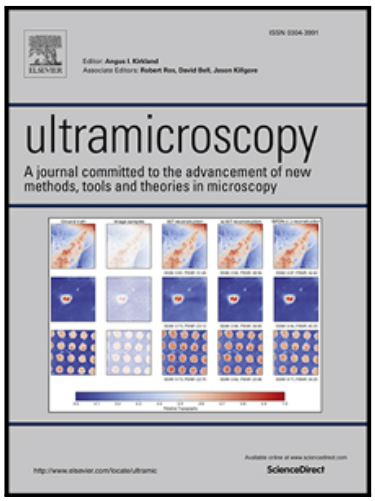

Complex Evaporation Behavior of a Transition Metal Carbo-Nitride (Hf(C,N)) Studied by Atom Probe Tomography

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Highlights

- The influence of changing the laser pulse energy on data quality and compositional
- accuracy is revealed
- Singly and doubly charged Hf peaks become better resolved with increasing laser
- pulse energy
- Quality of mass spectrum, hit multiplicity and mass resolving power improve with
- increasing laser pulse energy
- The Hf content is artificially increased with increasing laser pulse energy
- Counterintuitively, the most accurate composition is determined at lower laser pulse energies