

# Andrew Dickson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3806900/publications.pdf>

Version: 2024-02-01

50  
papers

6,380  
citations

136950

32  
h-index

197818

49  
g-index

56  
all docs

56  
docs citations

56  
times ranked

5151  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Standard potential of the reaction: , and and the standard acidity constant of the ion $\text{HSO}_4^{2-}$ in synthetic sea water from 273.15 to 318.15 K. <i>Journal of Chemical Thermodynamics</i> , 1990, 22, 113-127.                                      | 2.0 | 1,237     |
| 2  | Ocean $\text{pCO}_2$ calculated from dissolved inorganic carbon, alkalinity, and equations for $K_1$ and $K_2$ : validation based on laboratory measurements of $\text{CO}_2$ in gas and seawater at equilibrium. <i>Marine Chemistry</i> , 2000, 70, 105-119. | 2.3 | 815       |
| 3  | Thermodynamics of the dissociation of boric acid in synthetic seawater from 273.15 to 318.15 K. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1990, 37, 755-766.  | 1.5 | 797       |
| 4  | Total alkalinity: The explicit conservative expression and its application to biogeochemical processes. <i>Marine Chemistry</i> , 2007, 106, 287-300.  | 2.3 | 477       |
| 5  | Global relationships of total alkalinity with salinity and temperature in surface waters of the world's oceans. <i>Geophysical Research Letters</i> , 2006, 33, .  | 4.0 | 428       |
| 6  | Routine uncertainty propagation for the marine carbon dioxide system. <i>Marine Chemistry</i> , 2018, 207, 84-107.   | 2.3 | 213       |
| 7  | Dissociation constant of bisulfate ion in aqueous sodium chloride solutions to 250.degree.C. <i>The Journal of Physical Chemistry</i> , 1990, 94, 7978-7985.   | 2.9 | 197       |
| 8  | The measurement of sea water pH. <i>Marine Chemistry</i> , 1993, 44, 131-142.  | 2.3 | 192       |
| 9  | pH buffers for sea water media based on the total hydrogen ion concentration scale. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1993, 40, 107-118.  | 1.4 | 173       |
| 10 | Decadal changes in the aragonite and calcite saturation state of the Pacific Ocean. <i>Global Biogeochemical Cycles</i> , 2012, 26, .  | 4.9 | 151       |
| 11 | Robust empirical relationships for estimating the carbonate system in the southern California Current System and application to CalCOFI hydrographic cruise data (2005-2011). <i>Journal of Geophysical Research</i> , 2012, 117, .                            | 3.3 | 110       |
| 12 | A sensor for in situ indicator-based measurements of seawater pH. <i>Marine Chemistry</i> , 2008, 109, 18-28.  | 2.3 | 109       |
| 13 | Updated methods for global locally interpolated estimation of alkalinity, pH, and nitrate. <i>Limnology and Oceanography: Methods</i> , 2018, 16, 119-131.   | 2.0 | 107       |
| 14 | An inter-laboratory comparison assessing the quality of seawater carbon dioxide measurements. <i>Marine Chemistry</i> , 2015, 171, 36-43.  | 2.3 | 104       |
| 15 | Calculating surface ocean $\text{pCO}_2$ from biogeochemical Argo floats equipped with pH: An uncertainty analysis. <i>Global Biogeochemical Cycles</i> , 2017, 31, 591-604.   | 4.9 | 104       |
| 16 | An automated system for spectrophotometric seawater pH measurements. <i>Limnology and Oceanography: Methods</i> , 2013, 11, 16-27.   | 2.0 | 97        |
| 17 | Standards for Ocean Measurements. <i>Oceanography</i> , 2010, 23, 34-47.   | 1.0 | 85        |
| 18 | Decadal changes in Pacific carbon. <i>Journal of Geophysical Research</i> , 2008, 113, .   | 3.3 | 76        |

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|----|--|-----|-----------|
| 19 | Estimating the contribution of organic bases from microalgae to the titration alkalinity in coastal seawaters. <i>Limnology and Oceanography: Methods</i> , 2007, 5, 225-232.  | 2.0 | 68        |
| 20 | The development of the alkalinity concept in marine chemistry. <i>Marine Chemistry</i> , 1992, 40, 49-63.  | 2.3 | 61        |
| 21 | Insights from GO-SHIP hydrography data into the thermodynamic consistency of CO <sub>2</sub> system measurements in seawater. <i>Marine Chemistry</i> , 2019, 211, 52-63.  | 2.3 | 54        |
| 22 | Characterization of an Ion Sensitive Field Effect Transistor and Chloride Ion Selective Electrodes for pH Measurements in Seawater. <i>Analytical Chemistry</i> , 2014, 86, 11189-11195.   | 6.5 | 53        |
| 23 | A seawater filtration method suitable for total dissolved inorganic carbon and pH analyses. <i>Limnology and Oceanography: Methods</i> , 2014, 12, 191-195.  | 2.0 | 45        |
| 24 | Core Principles of the California Current Acidification Network: Linking Chemistry, Physics, and Ecological Effects. <i>Oceanography</i> , 2015, 25, 160-169.  | 1.0 | 44        |
| 25 | Metrological challenges for measurements of key climatological observables. Part 3: seawater pH. <i>Metrologia</i> , 2016, 53, R26-R39.  | 1.2 | 42        |
| 26 | Two decades of Pacific anthropogenic carbon storage and ocean acidification along Global Ocean Ship-based Hydrographic Investigations Program sections P16 and P02. <i>Global Biogeochemical Cycles</i> , 2017, 31, 306-327.                                     | 4.9 | 42        |
| 27 | A rapid, precise potentiometric determination of total alkalinity in seawater by a newly developed flow-through analyzer designed for coastal regions. <i>Marine Chemistry</i> , 2004, 85, 75-87.  | 2.3 | 41        |
| 28 | An evaluation of ISFET sensors for coastal pH monitoring applications. <i>Regional Studies in Marine Science</i> , 2017, 12, 11-18.  | 0.7 | 41        |
| 29 | Thermodynamic Modeling of Aqueous Aluminum Chemistry and Solid-Liquid Equilibria to High Solution Concentration and Temperature. I. The Acidic H-Al-Na-K-Cl-H <sub>2</sub> O System from 0 to 100°C. <i>Journal of Solution Chemistry</i> , 2007, 36, 1495-1523. | 1.2 | 39        |
| 30 | Rain impacts on CO <sub>2</sub> exchange in the western equatorial Pacific Ocean. <i>Geophysical Research Letters</i> , 2010, 37, .  | 4.0 | 38        |
| 31 | Quantifying anthropogenic carbon inventory changes in the Pacific sector of the Southern Ocean. <i>Marine Chemistry</i> , 2015, 174, 147-160.  | 2.3 | 38        |
| 32 | Technical Note: Controlled experimental aquarium system for multi-stressor investigation of carbonate chemistry, oxygen saturation, and temperature. <i>Biogeosciences</i> , 2013, 10, 5967-5975.  | 3.3 | 37        |
| 33 | Comment on "Modern age buildup of CO <sub>2</sub> and its effects on seawater acidity and salinity" by Hugo A. Loaiciga. <i>Geophysical Research Letters</i> , 2007, 34, .   | 4.0 | 36        |
| 34 | Tracer Monitored Titrations: A Measurement of Total Alkalinity. <i>Analytical Chemistry</i> , 2006, 78, 1817-1826.   | 6.5 | 34        |
| 35 | Assessment of the quality of the shipboard measurements of total alkalinity on the WOCE Hydrographic Program Indian Ocean CO <sub>2</sub> survey cruises 1994-1996. <i>Marine Chemistry</i> , 1998, 63, 9-20.  | 2.3 | 29        |
| 36 | Variability in oxygen and nutrients in South Pacific Antarctic Intermediate Water. <i>Global Biogeochemical Cycles</i> , 2003, 17, n/a-n/a.  | 4.9 | 26        |

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|----|--|-----|-----------|
| 37 | Technical note: Interpreting pH changes. Biogeosciences, 2021, 18, 1407-1415.  | 3.3 | 25        |
| 38 | Characterization of meta-Cresol Purple for spectrophotometric pH measurements in saline and hypersaline media at sub-zero temperatures. Scientific Reports, 2017, 7, 2481.   | 3.3 | 18        |
| 39 | Evaluation of marine pH sensors under controlled and natural conditions for the Wendy Schmidt Ocean Health XPRIZE. Limnology and Oceanography: Methods, 2017, 15, 586-600.   | 2.0 | 16        |
| 40 | Mixing and remineralization in waters detrained from the surface into Subantarctic Mode Water and Antarctic Intermediate Water in the southeastern Pacific. Journal of Geophysical Research: Oceans, 2014, 119, 4001-4028.   | 2.6 | 14        |
| 41 | Seasonal patterns in aragonite saturation state on the southern California continental shelf. Continental Shelf Research, 2018, 167, 77-86.  | 1.8 | 13        |
| 42 | Simultaneous quantum yield measurements of carbon uptake and oxygen evolution in microalgal cultures. PLoS ONE, 2018, 13, e0199125.  | 2.5 | 11        |
| 43 | Preparation of 2-amino-2-hydroxymethyl-1,3-propanediol (<sc>TRIS</sc>) <sc>pH<sub>T</sub></sc> buffers in synthetic seawater. Limnology and Oceanography: Methods, 2020, 18, 504-515.  | 2.0 | 11        |
| 44 | An evaluation of potentiometric pH sensors in coastal monitoring applications. Limnology and Oceanography: Methods, 2017, 15, 679-689.   | 2.0 | 9         |
| 45 | Chemical speciation models based upon the Pitzer activity coefficient equations, including the propagation of uncertainties. II. Tris buffers in artificial seawater at 25°C, and an assessment of the seawater "Total" pH scale. Marine Chemistry, 2022, 244, 104096. | 2.3 | 7         |
| 46 | Ocean Acidification's Effects on Marine Ecosystems and Biogeochemistry: Ocean Carbon and Biogeochemistry Scoping Workshop on Ocean Acidification Research; La Jolla, California, 9-11 October 2007. Eos, 2008, 89, 143.  | 0.1 | 6         |
| 47 | Development of an automated transportable continuous system to measure the total alkalinity of seawater. Talanta, 2021, 221, 121666.   | 5.5 | 3         |
| 48 | Nearshore Carbonate Dissolution in the Hawaiian Archipelago?. Aquatic Geochemistry, 2014, 20, 467-481.   | 1.3 | 2         |
| 49 | JGOFS: Measuring CO <sub>2</sub> in the ocean. Eos, 1992, 73, 546-546.   | 0.1 | 1         |
| 50 | An intercomparison exercise for oceanic carbon dioxide measurements. Eos, 1987, 68, 1580.  | 0.1 | 0         |