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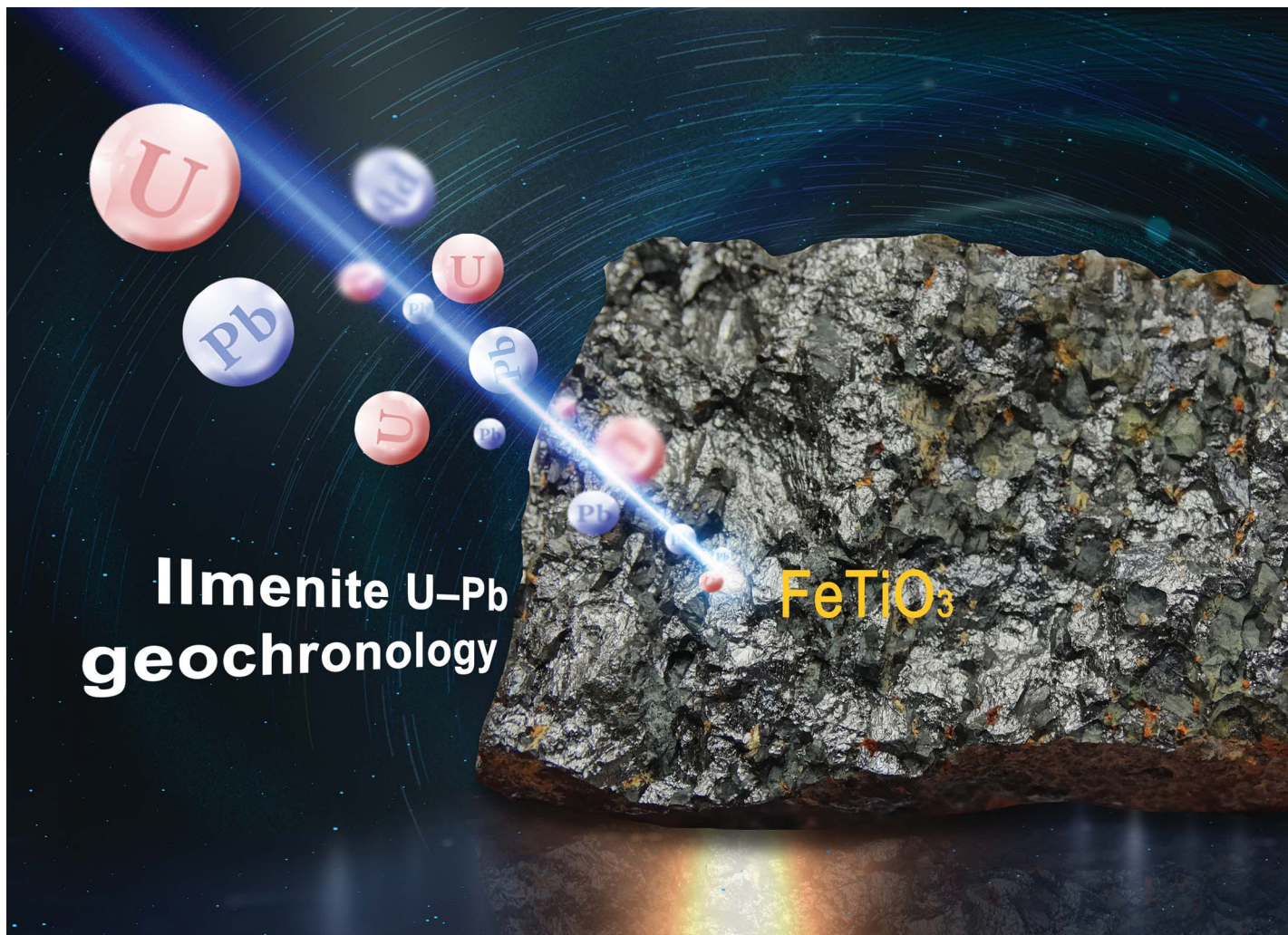


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Showcasing research from Dr. Yanwen Tang's laboratory, State Key Laboratory of Ore Deposit Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, China.

A new appraisal of ilmenite U-Pb dating method by LA-SF-ICP-MS

Besides being a major source of titanium metal, ilmenite is an important geochronometer in various rocks and deposits. The use of LA-SF-ICP-MS for ilmenite dating is an impressive technological approach, which allows rapid dating with spot sizes of ~60 μm and low U and Pb contents in the tens to hundreds of ppb range. The calibration of U-Pb isotopes using zircon 91500 to achieve accurate ages with minimal age offsets for ilmenite samples is a crucial aspect of this methodology. Three ilmenites are proposed as reference materials in the future.

As featured in:



See Yanwen Tang, Tingguang Lan *et al.*, *J. Anal. At. Spectrom.*, 2024, **39**, 109.