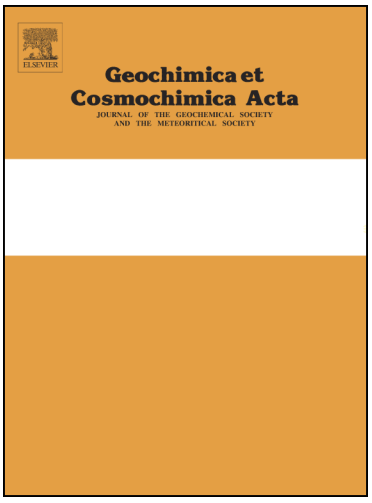

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Highlights:

- Cu adsorption onto phototrophic biofilm induces enrichment of biomass in heavy isotope.
- Heavy isotope is favored by Cu complexation with exopolymeric substances.
- Light isotope is favored by Cu reduction inside the biofilm.