



Publications 2010

Peer-reviewed articles

- Magen C, Chaillou G, Crowe SA, Mucci A, Sundby B, Gao A, Makabe R, Sasaki H (2010) Origin and fate of particulate organic matter in the southern Beaufort Sea – Amundsen Gulf region, Canadian Arctic. *Estuarine, Coastal and Shelf Science* 86: 31-41 (01.10)
- Mondal SK, Zhou MF (2010) Enrichment of PGE through interaction of evolved boninitic magmas with early formed cumulates in a gabbro-breccia zone of the Mesoarchean Nuasahi massif (eastern India). *Mineralium Deposita* 45:69-91. DOI: 10.1007/s00126-009-0264-0. (01.10)
- Karlsbeek F, Frei R (2010) Geochemistry of Precambrian sedimentary rocks used to solve stratigraphical problems: an example from the Neoproterozoic Volta basin, Ghana. *Precambrian Research* 176: 65-76 (01.10)
- Vendrasco MJ, Porter SM, Kouchinsky A, Li G, Fernandez CZ (2010) New data on molluscs and their shell microstructures from the Middle Cambrian Gowers Formation, Australia. *Palaeontology* 53: 97-135. DOI: 10.1111/j.1475-4983.2009.00922.x (01.10)
- Johnston DT, Poulton S, Dehler C, Porter S, Husson J, Canfield DE, Knoll AH (2010) An emerging picture of Neoproterozoic ocean chemistry: Insights from the Chuar Group, Grand Canyon, USA. *Earth and Planetary Science Letters* 290: 64-73 (02.10)
- Srivastava RK, Mondal SK, Balaram V, Gautam GC (2010) PGE geochemistry of low-Ti high-Mg siliceous mafic rocks within the Archean central Indian Bastar craton: implications for magma fractionation. *Mineralogy and Petrology* 98: 329-345. DOI 10.1007/s00710-009-0103-0 (02.10)
- Katsev S, Crowe SA, Mucci A, Sundby B, Nomosatryo S, Haffner GD, Fowle DA (2010) Mixing and its effects on biogeochemistry in the persistently stratified deep, tropical Lake Matano, Indonesia. *Limnology and Oceanography* 55: 763-776 (03.10)
- Kouchinsky, A., Bengtson, S., and Murdock, D.J.E. 2010. A new tannuolinid problematic from the lower Cambrian of the Sukharikha River in northern Siberia. *Acta Palaeontologica Polonica* 55 (2): 321–331(04.10)
- Rosing MT, Bird DK, Sleep NH, Bjerrum CJ (2010) No climate paradox under the faint early Sun. *Nature* 464: 744-749 (04.10)
- Curtis ML, Flowerdew MJ, Riley TR, Whitehouse MJ, Daly JS (2010). Andean sinistral transpression and kinematic partitioning in South Georgia. *Journal of Structural Geology* 32: 464-477 (04.10)
- Canfield DE, Farquhar J, Zerkle AL (2010) High isotope fractionations during sulfate reduction in a low-sulfate euxinic ocean analog. *Geology* 38: 415-418 DOI:10.1130/g30723.1 (05.10)
- Bengtson S (2010) A little Kraken wakes. News & Views. *Nature* 465: 427-428 (05.10)
- Farquhar J, Wu N, Canfield DE, Oduro H (2010) Connections between sulfur cycle evolution, sulfur isotopes, sediments, and base metal sulfide deposits. *Economic Geology* 105: 509-533 (05.10)
- Dahl TW, Anbar AD, Rosing MT, Frei RE, Canfield DE (2010) The behavior of Molybdenum and its isotopes across the chemocline and in the sediments of sulfidic Lake Cadagno, Switzerland. *Geochimica et Cosmochimica Acta* 74: 144-163, DOI: 10.1016/j.gca.2009.09.018. (06.10)
- Dahl TW, Stevenson DJ (2010) Turbulent Mixing of Metal and Silicate during Planet Accretion – and interpretation of the Hf-W chronometer. *Earth and Planetary Science Letters* 295: 177-186 (06.10)

- Moynier F, Yin Q-Z, Irisawa K, Boyet M, Jacobsen B, Rosing MT (2010) A coupled ^{182}W - ^{142}Nd constraint for early Earth differentiation. *PNAS* 107: 10810-10814. DOI:10.1073/pnas.0913605107 (06.10)
- Whitehouse MJ, Kemp AIS (2010) On the difficulty of assigning crustal residence, magmatic protolith and metamorphic ages to Lewisian granulites – constraints from combined in situ U-Pb and Lu-Hf. In: Law, R.D., Butler, R.W.H., Holdsworth, R., Krabbendam, M. and Strachan R. (editors). *Continental Tectonics and Mountain Building: The Legacy of Peach and Horne. Geological Society of London Special Publications* 335: 81-101 (06.10)
- El Albani A, Bengtson S, Canfield DE, Bekker A, Macchiarelli R, Mazurier A, Hammarlund EU, Boulvais P, Dupuis J-J, Fontaine C, Fürsich FT, Gauthier-Lafaye F, Janvier P, Javaux E, Ossa FO, Pierson-Wickmann AC, Riboulleau A, Sardini P, Vachard D, Whitehouse M, Meunier A (2010) Large colonial organisms with coordinated growth in oxygenated environments 2.1 Gyr ago. *Nature* 466: 100-104, DOI: 10.1038/nature09166 (07.10)
- Poulton SW, Fralick PW, Canfield DE (2010) Spatial variability in oceanic redox structure 1.8 billion years ago. *Nature Geoscience* 3: 486-490, DOI: 10.1038/NGE0889 (07.10)
- Saalman K, Mänttari I, Peltonen P, Whitehouse MJ, Grönholm P, Talikka M (2010). Geochronology and structural relationships of mesothermal gold mineralization in the Palaeoproterozoic Jokisivu prospect, southern Finland. *Geological Magazine* 147: 551-569 (07.10)
- Riley TR, Flowerdew MJ, Whitehouse MJ (2010). Middle Jurassic rhyolite volcanism of eastern Graham Land, Antarctic Peninsula: age correlations and stratigraphic relationships. *Geological Magazine*: 147, 581-595 (07.10)
- McAteer CA, Daly JS, Flowerdew MJ, Connelly JN, Housh TB, Whitehouse MJ (2010) Detrital zircon, detrital titanite and igneous clast U-Pb geochronology and basement-cover relationships of the Colonsay Group, SW Scotland: Laurentian provenance and correlation with the Neoproterozoic Dalradian Supergroup. *Precambrian Research* 181: 21-42 (08.10)
- Be'eri-Shlevin Y, Katzir Y, Blichert-Toft J, Kleinhanns IC, Whitehouse MJ (2010). Nd-Sr-Hf-O isotope provinciality in the northernmost Arabian-Nubian Shield: implications for crustal evolution. *Contributions to Mineralogy and Petrology*: 160, 181-201 (08.10)
- Frei KM, Van den Berghe I, Frei R, Mannering U, Lyngstrøm H (2010) Removal of natural organic dyes from wool – implications for ancient textile provenance studies. *Journal of Archaeological Science* 37: 2136-2145 (09.10)
- Siegesmund S, Steenken A, Martino RD, Wemmer K, Lopez de Luchi, MG, Frei R, Presnyakov S, Guereschi A (2010) Time constraints on the tectonic evolution of the eastern Sierras Pampeanas (Central Argentina). *International Journal of Earth Sciences* 99: 1199-1226. DOI: 10.1007/s00531-009-0471-z.
- Polat A, Frei R, Scherstén A, Appel PWU (2010) New age (ca. 2970 Ma), mantle source composition and geodynamic constraints on the Archean Fiskensætt anorthosite complex, SW Greenland. *Chemical Geology* 277: 1-20, DOI: 10.1016/j.chemgeo.2010.06.016 (09.10)
- McAteer C, Daly JS, Flowerdew MJ, Whitehouse MJ, Kirkland CL (2010). A Laurentian provenance for the Dalradian rocks of north Mayo, Ireland and evidence for an original basement-cover contact with the underlying Annagh Gneiss Complex. *Journal of the Geological Society, London*, 167: 1033-1048 (09.10)
- Canfield DE, Glazer AN, Falkowski (2010) The evolution and future of Earth's nitrogen cycle (review). *Science* 330: 192-196 (10.10)
- Dahl TW, Hammarlund E, Anbar AD, Bond DPG, Gill BC, Gordon GW, Knoll AH, Nielsen AT, Schovsbo NH, Canfield DE (2010) Devonian rise of atmospheric oxygen correlated to the radiations of terrestrial plants and large predatory fish. *PNAS* 107: 17911-17915. DOI: 10.1073/pnas.1011287107 (10.10)
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- Maheshwari A, Sial AN, Gaucher C, Bossi J, Bekker A, Ferreira VP, Romano AW (2010) Global nature of the Paleoproterozoic Lomagundi carbon isotope excursion: A review of occurrences in Brazil, India, and Uruguay. *Precambrian Research* 182: 274-299 (10.10)
- Chigolino L, Gaucher C, Sial AN, Bossi J, Ferreira VP, Pimentel MM (2010) Chemostratigraphy of Mesoproterozoic and Neoproterozoic carbonates of the Nico Pérez Terrane, Río de la Plata Craton, Uruguay. *Precambrian Research* 282: 313-336 (10.10)
- Stolper DA, Revsbech NP, Canfield DE (2010) Aerobic growth at low nanomolar oxygen concentrations. *PNAS* 107: 18755-18760 (11.10)
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- Rasmussen CMØ, Ebbestad JOR, Harper DAT (2010) Unravelling a late Ordovician pentameride (Brachiopoda) hotspot from the Boda Limestone, Siljan district, central Sweden. *Journal of the Geological Society of Sweden (GFF)* 132: 133-152 (11.10) check
- Drevnick PE, Muir DCG, Lamborg CH, Horgan MJ, Canfield DE, Boyle JF, Rose NL (2010) Increased accumulation of sulfur in lake sediments of the high Arctic. *Environmental Science & Technology* 44: 8415-8421 (11.10)
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- Dong X-P, Bengtson S, Gostling, NJ, Cunningham JA, Harvey THP, Kouchinsky A, Val'kov AK, Repetski JE, Stampanoni M, Marone F, Donoghue PCJ (2010) The anatomy, taphonomy, taxonomy and systematic affinity of Markuelia: Early Cambrian to early Ordovician Scalifophorans. *Palaeontology* 53: 1291–1314. DOI: 10.1111/j.1475-4983.2010.01006.x (11.10)
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- Cooper FJ, Platt JP, Anczkiewicz R, Whitehouse MJ (2010). Footwall dip of a core complex detachment fault: thermobarometric constraints from the northern Snake Range (Basin and Range, USA). *Journal of Metamorphic Geology* 28, 997-1020 (12.10)