

**HIGHLIGHTS AND BREAKTHROUGHS**

**Reaching new boundaries for in-situ U-Th geochronology**

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**Abstract:** In-situ U-Th dating is among the most challenging analytical techniques, requiring extreme sensitivity to quantify the low-abundance <sup>230</sup>Th. Consequently, not all mineral phases are suitable for this technique. In this issue, Wu et al. have demonstrated that baddeleyite in basic rocks can provide meaningful U-Th ages when analyzed using secondary ionization mass spectrometry. **Keywords:** U-Th dating, SIMS, baddeleyite, eruption age