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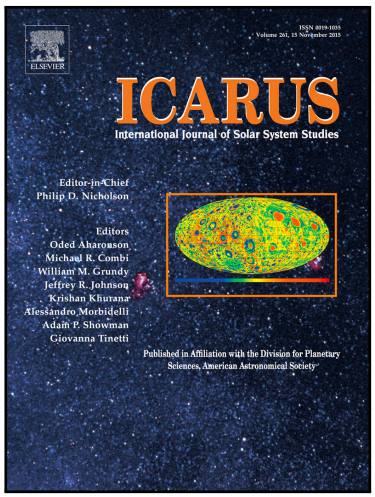

Laboratory simulations of the Vis-NIR spectra of comet 67P using sub-μm sized cosmochemical analogues

B. Rousseau, S. Érard, P. Beck, É. Quirico, B. Schmitt, O. Brissaud, G. Montes-Hernandez, F. Capaccioni, G. Filacchione, D. Bockelée-Morvan, C. Leyrat, M. Ciarniello, A. Raponi, D. Kappel, G. Arnold, L.V. Moroz, E. Palomba, F. Tosi, VIRTIS Team

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Highlights

- Sub-micrometre mixes were made with coal, iron sulphide (pyrrhotite) and silicate.
- Reflectance between 0.45-2.μm was compared to mean VIRTIS/Rosetta spectra of 67P.
- While pyrrhotite darkens the spectra, organics are needed to provide the red slope.
- The type of the mixture (intimate, coating) influences significantly the spectra.

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