

Peer Reviewed Publications

Jaumann, R., Tirsch, D., Adeli, S., Bahia, R., Michael, G., le Deit, L., Grau Galofre, A., Head, J., Bohacek, E., **Gross, C.**, Walter, S. G. H., & Hiesinger, H. (2024). Geological Record of Water and Wind Processes on Mars as Observed by the Mars Express High Resolution Stereo Camera. *Space Science Reviews*, 220(4), 45. <https://doi.org/10.1007/s11214-024-01076-z>

Wilk, K. A., Bishop, J. L., Weitz, C. M., Parente, M., Saranathan, A. M., Itoh, Y., **Gross, C.**, Flahaut, J., & Seelos, F. (2024). Characterization of aqueous alteration and formation of salty exposures at Ius Chasma, Mars. *Icarus*, 408, 115800. <https://doi.org/https://doi.org/10.1016/j.icarus.2023.115800>

Bishop, J. L., **Gross, C.**, Danielsen, J., Parente, M., Murchie, S. L., Horgan, B., Wray, J. J., Viviano, C., Ehlmann, B. L., Seelos, F. P. (2020). Multiple mineral horizons in layered outcrops at Mawrth Vallis, Mars, signify changing geochemical environments on early Mars. *10.1016/j.icarus.2020.113634*

Poulet, F., **Gross, C.**, Horgan, B., Loizeau, D., Bishop, J. L., Carter, J., Orgel, C. (2020). Mawrth Vallis, Mars: a fascinating place for future in situ exploration - *Astrobiology* –Volume 20, Issue 2. <https://doi.org/10.1089/ast.2019.2074>

Bishop, J. L., Fairén, A. G., Michalski, J. R., Gago-Duport, L., Baker, L. L., Velbel, M. A., **Gross, C.**, and Rampe, E. B. (2018) Surface clay formation during short-term warmer and wetter conditions on a largely cold ancient Mars. *Nature Astronomy*, v. 2, p. 206-213

Al-Samir, M., Nabhan, S., Fritz, J., Winkler, A., Bishop, J. L., **Gross, C.**, Jaumann, R. (2017). The paleolacustrine evolution of Juventae Chasma and Maja Valles and its implications for the formation of interior layered deposits on Mars. *Icarus*, Available online 27 December 2016, ISSN 0019-1035, <https://doi.org/10.1016/j.icarus.2016.12.023>

Michael, G.G., Walter, S.H.G., Kneissl, T., Zuschneid, W., **Gross, C.**, McGuire, P.C., Dumke, A., Schreiner, B., van Gasselt, S., Gwinner, K., Jaumann, R. (2016). Systematic processing of Mars Express HRSC panchromatic and colour image mosaics: Image equalisation using an external brightness reference. *Planetary and Space Science* 121; 18-26

Noel, A., Bishop, J.L., Al-Samir, M., **Gross, C.**, J. Flahaut, McGuire, P.C., Seelos, F., Weitz, C., Murchie, S. (2015). "Mineralogy, Morphology and Stratigraphy of the Light-Toned Interior Layered Deposits at Juventae Chasma". *Icarus*, doi:10.1016/j.icarus.2014.09.033

Cull, S., McGuire, P., **Gross, C.**, Meyers, J., Shmorhun, N. (2014). A new type of jarosite deposit on Mars: Evidence for past glaciation in Valles Marineris? *Geology*, Volume 42, no. 11, Pages 1-4

McGuire, P.C., Bonnici, A., Bruner, K.R., **Gross, C.**, Ormö, J., Smosna, R.A., Walter, S. and Wendt, L. (2014). The Cyborg Astrobiologist: Matching of Prior Textures by Image Compression for Geological Mapping and Novelty Detection. *International Journal of Astrobiology* 13 (3): 191–202 (2014), doi:10.1017/S147355041300037

Dohm, J. M., Miyamoto, H., Ori, G. G., Fairén, A. G., Davila, A. F., Komatsu, G., Mahaney, W. C., Williams, J.-P., Joye, S. B., Di Achille, G., Oehler, D. Z., Marzo, G. A., Schulze Makuch, D., Acocella, V., Glamoclija, M., Pondrelli, M., Boston, P., Hart, K. M., Anderson, R. C., Baker, V. R., Fink, W., Kelleher, B. P., Furfaro, R., **Gross, C.**, Hare, T. M., Frazer, A. R., Ip, F., Allen, C. C. R., Kim, K. J., Maruyama, S., McGuire, P. C., Netoff, D., Parnell, J., Wendt, L., Wheelock, S. J., Steele, A., Hancock, R. G. V., Havics, R. A., Costa, P., and Krinsley, D. (2011). An inventory of potentially habitable environments on Mars: Geological and biological perspectives. *Analogs for*

Planetary Exploration: Geological Society of America Special Paper 483, Pages 317–347, doi:10.1130/2011. 2483 (21)

Kneissl, T., van Gasselt, S., Wendt, L., **Gross, C.** and Neukum, G. (2011). Layering and degradation of the Rupes Tenuis unit, Mars – a structural analysis south of Chasma Boreale. *Geological Society, London, Special Publications 2011*, v. 356, p. 257-279

Roush, T.L., Marzo, G.A., Fonti, S., Orofino, V., Blanco, A., **Gross, C.**, Wendt, L. (2011). Assessing Spectral Evidence of Aqueous Activity in Two Putative Martian Paleolakes. *Icarus, Volume 214, Pages 240-245*

Wendt, L., **Gross, C.**, Kneissl, T., Sowe, M., Combe, J.-P., LeDeit, L., McGuire, P.C., Neukum, G. (2011). Sulfates and iron oxides in Ophir Chasma, Mars, based on OMEGA and CRISM observations. *Icarus, Volume 213, Pages 86-103*

Davila, A., **Gross, C.**, Marzo, G.A., Fairén, A.G., Kneissl, T., McKay, C.P., Dohm, J.M. (2011). A large sedimentary basin in the Terra Sirenum region of the southern highlands of Mars. *Icarus, Volume 212, Pages 579-589*

Foing, B.H., Stoker, C., Zavaleta, J., Ehrenfreund, P., Thiel, C., Sarrazin, P., Blake, D., Page, J., Pletser, V., Hendrikse, J., Direito, S., Kotler, M., Martins, Z., Orzechowska, G., **Gross, C.**, Wendt, L., Clarke, J., Borst, A.M., Peters, S.T.M., Wilhelm, M.-B., Davies, G.R. and ILEWG EuroGeoMars 2009 Team. (2011). Field astrobiology research in Moon–Mars analogue environment: instruments and methods. *International Journal of Astrobiology, Cambridge University Press, doi: 10.1017/S1473550411000036*

Marzo, G.A., Davila, A.F., Tornabene, L.L., Dohm, J.M., Fairén, A.G., **Gross, C.**, Kneissl, T., Bishop, J.L., Roush, T.L. and McKay, C.P. (2010). Evidence for Hesperian impact-induced Hydrothermalism on Mars. *Icarus, Volume 208, Pages 667-683*

McGuire, P.C., **Gross, C.**, Wendt, L., Bonnici, A., Souza-Egipsy, V., Ormö, J., Díaz-Martínez, E., Foing, B.H., Bose, R., Walter, S., Oesker, M., Ontrup, J., Haschke, R. and Ritter, H. (2010). The Cyborg Astrobiologist: testing a novelty detection algorithm on two mobile exploration systems at Rivas Vaciamadrid in Spain and at the Mars Desert Research Station in Utah. *International Journal of Astrobiology, 9: 11-27 Cambridge University Press doi:10.1017/S1473550409990358*

Fairén, A. G., Chevrier, V., Abramov, O., Marzo, G. A., Gavin, P., Davila, A. F., Tornabene, L. L., Bishop, J. L., Roush, T. L., **Gross, C.**, Kneissl, T., Uceda, E., Dohm, J. M., Schulze-Makuch, D., Rodriguez, A., Amils, R., McKay, C. P. (2010). Phyllosilicates in Impact Craters on Mars: Pre- and Post-Impact Genesis. *PNAS – Proceedings of the National Academy of Sciences of the United States of America, Issue 2010-07-06*

Conference Abstracts

Bishop, J. L., Weitz, C. M., Parente, M., **Gross, C.**, Saranathan, A. M., Itho, Y., Meusburger, J. M., Gruendler, M. R. D., Al-Samir, M. (2024). Investigating Sulfate Alteration on the Juventae Chasma Plateau to Reconstruct the Ancient Geochemical History. 55th Lunar and Planetary Science Conference, Abstract # 3040

Bishop, J. L., Gruendler, K. E. W., Parente, M., Saranathan, A. M., **Gross, C.** (2023). Investigating the Diversity of Phyllosilicates and Sulfates at Mawrth Vallis, Mars and the Implications for Changing Environmental Conditions. 55th Annual Meeting of the Division for Planetary Sciences, id. 217.06. Bulletin of the American Astronomical Society, Vol. 55, No. 8 e-id 2023n8i217p06

Gruendler, K. E. W., Bishop, J. L., Parente, M., Saranathan, A. M., **Gross, C.** (2023). Characterization of Moist Environments at Mawrth Vallis, Mars Through Comparison with Volcanic Alteration on the Island of Kauai. *55th Annual Meeting of the Division for Planetary Sciences, id. 212.02. Bulletin of the American Astronomical Society, Vol. 55, No. 8 e-id 2023n8i212p02*

Schreiner, B. P., **Gross, C.**, Jaumann, R., Neesemann, A., Walter, S. H. G. (2023). Virtual Reality: Visualisation of Mars Image Data from HRSC, CTX and HiRISE for Public Outreach and Research. *54th Lunar and Planetary Science Conference, Abstract # 2806*

Gross, C., Munteanu, R. R. C., Walter, S. H. G., Patermann, L., Schreiner, B., Jaumann, R., HRSC/Mars Express Teams. (2023). 20 Years of High Resolution Stereo Camera Image Releases of ESA's Mars Express Mission. *54th Lunar and Planetary Science Conference, Abstract # 1951*

Bishop, J. L., Parente, M., Saranathan, A. M., **Gross, C.**, Itho, Y., Elwood Madden, M. E. (2023). Diverse Phyllosilicate Assemblages in the Mawrth Vallis Channel. *54th Lunar and Planetary Science Conference, Abstract # 1913*

Walter, S. H. G., **Gross, C.**, Neesemann, A., Munteanu, R., Jaumann, R., Postberg, F., Bell, J. (2022). An Interactive Virtual Hiking Map for Jezero Crater, the Mars 2020 Perseverance Rover Landing Site. *European Planetary Science Congress (EPSC), Grenada, Spain, 18-23 September, <https://doi.org/10.5194/epsc2022-32>*

Schreiner, B. P., **Gross, C.**, Neesemann, A., Walter, S. H. G., Postberg, F. (2022). Virtual Reality: Visualisation of Mars HRSC Image Data for Public Outreach and Research. *53rd Lunar and Planetary Science Conference, Abstract #1921*

Gross, C., Al-Samir, M., Bishop, J. L., Poulet, F., Schubert, D., Zabel, P. (2022). Prospecting In-Situ Resources for Future Manned Missions to Mars. *53rd Lunar and Planetary Science Conference, Abstract #1946*

Walter, S. H. G., Neu, D., **Gross, C.**, Neesemann, A., Balthasar, H., Jaumann, R., Postberg, F. (2022). An Interactive Virtual Hiking Map for the Mars 2020 Perseverance Landing Site, Jezero Crater. *53rd Lunar and Planetary Science Conference, Abstract #1921*

Bishop, J. L., Parente, M., Saranathan, A. M., Itho, Y., **Gross, C.** (2021). The Clay Sulfate Transition at Mawrth Vallis and Implications for Changes in the Geochemical Environment and Climate. *AGU Fall Meeting, New Orleans, LA, Abstract P24A-09*

Al-Samir, M., **Gross, C.**, Schubert, D. (2021). A Plausible Formation Model for the Maja Valles Outflow Channel System. *52nd Lunar and Planetary Science Conference, Abstract #1491*

Bishop, J. L., Weitz, C. M., Parente, M., **Gross, C.**, Saranathan, A. M., Itho, Y., Al-Samir, M. (2021). Correlating Sulfates with the Aqueous Geochemical History at Juventae Chasma, Mars. *52nd Lunar and Planetary Science Conference, Abstract #1082*

Gross, C., Balthasar, H., Dumke, A., Neu, D., Schreiner, B., Walter, S., Jaumann, R. (2021). Looking Back to 17 Successful Years of High Resolution Stereo Camera Image Release of ESA's Mars Express Mission. *52nd Lunar and Planetary Science Conference, Abstract #1480*

Neesemann, A., Walter, S. H. G., **Gross, C.**, Jaumann, R., Gwinner, K., Michael, G. G., Schreiner, B. P., Zuschneid, W., Neu, D., Balthasar, H., Raberhge, C., Riedel, C., Kersten, E., Tirsch, D. (2021). High-Precision Topographic Map of the Mars 2020 Landing Site as Part of the MC-13E Syrtis Majoe Quadrangle Digital Terrain Model. *52nd Lunar and Planetary Science Conference, Abstract #2509*

Wilk, K. A., Bishop, J. L., Itho, Y., Saranathan, A. M., Parente, M., Weitz, C. M., Flahaut, J., **Gross, C.**, Seelos, F. (2021). Characterizing Unusual Deposits at Ius Chasma, Mars. *52nd Lunar and Planetary Science Conference, Abstract #1322*

Gross, C., Bishop, J. L. (2020). Tracking Layered Deposits Across the Dichotomy Boundary into the Northern Lowlands of Mars. *51th Lunar and Planetary Science Conference, Abstract # 2278*

Ehrlich, J., **Gross, C.** (2020). Morphological Mapping of Becquerel Crater, Mars and Comparison of Light-Toned Layered Deposit Formation Theories. *51th Lunar and Planetary Science Conference, Abstract # 1988*

Bishop, J. L., **Gross, C.**, Danielsen, J., Perrin, S., Miura, J., Usabal, G., Sessa, A., Wray, J. (2019). Multiple Mineral Horizons at Mawrth Vallis, Mars, Represent Changing Environmental Conditions. *EPSC-DPS Joint Meeting, id. EPSC-DPS2019-1175*

Weitz, C. M., Bishop, J. L., Flahaut, J., **Gross, C.**, Saranathan, A. M., Itoh, Y., and Parente, M. (2019). Evidence for Hesperian Acidic Alteration in Ius Chasma. *Ninth International Conference on Mars, LPI Contribution # 2089, id.6240*

Bishop, J. L., Weitz, C. M., Flahaut, J., **Gross, C.**, Saranathan, A. M., Danielsen, J. M., Usabal, G. S., Miura, J. K., Itoh, Y., and Parente, M. (2019). Salty Residues on Mars Mark Changing Geochemical Environments. *Ninth International Conference on Mars, LPI Contribution # 2089, id.6148*

Gross, C., Bishop, J. L., Carter, J., Horgan, B., Loizeau, D., Orgel, C., and Poulet, F. (2019). Investigating Fractured Phyllosilicate-Rich Deposits at Mawrth-Vallis, Mars. *50th Lunar and Planetary Science Conference, Abstract # 1517*

Musiol, S., Balthasar, H., Dumke, A., **Gross, C.**, Michael, G., Neu, D., Schreiner, B., and Jaumann, R. (2019). 15 Years High Resolution Stereo Camera Observations with ESA's Mars Express Mission. *50th Lunar and Planetary Science Conference, Abstract # 1537*

Schreiner, B. P., Neu, D., Musiol, S., Balthasar, H., Dumke, A., **Gross, C.**, and Michael, G. G. (2019). HRSC on Mars Express - Image Mosaicking for Public Outreach: Korolev Crater. *50th Lunar and Planetary Science Conference, Abstract # 2735*

Michael, G. G., Walter, S. H., Zuschneid, W., **Gross, C.**, Schreiner, B., and Gwinner, K. (2019). Brightness Equalization for Mars Images as Applied to HRSC Image Mosaics. *4th Planetary Data Workshop - Flagstaff, Arizona. LPI Contribution # 2151, id.7058*

Bishop, J. L., Wray, J. J., Sessa, A. M., Danielson, J. M., Ehlmann, B. L., Murchie, S. L., Horgan, B., **Gross, C.**, Parente, M., and Seelos, F. P. (2018). Evidence of Salty Residues in Layered Outcrops at Mawrth Vallis and Implications for Evaporative Environments on Early Mars. *49th Lunar and Planetary Science Conference, Abstract # 1117*

Gross, C., Orgel, C., Poulet, F., Carter, J., Horgan, B., and Bishop, J. L. (2018). ExoMars 2020 — High Priority Science Targets Within the Mawrth Vallis Candidate Landing Site. *49th Lunar and Planetary Science Conference, Abstract # 1405*

Hiesinger, H., Bernhardt, H., Reiss, D., Tirsch, D., Jaumann, R., Hauber, E., Head, J. W., Michael, G., Williams, D. A., Bishop, J. L., Poulet, F., Muller, J.-P., **Gross, C.**, Gwinner, K., Adeli, S., and Fanara, L. (2018). Absolute Model Ages and Stratigraphy of Neukum Crater Geologic Units, *49th Lunar and Planetary Science Conference, Abstract # 2001*

Musiol, S., Balthasar, H., Dumke, A., **Gross, C.**, Neu, D., Schreiner, B., and Jaumann, R. (2018). 15 years of fascinating Mars press images and movies from the High Resolution Stereo Camera on

Mars Express, prepared at Freie Universität Berlin. *European Planetary Science Congress, EPSC2018-329*

Hiesinger, H., Bernhardt, H., Reiss, D., Tirsch, D., Jaumann, R., Hauber, E., Head, J. W., Michael, G., Williams, D. A., Bishop, J. L., Poulet, F., Muller, J. P., **Gross, C.**, Gwinner, K., Adeli, S., and Fanara, L., Neukum Crater in Noachis Terra, Mars (2018). Absolute Model Ages and Stratigraphy. *Proceedings EGU General Assembly Conference, Volume 20, p.13328*

Tirsch, D., Jaumann, R., Adeli, S., Bernhardt, H., Bishop, J. L., Fanara, L., **Gross, C.**, Gwinner, K., Hauber, E., Head, J. W., Hiesinger, H., Michael, G., Muller, J.-P., Poulet, F., Reiss, D., Williams, D. A., Pinet, P., Foing, B., and McCord, T. (2018). The Complex Geomorphology of Neukum Crater on Mars. *Proceedings EGU General Assembly Conference, Volume 20, p. 1959*

Bishop, J. L., Fairén, A. G., Michalski, J. R., Gago-Duport, L., Baker, L. L., Velbel, M. A., **Gross, C.**, and Rampe, E. B. (2017). Diverse Early Aqueous Environments and Climate on Mars Revealed by the Phyllosilicate Record. *Proceedings Fourth International Conference on Early Mars: Geologic, Hydrologic, and Climatic Evolution and the Implications for Life, Volume 2014, Abstract # 3030*

Bishop, J. L., Baker, L., Fairén, A. G., Michalski, J. R., Gago-Duport, L., Velbel, M. A., Gross, C., and Rampe, E. B. (2017). Implications of Martian Phyllosilicate Formation Conditions to the Early Climate on Mars. *AGU Fall Meeting Abstracts, Abstract # P31F-04.*

Gross, C., Carter, J., Poulet, F., Loizeau, D., Bishop, J.L., Horgan, B., Michalski, J. (2017). Mawrth Vallis – An auspicious destination for the ESA and NASA 2020 landers. *48th Lunar and Planetary Science Conference, Abstract # 2194*

Bishop, J.L., Baker, L.L., Fairén, A.G., **Gross, C.**, Velbel, M.A., Rampe, E.B., Michalski, J.R. (2017). Unraveling the diversity of early aqueous environments and climate on Mars through the phyllosilicate record. *48th Lunar and Planetary Science Conference, Abstract # 1804*

Bishop, J.L., **Gross, C.**, Tirsch, D., Tornabene, L.L., Carter, J., Erkeling, G. (2016). Impacts on Mars: Excavation and/or Hydrothermal Alteration. *79th Annual Meeting of the Meteoritical Society, Abstract # 6462*

Gross, C., Poulet, F., Michalski, J., Horgan, B., Bishop, J.L. (2016). Mawrth Vallis – Proposed Landing Site for EXOMARS 2018/2020. *47th Lunar and Planetary Science Conference, Abstract # 1421*

Weitz, C.M., Bishop, J.L., Tornabene, L.L., Mest, S.C., Grant, J.A., **Gross, C.**, Rodriguez, J.A.P. (2016). Disrupted Hydrated Deposits in Southeastern Noctis Labyrinthus: Possible Displaced Subsurface Materials From Oudemans Crater? *47th Lunar and Planetary Science Conference, Abstract # 1610*

McGuire, P.C., Audouard, J., Dunker, **Gross, C.**, Kneissl, T., Michael, G., Ody, A., Poulet, F., Schreiner, B., van Gasselt, S., Walter, S.H.G., Wendt, L., Zuschneid, W. (2016). True- and False-Color HRSC+OMEGA Image Mosaics of Mars. *47th Lunar and Planetary Science Conference, Abstract # 1031*

Bishop, J.L., **Gross, C.**, Rampe, E.B., Wray, J.J., Parente, M., Horgan, B., Loizeau, D., Viviano-Beck, C.E., Clark, R.N., Seelos, F.P., Ehlmann, B.L., Murchie, S.L. (2016). Mineralogy of Layered Outcrops at Mawrth Vallis and Implications for Early Aqueous Geochemistry on Mars. *47th Lunar and Planetary Science Conference, Abstract # 1332*

Gross, C., Bishop, J. L., Maturilli, A., D'Amore, M., Helbert, J. (2015). A Hydrothermally Altered, Mn-incrusted Sediment as an Analogue for Martian Deposits? *AGU Fall Meeting, San Francisco, Calif., Abstract P31A-2039*

Horgan, B., Loizeau, D., Poulet, F., Bishop, J., Noe Dobrea, E. Z., Farrand, W., Michalski, J., **Gross, C.**, Kleinhenz, J., Linne, D. (2015). Habitable Noachian Environments and Abundant Resources in the Mawrth Vallis Exploration Zone. *First Landing Site/Exploration Zone Workshop for Human Missions to the Surface of Mars, 27-30 October 2015, Houston, Texas. LPI Contribution No. 1879, p.1009*

Bishop, J. L., **Gross, C.**, Parente, M., Wray, J., Horgan, B., Viviano-Beck, C., Seelos, F. (2015). The transition from neutral to acidic alteration at Mawrth Vallis as observed from the mineralogical record. *2015 GSA Annual Meeting, Baltimore, Maryland, 1-4 November, Abstract # 260648*

Bishop, J. L., **Gross, C.** (2015). Bentonite composition and stratigraphy at Mawrth Vallis, Mars. *Euroclay and The Clay Minerals Society 52nd Annual Meeting, Edinburgh, Scotland, 5-7 July, Abstract # 314*

Michael, G., Walter, S., McGuire, P., Kneissl, T., van Gasselt, S., **Gross, C.**, Schreiner, B., Zuschneid, W. (2015). Systematic Processing of Mars Express HRSC Image Mosaic Quadrangles. *European Geosciences Union General Assembly, Vienna; Geophysical Research Abstracts, Vol. 17, EGU2015-6956*

Gross, C., Carter, J., Tornabene, L. L., Sowe, M., Bishop, J. L. (2015). Stratified Phyllosilicate-bearing Deposits within Impact Craters in the Northern Plains of Mars. *46th Lunar and Planetary Science Conference, Abstract # 1817*

Bishop, J. L., **Gross, C.**, Wray, J. J., Horgan, B., Viviano-Beck, C. E., Seelos, F. P. (2015). Acid Alteration at Mawrth Vallis between the older Fe/Mg-rich Clays and the younger Al/Si-rich Clays. *46th Lunar and Planetary Science Conference, Abstract # 1455*

Michael, G., Walter, S., McGuire, P., Kneissl, T., van Gasselt, S., **Gross, C.**, Schreiner, B., Zuschneid, W. (2015). Systematic Processing of Mars Express HRSC Image Mosaic Quadrangles. *46th Lunar and Planetary Science Conference, Abstract # 2387*

McGuire, P.C., Walter, S.H.G., van Gasselt, S., Dumke, A., Dunker, T., **Gross, C.**, Wendt, L., Audouard, J., Ody A., Poulet, F. (2015). Color HRSC+OMEGA Image Mosaics of Mars. *46th Lunar and Planetary Science Conference, Abstract # 1404*

Gross, C., Carter, J., Tornabene, L. L., Sowe, M., Bishop, J. L. (2014). Excavation of Stratified Phyllosilicate-Bearing Rocks in the Northern Plains of Mars. *AGU Fall Meeting, San Francisco, Calif., Abstract P41A-3884*

Bishop, J. L., Flahaut, J., Weitz, C. M., **Gross, C.**, Parente, Horgan, B. H. N. (2014). Acidic Alteration Environments on Mars and Implications for Habitability. *AGU Fall Meeting, San Francisco, Calif., Abstract P41A-3885*

Bishop, J. L., Horgan, B., Wray, J. J., Loizeau, D., **Gross, C.**, McGuire, P. C., Parente, M., Seelos, F., Viviano-Beck, C. and Murchie, S. L. (2014). Composition and Stratigraphy of Acidic Components at Mawrth Vallis, Mars. *European Planetary Science Congress (EPSC), Cascais, Portugal, 7-12 September, Abstract # 694*

McGuire, P. C., Walter, S. H. G., van Gasselt, S., Dumke, A., Dunker, T., **Gross, C.**, Michael, G., Wendt, L., Audouard, J., Ody, A. and Poulet, F. (2014). Global Hybrid HRSC+OMEGA Image

Mosaics of Mars. *European Planetary Science Congress (EPSC), Cascais, Portugal, 7-12 September, Abstract # 414*

Gross, C., Carter, J., Sowe, M., Bishop, J. L. (2014). Excavation of Altered Sediments in the Northern Plains of Mars. *European Planetary Science Congress (EPSC), Cascais, Portugal, 7-12 September, Abstract # 365*

Gross, C., Carter, J., Sowe, M., Bishop, J. L. (2014). Uplifted Sediments in the Northern Plains of Mars? *Eighth International Conference on Mars, July 14-18 2014, Pasadena, California. Abstract # 1116*

McGuire, P. C., Walter, S. H. G., van Gasselt, S., Dumke, A., Dunker, T., **Gross, C.**, Michael, G., Wendt, L., Audouard, J., Ody, A. and Poulet, F. (2014). Global HRSC Image Mosaics of Mars: Dodging for High-Pass Filtering, Combined with Low-Pass-Filtered OMEGA Mosaics. *Eighth International Conference on Mars, July 14-18 2014, Pasadena, California. Abstract # 1118*

Gross, C., Noel, A., Bishop, J.L., Al-Samir, M., J. Flahaut, McGuire, P.C., Seelos, F., Weitz, C., Murchie, S. (2014). Investigating the Mineralogy, Morphology and Stratigraphy of Mound B in Juventae Chasma, Mars using Multiple Datasets. *45th Lunar and Planetary Science Conference, Abstract # 1918*

McGuire, P.C., Walter, S.H.G., van Gasselt, S., Dumke, A., **Gross, C.**, Michael, G., Wendt, L. (2014). Towards automated/global color mosaicking of MEx/HRSC images of Mars. *45th Lunar and Planetary Science Conference, Abstract # 1899*

Cull, S., McGuire, P.C., **Gross, C.**, Dumke, A. (2013). Stratigraphic mapping of hydrated phases in Western Ius Chasma, Mars. *AGU Fall Meeting, San Francisco, Calif., Abstract P23F-1844*

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