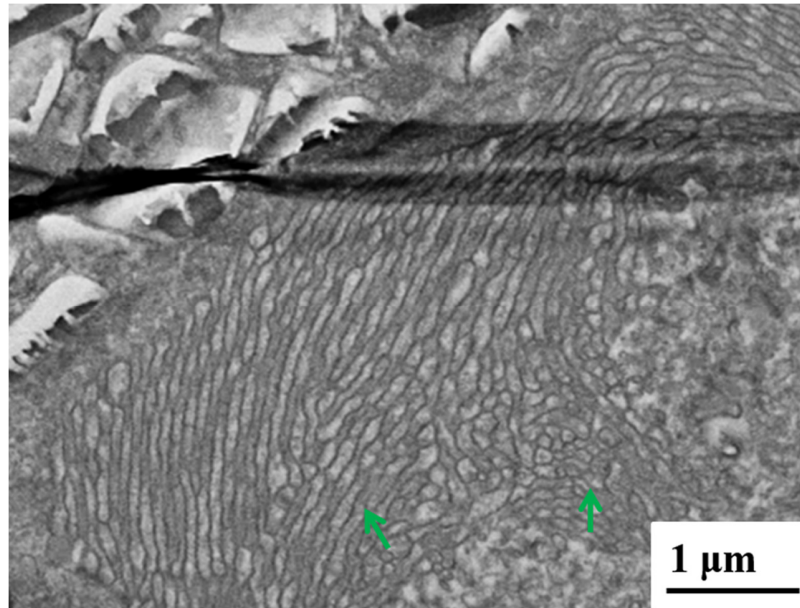


Figure S4. TEM image of the eye of 3.0 mm juvenile scallop. The continuous strips of tissue marked with green arrows are supposed to be the proximal retina.

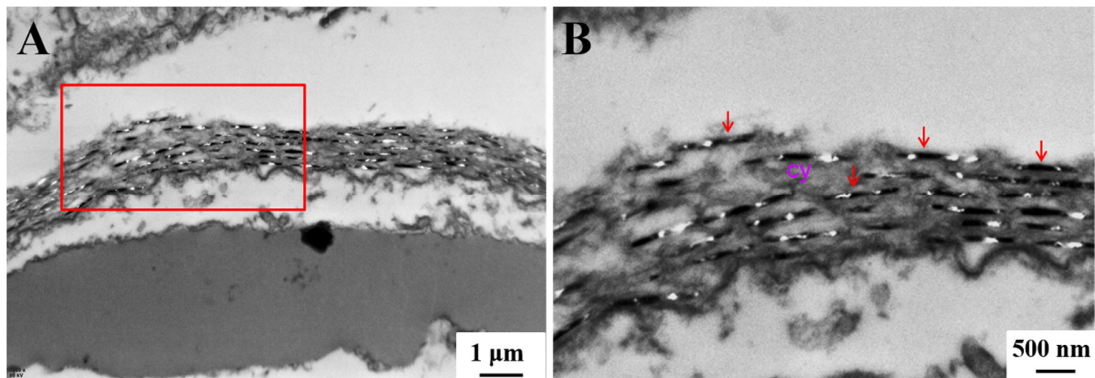


Figure S5. (A) TEM images of guanine crystals in the concave mirror region of adult scallop eyes. (B) Zoomed-in image of the region of concave mirror in red box of (A). *cy* cytoplasm.

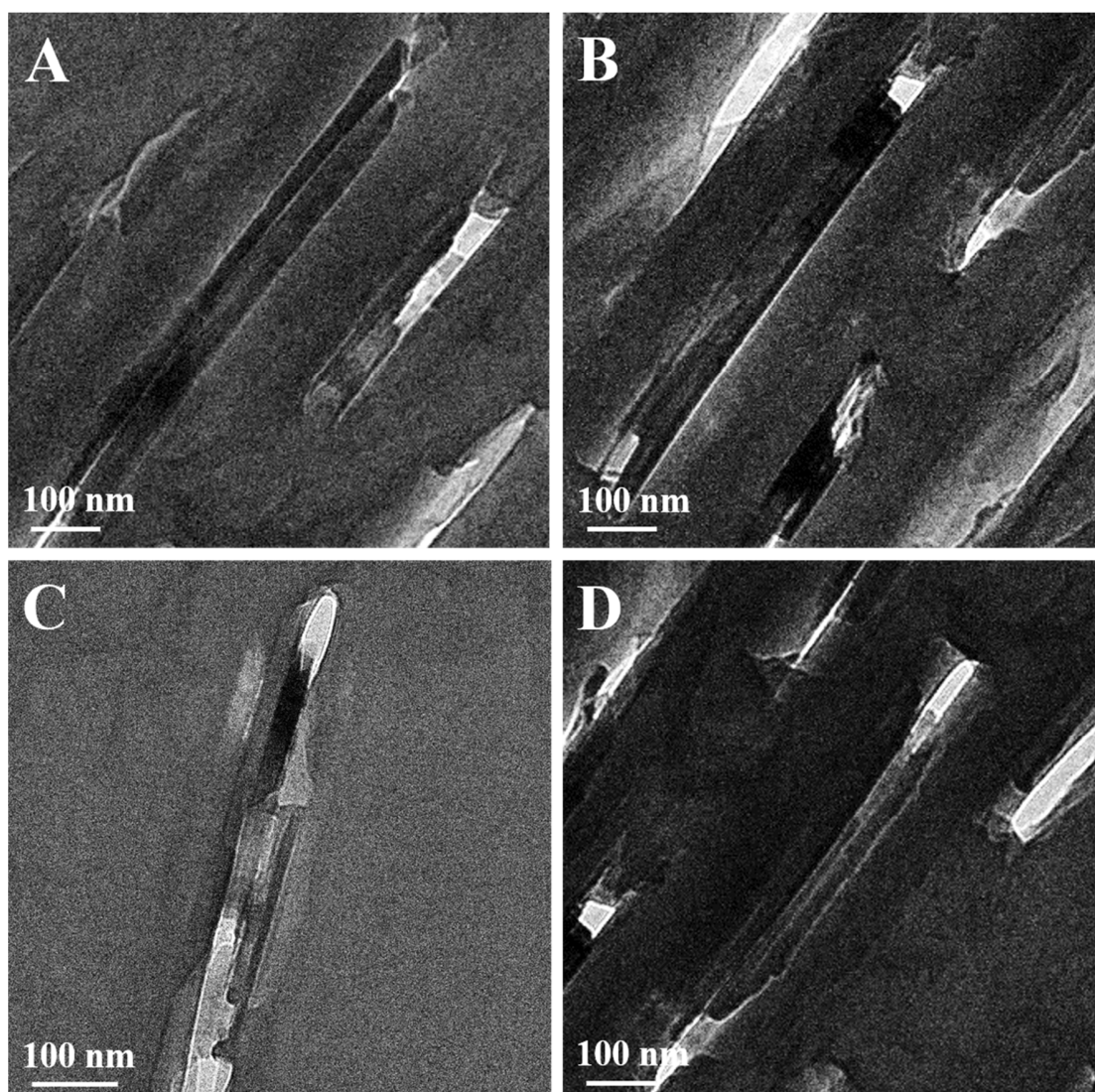


Figure S6. Cryo-TEM images of the guanine crystals exposing side faces.