Tiberiu Frentiu

List of Publications by Year
in descending order

67 papers	897 citations	516710 16 h-index	642732 23 g-index
67 all docs	67 docs citations	67 times ranked	700 citing authors

#	Article	IF	Citations
1	Heavy Metal-Resistant Filamentous Fungi as Potential Mercury Bioremediators. Journal of Fungi (Basel,) Tj ETQq1 1 0.784314 rgBT /Over	3.5	43
2	Simultaneous determination of As and Sb in soil using hydride generation capacitively coupled plasma microtorch optical emission spectrometry â€“ comparison with inductively coupled plasma optical emission spectrometry. Journal of Analytical Atomic Spectrometry, 2014, 29, 1880-1888.	3.0	36
3	New method for mercury determination in microwave digested soil samples based on cold vapor capacitively coupled plasma microtorch optical emission spectrometry: Comparison with atomic fluorescence spectrometry. Microchemical Journal, 2013, 110, 545-552.	4.5	31
4	Mercury determination in non- and biodegradable materials by cold vapor capacitively coupled plasma microtorch atomic emission spectrometry. Journal of Hazardous Materials, 2011, 193, 65-69.	12.4	29
5	Characterization and assessment of potential environmental risk of tailings stored in seven impoundments in the Aries river basin, Western Romania. Chemistry Central Journal, 2013, 7, 5.	2.6	28
6	Low power capacitively coupled plasma microtorch for simultaneous multielemental determination by atomic emission using microspectrometers. Microchemical Journal, 2011, 97, 188-195.	4.5	27
7	Arsenic and antimony determination in non- and biodegradable materials by hydride generation capacitively coupled plasma microtorch optical emission spectrometry. Talanta, 2013, 109, 84-90.	5.5	27
8	A novel analytical system with a capacitively coupled plasma microtorch and a gold filament microcollector for the determination of total Hg in water by cold vapour atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2012, 27, 1753.	3.0	23
9	Determination, speciation and distribution of mercury in soil in the surroundings of a former chlor-alkali plant: assessment of sequential extraction procedure and analytical technique. Chemistry Central Journal, 2013, 7, 178.	2.6	22
10	Methylmercury determination in seafood by photochemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry. Talanta, 2017, 170, 464-472.	5.5	22
11	Characterisation of soil quality and mobility of Cd, Cu, Pb and Zn in the Baia Mare area Northwest Romania following the historical pollution. International Journal of Environmental Analytical Chemistry, 2009, 89, 635-649.	3.3	21
12	Study of partitioning and dynamics of metals in contaminated soil using modified four-step BCR sequential extraction procedure. Chemical Papers, 2009, 63, .	2.2	19
13	A miniaturized capacitively coupled plasma microtorch optical emission spectrometer and a Rh coiled-filament as small-sized electrothermal vaporization device for simultaneous determination of volatile elements from liquid microsamples: Spectral and analytical characterization. Talanta, 2014, 129, 72-78.	5.5	19
14	Chemical modeling of groundwater in the Banat Plain, southwestern Romania, with elevated As content and co-occurring species by combining diagrams and unsupervised multivariate statistical approaches. Chemosphere, 2017, 172, 127-137.	8.2	19
15	Eco-scale non-chromatographic method for mercury speciation in fish using formic acid extraction and UVâ€“Vis photochemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry. Microchemical Journal, 2018, 141, 155-162.	4.5	19
16	Mercury speciation in fish tissue by eco-scale thermal decomposition atomic absorption spectrometry: method validation and risk exposure to methylmercury. Chemical Papers, 2018, 72, 441-448.	2.2	18
17	Atmospheric pressure capacitively coupled plasma source for the direct analysis of non-conductive solid samples. Journal of Analytical Atomic Spectrometry, 1999, 14, 541-545.	3.0	16
18	Distribution study of inorganic arsenic (III) and (V) species in soil and their mobility in the area of Baia-Mare, Romania. Chemical Speciation and Bioavailability, 2006, 18, 11-25.	2.0	16

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19	Evaluation of figures of merit for Zn determination in environmental and biological samples using EDL excited AFS in a new radiofrequency capacitively coupled plasma. Journal of Analytical Atomic Spectrometry, 2010, 25, 739.	3.0	16
20	Sono-induced cold vapour generation interfaced with capacitively coupled plasma microtorch optical emission spectrometry: analytical characterization and comparison with atomic fluorescence spectrometry. Journal of Analytical Atomic Spectrometry, 2015, 30, 1161-1168.	3.0	16
21	Analytical characterization of a method for mercury determination in food using cold vapour capacitively coupled plasma microtorch optical emission spectrometry â€“ compliance with European legislation requirements. Analytical Methods, 2015, 7, 747-752.	2.7	16
22	Determination of Cd in food using an electrothermal vaporization capacitively coupled plasma microtorch optical emission microspectrometer: Compliance with European legislation and comparison with graphite furnace atomic absorption spectrometry. Food Control, 2016, 61, 227-234.	5.5	16
23	Mercury speciation in seafood using non-chromatographic chemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry method â€“ Evaluation of methylmercury exposure. Food Control, 2017, 82, 266-273.	5.5	16
24	Preliminary investigation of a medium power argon radiofrequency capacitively coupled plasma as atomization cell in atomic fluorescence spectrometry of cadmium. Talanta, 2008, 76, 1170-1176.	5.5	15
25	A highly sensitive eco-scale method for mercury determination in water and food using photochemical vapor generation and miniaturized instrumentation for capacitively coupled plasma microtorch optical emission spectrometry. Journal of Analytical Atomic Spectrometry, 2018, 33, 799-808.	3.0	15
26	Capacitively coupled plasma with tip-ring electrode geometry for atomic emission spectrometry. Analytical performance and matrix effect of sodium chloride and potassium chloride. Journal of Analytical Atomic Spectrometry, 1994, 9, 635.	3.0	14
27	Elemental speciation of lead, zinc and copper in sedimented dust and soil using a capacitively coupled plasma atomic emission spectrometer as detector. Analyst, The, 1995, 120, 725.	3.5	14
28	Validation of the Tessier scheme for speciation of metals in soil using the Bland and Altman test. Chemical Papers, 2008, 62, .	2.2	14
29	Assessment of contamination and origin of metals in mining affected river sediments: A case study of the Aries catchment, Romania. Journal of the Serbian Chemical Society, 2014, 79, 1019-1036.	0.8	14
30	Determination of Total Mercury in Fish Tissue Using a Low-Cost Cold Vapor Capacitively Coupled Plasma Microtorch Optical Emission Microspectrometer: Comparison with Direct Mercury Determination by Thermal Decomposition Atomic Absorption Spectrometry. Food Analytical Methods, 2015, 8, 643-648.	2.6	14
31	Optimisation of analytical parameters in inorganic arsenic (III and V) speciation by hydride generation using L-cysteine as prereducing agent in diluted HCl medium. Chemical Speciation and Bioavailability, 2006, 18, 1-9.	2.0	13
32	Spectroscopic investigations on a low power atmospheric pressure capacitively coupled helium plasma. Plasma Sources Science and Technology, 2008, 17, 045016.	3.1	13
33	Application of low-cost electrothermal vaporization capacitively coupled plasma microtorch optical emission spectrometry for simultaneous determination of Cd and Pb in environmental samples. Microchemical Journal, 2015, 121, 192-198.	4.5	13
34	Prediction of the fate of Hg and other contaminants in soil around a former chlor-alkali plant using Fuzzy Hierarchical Cross-Clustering approach. Chemosphere, 2015, 138, 96-103.	8.2	13
35	Hydroxyapatite for removal of heavy metals from wastewater. Studia Universitatis Babes-Bolyai Chemia, 2017, 62, 93-104.	0.2	13
36	Analytical characterisation of a capacitively coupled plasma torch with a central tube electrode. Talanta, 1999, 48, 827-837.	5.5	12

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37	Interference-free, green microanalytical method for total mercury and methylmercury determination in biological and environmental samples using small-sized electrothermal vaporization capacitively coupled plasma microtorch optical emission spectrometry. Talanta, 2020, 217, 121067.	5.5	12
38	Characterization of a very low power argon CCP. Journal of Analytical Atomic Spectrometry, 2005, 20, 966.	3.0	11
39	Analytical capability of a medium power capacitively coupled plasma for the multielemental determination in multimineral/multivitamin preparations by atomic emission spectrometry. Food Chemistry, 2012, 134, 2447-2452.	8.2	11
40	Validation of an analytical method based on the high-resolution continuum source flame atomic absorption spectrometry for the fast-sequential determination of several hazardous/priority hazardous metals in soil. Chemistry Central Journal, 2013, 7, 43.	2.6	11
41	Rapid Determination of Trace Elements in Macedonian Grape Brandies for Their Characterization and Safety Evaluation. Food Analytical Methods, 2017, 10, 459-468.	2.6	11
42	Determination of selenium in food and environmental samples by hydride generation high-resolution continuum source quartz furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2021, 36, 267-272.	3.0	11
43	Preliminary study on heavy metals contamination of soil using solid phase speciation and the influence on groundwater in Bozantaâ€"Baia Mare Area, Romania. Chemical Speciation and Bioavailability, 2008, 20, 99-109.	2.0	10
44	Quenching of the OH and nitrogen molecular emission by methane addition in an Ar capacitively coupled plasma to remove spectral interference in lead determination by atomic fluorescence spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2010, 65, 565-570.	2.9	10
45	Characterization of Lycium barbarum L. berry cultivated in North Macedonia: AÂchemometric approach. Journal of Berry Research, 2020, 10, 223-241.	1.4	10
46	Cadmium Determination in Sedimented Dust by Atomic Emission Spectrometry With a New Radiofrequency Capacitively Coupled Plasma Source. Analytical Letters, 2000, 33, 323-335.	1.8	9
47	Investigation of a medium power radiofrequency capacitively coupled plasma and its application to high-temperature superconductor analysis via atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 957.	3.0	9
48	Profile distribution of As(III) and As(V) species in soil and groundwater in Bozanta area. Chemical Papers, 2007, 61, .	2.2	9
49	A microanalytical method based on electrothermal vaporization capacitively coupled plasma microtorch optical emission spectrometry for multielemental determination: comparison with inductively coupled plasma optical emission spectrometry. Chemical Papers, 2017, 71, 91-102.	2.2	9
50	Statistical Evaluation of Cu, Mn and Zn Determinations in Biological Samples by Radiofrequency Capacitively Coupled Plasma Atomic Emission Spectrometry Using the Bland and Altman Test. Mikrochimica Acta, 2003, 143, 245-254.	5.0	8
51	Effect of titanium ions on the ion release rate and uptake at the interface of silica based xerogels with simulated body fluid. Corrosion Science, 2013, 72, 41-46.	6.6	8
52	Investigation of Medium Power Radiofrequency Capacitively Coupled Plasmas and Their Application to Atomic Emission Spectrometry for the Determination of Aluminium in Water Samples. Mikrochimica Acta, 2004, 147, 93.	5.0	7
53	Discharge characteristics and non-spectral interferences on the emission of ca species in a medium power radiofrequency capacitively coupled plasma source. Acta Chimica Slovenica, 2010, 57, 173-81.	0.6	7
54	Influence of Mixed Additives on the Physicochemical Properties of a 5.25% Sodium Hypochlorite Solution: An Unsupervised Multivariate Statistical Approach. Journal of Endodontics, 2018, 44, 280-285.e3.	3.1	6

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55	Simultaneous Determination of As, Bi, Sb, Se, Te, Hg, Pb and Sn by Small-Sized Electrothermal Vaporization Capacitively Coupled Plasma Microtorch Optical Emission Spectrometry Using Direct Liquid Microsampling. Molecules, 2021, 26, 2642.	3.8	6
56	Effect of in vitro simulated gastrointestinal digestion on some nutritional characteristics of several dried fruits. Food Chemistry, 2022, 385, 132713.	8.2	6
57	Analytical performances and validation of optical emission and atomic absorption spectrometry methods for multielemental determination in vegetables and fruits. Revue Roumaine De Chimie, 2020, 65, 735-745.	0.2	5
58	Magnesium and selenium in diabetics with peripheral artery disease of the lower limbs. Clujul Medical, 2013, 86, 235-9.	0.1	5
59	"Spectrophotometric determination and assessment of potential health risk of nitrite from meat and processed meat products ". Studia Universitatis Babes-Bolyai Chemia, 2019, 64, 265-277.	0.2	4
60	Application of Inductively Coupled Plasma Spectrometric Techniques and Multivariate Statistical Analysis in the Hydrogeochemical Profiling of Cavesâ€"Case Study CloÈ™ani, Romania. Molecules, 2021, 26, 6788.	3.8	4
61	Simple and robust method for lithium traces determination in drinking water by atomic emission using low-power capacitively coupled plasma microtorch and microspectrometer. Food Chemistry, 2013, 141, 3621-3626.	8.2	3
62	ASSESSMENT OF POLLUTANTS INPUT OF ACID MINE DRAINAGE AND DOMESTIC ACTIVITIES IN ARIES RIVER WATER, ROMANIA - A CHEMOMETRIC APPROACH. Environmental Engineering and Management Journal, 2015, 14, 2567-2576.	0.6	2
63	Portable system for heavy metals detection based on spectral analysis. , 2014, , .		1
64	Low-power radio-frequency capacitively coupled plasma in air: an alternative spectral source?. , 2000, , .		0
65	"Influence of the composition evolution of waste computer motherboards on their recycling strategy ". Studia Universitatis Babes-Bolyai Chemia, 2018, 63, 147-158.	0.2	0
66	GROUNDWATER CHARACTERIZATION IN SOUTHWESTERN ROMANIA USING FUZZY HIERARCHICAL CROSS CLUSTERING. Environmental Engineering and Management Journal, 2019, 18, 1967-1976.	0.6	0
67	A free non-spectral interferences method based on inductively coupled plasma optical emission spectrometry for multielemental determination in multimineral/multivitamin preparations. Revue Roumaine De Chimie, 2020, 65, 573-578.	0.2	0