

**PEER REVIEWED PUBLICATIONS (Total: 45; H-index = 22)**

First authored publications (14)

- P. Gabrielli**, C. Barbante, J.M.C. Plane, A. Varga, S. Hong, G. Cozzi, V. Gaspari, F. Planchon, W. Cairns, C. Ferrari, P. Crutzen, P. Cescon, C.F. Boutron, Meteoric smoke fallout over the Holocene epoch revealed by iridium and platinum in Greenland ice, *Nature* 432(2004) 1011-1014.
- P. Gabrielli**, A. Varga, C. Barbante, C.F. Boutron, G. Cozzi, V. Gaspari, F. Planchon, W. Cairns, S. Hong, C. Ferrari, G. Capodaglio, Determination of Ir and Pt down to the sub-femtogram per gram level in polar ice by ICP-SFMS using preconcentration and a desolvation system, *J. Anal. At. Spectrom.* 19(2004) 831-837.
- P. Gabrielli**, C. Barbante, C.F. Boutron, G. Cozzi, V. Gaspari, F. Planchon, C. Ferrari, P. Cescon, Variations in atmospheric trace elements in Dome C (East Antarctica) ice over the last two climatic cycles, *Atmos. Environ.* 39(2005) 6420-6429.
- P. Gabrielli**, F. Planchon, S. Hong, K. Lee, S.D. Hur, C. Barbante, C. Ferrari, J.R. Petit, V.Y. Lipenkov, P. Cescon, C.F. Boutron, Trace elements in Vostok Antarctic ice during the last four climatic cycles, *Earth Planet. Sci. Lett.* 234/1-2(2005) 249-259.
- P. Gabrielli**, C. Barbante, C. Turetta, A. Marteel, C.F. Boutron, G. Cozzi, W. Cairns, C. Ferrari, P. Cescon, Direct Determination of Rare Earth Elements at the Sub Picogram per Gram Level in Antarctic Ice by ICP-SFMS Using a Desolvation System, *Anal. Chem.* 78(2006) 1883-1889.
- P. Gabrielli**, J.M.C. Plane, C.F. Boutron, S. Hong, G. Cozzi, P. Cescon, C. Ferrari, P. Crutzen, J.R. Petit, V.Y. Lipenkov, C. Barbante, A climatic control on the accretion of meteoric and super-chondritic iridium-platinum to the Antarctic ice cap, *Earth Planet. Sci. Lett.*, 250 (2006), 459-469.
- P. Gabrielli**, G. Cozzi, S. Torcini, P. Cescon, C. Barbante, Trace elements in winter snow of the Dolomites (Italy): a statistical study of natural and anthropogenic contributions, *Chemosphere* (2008), 72, 1504 - 1509.
- P. Gabrielli**, C. Barbante, J.M.C. Plane, C.F. Boutron, J.L. Jaffrezo, T.A. Mather, B. Stenni, V. Gaspari, G. Cozzi, C. Ferrari, P. Cescon, Siderophile metal fallout to Greenland from the 1991 winter eruption of Hekla (Iceland) and during the global atmospheric perturbation of Pinatubo, *Chemical Geology* (2008), 255, 78 - 86.
- P. Gabrielli**, F. Planchon, C. Barbante, C.F. Boutron, J.R. Petit, S. Bulat, S. Hong, G. Cozzi, P. Cescon, Ultra-low Rare Earth Element content in accreted ice from sub-glacial Lake Vostok, Antarctica, *Geochim. Cosmochim. Acta* (2009), 73, 20, 5959-5974.
- P. Gabrielli**, A. Wegner, J.R. Petit, B. Delmonte, P. De Dekker, V. Gaspari, H. Fisher, U. Ruth, M. Kriews, C.F. Boutron, P. Cescon, C. Barbante, A major glacial-interglacial change in aeolian dust composition as inferred from Rare Earth Elements in Antarctic ice, *Quat. Sci. Rev.* (2010), 29, 265-273.
- P. Gabrielli**, L. Carturan, J. Gabrieli, R. Dinale, K. Krainer, H. Hausmann, M. Davis, V. S. Zagorodnov, R. Seppi, C. Barbante, G. Dalla Fontana, L.G. Thompson, Atmospheric warming threatens the untapped glacial archive of Ortles mountain, South Tyrol, *J. Glaciol.* (2010), Vol. 56, No. 199, 843-853

- P. Gabrielli**, Barbante, C., Carturan, L., Cozzi, G., Dalla Fontana, G., Dinale, R., Draga, G., Gabrieli, J., Kehrwald, N., Mair, V., Mikhalenko, V.N., Piffer, G., Rinaldi, M., Seppi, R., Spolaor, A., Thompson, L.G., Tonidandel, D.,. Discovery of cold ice in a new drilling site in the Eastern European Alps. *Geogr. Fis. Dinam. Quat.* (2012), 35, 101-105.
- P. Gabrielli**, Hardy, D. Kehrwald N., Cozzi G., Turetta, C., Barbante C. and Thompson L. Deglaciated areas of Kilimanjaro as a source of volcanic trace elements deposited on the ice cap during the late Holocene, Invited Review (2014) *Quat. Sci. Rev.* 93, 1-10.
- P. Gabrielli** and P. Vallelonga, Contaminant records in ice cores, in: (Eds), *Environmental Contaminants: Using natural archives to track sources and long-term trends of pollution*, Springer, 2015

Co-authored per reviewed publications (31, \*my postdoc)

- F. Planchon, **P. Gabrielli**, A. Dommergue, P.A. Gauchard, C. Barbante, C.F. Boutron, W. Cairns, G. Capodaglio, P. Cescon, G. Cozzi, C. Ferrari, S.A. Nagorsky, A. Varga, E.W. Wolff, Direct determination of mercury at the sub-picogram per gram levels in polar snow and ice by ICP-SFMS, *J. Anal. At. Spectrom.* 19(2004) 823-830.
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- S. Hong, C.F. Boutron, **P. Gabrielli**, C. Barbante, C. Ferrari, J.R. Petit, K. Lee, V.Y. Lipenkov, Past natural changes in Cu, Zn and Cd in Vostok Antarctic ice dated back to the beginning of the next to last ice age, *Geophys. Res. Lett.* 31(2004) doi:10.1029/2004GL021075.
- S. Hong, C.F. Boutron, C. Barbante, S. Do Hur, K. Lee, **P. Gabrielli**, G. Capodaglio, C. Ferrari, J.R. Petit, V.Y. Lipenkov, Glacial-interglacial changes in the occurrence of Pb, Cd, Cu and Zn in Vostok Antarctic ice from 240 to 410 kyr BP, *Jour. Env. Monitor.* 7(2005) 1326-1331.
- P. Vallelonga, **P. Gabrielli**, K. Rosman, C. Barbante, C.F. Boutron, A 220 ky record of Pb isotopes at Dome C Antarctica from analyses of the EPICA ice core, *Geophys. Res. Lett.* 32(2005) doi:10.1029/2004GL021449.
- V. Gaspari, C. Barbante, G. Cozzi, P. Cescon, C.F. Boutron, **P. Gabrielli**, G. Capodaglio, C. Ferrari, J.R. Petit, B. Delmonte, Atmospheric iron over the last deglaciation: Climatic implications, *Geophys. Res. Lett.* 33(2006) doi:10.1029/2005GL024352.
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- M.L. Siggaard-Andersen, **P. Gabrielli**, J.P. Steffensen, T. Stromfeldt, C. Barbante, C.F. Boutron, H. Fisher, H. Miller, Soluble and insoluble chemistry of lithium in the EPICA Dome C ice core, *Earth Planet. Sci. Lett.*, 258 (2007), 32-43.
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- S.D. Hur, X. Cunde, S. Hong, C. Barbante, **P. Gabrielli**, K. Lee, C.F. Boutron, Yan Ming Seasonal patterns of heavy metal deposition to the snow on Lambert Glacier basin, East Antarctica, *Atmos. Environ.* (2007) 41, 8567-8578.
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- A. Marteel, C.F. Boutron, C. Barbante, **P. Gabrielli**, G. Cozzi, C. Ferrari, V. Gaspari, P. Cescon, A. Dommergue, K. Rosman, S. Hong, S. Do Hur, Changes in atmospheric heavy metals and metalloids in Dome C (East Antarctica) ice back to 671 ky BP (Marine Isotopic Stages 16.2), *Earth Planet. Sci. Lett.*(2008), 272, 579-590.
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- A. Marteel, V. Gaspari, C.F. Boutron, C. Barbante, **P. Gabrielli**, P. Cescon, G. Cozzi, C. Ferrari, A. Dommergue, K. Rosman, S. Hong, S. Do Hur, Climate-related variations in crustal trace elements in Dome C (Antarctica) ice during the past 672 kyr, *Clim. Change* (2009) 92, 191-211.
- P. Jitaru, **P. Gabrielli**, A. Marteel, J.M.C. Plane, F. Planchon, P.A. Gauchard, C. Ferrari, C.F. Boutron, F.C. Adams, S. Hong, P. Cescon, C. Barbante, Atmospheric depletion of mercury over Antarctica during glacial periods, *Nature Geoscience* (2009), 2, 505 - 508.
- P. Vallenga, **P. Gabrielli**, I. Balliana, A. Wegner, B. Delmonte, C. Turetta, F. Vanhaecke, K.J.R. Rosman, S. Hong, C.F. Boutron, P. Cescon, C. Barbante, Lead isotopic compositions in the EPICA Dome C ice core and Southern Hemisphere Potential Source Areas, *Quat. Sci. Rev.*(2010), 29, 247-255.

- J. Gabrieli, Vallelonga P., Cozzi G., **Gabrielli P.**, Gambaro A., Schwikowski M., Sigl M., Decet F., Gaeggeler H. W., Boutron C. F., Cescon P., and Barbante C. Post-17th-Century Changes of European PAHs Emissions Recorded in High-Altitude Alpine Snow and Ice, *Environ. Sci. Technol.* (2010) 44, 3260-3266.
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- Wegner, A., **P. Gabrielli**, D. Wilhelms-Dick, U. Ruth, M. Kriews, P. De Deckker, C. Barbante, G. Cozzi, B. Delmonte and H. Fischer, Change in dust variability in the Atlantic sector of Antarctica at the end of the last deglaciation. *Clim. Past* (2012), 8, 135-147.
- N. Kehrwald, R. Zangrando, **P. Gabrielli**, J.L. Jaffrezo, C. F. Boutron, C. Barbante, A. Gambaro, Levoglucosan as a specific marker of single fire event in Greenland snow, *Tellus B* (2012), 64, 18196, <http://dx.doi.org/10.3402/tellusb.v64i0.18196>.
- L. Carturan, R. Filippi C., R. Seppi, **P. Gabrielli**, Notarnicola, L. Bertoldi, F. Paul, P. Rastner G., F. Cazorzi, R. Dinale, Dalla Fontana, Area and volume loss of the glaciers in the Ortles-Cevedale group (Eastern Italian Alps): controls and imbalance of the remaining glaciers, *The Cryosphere* (2013), 7, 1339-1359.
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- \*C. Uglietti, C., **Gabrielli, P.**, Lutton, A., Olesik, J., Thompson, L., 2014. Large variability of trace element mass fractions determined by ICP-SFMS in ice core samples from worldwide high altitude glaciers *App. Geochem*, 47, 109-121.
- \*C. Uglietti, **Gabrielli, P.**, Cooke, C.A., Vallelonga, P., Thompson, L.G., 2015. Widespread pollution of the South American atmosphere predates the industrial revolution by 240 years. *P. Nat. Sci. Acad.*, 8, 212.
- D. Festi, Kofler, W., Bucher, E., Mair, V., **Gabrielli, P.**, Carturan, L., Oeggel, K., 2015. A novel pollen-based method to detect seasonality in ice cores: a case study from the Ortles Glacier (South Tyrol, Italy). *J. Glaciol.* 61, 229, 815-824, 2015.

## OTHER PUBLICATIONS (7)

- P. Gabrielli**, G. Cozzi, C. Barbante, P. Cescon, “La neve come indicatore della qualità dell'aria nelle Alpi”. Un progetto avviato dall'Università di Venezia, *Neve e Valanghe*, 34, (1998), 16-21.
- G. Cozzi, C.Barbante, **P.Gabrielli**, S.Torcini and P.Cescon, “Neve e contaminazione ambientale”, *Neve e Valanghe*, 39, (2000), 26-33.
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- P. Gabrielli**, Mai piu' neve in Trentino, Editorial *L'Adige*, Italy, November the 10<sup>th</sup> (2007).
- P. Gabrielli**, Ghiacci, sfida allo scioglimento, Editorial, *Il Sole 24 Ore*, Italy, April 29<sup>th</sup> (2012)
- Q.Zhang, Kang, S.C., **Gabrielli, P.**, Loewen, M., Schwikowski, M., Vanishing High Mountain Glacial Archives: Challenges and Perspectives. *Environ. Sci. Technol*, 49, (2015), 9499–9500.