

# Neil C Sturchio

## List of Publications by Year in descending order

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162  
papers

7,637  
citations

<sup>31976</sup>  
53  
h-index

<sup>66911</sup>  
78  
g-index

164  
all docs

164  
docs citations

164  
times ranked

6831  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Mineral-water interfacial structures revealed by synchrotron X-ray scattering. <i>Progress in Surface Science</i> , 2004, 77, 171-258.  | 8.3  | 334       |
| 2  | Kinetic isotopic fractionation during diffusion of ionic species in water. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 277-289.  | 3.9  | 191       |
| 3  | Cation sorption on the muscovite (001) surface in chloride solutions using high-resolution X-ray reflectivity. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 3549-3565.  | 3.9  | 182       |
| 4  | Organophosphate Esters in Sediment of the Great Lakes. <i>Environmental Science &amp; Technology</i> , 2017, 51, 1441-1449.   | 10.0 | 161       |
| 5  | Precipitation Source Inferred from Stable Isotopic Composition of Pleistocene Groundwater and Carbonate Deposits in the Western Desert of Egypt. <i>Quaternary Research</i> , 1997, 48, 29-37.                      | 1.7  | 142       |
| 6  | Hydration and Distribution of Ions at the Mica-Water Interface. <i>Physical Review Letters</i> , 2006, 97, 016101.  | 7.8  | 142       |
| 7  | Conversion of Chlorinated Volatile Organic Compounds to Carbon Dioxide and Methyl Chloride for Isotopic Analysis of Carbon and Chlorine. <i>Analytical Chemistry</i> , 1997, 69, 2727-2733.                         | 6.5  | 131       |
| 8  | The rare earth element geochemistry of acid-sulphate and acid-sulphate-chloride geothermal systems from Yellowstone National Park, Wyoming, USA. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 695-706.        | 3.9  | 130       |
| 9  | Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes. 2. Lakes Michigan and Huron. <i>Environmental Science &amp; Technology</i> , 2005, 39, 3474-3479.   | 10.0 | 129       |
| 10 | Monovalent Ion Adsorption at the Muscovite (001)-Solution Interface: Relationships among Ion Coverage and Speciation, Interfacial Water Structure, and Substrate Relaxation. <i>Langmuir</i> , 2012, 28, 8637-8650. | 3.5  | 128       |
| 11 | Hydrated Cation Speciation at the Muscovite (001)-Water Interface. <i>Langmuir</i> , 2010, 26, 16647-16651.   | 3.5  | 126       |
| 12 | Lead adsorption at the calcite-water interface: Synchrotron X-ray standing wave and X-ray reflectivity studies. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 251-263.   | 3.9  | 121       |
| 13 | Geology and origin of Meatiq Dome, Egypt: A Precambrian metamorphic core complex?. <i>Geology</i> , 1983, 11, 72.   | 4.4  | 119       |
| 14 | Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes. 3. Lakes Ontario and Erie. <i>Environmental Science &amp; Technology</i> , 2005, 39, 5600-5605.   | 10.0 | 119       |
| 15 | Structures of quartz (100)- and (101)-water interfaces determined by x-ray reflectivity and atomic force microscopy of natural growth surfaces. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 3037-3054.       | 3.9  | 115       |
| 16 | Isotopic Composition and Origin of Indigenous Natural Perchlorate and Co-Occurring Nitrate in the Southwestern United States. <i>Environmental Science &amp; Technology</i> , 2010, 44, 4869-4876.                  | 10.0 | 110       |
| 17 | Perchlorate Isotope Forensics. <i>Analytical Chemistry</i> , 2005, 77, 7838-7842.   | 6.5  | 109       |
| 18 | Resolving orthoclase dissolution processes with atomic force microscopy and X-ray reflectivity. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 3459-3474.   | 3.9  | 108       |

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|----|---|------|-----------|
| 19 | Stable isotopes in global precipitation: A unified interpretation based on atmospheric moisture residence time. <i>Geophysical Research Letters</i> , 2012, 39, .   | 4.0  | 107       |
| 20 | Polyhalogenated Carbazoles in Sediments of Lake Michigan: A New Discovery. <i>Environmental Science &amp; Technology</i> , 2014, 48, 12807-12815.   | 10.0 | 98        |
| 21 | Global patterns and environmental controls of perchlorate and nitrate co-occurrence in arid and semi-arid environments. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 164, 502-522.  | 3.9  | 90        |
| 22 | Uranium-Series Ages of Travertines and Timing of the Last Glaciation in the Northern Yellowstone Area, Wyoming-Montana. <i>Quaternary Research</i> , 1994, 41, 265-277.   | 1.7  | 88        |
| 23 | Chlorine Isotope Fractionation during Microbial Reduction of Perchlorate. <i>Environmental Science &amp; Technology</i> , 2003, 37, 3859-3863.  | 10.0 | 87        |
| 24 | Worldwide occurrence and origin of perchlorate ion in waters: A review. <i>Science of the Total Environment</i> , 2019, 661, 737-749.   | 8.0  | 86        |
| 25 | PCBs in sediments of the Great Lakes " Distribution and trends, homolog and chlorine patterns, and in situ degradation. <i>Environmental Pollution</i> , 2009, 157, 141-147.  | 7.5  | 82        |
| 26 | The chemical and isotopic composition of fumarolic gases and spring discharges from Galeras Volcano, Colombia. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 229-253.   | 2.1  | 81        |
| 27 | Spatial and Temporal Trends of Polyhalogenated Carbazoles in Sediments of Upper Great Lakes: Insights into Their Origin. <i>Environmental Science &amp; Technology</i> , 2017, 51, 89-97.   | 10.0 | 80        |
| 28 | Structure of rutile TiO <sub>2</sub> (110) in water and 1molal Rb <sup>+</sup> at pH 12: Inter-relationship among surface charge, interfacial hydration structure, and substrate structural displacements. <i>Surface Science</i> , 2007, 601, 1129-1143. | 1.9  | 78        |
| 29 | Probing Outer-Sphere Adsorption of Aqueous Metal Complexes at the Oxide-Water Interface with Resonant Anomalous X-Ray Reflectivity. <i>Physical Review Letters</i> , 2005, 94, 076104.  | 7.8  | 74        |
| 30 | Sulfur dioxide from Nevado del Ruiz volcano, Colombia: total flux and isotopic constraints on its origin. <i>Journal of Volcanology and Geothermal Research</i> , 1990, 42, 53-68.  | 2.1  | 73        |
| 31 | New evidence on the hydrothermal system in Long Valley caldera, California, from wells, fluid sampling, electrical geophysics, and age determinations of hot-spring deposits. <i>Journal of Volcanology and Geothermal Research</i> , 1991, 48, 229-263.  | 2.1  | 73        |
| 32 | Historical trends of inorganic and organic fluorine in sediments of Lake Michigan. <i>Chemosphere</i> , 2014, 114, 203-209.   | 8.2  | 73        |
| 33 | Atacama Perchlorate as an Agricultural Contaminant in Groundwater: Isotopic and Chronologic Evidence from Long Island, New York. <i>Environmental Science &amp; Technology</i> , 2009, 43, 5619-5625.   | 10.0 | 72        |
| 34 | Oxygen and Chlorine Isotopic Fractionation during Perchlorate Biodegradation: Laboratory Results and Implications for Forensics and Natural Attenuation Studies. <i>Environmental Science &amp; Technology</i> , 2007, 41, 2796-2802.                     | 10.0 | 71        |
| 35 | The relationship between fumarole gas composition and eruptive activity at Galeras Volcano, Colombia. <i>Geology</i> , 1996, 24, 531.   | 4.4  | 70        |
| 36 | Otavite-calcite solid-solution formation at the calcite-water interface studied in situ by synchrotron X-ray scattering. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 1467-1474.  | 3.9  | 69        |

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|----|---|------|-----------|
| 37 | Natural Chlorate in the Environment: Application of a New IC-ESI/MS/MS Method with a $Cl^{18}O_3$ Internal Standard. <i>Environmental Science &amp; Technology</i> , 2010, 44, 8429-8434.   | 10.0 | 69        |
| 38 | X-ray-driven reaction front dynamics at calcite-water interfaces. <i>Science</i> , 2015, 349, 1330-1334.  | 12.6 | 69        |
| 39 | Stable chlorine and carbon isotopic compositions of selected semi-volatile organochlorine compounds. <i>Organic Geochemistry</i> , 2002, 33, 437-444.   | 1.8  | 67        |
| 40 | In-situ synchrotron X-ray reflectivity measurements at the calcite-water interface. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 4103-4110.   | 3.9  | 66        |
| 41 | Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes. 4. Influencing Factors, Trends, and Implications. <i>Environmental Science &amp; Technology</i> , 2006, 40, 7528-7534.  | 10.0 | 66        |
| 42 | Element redistribution during hydrothermal alteration of rhyolite in an active geothermal system: Yellowstone drill cores Y-7 and Y-8. <i>Geochimica Et Cosmochimica Acta</i> , 1986, 50, 1619-1631.                              | 3.9  | 65        |
| 43 | X-ray standing wave study of arsenite incorporation at the calcite surface. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3153-3157.   | 3.9  | 65        |
| 44 | Carbon and Chlorine Isotope Effects During Abiotic Reductive Dechlorination of Polychlorinated Ethanes. <i>Environmental Science &amp; Technology</i> , 2007, 41, 4662-4668.  | 10.0 | 63        |
| 45 | Helium degassing related to the Kobe earthquake. <i>Chemical Geology</i> , 1998, 150, 171-179.  | 3.3  | 62        |
| 46 | Real-time observation of cation exchange kinetics and dynamics at the muscovite-water interface. <i>Nature Communications</i> , 2017, 8, 15826.   | 12.8 | 61        |
| 47 | Cosmogenic, radiogenic, and stable isotopic constraints on groundwater residence time in the Nubian Aquifer, Western Desert of Egypt. <i>Geochemistry, Geophysics, Geosystems</i> , 2005, 6, n/a-n/a.                             | 2.5  | 58        |
| 48 | Thermodynamics, Interfacial Structure, and pH Hysteresis of $Rb^+$ and $Sr^{2+}$ Adsorption at the Muscovite (001)-Solution Interface. <i>Langmuir</i> , 2008, 24, 13993-14004.   | 3.5  | 58        |
| 49 | Stable Chlorine Isotopic Compositions of Aroclors and Aroclor-Contaminated Sediments. <i>Environmental Science &amp; Technology</i> , 2000, 34, 2866-2870.  | 10.0 | 57        |
| 50 | Changes in adsorption free energy and speciation during competitive adsorption between monovalent cations at the muscovite (001)-water interface. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 123, 416-426.                    | 3.9  | 57        |
| 51 | Gibbsite growth kinetics on gibbsite, kaolinite, and muscovite substrates: atomic force microscopy evidence for epitaxy and an assessment of reactive surface area. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2337-2351. | 3.9  | 56        |
| 52 | Continental degassing of $4He$ by surficial discharge of deep groundwater. <i>Nature Geoscience</i> , 2015, 8, 35-39.   | 12.9 | 56        |
| 53 | Structure and growth of stearate monolayers on calcite: first results of an in situ X-ray reflectivity study. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3145-3152.   | 3.9  | 55        |
| 54 | A Chlorine Isotope Effect for Enzyme-Catalyzed Chlorination. <i>Journal of the American Chemical Society</i> , 2002, 124, 14526-14527.  | 13.7 | 54        |

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|----|--|------|-----------|
| 55 | Nano-SIMS Analysis of Mg, Sr, Ba and U in Natural Calcium Carbonate. <i>Analytical Sciences</i> , 2005, 21, 1091-1097.   | 1.6  | 54        |
| 56 | Structure of hydrated Zn <sup>2+</sup> at the rutile TiO <sub>2</sub> (110)-aqueous solution interface: Comparison of X-ray standing wave, X-ray absorption spectroscopy, and density functional theory results. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 4039-4056. | 3.9  | 52        |
| 57 | Chlorine-36 as a Tracer of Perchlorate Origin. <i>Environmental Science &amp; Technology</i> , 2009, 43, 6934-6938.  | 10.0 | 52        |
| 58 | Assessment of age, origin, and sustainability of fossil aquifers: A geochemical and remote sensing-based approach. <i>Journal of Hydrology</i> , 2019, 576, 325-341.   | 5.4  | 52        |
| 59 | Replacement of Calcite (CaCO <sub>3</sub> ) by Cerussite (PbCO <sub>3</sub> ). <i>Environmental Science &amp; Technology</i> , 2016, 50, 12984-12991.  | 10.0 | 51        |
| 60 | Current and historical concentrations of poly and perfluorinated compounds in sediments of the northern Great Lakes – Superior, Huron, and Michigan. <i>Environmental Pollution</i> , 2018, 236, 373-381.  | 7.5  | 49        |
| 61 | Paleoclimate record in the Nubian Sandstone Aquifer, Sinai Peninsula, Egypt. <i>Quaternary Research</i> , 2014, 81, 158-167.   | 1.7  | 48        |
| 62 | Radium isotopes, alkaline earth diagenesis, and age determination of travertine from Mammoth Hot Springs, Wyoming, U.S.A.. <i>Applied Geochemistry</i> , 1990, 5, 631-640.   | 3.0  | 47        |
| 63 | Competitive adsorption of strontium and fulvic acid at the muscovite–solution interface observed with resonant anomalous X-ray reflectivity. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 1762-1776.   | 3.9  | 47        |
| 64 | Historically and Currently Used Dechloranes in the Sediments of the Great Lakes. <i>Environmental Science &amp; Technology</i> , 2011, 45, 5156-5163.  | 10.0 | 47        |
| 65 | Occurrence of Atrazine and Related Compounds in Sediments of Upper Great Lakes. <i>Environmental Science &amp; Technology</i> , 2016, 50, 7335-7343.   | 10.0 | 47        |
| 66 | Winter precipitation and snow accumulation drive the methane sink or source strength of Arctic tussock tundra. <i>Global Change Biology</i> , 2016, 22, 2818-2833.   | 9.5  | 47        |
| 67 | Toward a better understanding of palaeoclimatic regimes that recharged the fossil aquifers in North Africa: Inferences from stable isotope and remote sensing data. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2012, 329-330, 137-149.                         | 2.3  | 46        |
| 68 | Incorporation of Pb at the Calcite (104)–Water Interface. <i>Environmental Science &amp; Technology</i> , 2014, 48, 9263-9269.   | 10.0 | 46        |
| 69 | X-ray standing wave investigation of the surface structure of selenite anions adsorbed on calcite. <i>Surface Science</i> , 1997, 382, L690-L695.  | 1.9  | 45        |
| 70 | Structure of the fluorapatite (100)-water interface by high-resolution X-ray reflectivity. <i>American Mineralogist</i> , 2004, 89, 1647-1654.   | 1.9  | 45        |
| 71 | Polybromodiphenyl Ethers and Decabromodiphenyl Ethane in Aquatic Sediments from Southern and Eastern Arkansas, United States. <i>Environmental Science &amp; Technology</i> , 2012, 46, 8017-8024.   | 10.0 | 45        |
| 72 | Untargeted Screening and Distribution of Organo-Bromine Compounds in Sediments of Lake Michigan. <i>Environmental Science &amp; Technology</i> , 2016, 50, 321-330.  | 10.0 | 45        |

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|----|--|------|-----------|
| 73 | Internal 238U-series systematics of pumice from the November 13, 1985, eruption of Nevado del Ruiz, Colombia. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 1215-1219.  | 3.9  | 44        |
| 74 | The calcite (10 $\bar{1}$ ,4) cleavage surface in water: Early results of a crystal truncation rod study. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 4557-4561.  | 3.9  | 44        |
| 75 | Epitaxial growth of otavite on calcite observed in situ by synchrotron X-ray scattering. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 5633-5638.   | 3.9  | 43        |
| 76 | Deposition, accumulation, and alteration of Cl $\bar{1}$ , NO $\bar{3}$ , ClO $\bar{4}$ and ClO $\bar{3}$ salts in a hyper-arid polar environment: Mass balance and isotopic constraints. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 182, 197-215. | 3.9  | 42        |
| 77 | Applications of Synchrotron Radiation in Low-Temperature Geochemistry and Environmental Science. , 2002, , .   |      | 41        |
| 78 | Strontium isotopic evidence on the chemical evolution of pore waters in the Milk River Aquifer, Alberta, Canada. <i>Applied Geochemistry</i> , 1998, 13, 463-475.  | 3.0  | 40        |
| 79 | Mapping Three-dimensional Dissolution Rates of Calcite Microcrystals: Effects of Surface Curvature and Dissolved Metal Ions. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 833-843.  | 2.7  | 40        |
| 80 | Boron-lithium relationships in rhyolites and associated thermal waters of young silicic calderas, with comments on incompatible element behaviour. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 3723-3731.                                       | 3.9  | 39        |
| 81 | Mars chronology: assessing techniques for quantifying surficial processes. <i>Earth-Science Reviews</i> , 2004, 67, 313-337.   | 9.1  | 37        |
| 82 | Interaction of Uranyl with Calcite in the Presence of EDTA. <i>Environmental Science &amp; Technology</i> , 2004, 38, 5078-5086.   | 10.0 | 37        |
| 83 | Investigation of Structure, Adsorption Free Energy, and Overcharging Behavior of Trivalent Yttrium Adsorbed at the Muscovite(001)â€œWater Interface. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23738-23749.                                  | 3.1  | 36        |
| 84 | Fractionation of stable isotopes in perchlorate and nitrate during in situ biodegradation in a sandy aquifer. <i>Environmental Chemistry</i> , 2009, 6, 44.  | 1.5  | 34        |
| 85 | Isotopic Mapping of Groundwater Perchlorate Plumes. <i>Ground Water</i> , 2012, 50, 94-102.  | 1.3  | 34        |
| 86 | Spatial and temporal trends in poly- and per-fluorinated compounds in the Laurentian Great Lakes Erie, Ontario and St. Clair. <i>Environmental Pollution</i> , 2018, 237, 396-405.   | 7.5  | 34        |
| 87 | The hydrothermal system of Nevado del Ruiz volcano, Colombia. <i>Bulletin of Volcanology</i> , 1988, 50, 399-412.  | 3.0  | 33        |
| 88 | Isotopic tracing of perchlorate sources in groundwater from Pomona, California. <i>Applied Geochemistry</i> , 2014, 43, 80-87.   | 3.0  | 32        |
| 89 | Local structure of Co $\bar{2}$ incorporated at the calcite surface:â€œAn x-ray standing wave and SEXAFS study. <i>Physical Review B</i> , 2000, 61, 4877-4883.  | 3.2  | 31        |
| 90 | Uraniumâ€œseries age determination of calcite veins, VCâ€œ1 drill core, Valles Caldera, New Mexico. <i>Journal of Geophysical Research</i> , 1988, 93, 6097-6102.  | 3.3  | 30        |

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|-----|---|------|-----------|
| 91  | Resonant anomalous X-ray reflectivity as a probe of ion adsorption at solid-liquid interfaces. <i>Thin Solid Films</i> , 2007, 515, 5654-5659.  | 1.8  | 30        |
| 92  | Perchlorate in The Great Lakes: Isotopic Composition and Origin. <i>Environmental Science &amp; Technology</i> , 2014, 48, 11146-11153.   | 10.0 | 30        |
| 93  | Untargeted Screening and Distribution of Organo-Iodine Compounds in Sediments from Lake Michigan and the Arctic Ocean. <i>Environmental Science &amp; Technology</i> , 2016, 50, 10097-10105.                                 | 10.0 | 30        |
| 94  | Chlorine isotopes as tracers of solute origin and age of groundwaters from the Eastern Desert of Egypt. <i>Earth and Planetary Science Letters</i> , 2019, 510, 37-44.  | 4.4  | 30        |
| 95  | Stable chlorine intramolecular kinetic isotope effects from the abiotic dehydrochlorination of DDT. <i>Environmental Science and Pollution Research</i> , 2002, 9, 183-186.   | 5.3  | 29        |
| 96  | Heteroepitaxial growth of cadmium carbonate at dolomite and calcite surfaces: Mechanisms and rates. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 205, 360-380.  | 3.9  | 28        |
| 97  | The hydrothermal system of Volcan Puracé, Colombia. <i>Bulletin of Volcanology</i> , 1993, 55, 289-296.   | 3.0  | 26        |
| 98  | The origin of small-scale geochemical and mineralogic variations in a granite intrusion. <i>Contributions To Mineralogy and Petrology</i> , 1986, 93, 513-523.  | 3.1  | 25        |
| 99  | Thorium-uranium disequilibrium in a geothermal discharge zone at yellowstone. <i>Geochimica Et Cosmochimica Acta</i> , 1987, 51, 2025-2034.   | 3.9  | 25        |
| 100 | Application of stable isotope ratio analysis for biodegradation monitoring in groundwater. <i>Current Opinion in Biotechnology</i> , 2013, 24, 542-549.   | 6.6  | 25        |
| 101 | Accumulation rates, focusing factors, and chronologies from depth profiles of $^{210}\text{Pb}$ and $^{137}\text{Cs}$ in sediments of the Laurentian Great Lakes. <i>Journal of Great Lakes Research</i> , 2018, 44, 693-704. | 1.9  | 25        |
| 102 | Krypton-81 in groundwater of the Culebra Dolomite near the Waste Isolation Pilot Plant, New Mexico. <i>Journal of Contaminant Hydrology</i> , 2014, 160, 12-20.   | 3.3  | 24        |
| 103 | Surface Charge of the Calcite (104) Terrace Measured by $\text{Rb}^{+}$ Adsorption in Aqueous Solutions Using Resonant Anomalous X-ray Reflectivity. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15216-15223.         | 3.1  | 24        |
| 104 | $\text{Pb}^{2+}$ -Calcite Interactions under Far-from-Equilibrium Conditions: Formation of Micropylramids and Pseudomorphic Growth of Cerussite. <i>Journal of Physical Chemistry C</i> , 2018, 122, 2238-2247.               | 3.1  | 23        |
| 105 | Legacy polychlorinated organic pollutants in the sediment of the Great Lakes. <i>Journal of Great Lakes Research</i> , 2018, 44, 682-692.   | 1.9  | 23        |
| 106 | Is Perchlorate Metabolized or Re-Translocated within Lettuce Leaves? A Stable-Isotope Approach. <i>Environmental Science &amp; Technology</i> , 2008, 42, 9437-9442.  | 10.0 | 21        |
| 107 | Method for Purification of Krypton from Environmental Samples for Analysis of Radiokrypton Isotopes. <i>Analytical Chemistry</i> , 2008, 80, 8688-8693.   | 6.5  | 19        |
| 108 | Determination of crustal fluid residence times using nucleogenic $^{39}\text{Ar}$ . <i>Geochimica Et Cosmochimica Acta</i> , 2012, 88, 19-26.   | 3.9  | 19        |

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|-----|---|------|-----------|
| 109 | Groundwater movement, recharge, and perchlorate occurrence in a faulted alluvial aquifer in California (USA). <i>Hydrogeology Journal</i> , 2015, 23, 467-491.  | 2.1  | 19        |
| 110 | Seasonality of nitrate sources and isotopic composition in the Upper Illinois River. <i>Journal of Hydrology</i> , 2019, 568, 849-861.  | 5.4  | 19        |
| 111 | Stable Isotopic Composition of Chlorine and Oxygen in Synthetic and Natural Perchlorate. , 2006, , 93-109.  |      | 19        |
| 112 | Relating Carbon and Nitrogen Isotope Effects to Reaction Mechanisms during Aerobic or Anaerobic Degradation of RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) by Pure Bacterial Cultures. <i>Applied and Environmental Microbiology</i> , 2016, 82, 3297-3309.                                 | 3.1  | 17        |
| 113 | Radionuclide geochemistry of groundwater in the Eastern Desert, Egypt. <i>Applied Geochemistry</i> , 2018, 93, 69-80.   | 3.0  | 17        |
| 114 | Geological and hydrogeochemical controls on radium isotopes in groundwater of the Sinai Peninsula, Egypt. <i>Science of the Total Environment</i> , 2018, 613-614, 877-885.   | 8.0  | 17        |
| 115 | Biotransformation of the insensitive munition constituents 3-nitro-1,2,4-triazol-5-one (NTO) and 2,4-dinitroanisole (DNAN) by aerobic methane-oxidizing consortia and pure cultures.. <i>Journal of Hazardous Materials</i> , 2021, 407, 124341.  | 12.4 | 17        |
| 116 | Climatic, eustatic, and tectonic controls on Quaternary deposits and landforms, Red Sea Coast, Egypt. <i>Journal of Geophysical Research</i> , 1994, 99, 12175-12190.   | 3.3  | 16        |
| 117 | Invariant chlorine isotopic signatures during microbial PCB reductive dechlorination. <i>Environmental Pollution</i> , 2004, 128, 445-448.  | 7.5  | 16        |
| 118 | On the variation of dissolution rates at the orthoclase (0 0 1) surface with pH and temperature. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 141, 598-611.   | 3.9  | 16        |
| 119 | Inter-laboratory Characterisation of Apatite Reference Materials for Chlorine Isotope Analysis. <i>Geostandards and Geoanalytical Research</i> , 2021, 45, 121-142.   | 3.1  | 15        |
| 120 | Structural Characterization of Aluminum (Oxy)hydroxide Films at the Muscovite (001)â€“Water Interface. <i>Langmuir</i> , 2016, 32, 477-486.   | 3.5  | 14        |
| 121 | Stable isotopic composition of perchlorate and nitrate accumulated in plants: Hydroponic experiments and field data. <i>Science of the Total Environment</i> , 2017, 595, 556-566.  | 8.0  | 14        |
| 122 | Temporal and spatial differences in deposition of organic matter and black carbon in Lake Michigan sediments over the period 1850â€“2010. <i>Journal of Great Lakes Research</i> , 2018, 44, 705-715.   | 1.9  | 14        |
| 123 | Effect of pH on the Formation of Gibbsite-Layer Films at the Muscovite (001)â€“Water Interface. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6560-6571.  | 3.1  | 14        |
| 124 | Ultrasonic vacuum extraction of gases from water for chemical and isotopic analysis. <i>Chemical Geology</i> , 1995, 122, 275-284.  | 3.3  | 13        |
| 125 | Stable isotope analyses of oxygen ( <sup>18</sup> O: <sup>17</sup> O: <sup>16</sup> O) and chlorine ( <sup>37</sup> Cl: <sup>35</sup> Cl) in perchlorate: reference materials, calibrations, methods, and interferences. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 85-110. | 1.5  | 13        |
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