Tyler B Coplen

List of Publications by Year
in descending order

81 papers	12,373 citations	61984 43 h-index	58581 82 g-index
104 all docs	104 docs citations	104 times ranked	11617 citing authors

#	Article	IF	Citations
1	Categorisation of northern California rainfall for periods with and without a radar brightband using stable isotopes and a novel automated precipitation collector. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28574.	1.6	26
2	The Table of Standard Atomic Weightsâ€"An exercise in consensus. Rapid Communications in Mass Spectrometry, 2022, 36, e8864.	1.5	3
3	Standard atomic weights of the elements 2021 (IUPAC Technical Report). Pure and Applied Chemistry, 2022, 94, 573-600.	1.9	57
4	USGS44, a new highâ€purity calcium carbonate reference material for Î´¹³C measurements. Rapid Communications in Mass Spectrometry, 2021, 35, e9006.	1.5	16
5	Devils Hole Calcite Was Precipitated at Â±1Â°C Stable Aquifer Temperatures During the Last Half Million Years. Geophysical Research Letters, 2021, 48, e2021GL093257.	4.0	6
6	Insights on Geochemical, Isotopic, and Volumetric Compositions of Produced Water from Hydraulically Fractured Williston Basin Oil Wells. Environmental Science & Technology, 2021, 55, 10025-10034.	10.0	4
7	Variation of lead isotopic composition and atomic weight in terrestrial materials (IUPAC Technical) Tj ETQq1 1 0.784314 rgBT /Overlo	1.9	4
8	Calibration of carbonate-water triple oxygen isotope fractionation: Seeing through diagenesis in ancient carbonates. Geochimica Et Cosmochimica Acta, 2020, 288, 369-388.	3.9	28
9	Dual clumped isotope thermometry resolves kinetic biases in carbonate formation temperatures. Nature Communications, 2020, 11, 4005.	12.8	70
10	Food Matrix Reference Materials for Hydrogen, Carbon, Nitrogen, Oxygen, and Sulfur Stable Isotope-Ratio Measurements: Collagens, Flours, Honeys, and Vegetable Oils. Journal of Agricultural and Food Chemistry, 2020, 68, 10852-10864.	5.2	18
11	IUPAC Periodic Table of the Elements and Isotopes (IPTEI) for the Education Community (IUPAC) Tj ETQq1 1 0.784314 rgBT /Overlock	1.9	66
12	Clarification of the term â€œnormal materialâ€•used for standard atomic weights (IUPAC Technical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.9	7
13	Preliminary assessment of stable nitrogen and oxygen isotopic composition of USGS51 and USGS52 nitrous oxide reference gases and perspectives on calibration needs. Rapid Communications in Mass Spectrometry, 2018, 32, 1207-1214.	1.5	21
14	Clarifying Atomic Weights: A 2016 Four-Figure Table of Standard and Conventional Atomic Weights. Journal of Chemical Education, 2017, 94, 311-319.	2.3	5
15	Antarctic Iceâ€Core Water (<scp>USGS</scp>49) â€“ A New Isotopic Reference Material for Î´²H and Î´¹⁸O Measurements of Water. Geostandards and Geoanalytical Research, 2017, 41, 63-68.	3.1	7
16	Optimization of onâ€line hydrogen stable isotope ratio measurements of halogenâ€•and sulfurâ€bearing organic compounds using elemental analyzerâ€“chromium/highâ€temperature conversion isotope ratio mass spectrometry (EAâ€Cr/HTCâ€IRMS). Rapid Communications in Mass Spectrometry, 2017, 31, 475-484.	1.5	34
17	New biotite and muscovite isotopic reference materials, USGS57 and USGS58, for Î´2H measurementsâ€“A replacement for NBS 30. Chemical Geology, 2017, 467, 89-99.	3.3	41
18	A new organic reference material, <scp>l</scp>â€glutamic acid, USGS41a, for Î´¹³C and Î´¹⁵N measurements â˜† a replacement for USGS41. Rapid Communications in Mass Spectrometry, 2016, 30, 859-866.	1.5	54

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19	Isotope-abundance variations and atomic weights of selected elements: 2016 (IUPAC Technical Report). Pure and Applied Chemistry, 2016, 88, 1203-1224.	1.9	46
20	Atomic weights of the elements 2013 (IUPAC Technical Report). Pure and Applied Chemistry, 2016, 88, 265-291.	1.9	518
21	Three whole-wood isotopic reference materials, USGS54, USGS55, and USGS56, for Î´2H, Î´18O, Î´13C, and Î´15N measurements. Chemical Geology, 2016, 442, 47-53.	3.3	22
22	A revision in hydrogen isotopic composition of USGS42 and USGS43 human-hair stable isotopic reference materials for forensic science. Forensic Science International, 2016, 266, 222-225.	2.2	25
23	Review of footnotes and annotations to the 1949â€“2013 tables of standard atomic weights and tables of isotopic compositions of the elements (IUPAC Technical Report). Pure and Applied Chemistry, 2016, 88, 689-699.	1.9	3
24	Isotopic compositions of the elements 2013 (IUPAC Technical Report). Pure and Applied Chemistry, 2016, 88, 293-306.	1.9	534
25	Organic Reference Materials for Hydrogen, Carbon, and Nitrogen Stable Isotope-Ratio Measurements: Caffeines, n-Alkanes, Fatty Acid Methyl Esters, Glycines, <scp>L</scp>-Valines, Polyethylenes, and Oils. Analytical Chemistry, 2016, 88, 4294-4302.	6.5	126
26	LIMS for Lasers 2015 for achieving long-term accuracy and precision ofÎ´²H,Î´¹⁷O, andÎ´¹⁸O of waters using laser absorption spectrometry. Rapid Communications in Mass Spectrometry, 2015, 29, 2122-2130.	1.5	62
27	A new isotopic reference material for stable hydrogen and oxygen isotopeâ€ratio measurements of water â€“ USGS50 Lake Kyoga Water. Rapid Communications in Mass Spectrometry, 2015, 29, 2078-2082.	1.5	5
28	Isotopic disproportionation during hydrogen isotopic analysis of nitrogenâ€bearing organic compounds. Rapid Communications in Mass Spectrometry, 2015, 29, 878-884.	1.5	31
29	Normalization of stable isotope data for carbonate minerals: Implementation of IUPAC guidelines. Geochimica Et Cosmochimica Acta, 2015, 158, 276-289.	3.9	116
30	On-Line Hydrogen-Isotope Measurements of Organic Samples Using Elemental Chromium: An Extension for High Temperature Elemental-Analyzer Techniques. Analytical Chemistry, 2015, 87, 5198-5205.	6.5	77
31	Beyond temperature: Clumped isotope signatures in dissolved inorganic carbon species and the influence of solution chemistry on carbonate mineral composition. Geochimica Et Cosmochimica Acta, 2015, 166, 344-371.	3.9	104
32	<scp>USGS</scp>46 Greenland Ice Core Water â€“ A New Isotopic Reference Material for Î´²H and Î´¹⁸O Measurements of Water. Geostandards and Geoanalytical Research, 2014, 38, 153-157.	3.1	5
33	Assessment of international reference materials for isotope-ratio analysis (IUPAC Technical Report). Pure and Applied Chemistry, 2014, 86, 425-467.	1.9	491
34	Spatial, seasonal, and source variability in the stable oxygen and hydrogen isotopic composition of tap waters throughout the USA. Hydrological Processes, 2014, 28, 5382-5422.	2.6	71
35	Lake Louise Water (USGS47): A new isotopic reference water for stable hydrogen and oxygen isotope measurements. Rapid Communications in Mass Spectrometry, 2014, 28, 351-354.	1.5	10
36	USGS48 Puerto Rico precipitation â€“ a new isotopic reference material for Î´²H and Î´¹⁸O measurements of water. Isotopes in Environmental and Health Studies, 2014, 50, 442-447.	1.0	7

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37	Biscayne aquifer drinking water (USGS45): A new isotopic reference material forÎ´²H andÎ´¹⁸O measurements of water. Rapid Communications in Mass Spectrometry, 2014, 28, 2031-2034.	1.5	5
38	Caution on the use of NBS 30 biotite for hydrogen-isotope measurements with on-line high-temperature conversion systems. Rapid Communications in Mass Spectrometry, 2014, 28, 1987-1994.	1.5	20
39	Approaches for Achieving Long-Term Accuracy and Precision of Î´¹⁸O and Î´²H for Waters Analyzed using Laser Absorption Spectrometers. Environmental Science & Technology, 2014, 48, 1123-1131.	10.0	69
40	Evidence for high salinity of Early Cretaceous sea water from the Chesapeake Bay crater. Nature, 2013, 503, 252-256.	27.8	29
41	ConfChem Conference on A Virtual Colloquium to Sustain and Celebrate IYC 2011 Initiatives in Global Chemical Education: The IUPAC Periodic Table of Isotopes for the Educational Community. Journal of Chemical Education, 2013, 90, 1550-1551.	2.3	2
42	Atomic weights of the elements 2011 (IUPAC Technical Report). Pure and Applied Chemistry, 2013, 85, 1047-1078.	1.9	348
43	Recognizing the potential pitfalls of hydrogen isotopic analysis of keratins with steam equilibration to infer origins of wildlife, food, and people. Rapid Communications in Mass Spectrometry, 2013, 27, 2569-2569.	1.5	9
44	Stable isotope deltas: tiny, yet robust signatures in nature. Isotopes in Environmental and Health Studies, 2012, 48, 393-409.	1.0	216
45	USGS42 and USGS43: Human-hair stable hydrogen and oxygen isotopic reference materials and analytical methods for forensic science and implications for published measurement results. Forensic Science International, 2012, 214, 135-141.	2.2	73
46	Improved online Î´¹⁸O measurements of nitrogenâ€•and sulfurâ€bearing organic materials and a proposed analytical protocol. Rapid Communications in Mass Spectrometry, 2011, 25, 2049-2058.	1.5	42
47	Investigation of preparation techniques for Î´²H analysis of keratin materials and a proposed analytical protocol. Rapid Communications in Mass Spectrometry, 2011, 25, 2209-2222.	1.5	70
48	Guidelines and recommended terms for expression of stableâ€isotopeâ€ratio and gasâ€ratio measurement results. Rapid Communications in Mass Spectrometry, 2011, 25, 2538-2560.	1.5	1,404
49	Novel silverâ€tubing method for quantitative introduction of water into highâ€temperature conversion systems for stable hydrogen and oxygen isotopic measurements. Rapid Communications in Mass Spectrometry, 2010, 24, 1821-1827.	1.5	52
50	Applying the silverâ€tube introduction method for thermal conversion elemental analyses and a new Î´²H value for NBS 22 oil. Rapid Communications in Mass Spectrometry, 2010, 24, 2269-2276.	1.5	20
51	Atomic weights of the elements 2009 (IUPAC Technical Report). Pure and Applied Chemistry, 2010, 83, 359-396.	1.9	225
52	Correction for the 17O interference in Î´(13C) measurements when analyzing CO2 with stable isotope mass spectrometry (IUPAC Technical Report). Pure and Applied Chemistry, 2010, 82, 1719-1733.	1.9	268
53	Caution on the Use of Liquid Nitrogen Traps in Stable Hydrogen Isotope-Ratio Mass Spectrometry. Analytical Chemistry, 2010, 82, 7849-7851.	6.5	2
54	Quality assurance and quality control in light stable isotope laboratories: A case study of Rio Grande, Texas, water samples. Isotopes in Environmental and Health Studies, 2009, 45, 126-134.	1.0	16

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55	Comprehensive interâ€laboratory calibration of reference materials for Î´¹⁸O versus VSMOW using various onâ€line highâ€temperature conversion techniques. Rapid Communications in Mass Spectrometry, 2009, 23, 999-1019.	1.5	167
56	Extreme changes in stable hydrogen isotopes and precipitation characteristics in a landfalling Pacific storm. Geophysical Research Letters, 2008, 35, .	4.0	71
57	Calibration of the calciteâ€“water oxygen-isotope geothermometer at Devils Hole, Nevada, a natural laboratory. Geochimica Et Cosmochimica Acta, 2007, 71, 3948-3957.	3.9	270
58	New Guidelines forÎ´13C Measurements. Analytical Chemistry, 2006, 78, 2439-2441.	6.5	762
59	After two decades a second anchor for the VPDBÎ´13C scale. Rapid Communications in Mass Spectrometry, 2006, 20, 3165-3166.	1.5	147
60	Devils Hole, Nevada, Î´18O record extended to the mid-Holocene. Quaternary Research, 2006, 66, 202-212.	1.7	80
61	Investigating surface waterâ€“well interaction using stable isotope ratios of water. Journal of Hydrology, 2005, 302, 154-172.	5.4	72
62	Two new organic reference materials forÎ´13C andÎ´15N measurements and a new value for theÎ´13C of NBS 22 oil. Rapid Communications in Mass Spectrometry, 2003, 17, 2483-2487.	1.5	190
63	Evaluation of the 34S/32S ratio of Soufre de Lacq elemental sulfur isotopic reference material by continuous flow isotope-ratio mass spectrometry. Chemical Geology, 2003, 199, 183-187.	3.3	44
64	Isotope-abundance variations of selected elements (IUPAC Technical Report). Pure and Applied Chemistry, 2002, 74, 1987-2017.	1.9	386
65	Atomic weights of the elements 1999 (IUPAC Technical Report). Pure and Applied Chemistry, 2001, 73, 667-683.	1.9	105
66	Distribution of oxygen-18 and deuterium in river waters across the United States. Hydrological Processes, 2001, 15, 1363-1393.	2.6	660
67	The relative contributions of summer and cool-season precipitation to groundwater recharge, Spring Mountains, Nevada, USA. Hydrogeology Journal, 1998, 6, 77-93.	2.1	139
68	History of the recommended atomic-weight values from 1882 to 1997: A comparison of differences from current values to the estimated uncertainties of earlier values (Technical Report). Pure and Applied Chemistry, 1998, 70, 237-257.	1.9	32
69	Reporting of relative sulfur isotope-ratio data (Technical Report). Pure and Applied Chemistry, 1997, 69, 293-296.	1.9	74
70	Unnatural Isotopic Composition of Lithium Reagents. Analytical Chemistry, 1997, 69, 4076-4078.	6.5	43
71	New guidelines for reporting stable hydrogen, carbon, and oxygen isotope-ratio data. Geochimica Et Cosmochimica Acta, 1996, 60, 3359-3360.	3.9	740
72	Atomic weights of the elements 1995 (Technical Report). Pure and Applied Chemistry, 1996, 68, 2339-2359.	1.9	139

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73	Discontinuance of SMOW and PDB. Nature, 1995, 375, 285-285.	27.8	180
74	An improved technique for the2H/1H analysis of urines from diabetic volunteers. Biological Mass Spectrometry, 1994, 23, 437-439.	0.5	15
75	Reporting of stable hydrogen, carbon, and oxygen isotopic abundances (Technical Report). Pure and Applied Chemistry, 1994, 66, 273-276.	1.9	697
76	Improvements in the gaseous hydrogen-water equilibration technique for hydrogen isotope-ratio analysis. Analytical Chemistry, 1991, 63, 910-912.	6.5	282
77	Normalization of oxygen and hydrogen isotope data. Chemical Geology: Isotope Geoscience Section, 1988, 72, 293-297.	0.6	323
78	Comparison of stable isotope reference samples. Nature, 1983, 302, 236-238.	27.8	852
79	Pressure control of a gas by a calculator-operated mercury piston. Analytical Chemistry, 1981, 53, 940-942.	6.5	11
80	A double-focusing double-collecting mass spectrometer for light stable isotope ratio analysis. International Journal of Mass Spectrometry and Ion Physics, 1973, 11, 37-40.	1.3	23
81	Updated Atomic Weights: Time to Review Our Table. ChemistryViews, 0, , .	0.0	1