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In situ Investigation of Neutrals Involved in the Formation of Titan
Tholins

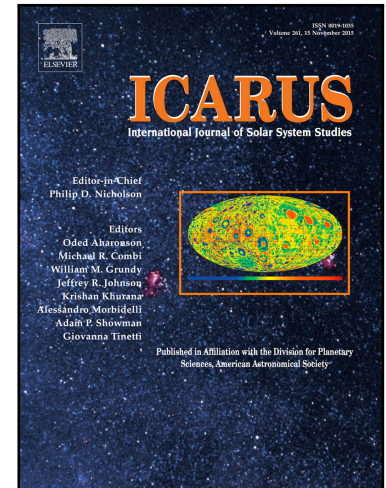
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Highlights

- *In situ* cryogenic trap in a plasma discharge enables quantification of gas-phase precursors in Titan-like conditions
- C₂H₄ is a major hydrocarbon precursor to tholin formation
- HCN and NH₃ are also important volatile products
- NH₃ is the most abundant product formed with a 1% CH₄ mixing ratio

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