

# Larry M Heaman

## List of Publications by Year in descending order

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71  
papers

6,170  
citations

76326

40  
h-index

98798

67  
g-index

72  
all docs

72  
docs citations

72  
times ranked

2904  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Mackenzie igneous events, Canada: Middle Proterozoic hotspot magmatism associated with ocean opening. <i>Earth and Planetary Science Letters</i> , 1989, 96, 38-48.   | 4.4 | 457       |
| 2  | Paragenesis and U-Pb systematics of baddeleyite (ZrO <sub>2</sub> ). <i>Chemical Geology</i> , 1993, 110, 95-126.   | 3.3 | 420       |
| 3  | Nature and timing of Franklin igneous events, Canada: Implications for a Late Proterozoic mantle plume and the break-up of Laurentia. <i>Earth and Planetary Science Letters</i> , 1992, 109, 117-131.  | 4.4 | 330       |
| 4  | The chemical composition of igneous zircon suites: implications for geochemical tracer studies. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 1597-1607.   | 3.9 | 307       |
| 5  | 1891-1883Ma Southern Bastar-Cuddapah mafic igneous events, India: A newly recognized large igneous province. <i>Precambrian Research</i> , 2008, 160, 308-322.  | 2.7 | 294       |
| 6  | Global mafic magmatism at 2.45 Ga: Remnants of an ancient large igneous province?. <i>Geology</i> , 1997, 25, 299.  | 4.4 | 285       |
| 7  | The application of U-Pb geochronology to mafic, ultramafic and alkaline rocks: An evaluation of three mineral standards. <i>Chemical Geology</i> , 2009, 261, 43-52.  | 3.3 | 242       |
| 8  | Between carbonatite and lamproite-Diamondiferous Torngat ultramafic lamprophyres formed by carbonate-fluxed melting of cratonic MARID-type metasomes. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 3258-3286.   | 3.9 | 221       |
| 9  | Timing of eastern North American kimberlite magmatism: continental extension of the Great Meteor hotspot track?. <i>Earth and Planetary Science Letters</i> , 2000, 178, 253-268.   | 4.4 | 203       |
| 10 | Precise U-Pb dating of Paleoproterozoic mafic dyke swarms of the Dharwar craton, India: Implications for the existence of the Neoproterozoic supercraton Sclavia. <i>Precambrian Research</i> , 2010, 183, 416-441.   | 2.7 | 201       |
| 11 | The temporal evolution of North American kimberlites. <i>Lithos</i> , 2004, 76, 377-397.  | 1.4 | 198       |
| 12 | Gunbarrel mafic magmatic event: A key 780 Ma time marker for Rodinia plate reconstructions. <i>Geology</i> , 2003, 31, 1053.  | 4.4 | 178       |
| 13 | The timing of kimberlite magmatism in North America: implications for global kimberlite genesis and diamond exploration. <i>Lithos</i> , 2003, 71, 153-184.   | 1.4 | 150       |
| 14 | U-Pb zircon dating by laser ablation-MC-ICP-MS using a new multiple ion counting Faraday collector array. <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 677.   | 3.0 | 149       |
| 15 | The newly discovered Jurassic Tikiusaaq carbonatite-aillikite occurrence, West Greenland, and some remarks on carbonatite-kimberlite relationships. <i>Lithos</i> , 2009, 112, 385-399.   | 1.4 | 112       |
| 16 | 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. <i>Earth and Planetary Science Letters</i> , 2007, 254, 55-68. | 4.4 | 109       |
| 17 | Mesoproterozoic kimberlites in south India: A possible link to ~1.1Ga global magmatism. <i>Precambrian Research</i> , 2007, 154, 192-204.   | 2.7 | 104       |
| 18 | The nature of the subcontinental mantle from SrNdPb isotopic studies on kimberlitic perovskite. <i>Earth and Planetary Science Letters</i> , 1989, 92, 323-334.   | 4.4 | 103       |

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|----|---|------|-----------|
| 19 | Torngat ultramafic lamprophyres and their relation to the North Atlantic Alkaline Province. <i>Lithos</i> , 2004, 76, 491-518.  | 1.4  | 93        |
| 20 | 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. <i>Journal of the Geological Society</i> , 2009, 166, 999-1012. | 2.1  | 89        |
| 21 | Diamond growth from oxidized carbon sources beneath the Northern Slave Craton, Canada: A $^{13}\text{C}$ study of eclogite-hosted diamonds from the Jericho kimberlite. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 6027-6047.                             | 3.9  | 89        |
| 22 | Multi-Stage Modification of the Northern Slave Mantle Lithosphere: Evidence from Zircon- and Diamond-Bearing Eclogite Xenoliths Entrained in Jericho Kimberlite, Canada. <i>Journal of Petrology</i> , 2006, 47, 821-858.   | 2.8  | 88        |
| 23 | Diamondiferous kimberlites in central India synchronous with Deccan flood basalts. <i>Earth and Planetary Science Letters</i> , 2010, 290, 142-149.   | 4.4  | 88        |
| 24 | The paleomagnetic significance of new U-Pb age data from the Molson dyke swarm, Cauchon Lake area, Manitoba. <i>Canadian Journal of Earth Sciences</i> , 2000, 37, 957-966.   | 1.3  | 86        |
| 25 | The origin of high-MgO diamond eclogites from the Jericho Kimberlite, Canada. <i>Earth and Planetary Science Letters</i> , 2009, 284, 527-537.  | 4.4  | 85        |
| 26 | $\text{U-Pb}$ geochronology and geochemical variation within two Proterozoic mafic dyke swarms, Labrador. <i>Canadian Journal of Earth Sciences</i> , 1993, 30, 1490-1504.  | 1.3  | 81        |
| 27 | Filling in the juvenile magmatic gap: Evidence for uninterrupted Paleoproterozoic plate tectonics. <i>Earth and Planetary Science Letters</i> , 2014, 388, 123-133.   | 4.4  | 79        |
| 28 | Queen Maud block: A newly recognized Paleoproterozoic (2.4-2.5 Ga) terrane in northwest Laurentia. <i>Geology</i> , 2007, 35, 707.  | 4.4  | 66        |
| 29 | The Archean Murmac Bay Group: evidence for a giant Archean rift in the Rae Province, Canada. <i>Precambrian Research</i> , 2004, 131, 345-372.  | 2.7  | 63        |
| 30 | Feasibility of chemical $\text{U-Th-total Pb}$ baddeleyite dating by electron microprobe. <i>Chemical Geology</i> , 2002, 188, 85-104.  | 3.3  | 61        |
| 31 | Timing and geochemistry of 1.88Ga Molson Igneous Events, Manitoba: Insights into the formation of a craton-scale magmatic and metallogenic province. <i>Precambrian Research</i> , 2009, 172, 143-162.  | 2.7  | 61        |
| 32 | Bilaterian Burrows and Grazing Behavior at >585 Million Years Ago. <i>Science</i> , 2012, 336, 1693-1696.   | 12.6 | 61        |
| 33 | Age, petrogenesis and tectonic setting of the Thessalon volcanic rocks, Huronian Supergroup, Canada. <i>Precambrian Research</i> , 2013, 233, 144-172.  | 2.7  | 61        |
| 34 | Sulfide and whole rock $\text{Re-Os}$ systematics of eclogite and pyroxenite xenoliths from the Slave Craton, Canada. <i>Earth and Planetary Science Letters</i> , 2009, 283, 48-58.  | 4.4  | 56        |
| 35 | New $\text{U-Pb}$ baddeleyite and zircon ages for the Scourie dyke swarm: A long-lived large igneous province with implications for the Paleoproterozoic evolution of NW Scotland. <i>Precambrian Research</i> , 2014, 249, 180-198.                              | 2.7  | 56        |
| 36 | Ancient (Meso- to Paleoproterozoic) crust in the Rae Province, Canada: Evidence from $\text{Sm-Nd}$ and $\text{U-Pb}$ constraints. <i>Precambrian Research</i> , 2005, 141, 137-153.  | 2.7  | 53        |

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|----|--|-----|-----------|
| 37 | Duration and periodicity of kimberlite volcanic activity in the Lac de Gras kimberlite field, Canada and some recommendations for kimberlite geochronology. <i>Lithos</i> , 2015, 218-219, 155-166.  | 1.4 | 48        |
| 38 | Extreme enrichment of high field strength elements in Jericho eclogite xenoliths: A cryptic record of Paleoproterozoic subduction, partial melting, and metasomatism beneath the Slave craton, Canada. <i>Geology</i> , 2002, 30, 507.   | 4.4 | 47        |
| 39 | Timing of kimberlite, carbonatite, and ultramafic lamprophyre emplacement in the alkaline province located 64°–67° N in southern West Greenland. <i>Lithos</i> , 2009, 112, 400-406.   | 1.4 | 44        |
| 40 | Post-Taltson sedimentary and intrusive history of the southern Rae Province along the northern margin of the Athabasca Basin, Western Canadian Shield. <i>Precambrian Research</i> , 2009, 175, 16-34.   | 2.7 | 43        |
| 41 | A nitrogen isotope fractionation factor between diamond and its parental fluid derived from detailed SIMS analysis of a gem diamond and theoretical calculations. <i>Chemical Geology</i> , 2015, 410, 188-200.  | 3.3 | 40        |
| 42 | Nature and evolution of the Slave Province subcontinental lithospheric mantle This article is one of a series of papers published in this Special Issue on the theme <i>Lithoprobe &#x201c; parameters, processes, and the evolution of a continent</i>.. <i>Canadian Journal of Earth Sciences</i> , 2010, 47, 369-388. | 1.3 | 39        |
| 43 | Petrogenesis of the Late Cretaceous northern Alberta kimberlite province. <i>Lithos</i> , 2004, 76, 435-459.   | 1.4 | 37        |
| 44 | New depositional age constraints for the Murmac Bay group of the southern Rae craton, Canada. <i>Precambrian Research</i> , 2013, 232, 70-88.  | 2.7 | 37        |
| 45 | Microxenoliths from the Slave craton: Archives of diamond formation along fluid conduits. <i>Lithos</i> , 2011, 126, 419-434.  | 1.4 | 36        |
| 46 | A Record of Paleoproterozoic Subduction Preserved in the Northern Slave Cratonic Mantle: Sr–Pb–O Isotope and Trace-element Investigations of Eclogite Xenoliths from the Jericho and Muskox Kimberlites. <i>Journal of Petrology</i> , 2014, 55, 549-583.  | 2.8 | 35        |
| 47 | Timing of high-pressure metamorphism in the Yukon &#x201c; Tanana terrane, Canadian Cordillera: constraints from U–Pb zircon dating of eclogite from the Teslin tectonic zone. <i>Canadian Journal of Earth Sciences</i> , 1997, 34, 709-715.  | 1.3 | 34        |
| 48 | U–Pb geochronology and Sr/Nd isotope compositions of groundmass perovskite from the newly discovered Jurassic Chidliak kimberlite field, Baffin Island, Canada. <i>Earth and Planetary Science Letters</i> , 2015, 415, 183-199.   | 4.4 | 33        |
| 49 | Diamond ages from Victor (Superior Craton): Intra-mantle cycling of volatiles (C, N, S) during supercontinent reorganisation. <i>Earth and Planetary Science Letters</i> , 2018, 490, 77-87.   | 4.4 | 33        |
| 50 | Dating Kimberlites: Methods and Emplacement Patterns Through Time. <i>Elements</i> , 2019, 15, 399-404.  | 0.5 | 33        |
| 51 | Evidence for a dominantly reducing Archaean ambient mantle from two redox proxies, and low oxygen fugacity of deeply subducted oceanic crust. <i>Scientific Reports</i> , 2019, 9, 20190.  | 3.3 | 24        |
| 52 | Ultramafic Carbonated Melt– and Auto–Metasomatism in Mantle Eclogites: Compositional Effects and Geophysical Consequences. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2019GC008774.  | 2.5 | 24        |
| 53 | The Paleoproterozoic Kaminak dykes, Hearne craton, western Churchill Province, Nunavut, Canada: Preliminary constraints on their age and petrogenesis. <i>Precambrian Research</i> , 2013, 232, 119-139.   | 2.7 | 21        |
| 54 | U–Pb detrital zircon ages from some Neoproterozoic successions of Uruguay: Provenance, stratigraphy and tectonic evolution. <i>Journal of South American Earth Sciences</i> , 2016, 71, 108-130.   | 1.4 | 20        |

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|----|--|------|-----------|
| 55 | 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. <i>Precambrian Research</i> , 2000, 99, 197-224.  | 2.7  | 19        |
| 56 | Precise Pb isotope ratio determination of picogram-size samples: A comparison between multiple Faraday collectors equipped with 1012 <sup>+</sup> amplifiers and multiple ion counters. <i>Chemical Geology</i> , 2015, 395, 27-40.  | 3.3  | 19        |
| 57 | Ages and sources of mantle eclogites: ID-TIMS and in situ MC-ICPMS Pb-Sr isotope systematics of clinopyroxene. <i>Chemical Geology</i> , 2019, 503, 15-28.   | 3.3  | 18        |
| 58 | A Review of the Geology of Global Diamond Mines and Deposits. <i>Reviews in Mineralogy and Geochemistry</i> , 2022, 88, 1-117.   | 4.8  | 18        |
| 59 | Ediacaran in Uruguay: Facts and controversies. <i>Journal of South American Earth Sciences</i> , 2014, 55, 43-57.  | 1.4  | 15        |
| 60 | Granulite sulphides as tracers of lower crustal origin and evolution: An example from the Slave craton, Canada. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 5368-5381.  | 3.9  | 14        |
| 61 | Punctuated, long-lived emplacement history of the Renard 2 kimberlite, Canada, revealed by new high precision U-Pb groundmass perovskite dating. <i>Mineralogy and Petrology</i> , 2018, 112, 639-651.   | 1.1  | 13        |
| 62 | Response to Comment on "Bilaterian Burrows and Grazing Behavior at >585 Million Years Ago". <i>Science</i> , 2013, 339, 906-906.   | 12.6 | 11        |
| 63 | Geochronology, classification and mantle source characteristics of kimberlites and related rocks from the Rae Craton, Melville Peninsula, Nunavut, Canada. <i>Mineralogy and Petrology</i> , 2018, 112, 653-672.   | 1.1  | 11        |
| 64 | Removal of continental lithosphere beneath the Canary archipelago revealed from a U Pb Age and Hf/O isotope study of modern sand detrital zircons. <i>Lithos</i> , 2020, 362-363, 105448.  | 1.4  | 6         |
| 65 | Rb–Sr and U–Pb geochronology and setting of the Buffalo Head Hills kimberlite field, northern Alberta<br>This article is one of a selection of papers published in this Special Issue on the theme<br>Geology of northeastern British Columbia and northwestern Alberta: diamonds, shallow gas, gravel, and glaciers<br>Canadian Journal of Earth Sciences, 2008, 45, 513-529.                               | 1.3  | 5         |
| 66 | A Comparison of Chronometers Applied to Monastery Kimberlite and the Feasibility of U-Pb Ilmenite Geochronology. , 2011, , 457-492.  |      | 5         |
| 67 | The petrology of kimberlites from South Australia: Linking olivine macrocrystic and micaceous kimberlites. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 373, 68-96.   | 2.1  | 4         |
| 68 | Kimberlite-sourced bentonite, its paleoenvironment and implications for the Late Cretaceous K14 kimberlite cluster, northern Alberta<br>This article is one of a selection of papers published in this Special Issue on the theme<br>Geology of northeastern British Columbia and northwestern Alberta: diamonds, shallow gas, gravel, and glaciers.. Canadian Journal of Earth Sciences, 2008, 45, 531-547. | 1.3  | 2         |
| 69 | Uranium-Lead, Rubidium-Strontium, Kimberlite. , 2013, , 1-13.  |      | 2         |
| 70 | The Assean Lake Complex. , 2019, , 703-722.  |      | 0         |
| 71 | Uranium–Lead, Rubidium-Strontium, Kimberlite. <i>Encyclopedia of Earth Sciences Series</i> , 2015, , 907-914.  | 0.1  | 0         |