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Superimposed optical and scanning electron micrographs of the mineralized protective armor plates of the chiton Acanthopleura granulata. Coincident with the dark pigments are image-forming lenses primarily composed of aragonite, in marked contrast to the protein-based eyes of most animals. In addition to providing mechanical protection, such design simultaneously allows the organism to monitor potential predatory attacks through optical vision. See pages 899 and 952.

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