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Minor element partitioning and mineralogy in limpets from a CO₂ vent site

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Specimens of the patellogastropod limpet *Patella caerulea* were collected within and outside a CO₂ vent site at Ischia, Italy. The shells were sectioned transversally and scanned for polymorph distribution by means of confocal Raman microscopy. Minor element to calcium ratios were measured using laser-ablation-inductively-coupledplasma-mass-spectroscopy (LA-ICPMS). Mg/Ca, Sr/Ca, and Li/Ca ratios were determined in calcitic as well as aragonitic parts of the shells. This approach allows for investigating the effects of the polymorph and the seawater carbonate chemistry on minor element partitioning separately.

Keywords: calcification, proxy, CO2, mineralogy, patellogastropod limpet

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