

Robert A. Creaser, Ph.D, FRSC

Awards

2016	Canada Research Chair (Tier I) in Isotope Geochemistry
2009	Canada Research Chair (Tier I) in Isotope Geochemistry
2008	Fellow of the Royal Society of Canada
2007	Distinguished Fellow Award, Geological Association of Canada
2007	Fellow, Society of Economic Geologists
2002	McCalla Professorship (University of Alberta)
1998	Past Presidents' Medal (WW Hutchison Medal), Geological Association of Canada
1997	Faculty of Science Research Award (University of Alberta)

Publications

Refereed Journal Publications:

- [278] JS Toma, RA Creaser. "Did subducted graphite fertilize the Franciscan mantle with radiogenic Os?". *Geology* (in press), accepted 14Aug2023
- [277] Archibald, Murphy and Creaser. "The genetic relationship between coeval Ediacaran mafic and granitoid plutons in the Antigonish Highlands, Nova Scotia". In *GSL special volume*, accepted 24April2023
- [276] BJC Neil, DB Tersmette, T Chacko, LM Heaman, BA Kjarsgaard, E Martel, RA Creaser, DG Pearson, RA Stern, SA Dufrane, Y Luo. "Evidence for a giant juvenile 32.-3.1 Ga terrane in the Rae Craton, Canada. *Geology* (in press).
- [275] KL Rasmussen, H Falck, V Elongo, J Reimink, Y Luo, DG Pearson, L Ootes, RA Creaser, P Lecumberri-Sanchez. "The source of tungsten-associated magmas in the northern Canadian Cordillera and implications for the basement". *Geology*, (in press), accepted 04April2023.
- [274] J Perelló, G Zulliger, A García, RA Creaser. "Revisiting the IOCG geology and age of Alemão in the Igarapé Bahia camp, Carajás province, Brazil". *South American Journal Earth Sciences* (2023), **124**, 104273. doi.org/10.1016/j.jsames.2023.104273
- [273] Brzozowski Hollings Zhu Creaser "Os isotopes record a complex magmatic history during the early stages of formation of the North American Midcontinent Rift — Implications for rift initiation" *Lithos* (2023), **436**, 106966. doi.org/10.1016/j.lithos.2022.106966
- [272] CW Jefferson, RH Rainbird, GM Young, JC White, VL Tschirhart, RA Creaser. "The Paleoproterozoic Amer supergroup, Amer Fold Belt, Nunavut: stratigraphy, structure, correlations and uranium metallogeny". *Canadian Journal of Earth Sciences* (in press), accepted 13Oct2022.
- [271] RO Maxeiner, NM Rayner, KM Ansdell, RA Creaser. "Constraints on the evolution of the eastern margin of the Hearne craton: New data from the southwestern Rottenstone Domain, Trans-Hudson Orogen, Saskatchewan". *Precambrian Research* (2022), **381**, 106851. doi.org/10.1016/j.precamres.2022.106851
- [270] DC Kreiner, C Holm-Denoma, L Pianowski, Z Flood, D Stevenson, GE Graham, J Vazquez and RA Creaser. "Geochronology and mapping constraints on the time-space evolution of the igneous and hydrothermal systems in the Taurus Cu-Mo district, eastern Alaska". *Economic Geology* (2023). doi.org/10.5382/econgeo.4999
- [269] F Rabayrol, AJ Wainwright, RG Lee, CJR Hart, RA Creaser and A Camacho. "District-scale VMS to porphyry-epithermal transitions in subduction to postcollisional tectonic environments: Insights from the Artvin Au-Cu district and the Hod Gold Corridor, Eastern Pontides Belt, Turkey". *Economic Geology* (2023). doi.org/10.5382/econgeo.4983
- [268] T Slagstad, IHC Henderson, NMW Roberts, EV Kulakov, M Ganerød, CL Kirkland, B Dalsl  en, RA Creaser and N Coint. "Anorthosite formation and emplacement coupled with differential tectonic exhumation of ultrahigh-temperature rocks in a Sveconorwegian

continental back-arc setting". Precambrian Research (2022), **376**, 106695. doi.org/10.1016/j.precamres.2022.106695

- [267] V Elongo, H Falck, KL Rasmussen, LJ Robbins, RA Creaser, Y Luo, DG Pearson, C Sarkar, E Adlakha, MC Palmer, JM Scott, K Hickey, K Konhauser and P Lecumberri-Sanchez "Ancient roots of tungsten in North America". Geology (2022), **50**, 791-795. doi.org/10.1130/G49801.1
- [266] J Majzlan, T Mikuš, S Kiefer, RA Creaser. "Rhenium-osmium geochronology of gersdorffite and skutterudite-pararammelsbergite links nickel-cobalt mineralization to the opening of the incipient Meliata Ocean (Western Carpathians, Slovakia)". Mineralium Deposita (2022), **57**, 621-629. doi.org/10.1007/s00126-022-01101-7
- [265] J Toma, RA Creaser, C Card, R Stern, T Chacko and M Steele-MacInnis. "Re-Os Systematics and Chronology of Graphite". Geochim Cosmochim Acta (2022), **323**, 164-182. doi.org/10.1016/j.gca.2022.02.012
- [264] J Perelló, A Wilson, J Wilton, RA Creaser. "Lufilian Copper-Gold Mineralization in the Mkushi District, Zambia: Regional metallogenic implications". Mineralium Deposita (2022), **57**, 1089-1106. doi.org/10.1007/s00126-022-01092-5
- [263] W-S Lee, DJ Kontak, JP Richards, T Barresi, RA Creaser. "Superimposed Porphyry Systems in the Dawson Range, Yukon". Society of Economic Geologists Special Publication **24** (2021), 29-48. doi: 10.5382/SP.24.03
- [262] MA Reynolds, SA Gleeson, RA Creaser, BA Friedlander, JC Haywood, D Hnatyshin, J McCusker, JWF Waldron. "Diagenetic controls on the formation of sediment-hosted massive sulfide ore in the Anarraaq Zn-Pb-Ag deposit, Red Dog district, Alaska" Economic Geology (2021), **116**, 1803-1824. doi.org/10.5382/econgeo.4849
- [261] NJ Saintilan, RA Creaser, D Selby, J Zieg, A Boyce. "Syn-sedimentary to diagenetic Cu ± Co mineralization in Mesoproterozoic pyritic shale driven by magmatic-hydrothermal activity on the edge of the Great Falls tectonic zone – Black Butte, Helena Embayment, Belt-Purcell Basin, USA: Evidence from sulfide Re-Os isotope geochemistry". Lithosphere (2021), 7866186. doi.org/10.2113/2021/7866186
- [260] LME Percival, LR Tedeschi, RA Creaser, C Bottini, E Erba, F Giraud, H Svensen, J Savian, R Trindade, R Coccioni, F Frontalini, L Jovane, TA Mather, HC Jenkyns. "Determining the style and provenance of magmatic activity during the Early Aptian Oceanic Anoxic Event (OAE 1a)". Global and Planetary Change (2021), **200**, 103461. doi.org/10.1016/j.gloplacha.2021.103461
- [259] J Perelló, RA Creaser, A García. Reply to "Porphyry-related high-sulfidation mineralization early in Central American Arc development: Cerro Quema deposit, Azuero Peninsula, Panama" by Corral (2021). Boletín de la Sociedad Geológica Mexicana (2021), **73**, A101220. dx.doi.org/10.18268/BSGM2021v73n1a101220
- [258] J Perelló, JA Clifford, AJ Wilson, S Kennedy, RA Creaser, VA. Valencia. "On the timing and metallogenic implications of the sediment-hosted stratiform copper-silver mineralization in the Creston Formation (Belt-Purcell Supergroup), British Columbia, Canada". Ore Geology Reviews (2021), **131**, 104032. doi.org/10.1016/j.oregeorev.2021.104032
- [257] NJ Saintilan, AD Sproson, D Selby, B Rottier, V Casanova, RA Creaser, K Kouzmanov, L Fontboté, M Piecha, M Gereke, JJ Zambito "Osmium isotopic constraints on sulphide formation in the epithermal environment of magmatic-hydrothermal mineral deposits", Chemical Geology (2021), **564**, 120053. doi.org/10.1016/j.chemgeo.2020.120053
- [256] LR Katz, DJ. Kontak, B Dubé, V McNicoll, RA Creaser and JA Petrus "An Archean Porphyry-Type Gold Deposit: The Côte Gold Au(-Cu) Deposit, Swayze Greenstone Belt, Superior Province, Ontario, Canada". Economic Geology (2020), **116**, 47-89. doi.org/10.5382/econgeo.4785
- [255] S Kiefer, M Števkó, R Vojtko, D Ozdín, A Gerdes, RA Creaser, M Szczerba and J Majzlan. "Geochronological constraints on the carbonate-sulfarsenide veins in Dobšiná, Slovakia:

U/Pb ages of hydrothermal carbonates, Re/Os age of gersdorffite, and K/Ar ages of fuchsite". Journal of Geosciences (2020), **65**, 229-247. [dx.doi.org/10.3190/jgeosci.314](https://doi.org/10.3190/jgeosci.314)

- [254] J Pašava, L Ackerman, J Žák, F Veselovská, RA Creaser, M Svojtka, B Luaise, O Poura, O Šebeka, J Trubač, E Haluzová, D Cividinie. "Elemental and isotopic compositions of trench-slope black shales, Bohemian Massif, with implications for oceanic and atmospheric oxygenation in early Cambrian". Paleogeography, Paleoclimatology Paleoecology (2021), **564**, 110195. <https://doi.org/10.1016/j.palaeo.2020.110195>
- [253] J Perello, RH Sillitoe and RA Creaser. "Mesoproterozoic porphyry copper mineralization at Mamainse Point, Ontario, Canada in the context of Midcontinent rift metallogeny". Ore Geology Reviews (2020), **127**, 103831. doi.org/10.1016/j.oregeorev.2020.103831
- [252] J Toma, RA Creaser, DI Pană. "High-precision Re-Os dating of Lower Jurassic shale packages from the Western Canadian Sedimentary Basin". Paleogeography, Paleoclimatology Paleoecology (2020), **560**, 110010. doi.org/10.1016/j.palaeo.2020.110010
- [251] R Seltmann, RJ Goldfarb, B Zu, RA Creaser, A Dolgoplova, VV Shatov. "The Muruntau Gold Deposit, Uzbekistan: The World's Largest Epigenetic Gold Deposit". Society of Economic Geologists Special Publication (2020), **23**, 497-521. doi.org/10.5382/SP.23.24; 25p
- [250] AJ Wilson, N Lisowiec, C Switzer, A Harris, RA Creaser, CM Fanning "The Telfer Gold-Copper Deposit, Paterson Province, Western Australia". Society of Economic Geologists Special Publication (2020), **23**, 227-249. doi.org/10.5382/SP.23.11; 23p
- [249] A Camacho, JKW Lee, J Zhao, YA Abdu, M Fayek, RA Creaser. "A test of the interlayer ionic porosity model as a measure of argon diffusivity in trioctahedral micas". Geochim. Cosmochim. Acta (2020), **288**, 341-368. doi.org/10.1016/j.gca.2020.07.041
- [248] RH Rainbird, AD Rooney, RA Creaser, T Skulski. "Shale and pyrite Re-Os ages from the Hornby Bay and Amundsen basins provide new chronological markers for Mesoproterozoic stratigraphic successions of northern Canada". Earth Planet Sci. Lett. (2020), **588**, 116492. doi.org/10.1016/j.epsl.2020.116492
- [247] JM Magnall, SA Gleeson, RA Creaser, S Paradis, J Glodny, JR Kyle. "The Mineralogical Evolution of the Clastic Dominant-Type Zn-Pb ± Ba Deposits at Macmillan Pass (Yukon, Canada)—Tracing Subseafloor Barite Replacement in the Layered Mineralization". Economic Geology (2020), **115**, 961-979. doi.org/10.5382/econgeo.4730
- [246] S Nizam, IS, Sen, V Vinoj, V Galy, D Selby, MF Azam, SK Pandey, RA Creaser, AK Agarwal, AP Singh, M Bizimis. "Biomass-1 derived provenance dominates glacial surface organic carbon in the western Himalaya". Environmental Science and Technology (2020), **54**, 8612-8621. <https://doi.org/10.1021/acs.est.0c02710>
- [245] M Osatenko, JM Logan, D Moore, H Samson, DR Heberlein, RM Friedman, RA Creaser. "Geology, geochemistry and age of the Kwanika porphyry Cu deposits". Canadian Institute of Mining Special Volume 57 (in press). Accepted 02June2020
- [244] A Escolme, DR Cooke, J Hunt, RF Berry, R Maas and RA Creaser. "The Productora Cu-Au-Mo Deposit, Chile: A Mesozoic Magmatic-Hydrothermal Breccia Complex with Both Porphyry and Iron Oxide Cu-Au Affinities". Economic Geology (2020), **115**, 543–580. [doi:10.5382/econgeo.4718](https://doi.org/10.5382/econgeo.4718)
- [243] N Kovacs, MM Allan, JL Crowley, M Colpron, CJR Hart, A Zagorevski, RA Creaser. "Carmacks Copper Cu-Au-Ag deposit: mineralization and post-ore migmatization of a Stikine arc porphyry copper system in Yukon, Canada". Economic Geology (2020), **115**, 1413-1442. doi.org/10.5382/econgeo.4756
- [242] F An, Y Zhu, JP Richards, RA Creaser, L Chen, B Zheng and B Lehmann. "Genetic link between gold mineralization and porphyry magmatism in the Baogutu district, West Junggar, NW China: Constraints from Re-Os and S isotopes in sulfide". Geological Journal (2020), **55**, 6098-6105. [doi:10.1002/gj.3795](https://doi.org/10.1002/gj.3795)
- [241] RH Sillitoe, G Magaranov, V Mladenov, and RA Creaser. "Rosen, Bulgaria: A Newly Recognized IOCG District". Economic Geology (2020), **115**, 481-488.

doi.org/10.5382/econgeo.4731

- [240] S Paradis, D Hnatyshin, G Simandl and RA Creaser. "Re-Os pyrite geochronology of the Yellowhead-type mineralization, Pend Oreille mine, Kootenay arc, Metaline District, Washington". Economic Geology (2020), **115**, 1373-1384. doi:10.5382/econgeo.4720
- [239] X Meng, JP Richards, J Mao, H Ye, SA DuFrane, RA Creaser, J Marsh and J Petrus . "The Tongkuangyu Cu Deposit, Trans-North China Orogen: A Metamorphosed Paleoproterozoic Porphyry Cu Deposit" Economic Geology (2020), **115**, 51-77. doi:10.5382/econgeo.4693
- [238] MG Gadd, JM Peter, D Hnatyshin, RA Creaser, S Gouwy and T Fraser. "A Middle Devonian basin-scale precious metal enrichment event across northern Yukon (Canada)" Geology (2020) **48**, 242–246. <https://doi.org/10.1130/G46874.1>
- [237] D Hnatyshin, RA Creaser, S Meffre, RA Stern, JJ Wilkinson and EC Turner. "Understanding the microscale spatial distribution and mineralogical residency of Re in pyrite: Examples from carbonate-hosted Zn-Pb ores and implications for pyrite Re-Os geochronology". Chemical Geology (2020), **533**, 119427. doi.org/10.1016/j.chemgeo.2019.119427
- [236] F Rabayrol, CJR Hart and RA Creaser. "Tectonic Triggers for Post-Subduction Magmatic-Hydrothermal Gold Metallogeny in the Late Cenozoic Anatolian Metallogenic Trend, Turkey, Economic Geology (2019), **114**, 1339-1363. <https://doi.org/10.5382/econgeo.4682>
- [235] J Perelló, A García and RA Creaser. "Porphyry-related high-sulfidation mineralization early in Central American Arc Development: Cerro Quema deposit, Azuero Peninsula, Panama". Boletín de la Sociedad Geológica Mexicana, (2020), **72**, a260719. doi.org/10.18268/BSGM2020v72n3a260719
- [234] GE Febbo, LA Kennedy, JL Nelson, MJ Savell, ME Campbell, RA Creaser, RM Friedman, BI van Straaten, HJ Stein. "The Evolution and Structural Modification of the Supergiant Mitchell Au-Cu Porphyry, Northwestern British Columbia". Economic Geology, (2019), **114**, 303-324. <https://doi.org/10.5382/econgeo.2019.4632>
- [233] TM Gibson, S Wörndle, PW Crockford, TH Bui, RA. Creaser, GP Halverson. "Radiogenic isotope chemostratigraphy reveals marine and nonmarine depositional environments in the late Mesoproterozoic Borden Basin, Arctic Canada". Geological Society of America Bulletin (2019), **131**, 1965–1978. <https://doi.org/10.1130/B35060.1>
- [232] E Smyk, P Hollings, M Baker, DR Cooke, JA Thompson, JM Thompson and RA Creaser. "Geochemistry and geochronology of the intrusive rocks of the central Wasatch Mountains igneous belt, Utah, USA: implications for Porphyry Mineralization". in SH Emerman, B Bowen, S Schamel and S Simmons (editors), Geofluids of Utah (2018): Utah Geological Association Publication, **47**, 305–327.
- [231] Al Sheen LM Heaman, B Kjarsgaard, L Ootes, DG Pearson, RA Creaser "Athapuscow aulacogen revisited: geochronology and geochemistry of the 2046 Ma Union Island Group mafic magmatism, East Arm of Great Slave Lake, NT, Canada". Precambrian Research (2019), **321**, 85-102. <https://doi.org/10.1016/j.precamres.2018.11.012>
- [230] NJ Saintilan, D Selby, RA Creaser and S Dewaele. "Sulphide Re-Os geochronology links orogenesis, salt and Cu-Co ores in the Central African Copperbelt". Scientific Reports (2018), **8**, article 14946. <https://doi.org/10.1038/s41598-018-33399-7>
- [229] M Bezzola, CM Hetman, G Garlick, RA Creaser, M Diering and T Nowicki. "Geology and resource development of the Kelvin kimberlite pipe, Northwest Territories, Canada". Mineralogy and Petrology (2018), **112**, 463-475. <https://doi.org/10.1007/s00710-018-0631-6>
- [228] P Acosta-Góngora, S Pehrsson, B Knox, D Regis, L Hulbert, RA Creaser and K Ashton. "Neoarchean convergent margin Ni-Cu mineralization: Axis Lake and Nickel King Ni-Cu deposits in the south Rae craton of the Canadian Shield". Precambrian Research (2018), **316**, 305-323. <https://doi.org/10.1016/j.precamres.2018.07.016>
- [227] J-J Zhu, JP Richards, C Rees, RA Creaser, SA DuFrane, A Locock, JA Petrus and J Lang. "Elevated Magmatic Sulfur and Chlorine Contents in Ore-Forming Magmas at the Red Chris Porphyry Cu-Au Deposit, Northern British Columbia, Canada". Economic Geology (2018), **113**, 1047-1075. <https://doi.org/10.5382/econgeo.2018.4581>

- [226] L Ackerman, K Žák, E Haluzová, RA Creaser, M Svojtka, J Pašava and F Veselovský. "Chronology of the Kašperské Hory orogenic gold deposit, Bohemian Massif, Czech Republic". Mineralium Deposita (2019), **54**, 473-484. doi.org/10.1007/s00126-018-0822-4
- [225] SA Aulbach, RA Creaser, TS Stachel, LM Heaman, I Chinn, and J Kong. "Diamond ages from Victor (Superior Craton): Intra-mantle cycling of volatiles (C,N,S) during supercontinent reorganization". Earth and Planetary Science Letters (2018), **490**, 77-87. doi.org/10.1016/j.epsl.2018.03.016
- [224] SP Tombe, JP Richards, CJ Greig, WS Board, RA Creaser, KA Muehlenbachs, PB Larson, SA DuFrane, and T Spell. "Origin of the high-grade Early Jurassic Brucejack epithermal Au-Ag deposits, Sulphurets Mining Camp, northwestern British Columbia". Ore Geology Reviews (2018), **95**, 480-517. doi.org/10.1016/j.oregeorev.2018.03.003
- [223] Al Sheen, B Kendall, CT Reinhard, RA Creaser, TW Lyons, A Bekker, SW Poulton and AD Anbar. "A Model for the Oceanic Mass Balance of Rhenium and Implications for the Extent of Proterozoic Ocean Anoxia". Geochimica et Cosmochimica Acta (2018), **227**, 75-95. doi.org/10.1016/j.gca.2018.01.036
- [222] CD Card, KM Bethune, N Rayner, RA Creaser. "Characterising the southern part of the Hearne Province: a forgotten part of Canada's Shield revisited". Precambrian Research (2018), **307**, 51-65. doi.org/10.1016/j.precamres.2018.01.002
- [221] TM Gibson, PM Shih, VM Cumming, WW Fischer, PW Crockford, MSW Hodgskiss, S Wörndle, RA Creaser, RH Rainbird, TM Skulski and GP Halverson. "Precise age of Bangiomorpha pubescens dates the origin of eukaryotic photosynthesis". Geology (2018), **46**, 135-138. doi.org/10.1130/G39829.1
- [220] RH Sillitoe, J Perelló, RA Creaser, J Wilton, AJ Wilson and T Dawborn. "Reply to discussions of "Age of the Zambian Copperbelt" by Hitzman and Broughton and Muchez et al.". Mineralium Deposita (2017), **52**, 1277-1281. doi.org/10.1007/s00126-017-0769-x
- [219] R Rodrigues de Assis, RP Xavier and RA Creaser. "Linking the Timing of Disseminated Granite-Hosted Gold-Rich Deposits to Paleoproterozoic Felsic Magmatism at Alta Floresta Gold Province, Amazon Craton, Brazil". Economic Geology (2017), **112**, 1937-1957. doi.org/10.5382/econgeo.2017.4535
- [218] ML Rinne, DR Cooke, AC Harris, D Finn, C Allen, M Heizler and RA Creaser. "Geology and Geochronology of the Golpu Porphyry and Wafi Epithermal Deposit, Morobe Province, Papua New Guinea". Economic Geology (2018), **113**, 271-294. doi:10.5382/econgeo.2018.4551
- [217] M Lesbros-Piat-Desvial, G Beaudoin, J Mercadier and RA Creaser. "Age and origin of uranium mineralization in the Camie River deposit (Otish Basin, Québec, Canada)". Ore Geology Reviews (2017), **91**, 196-215. doi.org/10.1016/j.oregeorev.2017.10.006
- [216] RL Harrison, A Maryono, MS Norris, BD Rohrlach, DR Cooke, JM Thompson, RA Creaser and DS Thiede. "Geochronology of the Tumpangpitu porphyry gold-copper-molybdenum and high-sulfidation epithermal gold-silver-copper deposit - Evidence for pre- and post-mineralization diatremes in the Tujuh Bukit district, Southeast Java, Indonesia" Economic Geology (2018), **113**, 163-192. doi:10.5382/econgeo.2018.4547
- [215] M D'Angelo, M Alfaro, P Hollings, K Byrne, S Piercey and RA Creaser. "Petrogenesis and magmatic evolution the Guichon Creek Batholith: Implications for the Highland Valley porphyry Cu ± (Mo) district, southcentral British Columbia". Economic Geology (2017), **112**, 1857-1888. doi.org/10.5382/econgeo.2017.4532
- [214] F Veselovský, L Ackerman, J Pašava, K Žák, E Haluzová, RA Creaser, P Dobeš, V Erban, R Tásler. "Multiphase formation of the Obří důl polymetallic skarn deposit, West Sudetes, Bohemian Massif: Geochemistry and Re-Os dating of sulfide mineralization". Mineralium Deposita (2018), **53**, 665-682. doi.org/10.1007/s00126-017-0766-0
- [213] T Baker D Bickford, S Juras, P Lewis, Y Oztas, K Ross, A Tukac, F Rabayrol, A Miskovic, R Friedman, RA Creaser and R Spikings. "The Geology of the Kisladag Porphyry Gold Deposit, Turkey". Society of Economic Geologists Special Publication, **19**, 57-83.

- [212] NA Fernandes, SA Gleeson, JM Magnall, RA Creaser, E Martel, BJ Fischer and R Sharp. "The origin of Late Devonian (Frasnian) stratiform and stratabound mudstone-hosted barite in the Selwyn Basin, Northwest Territories, Canada". Marine and Petroleum Geology (2017), **85**, 1-15. doi.org/10.1016/j.marpetgeo.2017.04.006
- [211] NH Jansen, JB Gemmell, Z Chang, DR Cooke, F Jourdan, RA Creaser and P Hollings. "Geology and Genesis of the Cerro la Mina Porphyry-High Sulfidation Au (Cu-Mo) Prospect, Mexico". Economic Geology (2017), **112**, 799-827. doi: 10.2113/econgeo.112.4.799
- [210] RH Sillitoe, J Perelló, RA Creaser, J Wilton, AJ Wilson and T Dawborn. "Age of the Zambian Copperbelt". Mineralium Deposita (2017), **52**, 1245-1268. DOI: 10.1007/s00126-017-0726-8
- [209] NJ Saintilan, RA Creaser and AA Bookstrom. "Re-Os systematics and geochemistry of cobaltite (CoAsS) in the Idaho cobalt belt, Belt-Purcell Basin, USA: Evidence for middle Mesoproterozoic sediment hosted Co-Cu sulfide mineralization with Grenvillian and Cretaceous remobilization". Ore Geology Reviews (2017), **86**, 509-525. doi: 10.1016/j.oregeorev.2017.02.032
- [208] NJ Saintilan, RA Creaser, PG Spry and D Hnatyshin. "Re-Os systematics of löllingite and arsenopyrite in granulite facies garnet rocks: Insights into the origin of the Broken Hill deposit and the thermal evolution of the Broken Hill block during the Early Mesoproterozoic (New South Wales, Australia)". Canadian Mineralogist (2017), **55**, 29-44. doi: 10.3749/canmin.1600039
- [207] JP Richards, GP Lopez, JJ Zhu, RA Creaser, AJ Locock and AH Mumin. "Contrasting Tectonic Settings and Sulfur Contents of Magmas Associated with Cretaceous Porphyry Cu \pm Mo \pm Au and Intrusion-Related Iron Oxide Cu-Au Deposits in Northern Chile". Economic Geology (2017), **112**, 295-318. doi:10.2113/econgeo.112.2.295
- [206] L Ackerman L, Haluzová E, RA Creaser etc "Temporal evolution of mineralization events in the Bohemian Massif inferred from Re-Os geochronology of molybdenites". Mineralium Deposita (2017), **52**, 651-662. doi:10.1007/s00126-016-0685-5
- [205] J Babo, N Oliver, C Spandler, M Brown, M Rubenach and RA Creaser. "The high grade Mo-Re Merlin deposit, Cloncurry District, Australia: Deposit description, geochronology and ore genesis". Economic Geology, (2017), **112**, 397-422. doi:10.2113/econgeo.112.2.397
- [204] R Haugaard, L Ootes, RA Creaser and KO Konhauser. "The nature of Mesoarchean seawater and continental weathering in 2.85 Ga banded iron formation, Slave craton, NW Canada". Geochim Cosmochim Acta (2016), **194**, 34-56. doi:10.1016/j.gca.2016.08.020
- [203] J Reimink, J Davies, T Chacko, R Stern, LM Heaman, C Sarkar, U Schaltegger, RA Creaser, and DG Pearson. "No evidence for Hadean continental crust within Earth's oldest evolved rock unit". Nature Geoscience (2016), **9**, 777-780. doi:10.1038/ngeo2786
- [202] D Hnatyshin, DJ Kontak, EC Turner, RA Creaser, R Morden and RA Stern. "Geochronologic (Re-Os) and fluid-chemical constraints on the formation of the Mesoproterozoic-hosted Nanisivik Zn-Pb deposit, Nunavut, Canada: Evidence for early diagenetic, low-temperature conditions of formation". Ore Geology Reviews (2016), **79**, 189-217. doi:10.1016/j.oregeorev.2016.05.017
- [201] L Liu, JP Richards, RA Creaser, SA DuFrane, K Muehlenbachs and P Larson. "Geology and age of the Morrison porphyry Cu-Au-Mo deposit, Babine Lake area, British Columbia". Canadian Journal of Earth Sciences (2016), **53**, 950-978. Doi: 10.1139/cjes-2015-0231
- [200] EJ Thiessen, SA Gleeson, V Bennett and RA Creaser. "The Tiger Deposit: A Carbonate-Hosted, Magmatic-Hydrothermal Gold Deposit, Central Yukon, Canada". Economic Geology (2016), **111**, 421-446. doi: 10.2113/econgeo.111.2.421
- [199] T Hawkins, MP Smith, RJ Herrington, V Maslennikov, AJ Boyce, T Jeffries and RA Creaser. "The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan". Ore Geology Reviews (2017), **85**, 216-246. doi: 10.1016/j.oregeorev.2015.10.016
- [198] R D'Souza, D Canil and RA Creaser. "Assimilation, differentiation and thickening during formation of arc crust in space and time: The Jurassic Bonanza arc, Vancouver Island, Canada". Geological Society America Bulletin (2016), **128**, 543-557. doi: 10.1130/B31289.1

- [197] B Kendall, RA Creaser, CT Reinhard, TW Lyons and AD Anbar. "Transient episodes of mild environmental oxygenation and oxidative continental weathering during the late Archean". Science Advances (2015), **1** (10), E1500777, DOI: 10.1126/sciadv.1500777
- [196] RH Sillitoe, J Perello, RA Creaser, J Wilton and T Dawborn. "Two Ages of Copper Mineralization in the Mwombezhi Dome, Northwestern Zambia: Metallogenic Implications for the Central African Copperbelt". Economic Geology (2015), **110**, 1917-1923. doi: 10.2113/econgeo.110.8.1917
- [195] R Wang, JP Richards, Z Hou, J Zhu, R Stern and RA Creaser. "The Role of Indian and Tibetan lithosphere in spatial distribution of Cenozoic magmatism and porphyry Cu-Mo deposits in the Gangdese belt, southern Tibet". Earth Science Reviews (2015), **150**, 68-94. doi:10.1016/j.earscirev.2015.07.003.
- [194] P Acosta-Gongora, SA Gleeson, IM Samson, L Corriveau, L Ootes, BE Taylor, RA Creaser and K Muehlenbachs. "Genesis of the Paleoproterozoic NICO Iron-Oxide-Cobalt-Gold-Bismuth deposit, Northwest Territories, Canada: evidence from isotope geochemistry and fluid inclusions". Precambrian Research (2015), **268**, 168-193. doi:10.1016/j.precamres.2015.06.007.
- [193] CJM Lawley, RA Creaser, SE Jackson, Z Yang, BJ Davis, SJ Pehrsson, B Dubé, P Mercier-Langevin and D Vaillancourt. "Unraveling the Western Churchill Province Paleoproterozoic Gold Metallotect: Constraints from Re-Os Arsenopyrite and U-Pb Xenotime Geochronology and LA-ICP-MS Arsenopyrite Trace Element Chemistry at the BIF-Hosted Meliadine Gold District, Nunavut, Canada". Economic Geology (2015), **110**, 1425-1454. doi: 10.2113/econgeo.110.6.1425
- [192] CL Kirkland, CV Spaggiari, R. Smithies, MTD Wingate, EA Belousova, Y Gréau, MT Sweetapple, R Watkins, S Tessalina, RA Creaser. "The affinity of Archean crust on the Yilgarn-Albany-Fraser Orogen boundary: implications for gold mineralization in the Tropicana Zone". Precambrian Research (2015), **266**, 260-281. doi:10.1016/j.precamres.2015.05.023
- [191] F Pirajno, TP Mernagh, D Huston, RA Creaser, R Seltmann. "The Mesoproterozoic Abra Polymetallic Sedimentary Rock-Hosted Mineral Deposit, Edmund Basin, Western Australia". Ore Geology Reviews (2016), **76**, 442-462. doi:10.1016/j.oregeorev.2015.04.019
- [190] R Wang, JP Richards, Z Hou, F An and RA Creaser. "Zircon U-Pb age and Sr-Nd-Hf-O isotope geochemistry of the Paleocene-Eocene igneous rocks in western Gangdese: Evidence for the timing of Neo-Tethyan slab breakoff". Lithos (2015), **224-225**, 179-194. doi:10.1016/j.lithos.2015.03.003
- [189] B Kendall, T Komiya, TW Lyons, SM Bates, GW Gordon, SJ Romaniello, G Jiang, RA Creaser, S Xiao, K McFadden, Y Sawaki, M Tahata, D Shu, J Han, Y Li, X Chu, AD Anbar. "Uranium and molybdenum isotope evidence for an episode of widespread ocean oxygenation during the late Ediacaran Period". Geochimica et Cosmochimica Acta (2015). **156**, 173-193. doi:10.1016/j.gca.2015.02.025
- [188] LM Heaman, J Pell, HS Grutter and RA Creaser. "U-Pb geochronology and Sr/Nd isotope compositions of groundmass perovskite from the newly discovered Jurassic Chidliak kimberlite field, Baffin Island, Canada". Earth and Planetary Science Letters (2015), **415**, 183-199. doi:10.1016/j.epsl.2014.12.056
- [187] ET Spencer, JJ Wilkinson, RA Creaser and J Sequel "The Distribution and Timing of Molybdenite Mineralization at the El Teniente Cu-Mo Porphyry Deposit, Chile". Economic Geology (2015), **110**, 387-421. doi: 10.2113/econgeo.110.2.387
- [186] D Hnatyshin, RA Creaser, S Gleeson and JJ Wilkinson. "Re-Os dating of pyrite confirms an early diagenetic onset and extended duration of mineralization in the Irish Zn-Pb orefield". Geology (2015), **43**, 143-146. doi: 10.1130/G36296.1
- [185] S Zhang, RA Creaser and J Pell. "Discovery of organic-rich black shale xenolith from kimberlite on the Hall Peninsula, Nunavut, and its implication for petroleum potential in Cumberland Sound". Bulletin of Canadian Petroleum Geology (2014), **62**, 125-131.

- [184] J Perello, JA Clifford, RA Creaser and VA Valencia. "An example of synorogenic sediment-hosted copper mineralization: Geologic and geochronologic evidence from the Paleoproterozoic Nussir deposit, Finnmark, northernmost Norway". Economic Geology (2015), **110**, 677-689. doi: 10.2113/econgeo.110.3.677
- [183] CPN Moreto, LVS Monteiro, RP Xavier, RA Creaser, CG Tassinari, A Dufrane, AIS Kemp, K Sato and WS Amaral. "Paleoproterozoic and Archean iron oxide-copper-gold events at the Sossego deposit, Carajás Province: Re-Os and U-Pb geochronological evidence". Economic Geology (2015), **110**, 809-835. doi: 10.2113/econgeo.110.3.809
- [182] S Tessalina, F Jourdan, L Nunes, A Kennedy, S Denyszyn, I Puchtel, M Touboul, RA Creaser, M Boyet, E Belousova and A Trinquier. "Application of Radiogenic isotopes in Geosciences – overview and perspectives". In: K Grice and B Keely (Eds). Principles and Practice of Analytical Techniques in Geosciences. Royal Society of Chemistry Detection Sciences Series (2015), No.4, Chapter 3, 49-93. DOI:10.1039/9781782625025-00049
- [181] CPN Moreto, LVS Monteiro, RA Creaser, GHC Melo, MAD Silva, RP Xavier, CCG Tassinari, SA DuFrane and K Sato. "Timing of multiple hydrothermal systems in the Southern Copper Belt, Carajás Province, Brazil: U-Pb SHRIMP geochronological constraints on the Bacuri and Bacaba iron oxide-copper-gold deposits". Mineralium Deposita (2014), **50**, 517-546. Doi: 10.1007/s00126-014-0549-9
- [180] N Steven, RA Creaser, K Wulff, A Kisters, B Eglington and J Miller. "Implications of high-precision Re-Os molybdenite dating of the Navachab orogenic gold deposit, Namibia". Geochemistry: Exploration, Environment, Analysis (2015), **15**, 125-130. doi:10.1144/geochem2014-272
- [179] B Zoheir, RA Creaser and B Lehmann. "Re-Os geochronology of gold mineralization in the Fawakhir area, Eastern Desert, Egypt". International Geology Review (2014), **57**, 1418-1432. doi: 10.1080/00206814.2014.935964
- [178] D van Acken, W Su, J Gao and RACreaser. "Preservation of Re-Os isotope signatures in pyrite throughout low-T, high-P eclogite facies metamorphism". Terra Nova (2014), **26**, 402-407. doi: 10.1111/ter.12113
- [177] J Parks, S Lin, DW Davis, X-M Yang, RA Creaser and MT Corkery. "Meso- and Neoproterozoic evolution of the Island Lake greenstone belt and the Northwestern Superior Province: evidence from lithogeochemistry, Nd isotope data and U-Pb zircon geochronology". Precambrian Research (2014), **246**, 160-179. doi: 10.1016/j.precamres.2014.02.016
- [176] A Raziq, RM Tosdal and RA Creaser. "Temporal evolution of the western porphyry Cu-Au systems at Reko Diq, Balochistan, western Pakistan". Economic Geology (2014), **109**, 2003-2021. doi: 10.2113/econgeo.109.7.2003
- [175] K Szilas, VJ Van Hinsberg, RA Creaser and AFM Kisters. "The geochemical composition of serpentinites in the Mesoproterozoic Tartoq Group, SW Greenland: Harzburgitic cumulates or melt-modified mantle?" Lithos (2014), **198-199**, 103-116. doi: 10.1016/j.lithos.2014.03.024
- [174] RH Sillitoe, RA Creaser, M Lenters and R Kern. "Squaw Peak, Arizona: Paleoproterozoic precursor to the Laramide porphyry copper province". Economic Geology (2014), **109**, 1171-1177. doi: 10.2113/econgeo.109.5.1171
- [173] RM Mobley, GM Yagozinski, RA Creaser and JM Berry. "Geologic History and Timing of Mineralization at the Haile Gold Mine, South Carolina, USA". Economic Geology (2014), **109**, 1863-1881. doi: 10.2113/econgeo.109.7.1863
- [172] RA Creaser. "Crustal Sulfide Minerals (Re-Os)". In: WJ Rink and J Thompson (Eds), Encyclopedia of Scientific Dating Methods, Springer (2014). doi: 10.1007/978-94-007-6326-5_87-1
- [171] A Imer, JP Richards, RA Creaser and TL Spell. "Syn-Collisional Magmatism and Associated Porphyry-Style Mineralization in Eastern Anatolia: The Oligocene Cevizlidere Cu–Au–Mo Deposit, Tunceli Province, Turkey" Mineralium Deposita (2015), **50**, 245-263. doi: 10.1007/s00126-014-0533-4

- [170] KV Smit, T. Stachel, RA Creaser, RB Ickert, SA Dufrane, RA Stern and M. Seller. "Origin of eclogite and pyroxenite xenoliths from the Victor kimberlite, Canada, and implications for Superior craton formation". Geochimica et Cosmochimica Acta (2014), **125**, 308-337. doi: 10.1016/j.gca.2013.10.019
- [169] A Moura, A Dória, AMR Neiva, C Leal Gomes and RA Creaser. "Metallogenesis at the Carris W-Mo-Sn deposit (Gerês, Portugal): constraints from fluid inclusions, mineral geochemistry, Re-Os and He-Ar isotopes". Ore Geology Reviews (2014), **56**, 73-93. doi: 10.1016/j.oregeorev.2013.08.001
- [168] K Lobanov, A Yakubchuk and RA Creaser. "Besshi-type VMS deposits of the Rudny Altai, Russia". Economic Geology (2014), **109**, 1403-1430. doi: 10.2113/econgeo.109.5.1403
- [167] AR Cabral, RA Creaser, T Nögler, B Lehmann, AR Voegelin, B Belyatsky, J Pašava, AA Seabra Gomes Jr., H Galbiatti, ME Böttcher and P Esche. "Trace-element and multi-isotope geochemistry of Late-Archean black shales in the Carajás iron ore district, Brazil". Chemical Geology (2013), **362**, 91-104. doi: 10.1016/j.chemgeo.2013.08.041
- [166] B Kendall, D VanAken and RA Creaser "Depositional age of the early Paleoproterozoic Klipputs Member, Nelani Formation (Ghaap Group, Transvaal Supergroup, South Africa) and implications for low-level Re-Os geochronology of organic-rich sedimentary rocks". Precambrian Research (2013), **237**, 1-12. doi: 10.1016/j.precamres.2013.08.002
- [165] DJ Kontak, RA Creaser, JA Petrus, D Archibald and RJ Horne. "A petrological and geochronological study of a 360 Ma metallogenic event in Maritime Canada with implications for lithophile-metal mineralization in the Canadian Appalachians". Canadian Journal of Earth Sciences (2013), **50**, 1147-1163. doi: 10.1139/cjes-2013-0019
- [164] D van Aken, D Thomson, RH Rainbird and RA Creaser. "Constraining the depositional history of the Neoproterozoic Shaler Supergroup, Amundsen Basin, NW Canada: Rhenium-osmium dating of black shales from the Wynnatt and Boot Inlet Formations". Precambrian Research (2013), **236**, 124-131. doi: 10.1016/j.precamres.2013.07.012
- [163] MM Allan, JK Mortensen, CJR Hart, LA Bailey, MG Sanchez, W Ciolkiewicz, GG McKenzie and RA Creaser. "Magmatic and metallogenic framework of west-central Yukon and eastern Alaska. Economic Geology Special Publication, (2013), **17**, 111-168. <https://doi.org/10.5382/SP.17.04>
- [162] KG Thorne, LR Fyffe and RA Creaser. "Re-Os geochronological constraints on the W-Mo mineralizing event in the Mount Pleasant Caldera". Atlantic Geology (2013), **49**, 131-150. doi: 10.4138/atlgel.2013.007
- [161] HW Fournier, JKW Lee, A Camacho and RA Creaser. "Retrogression of eclogite-facies shear zones by short-lived fluid infiltration during the Caledonian orogeny, Lofoten islands, Norway". Journal of the Geological Society of London Special Publication (2013), **390**. doi 10.1144/SP390.9
- [160] ML Hewton, DD Marshall, L Ootes, L Loughrey and RA Creaser. "Colombian-style emerald mineralization in the northern Canadian Cordillera: Integration into a regional Paleozoic fluid flow regime". Canadian Journal Earth Sciences (2013), **50**, 857-871. DOI: 10.1139/cjes-2012-0128
- [159] JP Richards, F Jourdan, RA Creaser, G Maldonado and SA DuFrane. "Geology, geochemistry, geochronology, and economic potential of Neogene volcanic rocks in the Laguna Pedernal and Salar de Aguas Calientes segments of the Archibarca lineament, northwest Argentina". Journal of Volcanology and Geothermal Research (2013), **258**, 47-73. <http://dx.doi.org/10.1016/j.jvolgeores.2013.04.004>
- [158] TB Betsi, D Lentz, M Chiaradia, TK Kyser and RA Creaser. "Genesis of the Au-Bi-Cu-As, Cu-Mo ± W, and base-metal Au-Ag mineralization at the Mountain Freegold (Yukon, Canada): constraints from Ar-Ar and Re-Os geochronology and Pb and stable isotope compositions". Mineralium Deposita (2013), **48**, 991-1017. DOI: 10.1007/s00126-013-0465-4
- [157] ER Arnold, HJ Greenfield and RA Creaser. "Domestic cattle mobility in early farming villages in southern Africa: Harvest profiles and strontium ($^{87}\text{Sr}/^{86}\text{Sr}$) isotope analyses from Early Iron

Age sites in the lower Thukela River valley of South Africa". Archeological and Anthropological Sciences (2013), **5**, 129-144. DOI: 10.1007/s12520-013-0121-z

- [156] NV Chalapathi Rao, RA Creaser, B Lehmann and BK Panwar. "Re–Os isotope study of Indian kimberlites and lamproites: Implications for their mantle source regions and cratonic evolution". Chemical Geology (2013), **353**, 36-47. <http://dx.doi.org/10.1016/j.chemgeo.2012.12.013>
- [155] A Imer, JP Richards and RA Creaser. "Age and Tectonomagmatic Setting of the Eocene Çöpler-Kabataş Magmatic Complex and Porphyry-Epithermal Au Deposit, East Central Anatolia, Turkey". Mineralium Deposita (2013), **48**, 557-583. DOI: 10.1007/s00126-012-0444-1
- [154] W Mayer, RA Creaser, K Mochnacka, T Oberc-Dziedzic and A Pieczka. "Isotopic Re-Os age of molybdenite from the Szklarska Poręba Huta Quarry (Karkonosze, SW Poland)". Geological Quarterly (2012), **56**, 505-512.
- [153] T Oberc-Dziedzic, K Mochnacka, W Mayer, A Pieczka, RA Creaser and M Goralski. "Studies on magnetite and pyrite mineralization and on their early Palaeozoic ocean-floor host rocks from the Leszczyńiec unit (West Sudetes, Poland)". Annales Societatis Geologorum Poloniae (2011), **81**, 133–160.
- [152] M Aucoin, G Beaudoin, RA Creaser, P Archer and C Perry "Metallogeny of the Marco zone, Corvet Est auriferous deposit, James Bay, Québec, Canada". Canadian Journal of Earth Sciences (2012), **49**, 1154-1176.
- [151] A Camacho, JD Fitz Gerald, JKW Lee, J Zhao, YA Abdu, D Jenkins, FC Hawthorne, TK Kyser and RA Creaser. "Density of planar defects and diffusion rates in trioctahedral micas: no correlation in phlogopite–rich examples from the Grenville province." Earth & Planetary Science Letters (2012), **341-344**, 255-267.
- [150] SE Box, B Syusyura, R Seltmann, RA. Creaser, A Dolgoplova, and ML. Zientek. "Dzhezkazgan and associated sandstone copper deposits of the Chu-Sarysu basin, central Kazakhstan". Society of Economic Geologists Special Publication (2013), **16**, 303-328.
- [149] JN Aleinikoff, RA Creaser, HA Lowers, C Magee, RI Grauch. "Multiple age components in individual molybdenite grains". Chemical Geology (2012), **300-301**, 55-60.
- [148] SJ Piercey, DC Murphy, and RA Creaser. "Lithosphere-Asthenosphere Mixing in a Transform-dominated Late Paleozoic Back-Arc Basin: Implications for northern Cordilleran Crustal Growth and Assembly". GeoSphere (2012), **8**, 716-739.
- [147] I Scharlotta, A Weber, Scott DuFrane, I Goriunova, and Robert Creaser. Assessing Hunter-Gatherer Mobility in Cis-Baikal, Siberia using LA-ICP-MS: Methodological Correction for Laser Interactions with Calcium Phosphate Matrices and the Potential for Integrated LA-ICP-MS Sampling of Archaeological Skeletal Materials. Venue: Laser Ablation: Effects and Applications. Accepted: 2011-08-01. Published: 2011-12-01. Pages: 45-98. Eds: SE Black. Place: New York. Publisher: Nova.
- [146] A Scherstén, RA Creaser, JAM van Gool, T Næraa, K Szilas and C Østergaard. "Re-Os and U-Pb constraints on gold mineralisation events in the Meso- to Neoproterozoic Storø greenstone belt, Storø, southern West Greenland". Precambrian Research (2012), **203**, 149-162.
- [145] SE Zurevinski, LM Heaman and RA Creaser. "The origin of Triassic/Jurassic kimberlite magmatism, Canada: Two mantle sources revealed from the Sr-Nd isotopic composition of groundmass perovskite". Geochemistry, Geophysics, Geosystems (2011), **12**, Q09005, doi:10.1029/2011GC003659
- [144] T Davies, JP Richards, RA Creaser, LM Heaman, T Chacko, A Simonetti, J Williamson and DW McDonald. "Paleoproterozoic Age Relationships in the Three Bluffs Iron Formation-Hosted Gold Deposit, Committee Bay Greenstone Belt, Nunavut, Canada", Journal of the Geological Society of CIM - Exploration and Mining Geology, (2010), **19**, 55-80.
- [143] JA Saunders, GD Kamenov, AH Hofstra, DL Unger, RA Creaser and F Barra. "Forensic geochemical approaches to constrain the source of Au-Ag in low-sulfidation epithermal ores".

In: R Steininger, and W Pennell (eds.): Great Basin Evolution and Metallogeny, Geological Society of Nevada Symposium (2010), 693-700.

- [142] AK Noyes, LM Heaman and RA Creaser. "A comparison of chronometers applied to the Monastery kimberlite and the feasibility of U-Pb ilmenite geochronology". In 6th International Dyke Conference Volume
- [141] L Ootes, RM Morelli, DR Lentz, H Falck, RA Creaser and WJ Davis. "The timing of Yellowknife gold mineralization: a relationship with crustal anatexis?". Economic Geology (2011), **106**, 713-720.
- [140] S Aulbach, T Stachel, LM Heaman, RA Creaser and SB Shirey. "Formation of Cratonic Subcontinental Lithospheric Mantle and Complementary Komatiite from Hybrid Plume Sources". Contributions to Mineralogy and Petrology (2011), **161**, 947-960.
- [139] VA Andrushko, MR Buzon, A Gibaja, GF McEwan, A Simonetti and RA Creaser. "Investigating a child sacrifice event from the Inca heartland". Journal of Archeological Science (2011), **38**, 323-333.
- [138] S Aulbach, C Krauss, RA Creaser, T Stachel, LM Heaman, S Matveev and T Chacko. "Granulite Sulfides as Tracers of Lower Crustal Origin and Evolution: An Example from the Slave Craton, Canada". Geochimica et Cosmochimica Acta (2010), **74**, 5368-5381.
- [137] CJM Lawley, JP Richards, RG Anderson, RA Creaser and LM Heaman. "Geochronology and Geochemistry of the MAX Porphyry Mo Deposit and its Relationship to Pb-Zn-Ag Mineralization in the Kootenay Arc, Southeastern British Columbia, Canada". Economic Geology, (2010), **105**, 1113-1142.
- [136] L Ootes, S Goff, S Gleeson, V Jackson, L Corriveau, A. Hamid Mumin, RA Creaser and N Evensen. "Timing and thermo-chemical constraints on multi-element mineralization at the Nori/RA Cu-Mo-U prospect, Great Bear magmatic zone, Northwest Territories, Canada". Mineralium Deposita (2010), **45**, 549-566.
- [135] RM Morelli, CC Bell, RA Creaser and A Simonetti. "Constraints on the genesis of gold mineralization at the Homestake Gold Deposit, Black Hills, South Dakota, from rhenium-osmium sulfide geochronology". Mineralium Deposita (2010), **45**, 461-480.
- [134] CA Conlee, MR Buzon, A Simonetti and RA Creaser "Identifying Foreigners versus Locals in a Burial Population of Nasca, Peru: An Investigation Using Strontium Isotope Analysis" Journal of Archaeological Science (2009), **36**, 2755-2764
- [133] N Michelutti, AP Wolfe, A Simonetti, JP Briner, S Funder and RA Creaser. "Temporal Trends of Pollution Pb and other metals in east-central Baffin Island Inferred from Lake-Sediment Geochemistry". Science of the Total Environment (2009), **407**, 5653-5662.
- [132] L Larson, LM Heaman, RA Creaser, R Duncan, R Frei and M Hutchison. "Tectonomagmatic events during stretching and basin formation in the Labrador Sea and the Davis Strait: evidence from age and composition of Mesozoic to Palaeogene dyke swarms in West Greenland". Journal of the Geological Society of London (2009), **166**, 999-1012.
- [131] T Bristow, MJ Kennedy, A Derkowski, M Droser G Jiang and RA Creaser. "Mineralogical constraints on the paleoenvironments of the Ediacaran Doushantuo Formation". Proceedings National Academy Sciences (2009), **106** (32), 13190-13195.
- [130] BS Kendall, RA Creaser, CR Calver, TD Raub and DAD Evans "Correlation of Sturtian Diamictite Successions in Southern Australia and Northwestern Tasmania by Re-Os Black Shale Geochronology and the Ambiguity of "Sturtian"-type Diamictite – Cap Carbonate Pairs as Chronostratigraphic Marker Horizons". Precambrian Research (2009), **172**, 301-310.
- [129] K Secher, LM Heaman, TFD Nielsen, SM Jensen, F Schjoth and RA Creaser "Timing of kimberlite, carbonatite and ultramafic lamprophyre emplacement in the alkaline province located 64-67N in southern West Greenland". Lithos (2009), **112S**, 400-406.
- [128] S Aulbach, RA Creaser, NJ Pearson, SS Simonetti, LM Heaman, WL Griffin and T Stachel "Sulfide and whole-rock Re-Os systematics of eclogite and pyroxenite xenoliths from the Slave Craton, Canada". Earth & Planetary Sciences Letters (2009), **283**, 48-53.

- [127] L Hunt, T Stachel, R Morton H Grutter and RA Creaser. "The Carolina kimberlite, Brazil – insights into an unconventional diamond deposit". Lithos (2009), **112S**, 843-851.
- [126] S Aulbach, TS Stachel, RA Creaser, LM Heaman, SB Shirey, K Muehlenbachs, D Eichenberg and JW Harris. "Sulfide survival and diamond genesis during formation and evolution of Archean subcontinental lithosphere: Slave vs. Kaapvaal". Lithos (2009), **112S**, 747-757.
- [125] AR Chakhmouradian, CO Böhm, A Demény, EP Reguir, E Hegner, RA Creaser, NM Halden and P Yang. "'Kimberlite' from Wekusko Lake, Manitoba: Actually a diamond-indicator-bearing dolomite carbonatite". Lithos (2009), **112S**, 347-357.
- [124] B Kendall, RA Creaser, GW Gordon and AD Anbar. "Re-Os and Mo Isotope Systematics of Black Shales from the Middle Proterozoic Velkerri and Wollgorang Formations, McArthur Basin, Northern Australia". Geochimica et Cosmochimica Acta (2009), **73**, 2534-2558.
- [123] P Duuring, SM Rowins, BSM McKinley, JM Dickinson, LJ Diakow, Y-S Kim and RA Creaser "Magmatic and structural controls on porphyry-style Cu-Au-Mo mineralization at Kemess South, Toodoggone district of British Columbia, Canada". Mineralium Deposita (2009), **44**, 435-462.
- [122] P Duuring, SM Rowins, JM Dickinson, BSM McKinley, LJ Diakow Y-S Kim and RA Creaser "Examining potential genetic links between Jurassic porphyry Cu-Au±Mo and epithermal Au±Ag mineralization in the Toodoggone district of north-central British Columbia, Canada". Mineralium Deposita (2009), **44**, 463-496.
- [121] V Ispolatov, B Lafrance, B Dubé, RA Creaser, and M Hamilton. "Geologic and structural setting of gold mineralization in the Kirkland Lake-Larder Lake gold belt, Ontario". Economic Geology (2008), **103**, 1309-1340.
- [120] SJ Piercey, EC Chaloux, AS Peloquin, MA Hamilton, and RA Creaser. "Synvolcanic and younger rocks from the Blake River Group: Implications for regional metallogenesis". Economic Geology (2008), **103**, 1243-1268.
- [119] DJ Kontak, DA Archibald, RA Creaser and LM Heaman "Dating Hydrothermal Alteration Attending IOCG Mineralization Along a Terrane Bounding Fault Zone: The Copper Lake Deposit, Nova Scotia". Atlantic Geology (2008), **44**, 146-166.
- [118] JE Scott JP Richards, LM Heaman, RA Creaser and GS Salazar. "The Schaft Creek Porphyry Cu-Mo-(Au) deposit, Northwestern British Columbia". Journal of the Geological Society of CIM - Exploration and Mining Geology (2008), **17**, 163-196.
- [117] S Zurevinski, LM Heaman, RA Creaser and P Strand. "The newly discovered Churchill kimberlite field, Canada: Petrography, mineral chemistry and geochronology". Canadian Journal of Earth Sciences (2008), **45**, 1039-1059.
- [116] K Azmy, B Kendall, RA Creaser, LM Heaman and TF de Oliveira. "Global Correlation of the Vazante Group, São Francisco Basin, Brazil: Re-Os and U-Pb radiometric age constraints". Precambrian Research (2008), **164**, 160-172.
- [115] VA Andrushko, MR Buzon, A Simonetti, RA Creaser. "Strontium isotope evidence for prehistoric migration at Chokepukio, Valley of Cuzco, Peru". Latin American Antiquity (2009), **20**, 57-75.
- [114] GA Morris and RA Creaser. "Correlation of mid-Cretaceous granites with source terranes in the northern Canadian Cordillera". Canadian Journal of Earth Sciences (2008), **45**, 389-403.
- [113] B Kendall, RA Creaser and D Selby. "¹⁸⁷Re-¹⁸⁷Os geochronology of Precambrian organic-rich sedimentary rocks". Geological Society of London Special Publication (2009), **326**, 85-107.
- [112] AG Mueller, GC Hall, AA Nemchin, HJ Stein, RA Creaser and DA Mason. "Archean high-Mg monzodiorite-syenite, epidote skarn and biotite-sericite gold lodes in the Granny Smith-Wallaby district Australia: U-Pb and Re-Os chronometry of two intrusion-related hydrothermal systems". Mineralium Deposita (2008), **43**, 337-362.
- [111] SC Turgeon and RA Creaser "Cretaceous Oceanic Anoxic Event 2 triggered by massive magmatic event". Nature (2008) **454**, 323-326.

- [110] RG Skirrow, EN Bastrakov, K Barovich, G Fraser, RA Creaser, CM Fanning, O Raymond and GJ Davidson. "Timing of Iron Oxide Cu-Au-(U) Hydrothermal Activity and Nd Isotope Constraints on Metal Sources in the Gawler Craton, South Australia". Economic Geology (2007), **102**, 1447-1470.
- [109] ChO Böhm, HV Zwanzig and RA Creaser. "Sm-Nd isotope technique as exploration tool: delineating the north extension of the Thompson Nickel Belt, Manitoba, Canada". Economic Geology (2007), **102**, 1217-1231.
- [108] CM Haverkort, AW Weber, MA Katzenberg, OI Goriunova, A Simonetti and RA Creaser. "Hunter-Gatherer mobility strategies and resource use based on strontium isotope ($^{87}\text{Sr}/^{86}\text{Sr}$) analysis: A case study from Middle Holocene Lake Baikal, Siberia". Journal of Archaeological Science (2008), **35**, 1265-1280.
- [107] DR Eccles, RA Creaser, LM Heaman and J Ward. "Rb-Sr and U-Pb geochronology and setting of Buffalo Head Hills kimberlite field, Northern Alberta". Canadian Journal of Earth Sciences (2008), **45**, 513-529.
- [106] Y Lemieux, RI Thompson P Erdmer, A Simonetti and RA Creaser. "Detrital zircon geochronology and provenance of late Proterozoic and mid-Paleozoic successions outboard of the miogeocline, southeastern Canadian Cordillera". Canadian Journal of Earth Sciences (2007), **44**, 1675-1693.
- [105] SC Turgeon, RA Creaser and TJ Algeo, "Re-Os depositional ages and seawater Os estimates for the Frasnian-Famennian boundary: implications for weathering rates, land plant evolution, and extinction mechanisms". Earth & Planetary Science Letters (2007), **261**, 649-661.
- [104] AD Anbar, Y Duan, TW Lyons, GL Arnold, B Kendall, RA Creaser, AJ Kaufman, GW Gordon, C Scott, J Garvin and R Buick. "A Whiff of Oxygen Before the Great Oxidation Event". Science. (2007), **317**, 1903-1906.
- [103] R Markey, HJ Stein, JL Hannah, D Selby and RA Creaser. "Standardizing Re-Os geochronology: A new molybdenite Reference Material (Henderson, USA) and the stoichiometry of Os salts". Chemical Geology (2007), **244**, 74-87.
- [102] L Ootes, DR Lentz, RA Creaser, J Ketchum, and H Falck. "Re-Os molybdenite ages from the Archean Yellowknife greenstone belt: comparison to U-Pb ages and evidence for metal introduction at ca. 2575 Ma". Economic Geology (2007), **102**, 511-518.
- [101] A Simonetti, MR Buzon and RA Creaser. "In-situ elemental and Sr isotope investigation of human tooth enamels by laser ablation – (MC) – ICPMS: successes and pitfalls. Archaeometry (2008), **50**, 371-385.
- [100] RM Morelli, RA Creaser, R Seltmann, FM Stuart, D Selby and T Graupner. "Age and source constraints for the giant Muruntau gold deposit, Uzbekistan, from coupled Re-Os-He isotopes in arsenopyrite. Geology (2007), **35**, 795-798.
- [99] MEJ Schultz, T Chacko, LM Heaman HA Sandeman, A Simonetti and RA Creaser. "The Queen Maud Block: A newly recognized Paleoproterozoic (2.4-2.5 Ga) Terrane in Northwest Laurentia". Geology (2007), **35**, 707-710.
- [98] D Selby, RA Creaser, HJ Stein, RJ Markey and JL Hannah. "Assessment of the ^{187}Re decay constant by cross calibration of the ^{187}Re - ^{187}Os molybdenite and U-Pb zircon chronometers". Geochimica et Cosmochimica Acta (2007), **71**, 1999-2013.
- [97] RJ Leite, LM Heaman, VA Janasi and RA Creaser. "The late- to postorogenic transition in the Neoproterozoic Agudos Grandes Granite Batholith (Apiá Domain, SE Brazil): Constraints from geology, mineralogy, and U-Pb geochronology". South American Journal Earth Sciences (2007), **23**, 193-212.
- [96] RJ Leite, VA Janasi, RA Creaser and LM Heaman. "The late- to postorogenic transition in the Apiá domain, SE Brazil: Constraints from the petrogenesis of the Neoproterozoic Agudos Grandes Granite Batholith". South American Journal Earth Sciences (2007), **23**, 213-235.

- [95] MR Buzon, A Simonetti, and RA Creaser. "Migration in the Nile Valley during the New Kingdom Period: A Preliminary Strontium Isotope Study". Journal of Archaeological Science (2007), **34**, 1391-1401.
- [94] SS Schmidberger, LM Heaman, A Simonetti, RA Creaser and S Whiteford. "Lu-Hf, in-situ Sr and Pb isotope and trace element systematics for mantle eclogites from the Diavik diamond mine: Evidence for Paleoproterozoic subduction beneath the Slave craton, Canada". Earth and Planetary Science Letters (2007), **254**, 55-68.
- [93] P Hollings, A Richardson, RA Creaser and J Franklin. "Radiogenic isotope characteristics of the Midproterozoic intrusive rocks of the Nipigon Embayment, Northwestern Ontario". Canadian Journal of Earth Sciences (2007), **44**, 1111-1129.
- [92] D Selby, RA Creaser, and MG Fowler. "Re-Os elemental and isotopic systematics in crude oils". Geochimica et Cosmochimica Acta (2007), **71**, 378-386.
- [91] I Balintoni, DI Pana, RA Creaser, and LM Heaman. "The Impact of Recent Sm-Nd and U-Pb Data on Previous Classifications of Basement Rocks in the Carpathians-Romania". Gondwana Research (2001), **4**, 144-146.
- [90] M Bowerman, A Christianson, RA Creaser, and RW Luth. "A petrological and geochemical study of the volcanic rocks of the Crowsnest Formation, southwestern Alberta, and of the Howell Creek suite, British Columbia". Canadian Journal of Earth Sciences (2006), **43**, 1621-1637.
- [89] TW Ruks, SJ Piercey, JJ Ryan, ME Villeneuve and RA Creaser. "Mid- to Late Paleozoic K-Feldspar Augen Granitoids of the Yukon-Tanana Terrane, Yukon, Canada: Implications for Crustal Growth and Tectonic Evolution of the Northern Cordillera". Geological Society of America Bulletin (2006), **118**, 1212-1231.
- [88] BS Kendall, RA Creaser, and D Selby. "Re-Os geochronology of post-glacial black shales in Australia: Constraints on the timing of "Sturtian" glaciation". Geology (2006), **34**, 729-732.
- [87] LM Heaman, RA Creaser, T Chacko and HO Cookenboo. "Multi-stage modification of the Slave Craton mantle lithosphere: Evidence from an unusual suite of zircon-bearing eclogites entrained in the Jericho kimberlite, Canada". Journal of Petrology (2006), **47**, 821-858.
- [86] S Paradis, SL Bailey, ND Hughes, RA Creaser, SJ Piercey and P Schiarizza. "Geochemistry and paleotectonic setting of the Eagle Bay Assemblage and its polymetallic massive sulphide deposits, British Columbia, Canada". Geological Association of Canada Special Paper (2006), **45**, 383-414.
- [85] SS Schmidberger, LM Heaman, A Simonetti, RA Creaser, and HO Cookenboo. "Formation of Paleoproterozoic Eclogitic Mantle, Slave Province (Canada): Insights From in-situ Hf and U-Pb Isotopic Analyses of Mantle Zircons". Earth and Planetary Science Letters (2005), **240**, 621-633.
- [84] RP Hartlaub, T Chacko T., LM Heaman, RA Creaser, KE Ashton and A Simonetti. "Ancient (Meso- to Paleoarchean) crust in the Rae Province, Canada: Evidence from Sm-Nd and U-Pb constraints". Precambrian Research (2005), **141**, 137-153.
- [83] RM Morelli, RA Creaser, D Selby, DJ Kontak and RJ Horne. "Rhenium-Osmium arsenopyrite geochronology of Meguma Group gold deposits, Meguma Terrane, Nova Scotia, Canada: evidence for multiple gold mineralizing events". Economic Geology (2005), **100**, 1229-1242.
- [82] DJ Kontak, RA Creaser, LM Heaman and D Archibald. "U-Pb tantalite, Re-Os molybdenite, and $^{40}\text{Ar}/^{39}\text{Ar}$ muscovite dating of the Brazil Lake pegmatite, Nova Scotia: A possible shear-zone related origin for an LCT-type pegmatite". Atlantic Geology (2005), **41**, 17-29.
- [81] RA Creaser and LD Stasiuk. "Depositional age of the Douglas Formation, northern Saskatchewan, determined by Re-Os geochronology". Geological Survey of Canada Bulletin (2007), **588**, 341-346.
- [80] A Simonetti, LM Heaman, RP Hartlaub, RA Creaser, T McHattie and ChO Böhm. "U-Pb zircon dating by laser ablation-MC-ICP-MS using a new multiple ion counting-faraday collector array". Journal of Analytical Atomic Spectrometry (2005), **20**, 677-686.
- [79] D Selby and RA Creaser. "Direct radiometric dating of hydrocarbon deposits using rhenium-

osmium isotopes". Science (2005), **308**, 1293-1295.

- [78] P Erdmer, MG Mihalynuk, H Gabrielse, LM Heaman and RA Creaser. "Cordilleran miogeoclinal strata conformably overlain by Mississippian volcanic arc rocks near the Turnagain River, northern British Columbia". Canadian Journal of Earth Sciences (2005), **42**, 1449-1465.
- [77] I Mitchell, RL Linnen and RA Creaser. "The Setting and Age of the Bermuda Showing, Grinnell Peninsula, Devon Island: Implications for MVT Mineralization in the Canadian Arctic". Journal of the Geological Society of CIM - Exploration and Mining Geology (2004), **13**, 109-118.
- [76] D Pana, RA Creaser, K Muehlenbachs, and K Wheatley. "Basement geology in the Alberta portion of the Athabasca Basin, context for the Maybelle River area". Geological Survey of Canada Bulletin (2007), **588**, 135-153.
- [75] D Selby, RA Creaser, K Dewing and M Fowler. "Evaluation of the utility of bitumen for Re-Os geochronology: Implications for the timing of hydrocarbon maturation and migration". Earth and Planetary Science Letters (2005), **235**, 1-15.
- [74] D Selby and RA Creaser. "Direct radiometric dating of the Devonian-Carboniferous timescale boundary using the Re-Os black shale geochronometer". Geology (2005), **33**, 545-548.
- [73] DJ Thorkelson, GJ Abbott, JK Mortensen, RA Creaser, ME Villeneuve, VJ McNicoll, and PW Layer. "Early and Middle Proterozoic evolution of Yukon, Canada". Canadian Journal of Earth Sciences (2005), **42**, 1045-1071.
- [72] Schwab, D.L., Thorkelson, D.J., Mortensen, J.K., RA Creaser, and Abbott, G.J., 2004, The Bear River Dikes (1265-1269 Ma): Westward continuation of the Mackenzie Dyke Swarm into Yukon, Canada. Precambrian Research, **133**, 175-186.
- [71] Lentz, D.R and Creaser, R.A., 2005, Re-Os model age constraints on the genesis of the Moss molybdenite pegmatite-aplite deposits, southwestern Grenville Province, Quyon, Quebec, Canada. Journal of the Geological Society of CIM - Exploration and Mining Geology, **14**, 95 - 103.
- [70] Caro, G., Kopylova, M. G., and RA Creaser, 2004, The hypabyssal 5034 kimberlite of the Gahcho Kue cluster (southeastern Slave craton, northern Canada): A granite-contaminated Group I kimberlite. Canadian Mineralogist, **42**, 183-207
- [69] Morelli, R., RA Creaser, Selby, D., Kelley, K., Leach, D., and King, A., 2004, Re-Os sulfide geochronology from the Red Dog sediment-hosted Zn-Pb Ag deposit, Alaska. Economic Geology, **99**, 1569-1576.
- [68] Kendall, B., RA Creaser, Ross, G.M., and Selby, D., 2004, Constraints on the timing of Marinoan "Snowball Earth" glaciation by ¹⁸⁷Re-¹⁸⁷Os dating of a Neoproterozoic, post-glacial black shale in Western Canada. Earth and Planetary Science Letters, **222**, 729-740.
- [67] Selby, D., and RA Creaser, 2004. Macroscale NTIMS and microscale LA-MC-ICP-MS Re-Os isotopic analysis of molybdenite: Testing spatial restrictions for reliable Re-Os age determinations, and implications for the decoupling of Re and Os within molybdenite. Geochimica et Cosmochimica Acta, **68**, 3897-3908
- [66] Heaman, L.M., Kjarsgaard, B., and RA Creaser, 2004, Temporal evolution of North American kimberlites. Lithos, **76**, 377-397.
- [65] Eccles, D.R., Heaman, L.M., Luth, R.W., and RA Creaser, 2004, Petrogenesis of the Late Cretaceous Northern Alberta Kimberlite Province. Lithos, **76**, 435-459.
- [64] RA Creaser, Grutter, H.S., Carlson J., and Crawford, B., 2004, Macrocystal phlogopite Rb-Sr dates for the Ekati property kimberlites: Evidence for multiple intrusive episodes during Paleocene and Eocene time. Lithos, **76**, 399-414.
- [63] Selby, D., RA Creaser, and Feely, M., 2004, Accurate and precise Re-Os molybdenite dates from the Galway Granite, Ireland. A Critical Comment to: "Disturbance of the Re-Os chronometer of molybdenites from the late-Caledonian Galway Granite, Ireland, by hydrothermal fluid circulation". Geochemical Journal, **38**, 291-294.

- [62] Piercey, S.J., Murphy, D.C., Mortensen, J.K., and RA Creaser, 2004, The Mid-Paleozoic Initiation of the Northern Cordilleran Marginal Back-Arc Basin: Geological, Geochemical and Neodymium Isotopic Evidence from the Oldest Mafic Magmatic Rocks in Yukon-Tanana Terrane, Finlayson Lake district, Southeast Yukon, Canada. Geological Society of America Bulletin, **116**, 1087-1106.
- [61] Petersen, N.T., Smith, P.L., Mortensen, J.K., RA Creaser, and Tipper, H.W., 2004, Provenance of Jurassic sedimentary rocks of south-central Quesnel Terrane, British Columbia. Canadian Journal of Earth Sciences, **41**, 103-125.
- [60] Selby, D., RA Creaser, Heaman, L.M. and Hart, C.J.R., 2003, Re-Os and U-Pb geochronology of the Clear Creek, Dublin Gulch and Mactung deposits, Tombstone Gold Belt, Yukon, Canada: Absolute timing relationships between plutonism and mineralization. Canadian Journal of Earth Sciences, **40**, 1839-1852.
- [59] Weber, A.W., RA Creaser, Goriunova, O.I., and Haverkort, C, 2003, Strontium isotope tracers in enamel of permanent human molars provide new insights into prehistoric hunter-gatherer mobility patterns: A pilot study of a Middle Holocene group from Cis-Baikal. Northern Hunter-Gatherers: research series, Vol 1. Canadian Circumpolar Institute Press, Edmonton.
- [58] Morris, G., and RA Creaser, 2003, Crustal recycling during subduction at the Eocene Cordilleran margin of North America: a petrogenetic study from the southwestern Yukon. Canadian Journal of Earth Sciences, **40**, 1805-1821.
- [57] Turner, W.A., Heaman, L.M., and RA Creaser, 2003, Sm-Nd and U-Pb dating of Proterozoic low-sulfidation epithermal Au-Ag deposits and associated host rocks at Mallery Lake, Nunavut, Canada. Canadian Journal of Earth Sciences, **40**, 1789-1804.
- [56] Bohm, Ch., Heaman, L.M., Stern, R.A., Corkery, M.T., and RA Creaser, 2003, Nature of Assean Lake ancient crust, Manitoba: Refinement based on a Sm-Nd isotope and combined ion microprobe – ID-TIMS zircon study. Precambrian Research, **126**, 55-94.
- [55] Selby, D., and RA Creaser, 2003, Re-Os geochronology of organic rich sediments: An evaluation of organic matter analysis methods. Chemical Geology, **200**, 225-240.
- [54] Heaman, L.M., Kjarsgaard, B., and RA Creaser, 2003, The timing of kimberlite magmatism in North America: implications for global kimberlite genesis and diamond exploration . Lithos, **71**, 153-184
- [53] Canil, D., Johnston, S.T., Evers, K., Shellnutt, J.G., and RA Creaser, 2003, Mantle exhumation in an Early Paleozoic passive margin, Yukon-Tanana terrane, Yukon. Journal of Geology, **111**, 313 – 327.
- [52] McBirney, A.R., and RA Creaser, 2003, The Skaergaard Layered Series. Part VII. Sr and Nd isotopes. Journal of Petrology, **44**, 757-771.
- [51] Piercey, S.J., Mortensen, J.K., and RA Creaser, 2003, Neodymium isotope geochemistry of felsic volcanic and intrusive rocks from the Yukon-Tanana terrane in the Finlayson Lake region, Yukon, Canada. Canadian Journal of Earth Sciences, **40**, 77-97.
- [50] Piercey, S.J., Mortensen, J.K., Murphy, D.C., Paradis, S., and RA Creaser, 2002, Geochemistry and tectonic significance of alkalic mafic magmatism in the Yukon-Tanana terrane, Finlayson Lake region, Yukon. Canadian Journal of Earth Sciences, **39**, 1729-1744
- [49] Erdmer, P., Moore, J.M., Heaman, L.M., Thompson, R.I., Daughtry, K.L. and RA Creaser, 2002, Extending the ancient margin outboard in the Canadian Cordillera: Evidence of Proterozoic crust and Paleocene regional metamorphism in the Nicola horst, southeastern British Columbia. Canadian Journal of Earth Sciences, **39**, 1605-1623.
- [48] Selby, D., RA Creaser, Hart, C.J., Rombach, C.S., Thompson, J.F.H., Smith, M.T., Bakke, A.A., and Goldfarb, R.J., 2002, Absolute timing of sulfide and gold mineralization: A comparison of Re-Os molybdenite and Ar-Ar mica methods from the Tintina Gold Belt, Alaska. Geology, **30**, 791-794.
- [47] RA Creaser, Sannigrahi, P., Chacko, T. and Selby, D., 2002, Further evaluation of the Re-Os geochronometer in organic-rich sediments: A test of hydrocarbon maturation effects in the Exshaw Formation, Western Canada Sedimentary Basin, Canada. Geochimica et

Cosmochimica Acta, **66**, 3441-3452.

- [46] Heaman, L.M., RA Creaser, and Cookenboo, H. O., 2002, Extreme high-field strength element enrichment in Jericho eclogite xenoliths: A cryptic record of Paleoproterozoic subduction, partial melting and metasomatism beneath the Slave craton, Canada. Geology, **30**, 507-510.
- [45] Unterschutz, J.L.E., RA Creaser, Erdmer, P., Thompson R.I., and Daughtry, K.L., 2002, North American margin origin of Quesnel terrane strata in the southern Canadian Cordillera: Inferences from geochemical and Nd isotopic characteristics of Triassic metasedimentary rocks. Geological Society of America Bulletin, **114**, 462–475.
- [44] Sharp, M., RA Creaser, and Skidmore, M., 2002, Strontium isotope composition of runoff from a glacierized carbonate terrain. Geochimica et Cosmochimica Acta, **66**, 595-614.
- [43] Pana, D.I., Heaman, L.M., RA Creaser and Erdmer, P., 2002, Pre-Alpine tectonic framework of the Apuseni Mountains, Romania: Constraints from Sm-Nd and U-Pb isotopic data. Journal of Geology, **110**, 341–354.
- [42] RA Creaser, 2002, A review of the rhenium-osmium (Re-Os) isotope system with application to organic-rich sedimentary rocks. In: Lentz, D.R., (Ed.), Geochemistry of Sediments and Sedimentary Rocks: Evolutionary considerations to Mineral Deposit-Forming Environments. Geological Association of Canada, Geotext **4**, 79-82.
- [41] Selby, D., and RA Creaser, 2001, Late- and Mid-Cretaceous mineralization in the northern Canadian Cordillera: constraints from Re-Os molybdenite dates. Economic Geology, **96**, 1461-1467.
- [40] Thorkelson, D.J., Mortensen, J.K., RA Creaser, Davidson, G.J., and Abbott, J.G., 2001, Early Proterozoic magmatism in Yukon, Canada: Constraints on the evolution of northwestern Laurentia. Canadian Journal of Earth Sciences, **38**, 1479-1494.
- [39] Thorkelson, D.J., Mortensen, J.K., Davidson, G.J., RA Creaser, Perez, W., and Abbott, J.G., 2001, Mesoproterozoic intrusive breccias in Yukon, Canada: The role of hydrothermal systems in reconstructions of North America and Australia. Precambrian Research, **111**, 31 – 55.
- [38] Erdmer. P., Heaman, L.M., RA Creaser, Thompson, R.I., and Daughtry, K.L., 2001, Eocambrian granite clasts in southern British Columbia shed light on Cordilleran hinterland crust. Canadian Journal of Earth Sciences, **38**, 1007-1016.
- [37] Selby, D, Nesbitt, B.E., RA Creaser, Reynolds, P.H., and Muehlenbachs, K., 2001, Evidence for a non-magmatic component in potassic hydrothermal fluids of porphyry Cu-Au-Mo systems, Yukon, Canada. Geochimica et Cosmochimica Acta, **65**, 571-587.
- [36] Selby, D and RA Creaser, 2001, Re-Os geochronology and systematics of molybdenite from the Endako porphyry Mo deposit, British Columbia, Canada. Economic Geology, **96**, 197-204.
- [35] Mezger, J.E., RA Creaser, and Erdmer, P., 2001, Cretaceous back-arc basin along the Coast Belt of the northern Canadian Cordillera: Evidence from geochemical and Nd isotopic signatures of the Kluane metamorphic assemblage, SW Yukon. Canadian Journal of Earth Sciences, **38**, 91-103.
- [34] Buhlmann, A., Cavell, P., Burwash, R., Luth, R.W., RA Creaser, 2000, Minettes and cognate mica-clinopyroxenite xenoliths from the Milk River area, southern Alberta: Records of a complex history of the northernmost part of the Archean Wyoming craton Canadian Journal of Earth Sciences, **37**, 1629-1650.
- [33] Chacko, T., De, S.K., RA Creaser, and Muehlenbachs, K., 2000, Tectonic setting of the 1.9 – 2.0 Ga Taltson Magmatic Zone, NE Alberta: A granite-based perspective. Canadian Journal of Earth Sciences, **37**, 1597-1609.
- [32] De, S.K., Chacko, T., RA Creaser, and Muehlenbachs, K., 2000, Geochemical and Nd-Pb-O isotope systematics of granites from the Taltson Magmatic Zone, NE Alberta: Implications for early Proterozoic tectonics in western Laurentia. Precambrian Research, **102**, 223-251.
- [31] Bohm, Ch., Heaman, L.M., RA Creaser, and Corkery, M.T., 2000, Discovery of pre- 3.5 Ga

crust at the northwestern margin of the Superior Craton, Manitoba Canada. Geology, **28**, 75-78.

- [30] Driver, L.A., RA Creaser, Chacko, T., and Erdmer, P., 2000, Petrogenesis of the Cretaceous Cassiar batholith, Yukon-B.C., Canada: Implications for magmatism in the North American Cordilleran Interior. Geological Society of America Bulletin, **112**, 1119-1133.
- [29] Yamashita, K., RA Creaser, and Villeneuve, M.E., 2000, Integrated Nd isotopic and U-Pb detrital zircon systematics of clastic sedimentary rocks from the Slave Province, Canada: Constraints for crustal recycling in early- to mid-Archean. Earth and Planetary Science Letters, **174**, 283-300.
- [28] Yamashita, K., RA Creaser, Jensen, J.E., Heaman, L.M., 2000, Origin and evolution of mid- to late-Archean crust in the Hanikahimajuk Lake area, Slave Province, Canada; Evidence from U-Pb geochronological, geochemical and Nd-Pb isotopic data. Precambrian Research, **99**, 197-224.
- [27] RA Creaser, Goodwin-Bell, J.S., and Erdmer, P., 1999, Geochemical and Nd isotopic constraints for the origin of eclogite protoliths, northern Cordillera: Implications for the Paleozoic tectonic evolution of the Yukon-Tanana terrane. Canadian Journal of Earth Sciences, **36**, 1697-1709.
- [26] Beakhouse, G.P, Heaman, L.M., RA Creaser, 1999, Geochemical and U-Pb zircon geochronological constraints on the development of a Late Archean greenstone belt at Birch Lake, Superior Province, Ontario. Precambrian Research, **97**, 77-98.
- [25] Yamashita, K., and RA Creaser, 1999, Geochemical and Nd isotopic study of late-Archean turbidites, Yellowknife area, SW Slave province, Canada. Geochimica et Cosmochimica Acta, **63**, 2579-2598.
- [24] Selby, D., RA Creaser, Nesbitt B.E., 1999, Geochemical and isotopic characterization of crystalline rocks from the Dawson Range, Yukon. Canadian Journal of Earth Sciences, **36**, 1463-1481.
- [23] Yamashita, K., RA Creaser, Stemler, J. and Zimaro, A., 1999, Geochemical and Nd-Pb isotopic systematics of late Archean granitoids, SW Slave province: Constraints for granitoid origin and crustal isotopic structure. Canadian Journal of Earth Sciences, **36**, 1131-1147.
- [22] Holmden, C., RA Creaser, Muehlenbachs, K., Leslie, S.A., Bergstrom, S.M., 1998, Isotopic evidence for geochemical decoupling between ancient epeiric seas and bordering oceans: Implications for secular curves. Geology, **26**, 567-570.
- [21] RA Creaser, Heaman, L.M., Erdmer, P., 1997, Timing of high-pressure metamorphism in the Yukon-Tanana terrane, Canadian Cordillera: constraints from U-Pb zircon dating of eclogite from the Teslin tectonic zone. Canadian Journal of Earth Sciences, **34**, 709-715.
- [20] Holmden, C., RA Creaser, Muehlenbachs, K., 1997, Paleosalinities in brackish water environments: A method based on the isotopic paleohydrology of strontium. Geochimica et Cosmochimica Acta, **61**, 2105-2118.
- [19] Holmden, C., Muehlenbachs, K., RA Creaser, 1997, Depositional environment of the early Cretaceous Ostracode Zone: Paleohydrologic constraints from O, C and Sr isotopes. Canadian Society of Petroleum Geologists Special Memoir **18**, 77-92.
- [18] RA Creaser, Erdmer, P., Stevens, R.A., Grant, S.L., 1997, Tectonic affinity of Nisutlin and Anvil assemblage strata from the Teslin tectonic zone, northern Canadian Cordillera: Constraints from neodymium isotope and geochemical evidence. Tectonics, **16**, 107-121.
- [17] Holmden, C., RA Creaser, Muehlenbachs, K., Leslie, S.A., Bergstrom, S.M., 1996, Isotopic and elemental systematics of Sr and Nd in 454 Ma biogenic apatites: implications for paleoseawater studies. Earth and Planetary Science Letters, **142**, 425-437.
- [16] AD Brandon, RA Creaser, SB Shirey and RW Carlson. "Osmium recycling in subduction zones". Science (1996), **272**, 861-864.
- [15] RA Creaser. "Origin of a Mesoproterozoic quartz latite - granitoid suite, Roxby Downs, South Australia". Precambrian Research (1996) , **79**, 371-394.
- [14] AD Brandon, RA Creaser and T Chacko. "Constraints on rates of granite magma transport

from epidote dissolution kinetics". Science (1996), **271**, 1845-1848.

- [13] RA Stevens, P Erdmer, RA Creaser and SL Grant. "Mississippian assembly of the Nisutlin assemblage: Evidence from primary contact relationships and Mississippian magmatism in the Teslin tectonic zone, part of the Yukon-Tanana terrane of south-central Yukon". Canadian Journal of Earth Sciences (1996), **33**, 103-116.
- [12] RA Creaser, "Neodymium isotopic constraints for the origin of Mesoproterozoic felsic magmatism, Gawler Craton, South Australia". Canadian Journal of Earth Sciences (1995), **32**, 460-471.
- [11] AH Blissett, RA Creaser, S Daly, RB Flint, and AJ Parker. "The Gawler Range Volcanics". South Australia Department of Mines and Energy Bulletin, **54**, 107-124.
- [10] RA Creaser and CM Fanning. "A U-Pb zircon study of the Mesoproterozoic Charleston Granite, Gawler Craton, South Australia". Australian Journal of Earth Sciences (1993), **40**, 519-526.
- [9] RA Creaser and JA Cooper. "U-Pb geochronology of felsic magmatism surrounding the Olympic Dam Cu-U-Au-Ag and Moonta Cu-Au-Ag deposits, South Australia". Economic Geology (1993), **88**, 186-197.
- [8] AD Anbar, RA Creaser, DA Papanastassiou and GJ Wasserburg. "Rhenium in seawater: Confirmation of generally conservative behavior". Geochimica et Cosmochimica Acta (1992), **56**, 4099-4103.
- [7] RA Creaser and CM Gray. "Preserved initial $^{87}\text{Sr} / ^{86}\text{Sr}$ ratios in apatite from altered felsic igneous rocks: A case study from the Middle Proterozoic of South Australia". Geochimica et Cosmochimica Acta (1992), **56**, 2789-2795.
- [6] RA Creaser, DA Papanastassiou and GJ Wasserburg. "Negative thermal ion mass spectrometry of osmium, rhenium and iridium. Geochimica et Cosmochimica Acta (1991), **55**, 397-401.
- [5] RA Creaser, RC Price and RJ Wormald. "Reply to comment on "A-type granites revisited - assessment of a residual source model"". Geology (1991), **19**, 1151-1152.
- [4] RA Creaser, RC Price, and RJ Wormald. "A-type granites revisited: Assessment of a residual source model". Geology (1991), **19**, 163-166.
- [3] RA Creaser and AJR White. "The Yardea Dacite - large-volume, high-temperature felsic volcanism from the Middle Proterozoic of South Australia". Geology (1991), **19**, 48-51.
- [2] RA Creaser. "Comment on "Depth and mineralogy of the magma source or pause region for the Carboniferous Liberty Hill pluton, South Carolina"". Geology (1989), **17**, 482-483.
- [1] AL Jaques, RA Creaser, J Ferguson and CB Smith. "A review of the alkaline rocks of Australia". Transactions of the Geological Society of South Africa (1985), **88**, 311-334.