Ralph Edward Sturgeon

List of Publications by Year in descending order

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200 papers

8,579 citations

52 h-index 74163 75 g-index

202 all docs 202 docs citations

times ranked

202

3361 citing authors

| # | Article | IF | CITATIONS |
|----|--|------------------|--------------|
| 1 | UV Vapor Generation for Determination of Selenium by Heated Quartz Tube Atomic Absorption Spectrometry. Analytical Chemistry, 2003, 75, 2092-2099. | 6.5 | 180 |
| 2 | Vapor Generation by UV Irradiation for Sample Introduction with Atomic Spectrometry. Analytical Chemistry, 2004, 76, 2401-2405. | 6.5 | 164 |
| 3 | Solid phase microextraction as a tool for trace element speciation. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2001, 56, 233-260. | 2.9 | 157 |
| 4 | Applications of chemical vapor generation in non-tetrahydroborate media to analytical atomic spectrometry. Journal of Analytical Atomic Spectrometry, 2010, 25, 1217. | 3.0 | 156 |
| 5 | Acid digestion of marine samples for trace element analysis using microwave heating. Analyst, The, 1988, 113, 159. | 3.5 | 144 |
| 6 | Critical evaluation of the application of photochemical vapor generation in analytical atomic spectrometry. Analytical and Bioanalytical Chemistry, 2007, 388, 769-774. | 3.7 | 136 |
| 7 | Chemical Vapor Generation:Â Atomic Absorption by Ag, Au, Cu, and Zn Following Reduction of Aquo lons with Sodium Tetrahydroborate(III). Analytical Chemistry, 2000, 72, 3523-3531. | 6.5 | 123 |
| 8 | Photochemical vapor generation: a radical approach to analyte introduction for atomic spectrometry. Journal of Analytical Atomic Spectrometry, 2017, 32, 2319-2340. | 3.0 | 114 |
| 9 | Headspace single-drop microextration for the detection of organotin compounds. Talanta, 2004, 63, 555-560. | 5.5 | 105 |
| 10 | Determination of total mercury and methylmercury in biological samples by photochemical vapor generation. Analytical and Bioanalytical Chemistry, 2007, 388, 837-847. | 3.7 | 105 |
| 11 | Metal Ion-Assisted Photochemical Vapor Generation for the Determination of Lead in Environmental Samples by Multicollector-ICPMS. Analytical Chemistry, 2015, 87, 4495-4502. | 6.5 | 98 |
| 12 | UV photochemical vapor generation–atomic fluorescence spectrometric determination of conventional hydride generation elements. Microchemical Journal, 2010, 95, 32-37. | 4.5 | 94 |
| 13 | Mechanisms of chemical generation of volatile hydrides for trace element determination (IUPAC) Tj ETQq $1\ 1\ 0.78$ | 4314 rgBT 1.9 | Overlock 1 |
| 14 | UV Photochemical Vapor Generation Sample Introduction for Determination of Ni, Fe, and Se in Biological Tissue by Isotope Dilution ICPMS. Analytical Chemistry, 2010, 82, 3899-3904. | 6.5 | 89 |
| 15 | Trace element analysis of biological material following pressure digestion with nitric acid-hydrogen peroxide and microwave heating. Journal of Analytical Atomic Spectrometry, 1989, 4, 323. | 3.0 | 88 |
| 16 | Some speculations on the mechanisms of photochemical vapor generation. Journal of Analytical Atomic Spectrometry, 2012, 27, 222-231. | 3.0 | 88 |
| 17 | A novel introduction system for hydride generation-inductively coupled plasma mass spectrometry: determination of selenium in biological materials. Journal of Analytical Atomic Spectrometry, 2000, 15, 143-149. | 3.0 | 87 |
| 18 | Certification of a new selenized yeast reference material (SELM-1) for methionine, selenomethinone and total selenium content and its use in an intercomparison exercise for quantifying these analytes. Analytical and Bioanalytical Chemistry, 2006, 385, 168-180. | 3.7 | 85 |

| # | Article | IF | Citations |
|----|---|--------------|-----------|
| 19 | Separation and Quantitation of the Stereoisomers of Ephedra Alkaloids in Natural Health Products Using Flow Injection-Electrospray Ionization-High Field Asymmetric Waveform Ion Mobility Spectrometry-Mass Spectrometry. Analytical Chemistry, 2003, 75, 2538-2542. | 6.5 | 83 |
| 20 | Direct analysis of solids by ultrasonic slurry electrothermal vaporization inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 1994, 9, 605-610. | 3.0 | 81 |
| 21 | Determination of methylmercury by solid-phase microextraction inductively coupled plasma mass spectrometry: a new sample introduction method for volatile metal species. Journal of Analytical Atomic Spectrometry, 2000, 15, 837-842. | 3.0 | 81 |
| 22 | Isotopic fractionation of mercury induced by reduction and ethylation. Analytical and Bioanalytical Chemistry, 2009, 393, 377-385. | 3.7 | 80 |
| 23 | Versatile Thin-Film Reactor for Photochemical Vapor Generation. Analytical Chemistry, 2010, 82, 3086-3093. | 6.5 | 78 |
| 24 | Determination of trace metals in seawater by graphite furnace atomic absorption following on-line separation and preconcentration. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1993, 48, 91-98. | 2.9 | 77 |
| 25 | High-Yield UV-Photochemical Vapor Generation of Iron for Sample Introduction with Inductively Coupled Plasma Optical Emission Spectrometry. Analytical Chemistry, 2010, 82, 2996-3001. | 6. 5 | 77 |
| 26 | Expanding the scope of chemical vapor generation for noble and transition metals. Analyst, The, 2001, 126, 1833-1837. | 3 . 5 | 75 |
| 27 | Determination of methylmercury in fish tissues by isotope dilution SPME-GC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2003, 18, 431-436. | 3.0 | 75 |
| 28 | Photochemical Alkylation of Inorganic Selenium in the Presence of Low Molecular Weight Organic Acids. Environmental Science & | 10.0 | 74 |
| 29 | Copper Ion Assisted Photochemical Vapor Generation of Chlorine for Its Sensitive Determination by Sector Field Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2018, 90, 4112-4118. | 6.5 | 72 |
| 30 | Trace element speciation using solid phase microextraction. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1243-1269. | 2.9 | 69 |
| 31 | Determination of Methionine and Selenomethionine in Selenium-Enriched Yeast by Species-Specific Isotope Dilution with Liquid Chromatographyâ''Mass Spectrometry and Inductively Coupled Plasma Mass Spectrometry Detection. Analytical Chemistry, 2005, 77, 344-349. | 6.5 | 69 |
| 32 | Comparison of extraction methods for quantitation of methionine and selenomethionine in yeast by species specific isotope dilution gas chromatography–mass spectrometry. Journal of Chromatography A, 2004, 1055, 177-184. | 3.7 | 68 |
| 33 | Vapour-phase acid digestion of inorganic and organic matrices for trace element analysis using a microwave heated bomb. Journal of Analytical Atomic Spectrometry, 1991, 6, 283. | 3.0 | 67 |
| 34 | Species specific isotope dilution calibration for determination of mercury species by gas chromatography coupled to inductively coupled plasma- or furnace atomisation plasma ionisation-mass spectrometry. Journal of Analytical Atomic Spectrometry, 2000, 15, 1540-1545. | 3.0 | 66 |
| 35 | Determination of Cadmium in Environmental Samples by Hydride Generation with In Situ Concentration and Atomic Absorption Detection. Analyst, The, 1997, 122, 331-336. | 3. 5 | 65 |
| 36 | UV photochemical vapor generation and in situ preconcentration for determination of ultra-trace nickel by flow injection graphite furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2009, 24, 1452. | 3.0 | 65 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 37 | Chemical vapor generation characteristics of transition and noble metals reacting with tetrahydroborate(iii). Journal of Analytical Atomic Spectrometry, 2003, 18, 1435. | 3.0 | 64 |
| 38 | Determination of Methionine and Selenomethionine in Yeast by Species-Specific Isotope Dilution GC/MS. Analytical Chemistry, 2004, 76, 5149-5156. | 6.5 | 64 |
| 39 | Determination of Bismuth by Dielectric Barrier Discharge Atomic Absorption Spectrometry Coupled with Hydride Generation: Method Optimization and Evaluation of Analytical Performance. Analytical Chemistry, 2014, 86, 9620-9625. | 6.5 | 64 |
| 40 | Analytical characteristics of a commercial ICP orthogonal acceleration time-of-flight mass spectrometer (ICP-TOFMS). Journal of Analytical Atomic Spectrometry, 2000, 15, 607-616. | 3.0 | 63 |
| 41 | Speciation of Methyl- and Inorganic Mercury in Biological Tissues Using Ethylation and Gas Chromatography With Furnace Atomization Plasma Emission Spectrometric Detection. Journal of Analytical Atomic Spectrometry, 1997, 12, 597-601. | 3.0 | 62 |
| 42 | Application of isotope dilution to the determination of methylmercury in fish tissue by solid-phase microextraction gas chromatography–mass spectrometry. Journal of Chromatography A, 2003, 1011, 135-142. | 3.7 | 62 |
| 43 | Insights into the mechanism of chemical vapor generation of transition and noble metals. Journal of Analytical Atomic Spectrometry, 2005, 20, 255-265. | 3.0 | 62 |
| 44 | Generation of Atomic and Molecular Cadmium Species from Aqueous Media. Analytical Chemistry, 2003, 75, 635-640. | 6.5 | 61 |
| 45 | Ultra-trace determination of iodine in sediments and biological material using UV photochemical generation-inductively coupled plasma mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 235-241. | 2.9 | 61 |
| 46 | Atomic absorption determination of lead at picogram per gram levels by ethylation with in-situ concentration in a graphite furnace. Analytical Chemistry, 1989, 61, 1867-1869. | 6.5 | 60 |
| 47 | A unified approach to mechanistic aspects of photochemical vapor generation. Journal of Analytical Atomic Spectrometry, 2019, 34, 636-654. | 3.0 | 60 |
| 48 | Communications. Furnace atomisation plasma emission spectrometry (FAPES). Journal of Analytical Atomic Spectrometry, 1989, 4, 669. | 3.0 | 56 |
| 49 | Determination of ultratrace levels of heavy metals in arctic snow by electrothermal vaporization inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 1993, 8, 1053-1058. | 3.0 | 55 |
| 50 | Rapid and controllable covalent functionalization of single-walled carbon nanotubes at room temperature. Chemical Communications, 2007, , 5146. | 4.1 | 55 |
| 51 | Comparison of the energetics of desorption of solution and vapour phase deposited analytes in graphite furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 1990, 5, 311. | 3.0 | 54 |
| 52 | Determination of Ephedrine Alkaloids in Dietary Supplement Standard Reference Materials. Analytical Chemistry, 2005, 77, 3101-3112. | 6.5 | 54 |
| 53 | Seawater as a multi-component physical carrier for ETV-ICP-MS. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1995, 50, 425-440. | 2.9 | 53 |
| 54 | UV photosynthesis of nickel carbonyl. Applied Organometallic Chemistry, 2004, 18, 205-211. | 3.5 | 53 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 55 | Use of Zr for mass bias correction in strontium isotope ratio determinations using MC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2008, 23, 1269. | 3.0 | 53 |
| 56 | Analyte transport efficiency with electrothermal vaporization inductively coupled plasma mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1999, 54, 773-786. | 2.9 | 52 |
| 57 | On-line determination of silver in sea-water and marine sediment by inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 88-93. | 3.0 | 52 |
| 58 | UV light-mediated alkylation of inorganic selenium. Applied Organometallic Chemistry, 2003, 17, 575-579. | 3.5 | 52 |
| 59 | Detection of Bromine by ICP- <i>oa</i> -ToF-MS Following Photochemical Vapor Generation. Analytical Chemistry, 2015, 87, 3072-3079. | 6.5 | 52 |
| 60 | Efficient Photochemical Vapor Generation of Molybdenum for ICPMS Detection. Analytical Chemistry, 2018, 90, 11688-11695. | 6.5 | 52 |
| 61 | Photochemical vapor generation of iodine for detection by ICP-MS. Journal of Analytical Atomic Spectrometry, 2009, 24, 508-514. | 3.0 | 51 |
| 62 | Improvement of Measurement Precision of SPME-GC/MS Determination of Tributyltin Using Isotope Dilution Calibration. Analytical Chemistry, 2002, 74, 5606-5613. | 6.5 | 50 |
| 63 | Mechanism of Generation of Volatile Hydrides of Trace Elements by Aqueous Tetrahydroborate(III). Mass Spectrometric Studies on Reaction Products and Intermediates. Analytical Chemistry, 2007, 79, 3008-3015. | 6.5 | 50 |
| 64 | Sampling and determination of metal hydrides by solid phase microextraction thermal desorption inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2000, 15, 1461-1465. | 3.0 | 49 |
| 65 | A comparison of alkyl derivatization methods for speciation of mercury based on solid phase microextraction gas chromatography with furnace atomization plasma emission spectrometry detection. Journal of Analytical Atomic Spectrometry, 2003, 18, 902. | 3.0 | 49 |
| 66 | Solid phase microextraction capillary gas chromatography combined with furnace atomization plasma emission spectrometry for speciation of mercury in fish tissues. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2003, 58, 427-441. | 2.9 | 49 |
| 67 | Simultaneous determination of Co, Fe, Ni and Pb in carbon nanotubes by means of solid sampling high-resolution continuum source graphite furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2013, 28, 657. | 3.0 | 49 |
| 68 | Generation of volatile cobalt species by UV photoreduction and their tentative identification. Journal of Analytical Atomic Spectrometry, 2008, 23, 583. | 3.0 | 48 |
| 69 | Figures of merit for furnace atomization plasma emission spectrometry. Analytical Chemistry, 1990, 62, 2370-2376. | 6.5 | 47 |
| 70 | Photochemical alkylation of inorganic arsenic: Part 1. Identification of volatile arsenic species. Journal of Analytical Atomic Spectrometry, 2005, 20, 702. | 3.0 | 47 |
| 71 | UV photochemical generation of volatile cadmium species. Journal of Analytical Atomic Spectrometry, 2011, 26, 2519. | 3.0 | 47 |
| 72 | Direct Determination of Trace Antimony in Natural Waters by Photochemical Vapor Generation ICPMS: Method Optimization and Comparison of Quantitation Strategies. Analytical Chemistry, 2015, 87, 7996-8004. | 6.5 | 47 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 73 | Cadmium Assisted Photochemical Vapor Generation of Tungsten for Detection by Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2019, 91, 13306-13312. | 6.5 | 47 |
| 74 | Determination of Inorganic and Total Mercury in Biological Tissues by Electrothermal Vaporization Inductively Coupled Plasma Mass Spectrometry. Analyst, The, 1997, 122, 751-754. | 3.5 | 46 |
| 75 | Improvement in measurement precision with SPME by use of isotope dilution mass spectrometry and its application to the determination of tributyltin in sediment using SPME GC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2002, 17, 944-949. | 3.0 | 46 |
| 76 | Determination of Trace Elements in Fluoropolymers after Microwave-Induced Combustion. Analytical Chemistry, 2013, 85, 374-380. | 6.5 | 46 |
| 77 | Graphite furnace atomic absorption spectrometric determination of nickel at sub-ng g–1levels in marine samples by carbonyl generation with in situ pre-concentration. Journal of Analytical Atomic Spectrometry, 1989, 4, 443-446. | 3.0 | 45 |
| 78 | Ambient Mass Spectrometric Detection of Organometallic Compounds Using Direct Analysis in Real Time. Analytical Chemistry, 2009, 81, 9834-9839. | 6.5 | 45 |
| 79 | Determination of strontium isotope amount ratios in biological tissues using MC-ICPMS. Analytical Methods, 2013, 5, 1687. | 2.7 | 45 |
| 80 | Determination of Total Chromium in Seawater by Isotope Dilution Sector Field ICPMS Using GC Sample Introduction. Analytical Chemistry, 2004, 76, 3510-3516. | 6.5 | 44 |
| 81 | The mechanism of formation of volatile hydrides by tetrahydroborate(III) derivatization: A mass spectrometric study performed with deuterium labeled reagents. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 423-438. | 2.9 | 44 |
| 82 | High-yield synthesis of milligram amounts of isotopically enriched methylmercury(CH3198HgCl). Applied Organometallic Chemistry, 2004, 18, 57-64. | 3.5 | 42 |
| 83 | Anion-Exchange Chromatographic Separation of Hg for Isotope Ratio Measurements by Multicollector ICPMS. Analytical Chemistry, 2008, 80, 2548-2555. | 6.5 | 42 |
| 84 | Determination of the Atomic Weight of ²⁸ Si-Enriched Silicon for a Revised Estimate of the Avogadro Constant. Analytical Chemistry, 2012, 84, 2321-2327. | 6.5 | 42 |
| 85 | Mass Bias Fractionation Laws for Multi-Collector ICPMS: Assumptions and Their Experimental Verification. Analytical Chemistry, 2009, 81, 6774-6778. | 6.5 | 41 |
| 86 | Determination of trace metals in high-salinity petroleum produced formation water by inductively coupled plasma mass spectrometry following on-line analyte separation/preconcentration. Journal of Analytical Atomic Spectrometry, 2011, 26, 578. | 3.0 | 41 |
| 87 | Quantitation of Trace Metals in Liquid Samples by Dried-Droplet Laser Ablation Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2005, 77, 2971-2977. | 6.5 | 40 |
| 88 | Certification of natural isotopic abundance inorganic mercury reference material NIMS-1 for absolute isotopic composition and atomic weight. Journal of Analytical Atomic Spectrometry, 2010, 25, 384. | 3.0 | 39 |
| 89 | Novel Ethyl-Derivatization Approach for the Determination of Fluoride by Headspace Gas Chromatography/Mass Spectrometry. Analytical Chemistry, 2013, 85, 877-881. | 6.5 | 39 |
| 90 | Alkaline solubilization of biological materials for trace element analysis by electrothermal atomic absorption spectrometry. Analyst, The, 1999, 124, 1843-1846. | 3.5 | 38 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 91 | Species-Specific Isotope Dilution-Based Calibration for Trace Element Speciation and Its Combined Uncertainty Evaluation:Â Determination of Tributyltin in Sediment by HPLCâ^ICPMS. Analytical Chemistry, 2002, 74, 2968-2976. | 6.5 | 38 |
| 92 | Comparison of mass bias correction models for the examination of isotopic composition of mercury using sector field ICP-MS. Journal of Analytical Atomic Spectrometry, 2003, 18, 1452. | 3.0 | 38 |
| 93 | Ultrasound-assisted vapor generation of mercury. Analytical and Bioanalytical Chemistry, 2007, 388, 849-857. | 3.7 | 37 |
| 94 | Determination of inorganic mercury in biological tissues by cold vapor atomic absorption spectrometry following tetramethylammonium hydroxide solubilization. Journal of Analytical Atomic Spectrometry, 1999, 14, 1929-1931. | 3.0 | 36 |
| 95 | Surfactant assisted chemical vapour generation of silver for AAS and ICP-OES: a mechanistic study. Journal of Analytical Atomic Spectrometry, 2003, 18, 487. | 3.0 | 36 |
| 96 | Solid phase microextraction for the determination of chromium in sea-water. Journal of Analytical Atomic Spectrometry, 2004, 19, 1098-1103. | 3.0 | 36 |
| 97 | Photochemical alkylation of inorganic arsenic: Part 2. Identification of aqueous phase organoarsenic species using multidimensional liquid chromatography and electrospray mass spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 709. | 3.0 | 36 |
| 98 | High precision determination of chromium isotope ratios in geological samples by MC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2008, 23, 1622. | 3.0 | 36 |
| 99 | System optimization for determination of cobalt in biological samples by ICP-OES using photochemical vapor generation. Journal of Analytical Atomic Spectrometry, 2016, 31, 1590-1604. | 3.0 | 36 |
| 100 | Simultaneous determination of hydride- and non-hydride-forming elements by inductively coupled plasma optical emission spectrometry. TrAC - Trends in Analytical Chemistry, 2010, 29, 1376-1389. | 11.4 | 35 |
| 101 | Comparison of dielectric barrier discharge, atmospheric pressure radiofrequency-driven glow discharge and direct analysis in real time sources for ambient mass spectrometry of acetaminophen. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 594-603. | 2.9 | 35 |
| 102 | Multivariate optimization of photochemical vapor generation for direct determination of arsenic in seawater by inductively coupled plasma mass spectrometry. Analytica Chimica Acta, 2015, 901, 34-40. | 5.4 | 35 |
| 103 | Atomic Absorption by Free Atoms in Solution Following Chemical Reduction from the Ionic State. Analytical Chemistry, 1998, 70, 1670-1676. | 6.5 | 34 |
| 104 | Detection of volatile arsenic chloride species during hydride generation: a new prospectus. Journal of Analytical Atomic Spectrometry, 2001, 16, 470-474. | 3.0 | 34 |
| 105 | Detection of Volatile Organometal Chloride Species in Model Atmosphere above Seawater and Sediment. Environmental Science & Eamp; Technology, 2002, 36, 1198-1201. | 10.0 | 34 |
| 106 | Chemical vapor generationâ€"electrothermal atomic absorption spectrometry: new perspectives. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 2047-2056. | 2.9 | 34 |
| 107 | Flow injection chemical vapor generation of Au using a mixed reductant. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 101-107. | 2.9 | 34 |
| 108 | Determination of thimerosal in human and veterinarian vaccines by photochemical vapor generation coupled to ICP OES. Journal of Analytical Atomic Spectrometry, 2010, 25, 1627. | 3.0 | 34 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Determination of selenomethionine in yeast using CNBr derivatization and species specific isotope dilution GC ICP-MS and GC-MS. Journal of Analytical Atomic Spectrometry, 2004, 19, 1448. | 3.0 | 33 |
| 110 | Determination of total mercury in biological samples using flow injection CVAAS following tissue solubilization in formic acid. Talanta, 2006, 68, 1259-1263. | 5.5 | 33 |
| 111 | Negative Chemical Ionization GC/MS Determination of Nitrite and Nitrate in Seawater Using Exact Matching Double Spike Isotope Dilution and Derivatization with Triethyloxonium Tetrafluoroborate. Analytical Chemistry, 2012, 84, 2592-2596. | 6.5 | 33 |
| 112 | Determination of Thorium and Uranium in Ultrapure Lead by Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2005, 77, 2432-2436. | 6.5 | 32 |
| 113 | Thin film hydride generation: determination of ultra-trace copper by flow injection in situ hydride trapping graphite furnace AAS. Journal of Analytical Atomic Spectrometry, 2010, 25, 1159. | 3.0 | 32 |
| 114 | Chemical Vapor Generation with Slurry Sampling: A Review of Applications to Atomic and Mass Spectrometry. Applied Spectroscopy Reviews, 2012, 47, 41-82. | 6.7 | 31 |
| 115 | Determination of mercury in gasoline by photochemical vapor generation coupled to graphite furnace atomic absorption spectrometry. Microchemical Journal, 2014, 117, 100-105. | 4.5 | 31 |
| 116 | Speciation without chromatography: Part I. Determination of tributyltin in aqueous samples by chloride generation, headspace solid-phase microextraction and inductively coupled plasma time of flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2001, 16, 1313. | 3.0 | 30 |
| 117 | Ultra-trace determination of mercury in water by cold-vapor generation isotope dilution mass spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 1226. | 3.0 | 29 |
| 118 | Isotope ratio precision with transient sample introduction using ICP orthogonal acceleration time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 1358. | 3.0 | 29 |
| 119 | Observations of Large Mass-Independent Fractionation Occurring in MC-ICPMS: Implications for Determination of Accurate Isotope Amount Ratios. Analytical Chemistry, 2011, 83, 8999-9004. | 6.5 | 29 |
| 120 | Determination of vanadium in biological fluids using HR-ICP-MS. Journal of Analytical Atomic Spectrometry, 2002, 17, 1300-1303. | 3.0 | 28 |
| 121 | Characterization of a suite of ginkgo-containing standard reference materials. Analytical and Bioanalytical Chemistry, 2007, 389, 179-196. | 3.7 | 28 |
| 122 | Atomization of Bismuthane in a Dielectric Barrier Discharge: AÂMechanistic Study. Analytical Chemistry, 2016, 88, 1804-1811. | 6.5 | 28 |
| 123 | Diethyldithiocarbamate enhanced chemical generation of volatile palladium species, their characterization by AAS, ICP-MS, TEM and DART-MS and proposed mechanism of action. Analytica Chimica Acta, 2018, 1005, 16-26. | 5.4 | 28 |
| 124 | Determination of U, Th and Pu in natural waters, biological materials and clinical samples by ETV-ICP-MS. Journal of Analytical Atomic Spectrometry, 2005, 20, 717. | 3.0 | 27 |
| 125 | Determination of natural Sr and 90Sr in environmental samples by ETV-ICP-MS. Journal of Analytical Atomic Spectrometry, 2007, 22, 1409. | 3.0 | 27 |
| 126 | High accuracy and precision isotope dilution mass spectrometry: An application to the determination of Mo in seawater. Journal of Analytical Atomic Spectrometry, 2009, 24, 1327. | 3.0 | 27 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Photo- and thermo-chemical vapor generation of mercury. Journal of Analytical Atomic Spectrometry, 2013, 28, 1610. | 3.0 | 27 |
| 128 | Application of double-spike isotope dilution for the accurate determination of Cr(III), Cr(VI) and total Cr in yeast. Analytical and Bioanalytical Chemistry, 2006, 386, 1673-1680. | 3.7 | 26 |
| 129 | Metrological Triangle for Measurements of Isotope Amount Ratios of Silver, Indium, and Antimony Using Multicollector-Inductively Coupled Plasma Mass Spectrometry: The 21st Century Harvard Method. Analytical Chemistry, 2010, 82, 8978-8982. | 6.5 | 26 |
| 130 | Comparison of the efficiencies of on-line and high-pressure closed vessel approaches to microwave heated sample decomposition. Fresenius' Journal of Analytical Chemistry, 1994, 349, 428-433. | 1.5 | 25 |
| 131 | Comparison of chloride- and hydride-generation for quantitation of germanium by headspace solid-phase microextraction–inductively coupled plasma–mass spectrometry. Analytical and Bioanalytical Chemistry, 2002, 373, 849-855. | 3.7 | 25 |
| 132 | Determination of inorganic mercury in petroleum production water by inductively coupled plasma optical emission spectrometry following photochemical vapor generation. Journal of Analytical Atomic Spectrometry, 2016, 31, 751-758. | 3.0 | 25 |
| 133 | Comparison of sample digestion techniques for the determination of trace and residual catalyst metal content in single-wall carbon nanotubes by inductively coupled plasma mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 105, 89-94. | 2.9 | 24 |
| 134 | On-line UV photochemical generation of volatile copper species and its analytical application. Microchemical Journal, 2016, 124, 344-349. | 4.5 | 24 |
| 135 | Performance comparison between furnace atomisation plasma emission spectrometry and microwave induced plasma-atomic emission spectrometry for the determination of mercury species in gas chromatography effluents. Journal of Analytical Atomic Spectrometry, 1998, 13, 1347-1353. | 3.0 | 22 |
| 136 | Influence of Speciation on the Response from Selenium to UV-Photochemical Vapor Generation. Analytical Sciences, 2012, 28, 807-811. | 1.6 | 22 |
| 137 | Establishing comparability and compatibility in the purity assessment of high purity zinc as demonstrated by the CCQM-P149 intercomparison. Metrologia, 2018, 55, 211-221. | 1.2 | 22 |
| 138 | Comparison of sector field- and quadrupole-ICP-MS for the determination of DBT and TBT in sediment following GC separation. Journal of Analytical Atomic Spectrometry, 2003, 18, 1365. | 3.0 | 21 |
| 139 | Blank correction considerations for isotope dilution and reverse isotope dilution calibration: Determination of methylmercury in fish tissue. Journal of Analytical Atomic Spectrometry, 2005, 20, 724. | 3.0 | 21 |
| 140 | Gas chromatography–mass spectrometric identification of iodine species arising from photo-chemical vapor generation. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 714-716. | 2.9 | 21 |
| 141 | Spatial imaging of the furnace atomization plasma emission spectrometry source. Journal of Analytical Atomic Spectrometry, 1994, 9, 1399. | 3.0 | 20 |
| 142 | Gas chromatography–mass spectrometry study of hydrogen–deuterium exchange reactions of volatile hydrides of As, Sb, Bi, Ge and Sn in aqueous media. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 778-787. | 2.9 | 20 |
| 143 | Effect of additives on the chemical vapour generation of bismuthane by tetrahydroborate(III) derivatization. Analytical and Bioanalytical Chemistry, 2007, 388, 783-791. | 3.7 | 20 |
| 144 | Purity determination as needed for the realisation of primary standards for elemental determination: status of international comparability. Accreditation and Quality Assurance, 2010, 15, 29-37. | 0.8 | 20 |

| # | Article | lF | Citations |
|-----|--|-----|-----------|
| 145 | Excitation and detection of molecular species with furnace atomization plasma emission spectrometry. Journal of Analytical Atomic Spectrometry, 1992, 7, 339. | 3.0 | 19 |
| 146 | Chemical vapour generation of silver: reduced palladium as permanent reaction modifier for enhanced performance. Journal of Analytical Atomic Spectrometry, 2004, 19, 1014-1016. | 3.0 | 19 |
| 147 | Dried-droplet laser ablation ICP-MS of HPLC fractions for the determination of selenomethionine in yeast. Journal of Analytical Atomic Spectrometry, 2005, 20, 431. | 3.0 | 19 |
| 148 | Comparison of laser ablation, electrothermal vaporization and solution nebulization for the determination of radionuclides in liquid samples by inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2006, 21, 1202. | 3.0 | 19 |
| 149 | Preparation and Characterization of a Suite of Ephedra-Containing Standard Reference Materials. Journal of AOAC INTERNATIONAL, 2006, 89, 1483-1495. | 1.5 | 19 |
| 150 | Chemical characterization of engineered nanoparticles. Analytical and Bioanalytical Chemistry, 2010, 396, 951-952. | 3.7 | 19 |
| 151 | Behavior of selenium hydride in heated quartz tube and dielectric barrier discharge atomizers. Analytica Chimica Acta, 2018, 1028, 11-21. | 5.4 | 19 |
| 152 | Determination of copper, iron, manganese and zinc in river and estuarine water by atom trapping-flame atomic absorption spectrometry. Fresenius' Journal of Analytical Chemistry, 1991, 340, 35-40. | 1.5 | 18 |
| 153 | A novel approach to the estimation of aqueous solubility of some noble metal vapor species generated by reaction with tetrahydroborate (III). Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 667-675. | 2.9 | 18 |
| 154 | Determination of total chromium in seawater with isotope dilution sector field ICP-MS following on-line matrix separation. Journal of Analytical Atomic Spectrometry, 2009, 24, 958. | 3.0 | 18 |
| 155 | Identification of volatile iron species generated by UV photolysis. Microchemical Journal, 2012, 105, 44-47. | 4.5 | 18 |
| 156 | Elemental Characterization of Single-Wall Carbon Nanotube Certified Reference Material by Neutron and Prompt Î ³ Activation Analysis. Analytical Chemistry, 2015, 87, 3699-3705. | 6.5 | 18 |
| 157 | High-efficiency photoreductive vapor generation of osmium. Journal of Analytical Atomic Spectrometry, 2021, 36, 2097-2106. | 3.0 | 18 |
| 158 | Ultrasensitive Detection of Ruthenium by Coupling Cobalt and Cadmium Ion-Assisted Photochemical Vapor Generation to Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2021, 93, 16543-16551. | 6.5 | 18 |
| 159 | Preparation of 8-quinolinol immobilized adsorbents with minimum contamination for the preconcentration of trace metals in water Bunseki Kagaku, 1993, 42, 107-110. | 0.2 | 17 |
| 160 | Ultra-trace determination of Se in sediments by electrothermal vaporizer-inductively coupled plasma-mass spectroscopy: use of the ETV as a thermochemical reactor. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1999, 54, 443-453. | 2.9 | 17 |
| 161 | Furnace atomization plasma emission spectrometry with He/Ar mixed gas plasmas. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1999, 54, 2121-2141. | 2.9 | 17 |
| 162 | Reduction of metal oxides by carbon in graphite furnaces. Journal of Analytical Atomic Spectrometry, 1999, 14, 1019-1024. | 3.0 | 17 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Title is missing!. Journal of Analytical Atomic Spectrometry, 2001, 16, 1302-1306. | 3.0 | 17 |
| 164 | Vapor generation coupled with furnace atomization plasma emission spectrometry for detection of mercury. Journal of Analytical Atomic Spectrometry, 2009, 24, 689. | 3.0 | 17 |
| 165 | Determination of moisture content of single-wall carbon nanotubes. Analytical and Bioanalytical Chemistry, 2012, 402, 429-438. | 3.7 | 17 |
| 166 | Evaluation of approaches to the abatement of nitrate interference with photochemical vapor generation. Journal of Analytical Atomic Spectrometry, 2017, 32, 2378-2390. | 3.0 | 17 |
| 167 | Evidence for photochemical synthesis of fluoromethane. Journal of Analytical Atomic Spectrometry, 2020, 35, 1720-1726. | 3.0 | 17 |
| 168 | Coupled thermogravimetry, mass spectrometry, and infrared spectroscopy for quantification of surface functionality on single-walled carbon nanotubes. Analytical and Bioanalytical Chemistry, 2010, 396, 1037-1044. | 3.7 | 16 |
| 169 | Chemical Vapor Generation of Cu: Optimization of Generation Media. Annali Di Chimica, 2005, 95, 491-499. | 0.6 | 15 |
| 170 | Condensation cascades and methylgroup transfer reactions during the formation of arsane, methyland dimethylarsane by aqueous borohydride and (methyl) arsenates. Analytical and Bioanalytical Chemistry, 2012, 402, 921-933. | 3.7 | 15 |
| 171 | Gas-phase re-distribution of analyte species in the integrated contact cuvette furnace atomization plasma emission spectrometry source. Journal of Analytical Atomic Spectrometry, 1994, 9, 493. | 3.0 | 14 |
| 172 | Syntheses of polysulfones containing chelating reagents and their application to the preconcentration of trace metals. Reactive and Functional Polymers, 1996, 31, 207-218. | 4.1 | 13 |
| 173 | Application of direct analysis in real time to a multiphase chemical system: Identification of polymeric arsanes generated by reduction of monomethylarsenate with sodium tetrahydroborate. International Journal of Mass Spectrometry, 2014, 371, 42-46. | 1.5 | 13 |
| 174 | Copper-ion assisted photochemical vapor generation of bromide and bromate. Journal of Analytical Atomic Spectrometry, 2021, 36, 1235-1243. | 3.0 | 13 |
| 175 | Effects of γ-sterilization on butyltin homogeneity and content in sediments: a GC–ICP–MS study. Analytical and Bioanalytical Chemistry, 2003, 376, 85-91. | 3.7 | 12 |
| 176 | Mechanism of hydrogen transfer in arsane generation by aqueous tetrahydridoborate: Interference effects of AullI and other noble metals. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 740-747. | 2.9 | 12 |
| 177 | Iridium as a permanent modifier for determination of cadmium and lead in sediment and biological samples by furnace atomization plasma emission spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 693-698. | 3.0 | 11 |
| 178 | Reduction of metal oxides by carbon in graphite furnaces. Part 2. Temporal oscillations in atomic absorption during the process of slow evaporation of Al, Mn and Yb oxides in spatially isothermal and non-isothermal graphite atomizers. Journal of Analytical Atomic Spectrometry, 2000, 15, 115-120. | 3.0 | 10 |
| 179 | GC-MS exploration of photochemically generated species of Os, W and Ru from reductive and oxidative media. Journal of Analytical Atomic Spectrometry, 2022, 37, 528-534. | 3.0 | 10 |
| 180 | Influence of plasma gas composition on analyte ionization in furnace atomization plasma emission spectrometry. Journal of Analytical Atomic Spectrometry, 1999, 14, 901-912. | 3.0 | 9 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 181 | Solid phase microextraction as a tool for trace element determination. Comprehensive Analytical Chemistry, 2003, 41, 371-391. | 1.3 | 9 |
| 182 | The Binomial Distribution of Hydrogen and Deuterium in Arsanes, Diarsanes, and Triarsanes Generated from As(<scp> ii</scp>)/[BH _{<i>n</i>} D _{4-<i>n</i>}] ^{â^'} and the Effect of Trace Amounts of Rh(<scp> ii</scp>) Ions. Journal of the American Society for Mass Spectrometry, 2012, 23, 2178-2186. | 2.8 | 9 |
| 183 | Uncertainty of relative sensitivity factors in glow discharge mass spectrometry. Metrologia, 2017, 54, 796-804. | 1.2 | 9 |
| 184 | The Use of a Samplerâ^'Skimmer Interface for Ion Sampling in Furnace Atomization Plasma Ionization Mass Spectrometry. Analytical Chemistry, 1999, 71, 5146-5156. | 6.5 | 8 |
| 185 | Gas phase detection of tributyltin chloride arising from aqueous and solid matrices. Journal of Analytical Atomic Spectrometry, 2002, 17, 1506-1510. | 3.0 | 8 |
| 186 | Enhancing reliability of elemental speciation results - quo vadis?. Environmental Chemistry, 2009, 6, 294. | 1.5 | 8 |
| 187 | Speciation without chromatography: Part 2. Determination of tributyltin by chloride generation flow injection atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 1511-1515. | 3.0 | 7 |
| 188 | A systematic approach to quantitation of ephedra alkaloids in natural health products. Analytical and Bioanalytical Chemistry, 2005, 383, 268-281. | 3.7 | 6 |
| 189 | Use of Ar–He mixed gas plasmas for furnace atomisation plasma ionisation mass spectrometry (FAPIMS). Journal of Analytical Atomic Spectrometry, 2000, 15, 1223-1232. | 3.0 | 4 |
| 190 | CCQM-P43: Tributyltin and dibutyltin in sediment. Metrologia, 2006, 43, 08002-08002. | 1.2 | 4 |
| 191 | An Evaluation of the Use of Formic Acid for Extraction of Trace Elements from Brazil Nut and Babassu Coconut and Its Suitability for Multi-Element Determination by ICP-MS. Journal of the Brazilian Chemical Society, 2016, , . | 0.6 | 4 |
| 192 | Chapter 28 Sampling and sample preparation for trace element speciation. Comprehensive Analytical Chemistry, 2002, 37, 939-966. | 1.3 | 2 |
| 193 | Spectrophotometric Determination of Aluminium in Hemodialysis Water. Journal of the Brazilian Chemical Society, 2015, , . | 0.6 | 2 |
| 194 | ICP OES Determination of Contaminant Elements Leached from Food Packaging Films. Brazilian Archives of Biology and Technology, 2017, 60, . | 0.5 | 2 |
| 195 | Introduction to vapor generation techniques. , 2022, , 1-16. | | 2 |
| 196 | Rapid determination of silicone oil lubricant in elastomeric closures by ICP-OES. Analytical Methods, 2013, 5, 4263. | 2.7 | 1 |
| 197 | A mass spectrometric study of hydride generated arsenic species identified by direct analysis in real time (DART) following cryotrapping. Analytical and Bioanalytical Chemistry, 2021, 413, 3443-3453. | 3.7 | 1 |
| 198 | Evaluation of Sample Preparation Procedures for Determination of Cr(VI) in Cr2O3 Pigments by Vis Spectrophotometry. Brazilian Archives of Biology and Technology, 2021, 64, . | 0.5 | 1 |

| # | Article | IF | CITATIONS |
|-----|--|----|-----------|
| 199 | Other chemical vapor generation techniques. , 2022, , 153-190. | | O |
| 200 | Photo-sono-thermo-chemical vapor generation techniques. , 2022, , 213-263. | | 0 |