

## Refereed articles in 2020

- [1] R. Brunetto, C. Lantz, T. Nakamura, D. Baklouti, T. Le Pivert-Jolivet, S. Kobayashi, and F. Borondics. Characterizing irradiated surfaces using IR spectroscopy. *Icarus*, 345:113722, July 2020.
- [2] G. Cremonese, F. Capaccioni, M. T. Capria, A. Doressoundiram, P. Palumbo, M. Vincendon, M. Massironi, S. Debei, M. Zusì, F. Altieri, M. Amoroso, G. Aroldi, M. Baroni, A. Barucci, G. Bellucci, J. Benkhoff, S. Besse, C. Bettanini, M. Blecka, D. Borrelli, J. R. Brucato, C. Carli, V. Carlier, P. Cerroni, A. Cicchetti, L. Colangeli, M. Dami, V. Da Deppo, V. Della Corte, M. C. De Sanctis, S. Erard, F. Esposito, D. Fantinel, L. Ferranti, F. Ferri, I. Ficai Veltroni, G. Filacchione, E. Flamini, G. Forlani, S. Fornasier, O. Forni, M. Fulchignoni, V. Galluzzi, K. Gwinner, W. Ip, L. Jorda, Y. Langevin, L. Lara, F. Leblanc, C. Leyrat, Y. Li, S. Marchi, L. Marinangeli, F. Marzari, E. Mazzotta Epifani, M. Mendillo, V. Menella, R. Mugnuolo, K. Muinonen, G. Naletto, R. Noschese, E. Palomba, R. Paolinetti, D. Perna, G. Piccioni, R. Politi, F. Poulet, R. Ragazzoni, C. Re, M. Rossi, A. Rotundi, G. Salemi, M. Sgavetti, E. Simioni, N. Thomas, L. Tommasi, A. Turella, T. Van Hoolst, L. Wilson, F. Zambon, A. Aboudan, O. Barraud, N. Bott, P. Borin, G. Colombatti, M. El Yazidi, S. Ferrari, J. Flahaut, L. Giacomini, L. Guzzetta, A. Lucchetti, E. Martellato, M. Pajola, A. Slemer, G. Tognon, and D. Turrini. SIMBIO-SYS: Scientific Cameras and Spectrometer for the BepiColombo Mission. *Space Sci. Rev.*, 216(5):75, June 2020.
- [3] Pierre Guiot, Mathieu Vincendon, John Carter, Yves Langevin, and Alain Carapelle. Characterization of transient signal induced in IR detector array by Jupiter high-energy electrons and implications for JUICE/MAJIS operability. *Planetary Space Science*, 181:104782, February 2020.
- [4] Klaus Hornung, Eva Maria Mellado, John Paquette, Nicolas Fray, Henning Fischer, Oliver Stenzel, Donia Baklouti, Sihane Merouane, Yves Langevin, Anais Bardyn, Cecile Engrand, Hervé Cottin, Laurent Thirkell, Christelle Briois, Paola Modica, Jouni Rynö, Johan Silen, Rita Schulz, Sandra Siljeström, Harry Lehto, Kurt Varmuza, Andreas Koch, Jochen Kissel, and Martin Hilchenbach. Electrical properties of cometary dust particles derived from line shapes of TOF-SIMS spectra measured by the ROSETTA/COSIMA instrument. *Planetary Space Science*, 182:104758, March 2020.
- [5] Hannah H. Kaplan, Victoria E. Hamilton, Ellen S. Howell, F. Scott Anderson, M. Antonella Barrucci, John Brucato, Thomas H. Burbine, Beth E. Clark, Ed A. Cloutis, Harold C. Connolly, Elisabetta Dotto, Joshua P. Emery, Sonia Fornasier, Cateline Lantz, Lucy F. Lim, Frederic Merlin, Alice Praet, Dennis C. Reuter, Scott A. Sandford, Amy A. Simon, Driss Takir, and Dante S. Lauretta. Visible-near infrared spectral indices for mapping mineralogy and chemistry with OSIRIS-REx. *Meteoritics and Planetary Science*, 55(4):744–765, April 2020.
- [6] Y. Langevin, S. Merouane, M. Hilchenbach, M. Vincendon, K. Hornung, C. Engrand, R. Schulz, J. Kissel, and J. Ryno. Optical properties of

- cometary particles collected by COSIMA: Assessing the differences between microscopic and macroscopic scales. *Planetary Space Science*, 182:104815, March 2020.
- [7] C. Lantz, F. Poulet, D. Loizeau, L. Riu, C. Pilorget, J. Carter, H. Dypvik, F. Rull, and S. C. Werner. Planetary Terrestrial Analogues Library project: 1. characterization of samples by near-infrared point spectrometer. *Planetary Space Science*, 189:104989, September 2020.
  - [8] T. Morota, S. Sugita, Y. Cho, M. Kanamaru, E. Tatsumi, N. Sakatani, R. Honda, N. Hirata, H. Kikuchi, M. Yamada, Y. Yokota, S. Kameda, M. Matsuoka, H. Sawada, C. Honda, T. Kouyama, K. Ogawa, H. Suzuki, K. Yoshioka, M. Hayakawa, N. Hirata, M. Hirabayashi, H. Miyamoto, T. Michikami, T. Hiroi, R. Hemmi, O. S. Barnouin, C. M. Ernst, K. Kitazato, T. Nakamura, L. Riu, H. Senshu, H. Kobayashi, S. Sasaki, G. Komatsu, N. Tanabe, Y. Fujii, T. Irie, M. Suemitsu, N. Takaki, C. Sugimoto, K. Yumoto, M. Ishida, H. Kato, K. Moroi, D. Domingue, P. Michel, C. Pilorget, T. Iwata, M. Abe, M. Ohtake, Y. Nakauchi, K. Tsumura, H. Yabuta, Y. Ishihara, R. Noguchi, K. Matsumoto, A. Miura, N. Namiki, S. Tachibana, M. Arakawa, H. Ikeda, K. Wada, T. Mizuno, C. Hirose, S. Hosoda, O. Mori, T. Shimada, S. Soldini, R. Tsukizaki, H. Yano, M. Ozaki, H. Takeuchi, Y. Yamamoto, T. Okada, Y. Shimaki, K. Shirai, Y. Iijima, H. Noda, S. Kikuchi, T. Yamaguchi, N. Ogawa, G. Ono, Y. Mimasu, K. Yoshikawa, T. Takahashi, Y. Takei, A. Fujii, S. Nakazawa, F. Terui, S. Tanaka, M. Yoshikawa, T. Saiki, S. Watanabe, and Y. Tsuda. Sample collection from asteroid (162173) Ryugu by Hayabusa2: Implications for surface evolution. *Science*, 368(6491):654–659, May 2020.
  - [9] M. Pineau, L. Le Deit, B. Chauviré, J. Carter, B. Rondeau, and N. Mangold. Toward the geological significance of hydrated silica detected by near infrared spectroscopy on Mars based on terrestrial reference samples. *Icarus*, 347:113706, September 2020.
  - [10] François Poulet, Christoph Gross, Briony Horgan, Damien Loizeau, Janice L. Bishop, John Carter, and Csilla Orgel. Mawrth Vallis, Mars: A Fascinating Place for Future In Situ Exploration. *Astrobiology*, 20(2):199–234, February 2020.
  - [11] A. Raponi, M. Ciarniello, F. Capaccioni, V. Mennella, G. Filacchione, V. Vinogradoff, O. Poch, P. Beck, E. Quirico, M. C. De Sanctis, L. V. Moroz, D. Kappel, S. Erard, D. Bockelée-Morvan, A. Longobardo, F. Tosi, E. Palomba, J. P. Combe, B. Rousseau, G. Arnold, R. W. Carlson, A. Pommerol, C. Pilorget, S. Fornasier, G. Bellucci, A. Barucci, F. Mancarella, M. Formisano, G. Rinaldi, I. Istiqomah, and C. Leyrat. Infrared detection of aliphatic organics on a cometary nucleus. *Nature Astronomy*, 4:500–505, January 2020.
  - [12] A. Stcherbinine, M. Vincendon, F. Montmessin, M. J. Wolff, O. Koralev, A. Fedorova, A. Trokhimovskiy, A. Patrakeev, G. Lacombe, L. Baggio, and A. Shakun. Martian Water Ice Clouds During the 2018 Global Dust Storm as Observed by the ACS-MIR Channel Onboard the Trace Gas Orbiter. *Journal of Geophysical Research (Planets)*, 125(3):e06300, March 2020.

- [13] Marco Veneranda, Guillermo Lopez-Reyes, José Antonio Manrique, Jesus Medina, Patricia Ruiz-Galende, Imanol Torre-Fdez, Kepa Castro, Cateline Lantz, François Poulet, Henning Dypvik, Stephanie C. Werner, and Fernando Rull. ExoMars Raman Laser Spectrometer: A Tool for the Potential Recognition of Wet-Target Craters on Mars. *Astrobiology*, 20(3):349–363, March 2020.