

Publications in international peer-reviewed scientific journals, listed in chronological order. The three most important works are marked by a preceding (!). Bachelor, Master, and PhD theses are not listed here. They are archived with the University of Bern.

1. D. R. Müller, K. Altwegg, J. J. Berthelier, M. Combi, J. De Keyser, S. A. Fuselier, N. Hänni, B. Pestoni, M. Rubin, I. R. H. G. Schroeder I, and S. F. Wampfler. *High D/H ratios in water and alkanes in comet 67P/Churyumov-Gerasimenko measured with the Rosetta/ROSINA DFMS*. Submitted to *Astron. Astroph.* (2022).
2. (!) N. Hänni, K. Altwegg, M. Combi, S. A. Fuselier, J. De Keyser, M. Rubin, and S. F. Wampfler. *Evidence for a continuum of cometary organics between volatile and refractory*. Under revision with *Nat. Commun.* (2022).
3. A. Lethuillier, C. Feller, E. Kaufmann, P. Becerra, N. Hänni, R. Diethelm, C. Kreuzig, B. Gundlach, J. Blum, A. Pommerol, G. Kargl, E. Kührt, H. Capelo, D. Haack, X. Zhang, J. Knollenberg, N. S. Molinski, T. Gilke, H. Sierks, P. Tiefenbacher, C. Güttler, K. A. Otto, D. Bischoff, M. Schweighart, A. Hagermann, N. Jäggi. *Cometary dust analogues for physics experiments*. Under revision with *Mon. Not. R. Astron. Soc.* (2022).
4. M. Rubin, K. Altwegg, J.-J. Berthelier, M. R. Combi, J. De Keyser, F. Dhooghe, S. Fuselier, T. I. Gombosi, N. Hänni, D. Müller, B. Pestoni, S. F. Wampfler, P. Wurz. *Refractory elements in the gas phase at comet 67P/Churyumov-Gerasimenko - Direct release of atomic Na, Si, and Fe from nanograins?*. Under revision with *Astron. Astroph.* (2022).
5. C. Kreuzig, G. Kargl, A. Pommerol, J. Knollenberg, A. Lethuillier, N. S. Molinski, T. Gilke, D. Bischoff, C. Feller, E. Kührt, H. Sierks, N. Hänni, H. Capelo, C. Güttler, D. Haack, K. Otto, E. Kaufmann, M. Schweighart, W. Macher, P. Tiefenbacher, B. Gundlach, and J. Blum. *The CoPhy-Lab comet-simulation chamber*. *Rev. Sci. Inst.* (2021) 92, 115102.
<https://doi.org/10.1063/5.0057030>.
6. B. Pestoni, K. Altwegg, H. Balsiger, N. Hänni, M. Rubin, I. Schroeder, M. Schuhmann, and S. Wampfler. *Detection of volatiles undergoing sublimation from 67P/Churyumov-Gerasimenko coma particles using ROSINA/COPS. II. The nude gauge*. *Astron. Astroph.* (2021) 651, A26;
<https://doi.org/10.1051/0004-6361/202140634>.
7. B. Pestoni, K. Altwegg, H. Balsiger, N. Hänni, M. Rubin, I. Schroeder, M. Schuhmann, and S. F. Wampfler. *Detection of volatiles undergoing sublimation from 67P/Churyumov-Gerasimenko coma particles using ROSINA/COPS. I. The ram gauge*. *Astron. Astroph.* (2021) 645, A38;
<https://doi.org/10.1051/0004-6361/202039130>.
8. N. Hänni, D. Sheptyakov, U. Stuhr, L. Keller, M. Medarde, A. Cervellino, L.-P. Regnault, E. Hirtenlechner, M. Mena, K. W. Krämer, B. Normand, and C. Rüegg. *Magnetic order in the quasi-one-dimensional Ising system RbCoCl₃*. *Phys. Rev. B* (2021) 103, 094424;

- <https://doi.org/10.1103/PhysRevB.103.094424>.
9. N. Hänni, K. Altwegg, H. Balsiger, M. Combi, S. A. Fuselier, J. De Keyser, B. Pestoni, M. Rubin, and S. F. Wampfler. *Cyanogen, cyanoacetylene, and acetonitrile in comet 67P and their relation to the cyano radical*. *Astron. Astroph.* (2021) 647, A22;
<https://doi.org/10.1051/0004-6361/202039580>.
 10. K. Altwegg, H. Balsiger, M. Combi, J. De Keyser, M. N. Drozdovskaya, S. A. Fuselier, T. I. Gombosi, N. Hänni, M. Rubin, M. Schuhmann, I. Schroeder, S. F. Wampfler. *Molecule dependent oxygen isotopic ratios in the coma of comet 67P/Churyumov-Gerasimenko*. *Mon. Not. R. Astron. Soc.* (2020) 498, 4, 5855-5862;
<https://doi.org/10.1093/mnras/staa2701>.
 11. M. Mena, N. Hänni, S. Ward, E. Hirtenlechner, R. Bewley, C. Hubig, U. Schollwöck, B. Normand, K.W. Krämer, D. F. McMorro, and Ch. Rüegg. *Thermal control of spin excitations in the coupled Ising-chain material $RbCoCl_3$* . *Phys. Rev. Lett.* (2020) 124, 257201;
<https://doi.org/10.1103/PhysRevLett.124.257201>.
 12. (!) N. Hänni, K. Altwegg, B. Pestoni, M. Rubin, I. Schroeder, M. Schuhmann, S. Wampfler. *First in-situ detection of the CN radical in comets and evidence for a distributed source*. *Mon. Not. R. Astron. Soc.* (2020) 498, 2, 2239-2248;
<https://doi.org/10.1093/mnras/staa2387>.
 13. K. Altwegg, H. Balsiger, N. Hänni, M. Rubin, M. Schuhmann, I. Schroeder, T. Sémon, S. Wampfler, J.-J. Berthelier, C. Briois, M. Combi, T. I. Gombosi, H. Cottin, J. De Keyser, F. Dhooghe, B. Fiethe, and S. A. Fuselier. *Evidence of ammonium salts in comet 67P as explanation for the nitrogen depletion in cometary comae*. *Nat. Astron.* (2020) 4, 533-540;
<https://doi.org/10.1038/s41550-019-0991-9>.
 14. (!) N. Hänni, S. Gasc, A. Etter, M. Schuhmann, I. Schroeder, S. Wampfler, S. Schürch, M. Rubin, K. Altwegg. *Ammonium salts as a source of small molecules observed with high-resolution electron-impact ionization mass spectrometry*. *J. Phys. Chem. A* (2019) 123, 5805-5814;
<https://doi.org/10.1021/acs.jpca.9b03534>.
 15. M. Rubin, K. Altwegg, H. Balsiger, J.-J. Berthelier, M. R. Combi, J. De Keyser, M. Drozdovskaya, B. Fiethe, S. A. Fuselier, S. Gasc, T. I. Gombosi, N. Hänni, K. C. Hansen, U. Mall, H. Rème, I. R. H. G. Schroeder, M. Schuhmann, T. Sémon, J. H. Waite, S. F. Wampfler, P. Wurz. *Elemental and molecular abundances in comet 67P/Churyumov-Gerasimenko*. *Mon. Not. R. Astron. Soc.* (2019) 489, 594-607;
<https://doi.org/10.1093/mnras/stz2086>.
 16. M. Schuhmann, K. Altwegg, H. Balsiger, J.-J. Berthelier, J. De Keyser, S. A. Fuselier, S. Gasc, T. I. Gombosi, N. Hänni, M. Rubin, T. Sémon, C.-Y. Tzou, S. F. Wampfler. *CHO-bearing molecules*

- in comet 67P/Churyumov-Gerasimenko*. ACS Earth Space Chem. (2019) 3, 9, 1854-1861;
<https://doi.org/10.1021/acsearthspacechem.9b00094>.
17. M. Schuhmann, K. Altwegg¹, H. Balsiger, J.-J. Berthelier, J. De Keyser, B. Fiethe, S. A. Fuselier, S. Gasc, T. I. Gombosi, N. Hänni, M. Rubin, C.-Y. Tzou, and S. F. Wampfler. *Aliphatic and aromatic hydrocarbons in comet 67P/Churyumov-Gerasimenko seen by ROSINA*. Astron. Astrophys. (2019) 630, A31;
<https://doi.org/10.1051/0004-6361/201834666>.
18. N. Hänni, M. Frontzek, J. Hauser, D. Cheptiakov, K. Krämer. *Low temperature phases of Na₂Ti₃Cl₈ revisited*. Z. Anorg. Allg. Chem. (2017) 643, 2063-2069;
doi.org/10.1002/zaac.201700331.