

Leonard I Wassenaar

List of Publications by Year in descending order

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Version: 2024-02-01

232
papers

12,982
citations

26567

56
h-index

32761

100
g-index

245
all docs

245
docs citations

245
times ranked

8390
citing authors

#	ARTICLE	IF	CITATIONS
1	Global application of stable hydrogen and oxygen isotopes to wildlife forensics. <i>Oecologia</i> , 2005, 143, 337-348.	0.9	862
2	Comparative equilibration and online technique for determination of non-exchangeable hydrogen of keratins for use in animal migration studies. <i>Isotopes in Environmental and Health Studies</i> , 2003, 39, 211-217.	0.5	566
3	Linking breeding and wintering grounds of neotropical migrant songbirds using stable hydrogen isotopic analysis of feathers. <i>Oecologia</i> , 1997, 109, 142-148.	0.9	492
4	Evaluation of the origin and fate of nitrate in the Abbotsford Aquifer using the isotopes of ^{15}N and ^{18}O in NO_3^- . <i>Applied Geochemistry</i> , 1995, 10, 391-405.	1.4	392
5	High-Precision Laser Spectroscopy D/H and $^{18}\text{O}/^{16}\text{O}$ Measurements of Microliter Natural Water Samples. <i>Analytical Chemistry</i> , 2008, 80, 287-293.	3.2	364
6	Natal origins of migratory monarch butterflies at wintering colonies in Mexico: New isotopic evidence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 15436-15439.	3.3	287
7	Influence of drinking water and diet on the stable-hydrogen isotope ratios of animal tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 8003-8006.	3.3	236
8	Effects of lipid extraction on stable carbon and nitrogen isotope analyses of fish tissues: potential consequences for food web studies. <i>Ecology of Freshwater Fish</i> , 2004, 13, 155-160.	0.7	236
9	Stable isotopes (^2H and ^{13}C) are geographic indicators of natal origins of monarch butterflies in eastern North America. <i>Oecologia</i> , 1999, 120, 397-404.	0.9	204
10	Global isoscapes for ^2H and ^{18}O and $^2\text{H}/^{18}\text{O}$ in precipitation: improved prediction using regionalized climatic regression models. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 4713-4728.	1.9	202
11	Using stable hydrogen and oxygen isotope measurements of feathers to infer geographical origins of migrating European birds. <i>Oecologia</i> , 2004, 141, 477-488.	0.9	190
12	High Resolution Pore Water ^2H and ^{18}O Measurements by $\text{H}_2\text{O}(\text{liquid}) \rightleftharpoons \text{H}_2\text{O}(\text{vapor})$ Equilibration Laser Spectroscopy. <i>Environmental Science & Technology</i> , 2008, 42, 9262-9267.	4.6	185
13	Improved Method for Determining the Stable-Hydrogen Isotopic Composition (^2H) of Complex Organic Materials of Environmental Interest. <i>Environmental Science & Technology</i> , 2000, 34, 2354-2360.	4.6	183
14	Individual specialization and trophic adaptability of northern pike (<i>Esox lucius</i>): an isotope and dietary analysis. <i>Oecologia</i> , 1999, 120, 386-396.	0.9	175
15	A groundwater isoscape (^2H , ^{18}O) for Mexico. <i>Journal of Geochemical Exploration</i> , 2009, 102, 123-136.	1.5	154
16	Stable isotopes as indicators of altitudinal distributions and movements in an Ecuadorean hummingbird community. <i>Oecologia</i> , 2003, 136, 302-308.	0.9	149
17	Tracking multi-generational colonization of the breeding grounds by monarch butterflies in eastern North America. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20131087.	1.2	146
18	Linking Hydrogen (^2H) Isotopes in Feathers and Precipitation: Sources of Variance and Consequences for Assignment to Isoscapes. <i>PLoS ONE</i> , 2012, 7, e35137.	1.1	143

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19	Isotope hydrology of precipitation, surface and ground waters in the Okanagan Valley, British Columbia, Canada. <i>Journal of Hydrology</i> , 2011, 411, 37-48.	2.3	137
20	Effects of selected pharmaceuticals on riverine biofilm communities. <i>Canadian Journal of Microbiology</i> , 2005, 51, 655-669.	0.8	127
21	STABLE-CARBON AND HYDROGEN ISOTOPE RATIOS REVEAL BREEDING ORIGINS OF RED-WINGED BLACKBIRDS. , 2000, 10, 911-916.		123
22	Implications of the distribution of $\delta^2\text{H}$ in pore waters for groundwater flow and the timing of geologic events in a thick aquitard system. <i>Water Resources Research</i> , 1999, 35, 1751-1760.	1.7	115
23	A Method for Investigating Population Declines of Migratory Birds Using Stable Isotopes: Origins of Harvested Lesser Scaup in North America. <i>PLoS ONE</i> , 2009, 4, e7915.	1.1	109
24	Chloride and chlorine isotopes (^{36}Cl and ^{37}Cl) as tracers of solute migration in a thick, clay-rich aquitard system. <i>Water Resources Research</i> , 2000, 36, 285-296.	1.7	108
25	Dissolved organic carbon and methane in a regional confined aquifer, southern Ontario, Canada: Carbon isotope evidence for associated subsurface sources. <i>Applied Geochemistry</i> , 1993, 8, 483-493.	1.4	104
26	A Stable-Isotope Approach to Delineate Geographical Catchment Areas of Avian Migration Monitoring Stations in North America. <i>Environmental Science & Technology</i> , 2001, 35, 1845-1850.	4.6	104
27	Estimating ^{14}C Groundwater Ages in a Methanogenic Aquifer. <i>Water Resources Research</i> , 1995, 31, 2307-2317.	1.7	103
28	Stable Nitrogen Isotopes in Waterfowl Feathers Reflect Agricultural Land Use in Western Canada. <i>Environmental Science & Technology</i> , 2001, 35, 3482-3487.	4.6	101
29	Stable-hydrogen isotope heterogeneity in keratinous materials: mass spectrometry and migratory wildlife tissue subsampling strategies. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 2505-2510.	0.7	100
30	Regional climate on the breeding grounds predicts variation in the natal origin of monarch butterflies overwintering in Mexico over 38 years. <i>Global Change Biology</i> , 2017, 23, 2565-2576.	4.2	98
31	The Global Network of Isotopes in Rivers (GNIR): integration of water isotopes in watershed observation and riverine research. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 3419-3431.	1.9	94
32	Decadal Geochemical and Isotopic Trends for Nitrate in a Transboundary Aquifer and Implications for Agricultural Beneficial Management Practices. <i>Environmental Science & Technology</i> , 2006, 40, 4626-4632.	4.6	92
33	Re-evaluation of the hydrogen stable isotopic composition of keratin calibration standards for wildlife and forensic science applications. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 1193-1203.	0.7	90
34	Stable hydrogen and oxygen isotopes in aquatic food webs are tracers of diet and provenance. <i>Functional Ecology</i> , 2013, 27, 535-543.	1.7	89
35	Spatial and temporal variability of prairie lake hydrology as revealed using stable isotopes of hydrogen and oxygen. <i>Limnology and Oceanography</i> , 2009, 54, 101-118.	1.6	86
36	Stable isotope ecology: an introduction. <i>Oecologia</i> , 1999, 120, 312-313.	0.9	84

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37	A multi-isotope (^{13}C , ^{15}N , ^2H) feather isoscape to assign Afrotropical migrant birds to origins. <i>Ecosphere</i> , 2012, 3, 1-20.	1.0	83
38	Dynamics of dissolved oxygen isotopic ratios: a transient model to quantify primary production, community respiration, and air-water exchange in aquatic ecosystems. <i>Oecologia</i> , 2007, 153, 385-398.	0.9	80
39	Do Healthy Monarchs Migrate Farther? Tracking Natal Origins of Parasitized vs. Uninfected Monarch Butterflies Overwintering in Mexico. <i>PLoS ONE</i> , 2015, 10, e0141371.	1.1	80
40	Controls on the distribution of major ions in pore waters of a thick surficial aquitard. <i>Water Resources Research</i> , 2000, 36, 503-513.	1.7	78
41	Technical Note: Evaluation of between-sample memory effects in the analysis of ^2H and ^{18}O of water samples measured by laser spectrometers. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 3925-3933.	1.9	78
42	Bacteriogenic Ethane in Near-Surface Aquifers: Implications for Leaking Hydrocarbon Well Bores. <i>Environmental Science & Technology</i> , 2000, 34, 4727-4732.	4.6	76
43	An On-Line Technique for the Determination of the ^{18}O and ^{17}O of Gaseous and Dissolved Oxygen. <i>Analytical Chemistry</i> , 1999, 71, 4965-4968.	3.2	75
44	The Radial Diffusion Method: 1. Using intact cores to determine isotopic composition, chemistry, and effective porosities for groundwater in aquitards. <i>Water Resources Research</i> , 1996, 32, 1815-1822.	1.7	71
45	Using Isotopic Variance to Detect Long-Distance Dispersal and Philopatry in Birds: An Example with Ovenbirds and American Redstarts. <i>Condor</i> , 2004, 106, 732-743.	0.7	71
46	Geographic variation in the isotopic (^2H , ^{13}C , ^{15}N , ^{34}S) composition of feathers and claws from lesser scaup and northern pintail: implications for studies of migratory connectivity. <i>Canadian Journal of Zoology</i> , 2006, 84, 1395-1401.	0.4	71
47	Stable isotopes (^2H) delineate the origins and migratory connectivity of harvested animals: the case of European woodpigeons. <i>Journal of Applied Ecology</i> , 2009, 46, 572-581.	1.9	70
48	Approaches for Achieving Long-Term Accuracy and Precision of ^{18}O and ^2H for Waters Analyzed using Laser Absorption Spectrometers. <i>Environmental Science & Technology</i> , 2014, 48, 1123-1131.	4.6	69
49	Critique: measuring hydrogen stable isotope abundance of proteins to infer origins of wildlife, food and people. <i>Bioanalysis</i> , 2013, 5, 751-767.	0.6	68
50	Linking Breeding and Wintering Grounds of Bicknell's Thrushes Using Stable Isotope Analyses of Feathers. <i>Auk</i> , 2001, 118, 16-23.	0.7	66
51	USING ISOTOPIC VARIANCE TO DETECT LONG-DISTANCE DISPERSAL AND PHILOPATRY IN BIRDS: AN EXAMPLE WITH OVENBIRDS AND AMERICAN REDSTARTS. <i>Condor</i> , 2004, 106, 732.	0.7	66
52	Isotopic Evidence That Dragonflies (<i>Pantala flavescens</i>) Migrating through the Maldives Come from the Northern Indian Subcontinent. <i>PLoS ONE</i> , 2012, 7, e52594.	1.1	66
53	Paleohydrogeology of the Cretaceous sediments of the Williston Basin using stable isotopes of water. <i>Water Resources Research</i> , 2013, 49, 4580-4592.	1.7	66
54	Isotopic evidence for widespread cold-season-biased groundwater recharge and young streamflow across central Canada. <i>Hydrological Processes</i> , 2017, 31, 2196-2209.	1.1	65

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55	A stable carbon and nitrogen isotope study of lake food webs in Canada's Boreal Plain. <i>Freshwater Biology</i> , 2001, 46, 465-477.	1.2	63
56	Comparative microscale analysis of the effects of triclosan and triclocarban on the structure and function of river biofilm communities. <i>Science of the Total Environment</i> , 2009, 407, 3307-3316.	3.9	63
57	LIMS for Lasers 2015 for achieving long-term accuracy and precision of $\delta^2\text{H}$, $\delta^{17}\text{O}$, and $\delta^{18}\text{O}$ of waters using laser absorption spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 2122-2130.	0.7	62
58	A unified Craig-Gordon isotope model of stable hydrogen and oxygen isotope fractionation during fresh or saltwater evaporation. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 235, 224-236.	1.6	60
59	Worldwide proficiency test for routine analysis of $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in water by isotope-ratio mass spectrometry and laser absorption spectroscopy. <i>Rapid Communications in Mass Spectrometry</i> , 2012, 26, 1641-1648.	0.7	59
60	A dragonfly ($\delta^2\text{H}$) isoscape for North America: a new tool for determining natal origins of migratory aquatic emergent insects. <i>Methods in Ecology and Evolution</i> , 2012, 3, 766-772.	2.2	58
61	Linking Breeding and Wintering Grounds of Bicknell's Thrushes Using Stable Isotope Analyses of Feathers. , 0, .		58
62	Isotopic composition (^{13}C , ^{14}C , ^2H) and geochemistry of aquatic humic substances from groundwater. <i>Organic Geochemistry</i> , 1990, 15, 383-396.	0.9	56
63	Stable carbon and hydrogen isotopes from bat guano in the Grand Canyon, USA, reveal Younger Dryas and 8.2 ka events. <i>Geology</i> , 2008, 36, 683.	2.0	56
64	Determining the stable isotope composition of pore water from saturated and unsaturated zone core: improvements to the direct vapour equilibration laser spectrometry method. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 4427-4440.	1.9	56
65	Differential migration and the link between winter latitude, timing of migration, and breeding in a songbird. <i>Oecologia</i> , 2016, 181, 413-422.	0.9	56
66	Global patterns of nitrate isotope composition in rivers and adjacent aquifers reveal reactive nitrogen cascading. <i>Communications Earth & Environment</i> , 2021, 2, .	2.6	56
67	ISOTOPIC DELINEATION OF NORTH AMERICAN MIGRATORY WILDLIFE POPULATIONS: LOGGERHEAD SHRIKES. , 2001, 11, 1545-1553.		54
68	Feather stable isotopes in western North American waterfowl: spatial patterns, underlying factors, and management applications. <i>Wildlife Society Bulletin</i> , 2005, 33, 92-102.	1.6	54
69	Seeking excellence: An evaluation of 235 international laboratories conducting water isotope analyses by isotope-ratio and laser-absorption spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2018, 32, 393-406.	0.7	54
70	Spatio-temporal variation of nitrate sources to Lake Winnipeg using N and O isotope ($\delta^{15}\text{N}$, $\delta^{18}\text{O}$) analyses. <i>Science of the Total Environment</i> , 2019, 647, 486-493.	3.9	54
71	A Triple-Isotope Approach to Predict the Breeding Origins of European Bats. <i>PLoS ONE</i> , 2012, 7, e30388.	1.1	53
72	Radiocarbon in Dissolved Organic Carbon, A Possible Groundwater Dating Method: Case Studies From Western Canada. <i>Water Resources Research</i> , 1991, 27, 1975-1986.	1.7	52

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73	Stable Isotopes ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$) Reveal Associations Among Geographic Location and Condition of Alaskan Northern Pintails. <i>Journal of Wildlife Management</i> , 2008, 72, 715-725.	0.7	51
74	Origin and structures of groundwater humic substances from three Danish aquifers. <i>Environment International</i> , 1996, 22, 519-534.	4.8	50
75	Characterizing the hydrogeology of a complex clay-rich aquitard system using detailed vertical profiles of the stable isotopes of water. <i>Journal of Hydrology</i> , 2004, 293, 47-56.	2.3	50
76	Tracking Cats: Problems with Placing Feline Carnivores on $\delta^{18}\text{O}$, $\delta^{13}\text{C}$ Isoscapes. <i>PLoS ONE</i> , 2011, 6, e24601.	1.1	49
77	STRUCTURAL AND FUNCTIONAL RESPONSES OF RIVER BIOFILM COMMUNITIES TO THE NONSTEROIDAL ANTI-INFLAMMATORY DICLOFENAC. <i>Environmental Toxicology and Chemistry</i> , 2007, 26, 573.	2.2	48
78	Migratory Connectivity of the Monarch Butterfly (<i>Danaus plexippus</i>): Patterns of Spring Re-Colonization in Eastern North America. <i>PLoS ONE</i> , 2012, 7, e31891.	1.1	48
79	Stable isotope and band-encounter analyses delineate migratory patterns and catchment areas of white-throated sparrows at a migration monitoring station. <i>Oecologia</i> , 2005, 144, 541-549.	0.9	47
80	An online temperature-controlled vacuum equilibration preparation system for the measurement of $\delta^2\text{H}$ values of non-exchangeable H_2 and of $\delta^{18}\text{O}$ values in organic materials by isotope ratio mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 397-407.	0.7	47
81	AQUATIC METABOLISM AND ECOSYSTEM HEALTH ASSESSMENT USING DISSOLVED O_2 STABLE ISOTOPE DIEL CURVES. <i>Ecological Applications</i> , 2008, 18, 965-982.	1.8	46
82	A test of comparative equilibration for determining non-exchangeable stable hydrogen isotope values in complex organic materials. <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 2316-2320.	0.7	46
83	Defining fish community structure in Lake Winnipeg using stable isotopes ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^{34}\text{S}$): Implications for monitoring ecological responses and trophodynamics of mercury & other trace elements. <i>Science of the Total Environment</i> , 2014, 497-498, 239-249.	3.9	45
84	DO NORTH AMERICAN MONARCH BUTTERFLIES TRAVEL TO CUBA? STABLE ISOTOPE AND CHEMICAL TRACER TECHNIQUES. , 2004, 14, 1106-1114.		44
85	Stable isotopes in ecological studies. <i>Oecologia</i> , 2005, 144, 517-519.	0.9	43
86	Improved online $\delta^{18}\text{O}$ measurements of nitrogen- and sulfur-bearing organic materials and a proposed analytical protocol. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 2049-2058.	0.7	42
87	Migration distance as a selective episode for wing morphology in a migratory insect. <i>Movement Ecology</i> , 2017, 5, 7.	1.3	42
88	Contrasting assignment of migratory organisms to geographic origins using long-term versus year-specific precipitation isotope maps. <i>Methods in Ecology and Evolution</i> , 2014, 5, 891-900.	2.2	41
89	Distribution and isotopic characterization of methane in a confined aquifer in southern Ontario, Canada. <i>Journal of Hydrology</i> , 1995, 173, 51-70.	2.3	40
90	An Automated Technique for Measuring $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ Values of Porewater by Direct CO_2 and H_2 Equilibration. <i>Analytical Chemistry</i> , 2000, 72, 5659-5664.	3.2	40

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91	Geochemical and transport properties of dissolved organic carbon in a clay-rich aquitard. <i>Water Resources Research</i> , 2003, 39, .	1.7	40
92	An Introduction to Light Stable Isotopes for Use in Terrestrial Animal Migration Studies. <i>Journal of Nano Education (Print)</i> , 2008, 2, 21-44.	0.3	40
93	A Ti(III) reduction method for one-step conversion of seawater and freshwater nitrate into N ₂ O for stable isotopic analysis of ¹⁵ N/ ¹⁴ N, ¹⁸ O/ ¹⁶ O and ¹⁷ O/ ¹⁶ O. <i>Rapid Communications in Mass Spectrometry</i> , 2019, 33, 1227-1239.	0.7	40
94	Stable hydrogen isotopes of bison bone collagen as a proxy for Holocene climate on the Northern Great Plains. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2006, 239, 87-99.	1.0	39
95	Community-Level Assessment of the Effects of the Broad-Spectrum Antimicrobial Chlorhexidine on the Outcome of River Microbial Biofilm Development. <i>Applied and Environmental Microbiology</i> , 2008, 74, 3541-3550.	1.4	39
96	Cl/Br ratios and stable chlorine isotope analysis of magmatic hydrothermal fluid inclusions from Butte, Montana and Bingham Canyon, Utah. <i>Mineralium Deposita</i> , 2009, 44, 837-848.	1.7	39
97	Understanding the migration ecology of European red admirals <i>Vanessa atalanta</i> using stable hydrogen isotopes. <i>Ecography</i> , 2010, 33, 720-729.	2.1	38
98	Using Stable Hydrogen Isotope Analysis of Feathers to Delineate Origins of Harvested Sandhill Cranes in the Central Flyway of North America. <i>Waterbirds</i> , 2006, 29, 137-147.	0.2	37
99	Selected Papers of the 3rd International Conference on Applications of Stable Isotope Techniques to Ecological Studies. <i>Isotopes in Environmental and Health Studies</i> , 2003, 39, 1-3.	0.5	36
100	Estimating endogenous nutrient allocations to reproduction in Redhead Ducks: a dual isotope approach using deltaD and delta13C measurements of female and egg tissues. <i>Functional Ecology</i> , 2004, 18, 737-745.	1.7	36
101	Isotopic characterization of nitrate sources and transformations in Lake Winnipeg and its contributing rivers, Manitoba, Canada. <i>Journal of Great Lakes Research</i> , 2012, 38, 135-146.	0.8	36
102	Can argillaceous formations isolate nuclear waste? Insights from isotopic, noble gas, and geochemical profiles. <i>Geofluids</i> , 2015, 15, 381-386.	0.3	36
103	Improved high-resolution global and regionalized isoscapes of ¹⁸ O, ² H and <i>d</i> -excess in 1.1 precipitation. <i>Hydrological Processes</i> , 2021, 35, e14254.		36
104	Radiocarbon and stable isotopes in water and dissolved constituents, Milk River aquifer, Alberta, Canada. <i>Applied Geochemistry</i> , 1991, 6, 381-392.	1.4	35
105	Identification of Summer Origins of Songbirds Migrating through Southern Canada in Autumn. <i>Avian Conservation and Ecology</i> , 2006, 1, .	0.3	35
106	The stable isotopic composition (37Cl/35Cl) of dissolved chloride in rainwater. <i>Applied Geochemistry</i> , 2010, 25, 91-96.	1.4	35
107	Effects of size and diet on stable hydrogen isotope values (δD) in fish: implications for tracing origins of individuals and their food sources. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2011, 68, 2011-2019.	0.7	35
108	Stable isotopes in global lakes integrate catchment and climatic controls on evaporation. <i>Nature Communications</i> , 2021, 12, 7224.	5.8	35

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109	Connecting Breeding and Wintering Habitats of Migratory Piscivorous Birds: Implications for Tracking Contaminants (Hg) Using Multiple Stable Isotopes. <i>Environmental Science & Technology</i> , 2012, 46, 3263-3272.	4.6	34
110	Stable $\delta^2\text{H}$ hydrogen isotope measures of natal dispersal reflect observed population declines in a threatened migratory songbird. <i>Diversity and Distributions</i> , 2012, 18, 919-930.	1.9	34
111	On-Line Technique for the Determination of the ^{37}Cl of Inorganic and Total Organic Cl in Environmental Samples. <i>Analytical Chemistry</i> , 2004, 76, 6384-6388.	3.2	33
112	Isotope constraints on water, carbon, and heat fluxes from the northern Great Plains region of North America. <i>Global Biogeochemical Cycles</i> , 2007, 21, n/a-n/a.	1.9	33
113	Correcting for Methane Interferences on ^{22}H and ^{18}O Measurements in Pore Water Using H_2O (liquid) \rightleftharpoons H_2O (vapor) Equilibration Laser Spectroscopy. <i>Analytical Chemistry</i> , 2011, 83, 5789-5796.	3.2	33
114	Mechanisms Controlling the Distribution and Transport of ^{14}C in a Clay-Rich Till Aquitard. <i>Ground Water</i> , 2000, 38, 343-349.	0.7	32
115	Stable Isotopes (^{18}O , ^2H) of Pore Waters in Clay-Rich Aquitards: A Comparison and Evaluation of Measurement Techniques. <i>Ground Water Monitoring and Remediation</i> , 2001, 21, 108-116.	0.6	32
116	Inferring Heterogeneity in Aquitards Using High-Resolution ^2D and ^{18}O Profiles. <i>Ground Water</i> , 2009, 47, 639-645.	0.7	32
117	A geostatistical approach to optimize water quality monitoring networks in large lakes: Application to Lake Winnipeg. <i>Journal of Great Lakes Research</i> , 2012, 38, 174-182.	0.8	32
118	Distribution and biogeochemical importance of bacterial populations in a thick clay-rich aquitard system. <i>Microbial Ecology</i> , 2000, 40, 273-291.	1.4	31
119	Stable isotope analyses of feathers help identify autumn stopover sites of three long-distance migrants in northeastern Africa. <i>Journal of Avian Biology</i> , 2005, 36, 235-241.	0.6	31
120	Monarch butterflies cross the Appalachians from the west to recolonize the east coast of North America. <i>Biology Letters</i> , 2011, 7, 43-46.	1.0	31
121	High-frequency NO_3^- isotope ($\delta^{15}\text{N}$) groundwater recharge reveal that short-term changes in land use and precipitation influence nitrate contamination trends. <i>Hydrology and Earth System Sciences</i> , 2010, 22, 4267-4270.	1.9	31
122	Dynamics and Stable Isotope Composition of Gaseous and Dissolved Oxygen. <i>Ground Water</i> , 2007, 45, 447-460.	0.7	30
123	Controls on the long-term downward transport of ^2H of water in a regionally extensive, two-layered aquitard system. <i>Water Resources Research</i> , 2011, 47, .	1.7	30
124	Millennial-scale diffusive migration of solutes in thick clay-rich aquitards: evidence from multiple environmental tracers. <i>Hydrogeology Journal</i> , 2011, 19, 259-270.	0.9	30
125	Improved Piezometer Construction and Sampling Techniques to Determine Pore Water Chemistry in Aquitards. <i>Ground Water</i> , 1999, 37, 564-571.	0.7	29
126	Migratory Connectivity in Bicknell's Thrush: Locating Missing Populations With Hydrogen Isotopes. <i>Condor</i> , 2004, 106, 905-909.	0.7	29

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127	An isotopic baseline ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$) for fishes of Lake Winnipeg: Implications for investigating impacts of eutrophication and invasive species. <i>Journal of Great Lakes Research</i> , 2012, 38, 58-65.	0.8	29
128	Origin and migration of dissolved organic carbon fractions in a clay-rich aquitard: $\delta^{14}\text{C}$ and $\delta^{13}\text{C}$ evidence. <i>Water Resources Research</i> , 2005, 41, .	1.7	28
129	Aquatic community metabolism response to municipal effluent inputs in rivers quantified using diel $\delta^{18}\text{O}$ values of dissolved oxygen. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2010, 67, 1232-1246.	0.7	28
130	Correcting Laser-Based Water Stable Isotope Readings Biased by Carrier Gas Changes. <i>Environmental Science & Technology</i> , 2016, 50, 7074-7081.	4.6	28
131	MIGRATORY CONNECTIVITY IN BICKNELL'S THRUSH: LOCATING MISSING POPULATIONS WITH HYDROGEN ISOTOPES. <i>Condor</i> , 2004, 106, 905.	0.7	27
132	Origins of American Kestrels Wintering at Two Southern U.S. Sites: An Investigation Using Stable-Isotope ($\delta^2\text{H}$, $\delta^{18}\text{O}$) Methods. <i>Journal of Raptor Research</i> , 2009, 43, 325-337.	0.2	27
133	Corrigendum "Geographic variation in the isotopic ($\delta^2\text{H}$, $\delta^{13}\text{C}$, $\delta^{15}\text{N}$) Tj ETQq1 1 0.784314 rgBT /Overlock implications for studies of migratory connectivity. <i>Canadian Journal of Zoology</i> , 2009, 87, 553-554.	0.4	27
134	Correcting for Biogenic Gas Matrix Effects on Laser-Based Pore Water Vapor Stable Isotope Measurements. <i>Vadose Zone Journal</i> , 2018, 17, 1-10.	1.3	27
135	Microbial Respiration and Diffusive Transport of O_2 , $^{16}\text{O}_2$, and $^{18}\text{O}_2$ in Unsaturated Soils and Geologic Sediments. <i>Environmental Science & Technology</i> , 2003, 37, 2913-2919.	4.6	26
136	Microbial respiration and diffusive transport of O_2 , $^{16}\text{O}_2$, and $^{18}\text{O}_2$ in unsaturated soils: a mesocosm experiment. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 3367-3374.	1.6	25
137	Characterizing Geochemical Reactions in Unsaturated Mine Waste-Rock Piles Using Gaseous O_2 , $^{12}\text{CO}_2$, and $^{13}\text{CO}_2$. <i>Environmental Science & Technology</i> , 2003, 37, 496-501.	4.6	25
138	Transport and geochemical controls on the distribution of solutes and stable isotopes in a thick clay-rich till aquitard, Canada. <i>Isotopes in Environmental and Health Studies</i> , 2004, 40, 3-19.	0.5	25
139	Estimating Origins of Three Species of Neotropical Migrant Songbirds at a Gulf Coast Stopover Site: Combining Stable Isotope and Gis Tools. <i>Condor</i> , 2007, 109, 256-267.	0.7	25
140	$\delta^{15}\text{N}$ and $\delta^{18}\text{O}$ isotope ($\delta^{15}\text{N}$, $\delta^{18}\text{O}$) by the Cd-zinc reduction method and N_2O laser spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2018, 32, 184-194.	0.7	25
141	Temperature and precipitation effects on the isotopic composition of global precipitation reveal long-term climate dynamics. <i>Scientific Reports</i> , 2021, 11, 18503.	1.6	25
142	ESTIMATING ORIGINS OF THREE SPECIES OF NEOTROPICAL MIGRANT SONGBIRDS AT A GULF COAST STOPOVER SITE: COMBINING STABLE ISOTOPE AND GIS TOOLS. <i>Condor</i> , 2007, 109, 256.	0.7	24
143	Placing butterflies on the map " testing regional geographical resolution of three stable isotopes in Sweden using the monophagus peacock (<i>Inachis io</i>). <i>Ecography</i> , 2008, 31, 490-498.	2.1	24
144	A Comparision of Laboratory and Field Based Determinations of Molecular Diffusion Coefficients in a Low Permeability Geologic Medium. <i>Environmental Science & Technology</i> , 2009, 43, 6730-6736.	4.6	24

#	ARTICLE	IF	CITATIONS
145	Realtime Stable Isotope Monitoring of Natural Waters by Parallel-Flow Laser Spectroscopy. <i>Analytical Chemistry</i> , 2011, 83, 913-919.	3.2	24
146	Sensitivity of structural and functional indicators depends on type and resolution of anthropogenic activities. <i>Ecological Indicators</i> , 2014, 45, 274-284.	2.6	24
147	Lake Winnipeg: The forgotten great lake. <i>Journal of Great Lakes Research</i> , 2012, 38, 1-5.	0.8	23
148	Possible linkage between neuronal recruitment and flight distance in migratory birds. <i>Scientific Reports</i> , 2016, 6, 21983.	1.6	23
149	Dissolved oxygen status of Lake Winnipeg: Spatio-temporal and isotopic ($\delta^{18}O$) patterns. <i>Journal of Great Lakes Research</i> , 2012, 38, 123-134.	0.8	22
150	Conservation through connectivity: can isotopic gradients in Africa reveal winter quarters of a migratory bird?. <i>Oecologia</i> , 2013, 171, 591-600.	0.9	22
151	Precipitation isoscapes for New Zealand: enhanced temporal detail using precipitation-weighted daily climatology. <i>Isotopes in Environmental and Health Studies</i> , 2016, 52, 343-352.	0.5	22
152	Assessing the fate of explosives derived nitrate in mine waste rock dumps using the stable isotopes of oxygen and nitrogen. <i>Science of the Total Environment</i> , 2018, 640-641, 127-137.	3.9	22
153	Holocene variation in the Antarctic coastal food web: linking δD and $\delta^{13}C$ in snow petrel diet and marine sediments. <i>Marine Ecology - Progress Series</i> , 2006, 306, 31-40.	0.9	21
154	STABLE ISOTOPES PROVIDE EVIDENCE FOR POOR NORTHERN PINTAIL PRODUCTION ON THE CANADIAN PRAIRIES. <i>Journal of Wildlife Management</i> , 2005, 69, 101-109.	0.7	20
155	Temporal Sources of Deuterium (δD) Variability in Waterfowl Feathers Across a Prairie-to-Boreal Gradient. <i>Condor</i> , 2009, 111, 255-265.	0.7	20
156	Introduction to Conducting Stable Isotope Measurements for Animal Migration Studies. , 2019, , 25-51.		20
157	Organic carbon isotope geochemistry of clayey deposits and their associated porewaters, southern Alberta. <i>Journal of Hydrology</i> , 1990, 120, 251-270.	2.3	19
158	Chemical and carbon isotopic composition of dissolved organic carbon in a regional confined methanogenic aquifer. <i>Isotopes in Environmental and Health Studies</i> , 2004, 40, 103-114.	0.5	19
159	Application of Multi-stable Isotope (^{13}C , ^{15}N , ^{34}S , ^{37}Cl) Assays to Assess Spatial Separation of Fish (Longnose Sucker <i>Catostomus catostomus</i>) in an Area Receiving Complex Effluents. <i>Water Quality Research Journal of Canada</i> , 2005, 40, 275-287.	1.2	19
160	A feather hydrogen isoscape for Mexico. <i>Journal of Geochemical Exploration</i> , 2009, 102, 63-70.	1.5	19
161	Numerical modeling of hydrodynamics and tracer dispersion during ice-free period in Lake Winnipeg. <i>Journal of Great Lakes Research</i> , 2012, 38, 147-157.	0.8	19
162	Isoscape Computation and Inference of Spatial Origins With Mixed Models Using the R package IsoriX. , 2019, , 207-236.		19

#	ARTICLE	IF	CITATIONS
163	Small-scale chemical and isotopic variability of hydrological pathways in a mountain lake catchment. <i>Journal of Hydrology</i> , 2020, 585, 124834.	2.3	19
164	The Geochemistry and Evolution of Natural Organic Solutes in Groundwater. <i>Radiocarbon</i> , 1989, 31, 865-876.	0.8	18
165	Controls on the transport and carbon isotopic composition of dissolved organic carbon in a shallow groundwater system, Central Ontario, Canada. <i>Chemical Geology: Isotope Geoscience Section</i> , 1991, 87, 39-57.	0.7	18
166	Comparison of methods for stable isotope ratio ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^2\text{H}$). <i>Tj ETQq 0.0 0 rgBT /Overlock</i>	2.2	18
167	Assessing waterbird habitat use in coastal evaporative systems using stable isotopes ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$ and $\delta^2\text{H}$) as environmental tracers. <i>Estuarine, Coastal and Shelf Science</i> , 2011, 92, 217-222.	0.9	17
168	Measurement of stable isotope activities in saline aqueous solutions using optical spectroscopy methods. <i>Isotopes in Environmental and Health Studies</i> , 2013, 49, 378-386.	0.5	17
169	No evidence for assortative mating within a willow warbler migratory divide. <i>Frontiers in Zoology</i> , 2014, 11, 52.	0.9	17
170	60-year trends of $\delta^{18}\text{O}$ in global precipitation reveal large scale hydroclimatic variations. <i>Global and Planetary Change</i> , 2020, 195, 103335.	1.6	17
171	Hydrogen isotopes ($\delta^2\text{H}$) of polyunsaturated fatty acids track bioconversion by zooplankton. <i>Functional Ecology</i> , 2022, 36, 538-549.	1.7	17
172	A feather hydrogen isoscape for Mexico. <i>Journal of Geochemical Exploration</i> , 2009, 102, 167-174.	1.5	16
173	In situ experiment to determine advective-diffusive controls on solute transport in a clay-rich aquitard. <i>Journal of Contaminant Hydrology</i> , 2012, 131, 79-88.	1.6	16
174	The influence of metabolic effects on stable hydrogen isotopes in tissues of aquatic organisms. <i>Isotopes in Environmental and Health Studies</i> , 2013, 49, 305-311.	0.5	16
175	Space-time tradeoffs in the development of precipitation-based isoscape models for determining migratory origin. <i>Journal of Avian Biology</i> , 2015, 46, 658-667.	0.6	16
176	The Pulse of the Amazon: Fluxes of Dissolved Organic Carbon, Nutrients, and Ions From the World's Largest River. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006895.	1.9	16
177	Compound-specific stable hydrogen isotope ($\delta^2\text{H}$) analyses of fatty acids: A new method and perspectives for trophic and movement ecology. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9135.	0.7	16
178	Does a lack of design and repeatability compromise scientific criticism? A response to Smith et al. (2009). <i>Auk</i> , 2009, 126, 922-926.	0.7	15
179	Using hydrogen isotopes of freshwater fish tissue as a tracer of provenance. <i>Ecology and Evolution</i> , 2016, 6, 7776-7782.	0.8	15
180	Stable isotope fractionations in the evaporation of water: The wind effect. <i>Hydrological Processes</i> , 2020, 34, 3596-3607.	1.1	15

#	ARTICLE	IF	CITATIONS
181	A Transient Model of Vadose Zone Reaction Rates Using Oxygen Isotopes and Carbon Dioxide. <i>Vadose Zone Journal</i> , 2007, 6, 67-76.	1.3	14
182	Stable hydrogen isotope ($\delta^2\text{H}$) values in songbird nestlings: effects of diet, temperature, and body size. <i>Canadian Journal of Zoology</i> , 2009, 87, 767-772.	0.4	14
183	Determination of the Hydrogen Isotopic Compositions of Organic Materials and Hydrous Minerals Using Thermal Combustion Laser Spectroscopy. <i>Analytical Chemistry</i> , 2012, 84, 3640-3645.	3.2	14
184	The influence of metabolic rate on the contribution of stable hydrogen and oxygen isotopes in drinking water to quail blood plasma and feathers. <i>Functional Ecology</i> , 2012, 26, 1111-1119.	1.7	14
185	An Appraisal of the Use of Hydrogen-Isotope Methods to Delineate Origins of Migratory Saw-whet Owls in North America. <i>Condor</i> , 2013, 115, 366-374.	0.7	14
186	Hydrogen isotope variability in prairie wetland systems: implications for studies of migratory connectivity. , 2013, 23, 110-121.		14
187	Patterns of parasitism in monarch butterflies during the breeding season in eastern North America. <i>Ecological Entomology</i> , 2018, 43, 28-36.	1.1	14
188	Progress and challenges in dual- and triple-isotope ($\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{17}\text{O}$) analyses of environmental waters: An international assessment of laboratory performance. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9193.	0.7	14
189	Migratory connectivity in a declining bird species: using feather isotopes to inform demographic modelling. <i>Diversity and Distributions</i> , 2010, 16, 643-654.	1.9	13
190	Measurement of extremely $\delta^2\text{H}$ -enriched water samples by laser spectrometry: application to batch electrolytic concentration of environmental tritium samples. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 415-422.	0.7	13
191	Stable isotope patterns reveal widespread rainy-period-biased recharge in phreatic aquifers across Greece. <i>Journal of Hydrology</i> , 2019, 568, 1081-1092.	2.3	13
192	Carbon Cycling in Terrestrial Environments. , 1998, , 577-610.		12
193	American woodcock migratory connectivity as indicated by hydrogen isotopes. <i>Journal of Wildlife Management</i> , 2016, 80, 510-526.	0.7	12
194	A compact tritium enrichment unit for large sample volumes with automated re-filling and higher enrichment factor. <i>Applied Radiation and Isotopes</i> , 2016, 118, 80-86.	0.7	12
195	Solving a Migration Riddle Using Isoscapes: House Martins from a Dutch Village Winter over West Africa. <i>PLoS ONE</i> , 2012, 7, e45005.	1.1	11
196	Factors Influencing the Turnover and Net Isotopic Discrimination of Hydrogen Isotopes in Proteinaceous Tissue: Experimental Results Using Japanese Quail. <i>Physiological and Biochemical Zoology</i> , 2012, 85, 376-384.	0.6	10
197	Geographic origin and migration phenology of European red admirals (<i>Vanessa atalanta</i>) as revealed by stable isotopes. <i>Movement Ecology</i> , 2018, 6, 25.	1.3	10
198	An exploration of migratory connectivity of the Rufous Hummingbird (<i>Selasphorus rufus</i>), using feather deuterium. <i>Journal of Ornithology</i> , 2013, 154, 423-430.	0.5	9

#	ARTICLE	IF	CITATIONS
199	The first IAEA inter-laboratory comparison exercise in Latin America and the Caribbean for stable isotope analyses of water samples. <i>Isotopes in Environmental and Health Studies</i> , 2020, 56, 391-401.	0.5	9
200	Distinguishing in-cloud and below-cloud short and distal N-sources from high-temporal resolution seasonal nitrate and ammonium deposition in Vienna, Austria. <i>Atmospheric Environment</i> , 2021, 266, 118740.	1.9	9
201	High spatial resolution prediction of tritium (³ H) in contemporary global precipitation. <i>Scientific Reports</i> , 2022, 12, .	1.6	9
202	Proficiency testing of 78 international laboratories measuring tritium in environmental waters by decay counting and mass spectrometry for age dating and water resources assessment. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8832.	0.7	8
203	Isotopic composition (¹⁵ N, ¹⁸ O) of nitrate in high-frequency precipitation events differentiate atmospheric processes and anthropogenic NO _x emissions. <i>Atmospheric Research</i> , 2022, 267, 105971.	1.8	8
204	Contrasting Pathways of Assimilation. <i>Journal of Environmental Quality</i> , 2006, 35, 1884-1893.	1.0	7
205	Diurnal variations in the photosynthesis-respiration activity of a cyanobacterial bloom in a freshwater dam reservoir: an isotopic study. <i>Isotopes in Environmental and Health Studies</i> , 2008, 44, 163-175.	0.5	7
206	Future Directions and Challenges for Using Stable Isotopes in Advancing Terrestrial Animal Migration Research. <i>Journal of Nano Education (Print)</i> , 2008, , 129-139.	0.3	7
207	Rates of microbial elemental sulfur oxidation and ¹⁸ O and ³⁴ S isotopic fractionation under varied nutrient and temperature regimes. <i>Applied Geochemistry</i> , 2012, 27, 186-196.	1.4	7
208	A feather-precipitation hydrogen isoscape model for New Zealand: implications for ecoforensics. <i>Ecosphere</i> , 2012, 3, 1-13.	1.0	7
209	Variation in shell chemistry of terrestrial gastropods (<i>Cerion incanum</i> , <i>Cerion uva</i> , and <i>Tudora</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 101	0.4	6
210	Tracing Waterbird Exposure to Total Mercury and Selenium: A Case Study at the Solar Saltworks of Thyna (Sfax, Tunisia). <i>Environmental Science & Technology</i> , 2011, 45, 5118-5124.	4.6	6
211	Social and habitat correlates of immigrant recruitment of yearling female Mallards to breeding locations. <i>Journal of Ornithology</i> , 2011, 152, 781-791.	0.5	6
212	A laboratory information management system for the analysis of tritium (³ H) in environmental waters. <i>Applied Radiation and Isotopes</i> , 2018, 137, 139-146.	0.7	6
213	A simple polymer electrolyte membrane system for enrichment of low-level tritium (³ H) in environmental water samples. <i>Isotopes in Environmental and Health Studies</i> , 2018, 54, 274-287.	0.5	6
214	Outlook for Using Stable Isotopes in Animal Migration Studies. , 2019, , 237-244.		6
215	Principles and uncertainties of ¹⁴ C age estimations for groundwater transport and resource evaluation. <i>Isotopes in Environmental and Health Studies</i> , 2021, 57, 111-141.	0.5	6
216	Nitrate sources and mixing in the Danube watershed: implications for transboundary river basin monitoring and management. <i>Scientific Reports</i> , 2022, 12, 2150.	1.6	6

#	ARTICLE	IF	CITATIONS
217	Influence of equilibration time, soil texture, and saturation on the accuracy of porewater water isotope assays using the direct H ₂ O(liquid)â€“H ₂ O(vapor) equilibration method. <i>Journal of Hydrology</i> , 2022, 607, 127560.	2.3	6
218	A new isotopic reference material for stable hydrogen and oxygen isotopeâ€“ratio measurements of water â€“ USGS50 Lake Kyoga Water. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 2078-2082.	0.7	5
219	Assessment of rapid lowâ€“cost isotope (¹⁵ N, ¹⁸ O) analyses of nitrate in fruit extracts by Ti(III) reduction to differentiate organic from conventional production. <i>Rapid Communications in Mass Spectrometry</i> , 2022, 36, e9259.	0.7	5
220	Isotopic and elemental geochemistry of marine invertebrates from the Late Quaternary Fort Langley Formation and Capilano Sediments, southwestern British Columbia, Canada. <i>Chemical Geology: Isotope Geoscience Section</i> , 1988, 73, 221-231.	0.7	4
221	Prey consumption and trace element concentrations in double-crested cormorants (<i>Phalacrocorax</i>) Tj ETQq1 1 0.784314 rgBT /Overlo	0.8	4
222	Selected papers of the 4th International Conference on â€œApplications of stable Isotope Techniques to Ecological Studiesâ€“, April 19â€“23, 2004, Wellington, New Zealand. <i>Isotopes in Environmental and Health Studies</i> , 2005, 41, 1-2.	0.5	3
223	Costs and benefits of natal dispersal in yearling mallards <i>Anas platyrhynchos</i> . <i>Journal of Avian Biology</i> , 2011, 42, 123-133.	0.6	3
224	Inferring the ecology of willow warblers during their winter moult by sequential stable isotope analyses of remiges. <i>Journal of Avian Biology</i> , 2013, 44, 561-566.	0.6	3
225	Performance of lowâ€“cost stainlessâ€“steel beverage kegs for longâ€“term storage integrity and easy dispensing of water isotope (¹⁸ O, ² H) reference materials. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9164.	0.7	3
226	The efficacy of scale sampling for monitoring trace element concentrations and stable isotopes in commercially harvested walleye (<i>Sander vitreus</i>). <i>Isotopes in Environmental and Health Studies</i> , 2015, 51, 359-371.	0.5	1
227	¹⁴ C chronology and stable isotopes on <i>Lymnaea viatrix</i> shells in northwest Patagonia, Argentina. Do they express the Antarctic climatic reversal?. <i>Carbonates and Evaporites</i> , 2019, 34, 133-142.	0.4	1
228	Comparative evaluation of ² H- versus ³ H-based enrichment factor determination on the uncertainty and accuracy of low-level tritium analyses of environmental waters. <i>Applied Radiation and Isotopes</i> , 2021, 176, 109850.	0.7	1
229	The Use of Stable Isotopic Analyses to Identify Pulp Mill Effluent Signatures in Riverine Food Webs. , 2020, , 413-423.		1
230	Experimental Evaluation of ² H, ¹³ C and ¹⁵ N Variability in Blood and Feathers of Wild and Captive Birds: Implications for Interspecific Food Web Studies. <i>Diversity</i> , 2021, 13, 495.	0.7	1
231	IAEA International Symposium on Isotope Hydrology: Revisiting Foundations and Exploring Frontiers, 11â€“15 May 2015, Vienna, Austria. <i>Isotopes in Environmental and Health Studies</i> , 2016, 52, 327-328.	0.5	0
232	PREFACE: IAEA International Symposium on Isotope Hydrology. <i>Isotopes in Environmental and Health Studies</i> , 2020, 56, 93-94.	0.5	0