

**Publication list Tais W. Dahl**

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*PUBLICATION STATISTICS*

23 (15 first authored) papers in peer-reviewed journals since 2010 with 1000+ (750+) citations. H-index = 14 (12). Average citations per item: 39 (29). Sources: Google Scholar (Scopus).

Publication list (10 selected publications marked with \*)

*I. ARTICLES IN PEER REVIEWED JOURNALS (A: ARTICLES, B: COMMENTARIES, C: EDITORIALS)*

- A1) \* **Dahl TW**, Anbar A, Gordon G, Rosing M, Frei R, Canfield DE. 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 (2010).
- A2) \* **Dahl TW** and Stevenson DJ. Turbulent Mixing of Metal and Silicate during Planet Accretion – and interpretation of the Hf-W chronometer. *Earth and Planetary Science Letters* 295 pp. 177-186 (2010)
- A3) \* **Dahl TW**, Hammarlund EH, Anbar AD, Bond DPG, Gill BC, Gordon GW, Knoll AH, Nielsen AT, Schovsbo NH, Canfield DE 2010. A Devonian rise of atmospheric oxygen correlated to the radiations of terrestrial plants and predatory fish. *Proceedings of the National Academy of Sciences* 107, 17911-17915 (2010).
- A4) **Dahl TW**, Clausen AU, Hansen PB, The human impact on natural rock reserves using basalt, anorthosite, and carbonates as raw materials in insulation products, *International Geology Review* 53, 894 - 904 (2011)  
Consultancy work for Rockwool International A/S.
- B1) **Dahl TW** and Hammarlund EH, Anbar AD, Bond DPG, Gill BC, Gordon GW, Knoll AH, Nielsen AT, Canfield DE. Reply to Butterfield: The Devonian radiation of large predatory fish coincided with elevated atmospheric oxygen levels *Proceedings of the National Academy of Sciences* 108, 9, E29-E29 (2011).
- A5) **Dahl TW**, Hammarlund E, Do large predatory fish track ocean oxygenation? *Communicative and Integrative Biology*. 4:1, 1-3 Jan/Feb (2011).  
Journal not registered with WoS (11).
- A6) **Dahl TW**, Canfield DE, Rosing MT, Frei RE., Gordon GW, Knoll A, Anbar AD, Molybdenum evidence for expansive sulfidic water masses in 750 Ma oceans, *Earth and Planetary Science Letters* 311, 264-274 (2011).
- A7) Hammarlund EU, **Dahl TW**, Harper DAT, Bond DPG, Nielsen AT, Bjerrum CJ, Schovsbo NH, Schönlaub HP, Zalasiewicz JA, Canfield, D. E., A sulfidic driver for the end-Ordovician mass extinction. *Earth and Planetary Science Letters* 331-332, 128-139 (2012).
- A8) \* **Dahl TW**, Chappaz A, Lyons T, Fitts J, Molybdenum reduction in a sulfidic lake: Evidence from X-Ray Absorption Fine-Structure Spectroscopy and implications for the Mo paleoproxy. *Geochimica et Cosmochimica Acta* 103: 213–231 (2013).
- A9) Balslev-Clausen D, **Dahl TW**, Saad N, Rosing MT. Precise  $\delta^{13}\text{C}$  analyses of rock samples using Continuous Flow Cavity Ring Down Spectroscopy (CF-CRDS). *J. Anal. At. Spectrom.* 28(4): 516–523 (2013)
- A10) Wirth SB, Gilli A, Niemann H, **Dahl TW**, Ravasi D, Lehmann MF, Peduzzi R, Peduzzi S, Tonolla M, Anselmetti FS, Combining sedimentological, trace metal (Mn, Mo) and molecular evidence for reconstructing past water-column redox conditions: The example of meromictic Lake Cadagno (Swiss Alps). *Geochimica et Cosmochimica Acta* 120: 220–238 (2013)

- A11) \* **Dahl TW**, Ruhl M, Hammarlund EU, Canfield DE, Rosing MT, Bjerrum CJ. Tracing euxinia by molybdenum concentrations in sediments using handheld x-ray fluorescence spectroscopy (HH-XRF). *Chemical Geology* 360–361, 241–251 (2013).
- A12) Overballe-Petersen S, Harms K, Orlando LAA, Mayar JVM, Rasmussen S, **Dahl TW**, Rosing MT, Poole AM, Sicheritz-Ponten T, Brunak S, Inselmann S, de Vries J, Wackernagel W, Pybus O, Nielsen R, Johnsen PJ, Nielsen KM, Willerslev E. Bacterial natural transformation by highly fragmented and damaged DNA. *Proceedings of the National Academy of Sciences* 110, 19860–19865 (2013).
- A13) \* **Dahl TW**, Boyle RA, Canfield DE, Connelly JN, Gill BC, Lenton TM, Bizzarro M. Uranium isotopes distinguish two geochemically distinct stages during the later Cambrian SPICE event. *Earth and Planetary Science Letters* 401, 313–326 (2014).
- A14) \* Boyle RA, **Dahl TW**, Dale A, Shields-Zhou GA, Zhu M, Brasier MD, Canfield DE, Lenton TM. Stabilization of the coupled oxygen and phosphorus cycles by the evolution of bioturbation. *Nature-Geoscience* 7, 671–676 (2014).
- B2) Zhang S, Wang X, Wang H, Bjerrum CJ, Hammarlund EU, **Dahl TW**, Canfield DE. Reply to Planavsky et al.: Strong evidence for high atmospheric oxygen levels 1,400 million years ago. *Proc Natl Acad Sci USA* 113, E2552–2553 (2016).
- C1) **Dahl TW**. Identifying remnants of early Earth. *Science* 352, 768–769 (2016).
- A15) \* Lenton T, **Dahl TW**, Daines S, Mills B, Ozaki K, Saltzman MR, Porada P. Earliest land plants created modern levels of atmospheric oxygen. *Proc Natl Acad Sci* 113, 9704–9 (2016)
- A16) \* **Dahl TW**, Chappaz A, Hoek J, McKenzie C, Svane S, Canfield DE. Evidence of molybdenum interaction with particulate organic matter under sulfidic conditions. *Geobiology*, 1–13.
- A17) Kendall B†, **Dahl TW**†, Anbar AD. Good Golly, Why Moly? The Stable Isotope Geochemistry of Molybdenum. *Reviews in Mineralogy and Geochemistry* 82, 683–732 (2017)
- † shared first-authorship
- A18) **Dahl TW** and Wirth S. Molybdenum isotope fractionation in a sulfidic lake – testing ways to discern isotope fractionation processes in euxinic sediments *Chem. Geol* 460, 84–92. (2017)
- A19) \***Dahl TW**, Connelly JN, Kouchinsky A, Gill BC, Månsson SF, Bizzarro M. Reorganization of Earth's biogeochemical cycles briefly oxygenated the oceans 520 Myr ago. *Geochemical Perspectives Letters* 3, 210–220 (2017).
- A20) Boyle RA, **Dahl TW**, Bjerrum CJ, Canfield DE. Bioturbation and directionality in Earth's carbon isotope record across the Neoproterozoic–Cambrian transition. *Geobiology*, 2018, 1–27.
- A21) Scheller EL, Dickson A, Canfield DE, Korte C, Kristiansen KK, **Dahl TW**. Ocean redox conditions between the Snowballs – geochemical constraints from Arena Formation, East Greenland. *Precambrian Research*, available online Dec 2017.

*Ib. Manuscripts in review or submission stage:*

Gill B, **Dahl TW**, Hammarlund E, Young S, Gordon GW, Canfield DE, Anbar AD, Lyons T. Molybdenum isotope evidence for a reducing deep ocean during the Cambrian and implications for the evolution of metazoa after the Cambrian explosion (In prep.)

**Dahl TW**, Connelly JN, Li D, Kouchinsky A, Gill BC, Bizzarro M. Oxygen and nutrient availability as triggers for the establishment of animal ecosystems on Earth (In prep).

**Dahl TW**, Rasmussen BW, Siggard-Andersen M-L, Schovsbo N, Kjær K, Nielsen AT. Brief detoxification events in the Cambrian ocean allowed animals to invade (In prep).

2. *OTHER PUBLICATIONS (TEACHING MATERIAL, BOOKS, NEWSPAPERS, ETC.)*

- T1) **Dahl TW**, Leer KL, Pagh M Planetkort. Geografforlaget ISBN: 978-87-7702-522-8 (2007)
- T2) Jensen F, **Dahl TW**, Leer KL, Pagh M. Planetkort lærervejledning. Geografforlaget (2008)
- T3) **Dahl TW**, Leer KL, Pagh M. Planetkort 2, Forlaget Meloni. ISBN 978-87-92505-57-6 (2011)
- T4) **Dahl TW**, Kock B, + scientific playground team PlanetCards for Apple iPhone/iPod (2012).
- T5) Jensen F, **Dahl TW**, Leer KL, T. Meloni. Lost in Space. Web-based science teaching for primary school (in press).
- T6) Rosing et al. Nordøstgrønland Ekspeditionen Ehrhorn Hummerston, Denmark (2011)
- T7) Løkken M. Nysgjerrig på... Havdypet, Manschou AS, Bergen, Norway (2015).
- T8) Lundby A, Gerken M, Quist P, Bille M, **Dahl TW**. *Flere kvinder giver fair play*. Weekendavisen May 29, 2015
- T9) Lundby A, Gerken M, Jess T, **Dahl TW**. *Hvordan når kvinderne toppen*. Berlingske Tidende Nov 5, 2013
- T10) **Dahl TW**. The origin of O<sub>2</sub> on Earth, in: *Origins Eds. D. Harper & O. Seeberg*, Dunedin Academic Press (In press).
- T11) Jørgensen UG, Buchhave LA, **Dahl TW**. *Exoplaneter – det næste skridt: Hvordan ser atmosfærerne ud?* KVANT, nr. 1 (2017).
- T12) **Dahl TW** & Overballe-Petersen S. Mikrobekort. Videnskabsklubben.dk (2017)
- T13) **Dahl TW**, Leer KL, Planetkort. Scientific Playground (2017) EAN-13: 5700002085214
- T14) **Dahl TW**, Leer KL, PlanetCards. Scientific Playground (2017) EAN-13: 5700002085221
- T15) Overballe-Petersen S, Kelager A, **Dahl TW**. Mikrobernes Verden (2017) undervisningsprogram for Videnskabsklubben.
- T16) **Dahl TW**. *Mikrobekort* for Videnskabsklubben.

3. *PRESS RELEASES HATCHED FROM MY RESEARCH*

- P1) *Humble moss helped create our oxygen-rich atmosphere*, 2016 (PNAS)
- P2) *Burrowing animals – key to stabilizing Earth's oxygen* 2014 (Nature-Geo).
- P3) *Poisonous oceans delayed animal evolution*, 2011 (EPSL)
- P4) *Oxygenation by land plants kickstarted evolutionary drama*, 2010 (PNAS)
- P5) *Earth and Moon formed later than previously thought*, 2010 (EPSL)