

# Piotr Jamroz

## List of Publications by Year in descending order

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101  
papers

2,165  
citations

249298

26  
h-index

312153

41  
g-index

104  
all docs

104  
docs citations

104  
times ranked

1748  
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of hydrogen in microwave plasma valorization of producer gas. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 11640-11651.	3.8	8
2	How does direct current atmospheric pressure glow discharge application influence on physicochemical, nutritional, microbiological, and cytotoxic properties of orange juice?. <i>Food Chemistry</i> , 2022, 377, 131903.	4.2	2
3	Do we need cold plasma treated fruit and vegetable juices? A case study of positive and negative changes occurred in these daily beverages. <i>Food Chemistry</i> , 2022, 375, 131831.	4.2	11
4	The sensitive determination of Ag, Pb and Tl as well as reduction of spectral interferences in a hanging drop cathode atmospheric pressure glow discharge excitation microsource equipped with a Dove prism system. <i>Journal of Analytical Atomic Spectrometry</i> , 2022, 37, 517-527.	1.6	6
5	Response surface methodology assisted development of a simplified sample preparation procedure for the multielement (Ba, Ca, Cu, Fe, K, Mg, Mn, Na, Sr and Zn) analysis of different coffee brews by means of inductively coupled plasma optical emission spectrometry. <i>Talanta</i> , 2022, 241, 123215.	2.9	7
6	Application of pulse-modulated radio-frequency atmospheric pressure glow discharge for degradation of doxycycline from a flowing liquid solution. <i>Scientific Reports</i> , 2022, 12, 7354.	1.6	3
7	Rapid and easy ICP OES determination of selected major, minor and trace elements in Pu-erh tea infusions using the response surface methodology along with the joint desirability function approach. <i>Talanta</i> , 2022, 249, 123650.	2.9	7
8	Application of cold atmospheric pressure plasmas for high-throughput production of safe-to-consume beetroot juice with improved nutritional quality. <i>Food Chemistry</i> , 2021, 336, 127635.	4.2	21
9	Biological Effects of Cold Atmospheric Pressure Plasma on Skin Cancer. <i>Plasma Chemistry and Plasma Processing</i> , 2021, 41, 507-529.	1.1	8
10	The Influence of Cold Atmospheric Pressure Plasma-Treated Media on the Cell Viability, Motility, and Induction of Apoptosis in Human Non-Metastatic (MCF7) and Metastatic (MDA-MB-231) Breast Cancer Cell Lines. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3855.	1.8	27
11	Multivariate Optimization of the FLC-dc-APGD-Based Reaction-Discharge System for Continuous Production of a Plasma-Activated Liquid of Defined Physicochemical and Anti-Phytopathogenic Properties. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4813.	1.8	4
12	Five years of innovations in development of glow discharges generated in contact with liquids for spectrochemical elemental analysis by optical emission spectrometry. <i>Analytica Chimica Acta</i> , 2021, 1169, 338399.	2.6	28
13	Implementation of a Non-Thermal Atmospheric Pressure Plasma for Eradication of Plant Pathogens from a Surface of Economically Important Seeds. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9256.	1.8	9
14	Cold atmospheric pressure plasmas as versatile tools for effective degradation of a mixture of hazardous and endocrine disturbing compounds from liquid wastes. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106718.	3.3	5
15	Rhenium Nanostructures Loaded into Amino-Functionalized Resin as a Nanocomposite Catalyst for Hydrogenation of 4-Nitrophenol and 4-Nitroaniline. <i>Polymers</i> , 2021, 13, 3796.	2.0	4
16	Non-thermal atmospheric pressure plasma as a powerful tool for the synthesis of rhenium-based nanostructures for the catalytic hydrogenation of 4-nitrophenol. <i>RSC Advances</i> , 2021, 11, 38596-38604.	1.7	6
17	Activation of the Normal Human Skin Cells by a Portable Dielectric Barrier Discharge-Based Reaction-Discharge System of a Defined Gas Temperature. <i>Plasma Chemistry and Plasma Processing</i> , 2020, 40, 79-97.	1.1	17
18	Element sensor based on microplasma generators. <i>Sensor Review</i> , 2020, 40, 437-444.	1.0	3

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19	Comprehensive studies on the properties of apple juice treated by non-thermal atmospheric plasma in a flow-through system. <i>Scientific Reports</i> , 2020, 10, 21166.	1.6	3
20	Hanging drop cathode-atmospheric pressure glow discharge as a new method of sample introduction for inductively coupled plasma-optical emission spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 4211-4219.	1.9	11
21	Plant Extracts Activated by Cold Atmospheric Pressure Plasmas as Suitable Tools for Synthesis of Gold Nanostructures with Catalytic Uses. <i>Nanomaterials</i> , 2020, 10, 1088.	1.9	7
22	Multivariable optimization of ultrasound-assisted solvent extraction of bee pollen prior to its element analysis by FAAS. <i>Microchemical Journal</i> , 2020, 157, 105009.	2.3	7
23	Application of Oil-in-Water Nanoemulsion Carrying Size-Defined Gold Nanoparticles Synthesized by Non-thermal Plasma for the Human Breast Cancer Cell Lines Migration and Apoptosis. <i>Plasma Chemistry and Plasma Processing</i> , 2020, 40, 1037-1062.	1.1	14
24	A ceramic microchip with LDA-APGD as the excitation source for OES – a sensitive Hg detecting sensor for microsample analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 1880-1886.	1.6	8
25	Room temperature solvent extraction for simple and fast determination of total concentration of Ca, Cu, Fe, Mg, Mn, and Zn in bee pollen by FAAS along with assessment of the bioaccessible fraction of these elements using in vitro gastrointestinal digestion. <i>Journal of Trace Elements in Medicine and Biology</i> , 2020, 60, 126479.	1.5	21
26	Element analysis of bee-collected pollen and bee bread by atomic and mass spectrometry – Methodological development in addition to environmental and nutritional aspects. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 128, 115922.	5.8	14
27	Production of antimicrobial silver nanoparticles modified by alkanethiol self-assembled monolayers by direct current atmospheric pressure glow discharge generated in contact with a flowing liquid anode. <i>Plasma Processes and Polymers</i> , 2019, 16, 1900033.	1.6	4
28	New Green Determination of Cu, Fe, Mn, and Zn in Beetroot Juices along with Their Chemical Fractionation by Solid-Phase Extraction. <i>Molecules</i> , 2019, 24, 3645.	1.7	2
29	Hydrogel-based nanocomposite catalyst containing uncoated gold nanoparticles synthesized using cold atmospheric pressure plasma for the catalytic decomposition of 4-nitrophenol. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 582, 123886.	2.3	16
30	Tuning Optical and Granulometric Properties of Gold Nanostructures Synthesized with the Aid of Different Types of Honeys for Microwave-Induced Hyperthermia. <i>Materials</i> , 2019, 12, 898.	1.3	2
31	A miniaturized atmospheric pressure glow microdischarge system generated in contact with a hanging drop electrode – a new approach to spectrochemical analysis of liquid microsamples. <i>Journal of Analytical Atomic Spectrometry</i> , 2019, 34, 1287-1293.	1.6	22
32	Size-defined synthesis of magnetic nanorods by <i>Salvia hispanica</i> essential oil with electromagnetic excitation properties useful in microwave imaging. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 480, 87-96.	1.0	2
33	In-situ generation of Ag, Cd, Hg, In, Pb, Tl and Zn volatile species by flowing liquid anode atmospheric pressure glow discharge operated in gaseous jet mode – Evaluation of excitation processes and analytical performance. <i>Talanta</i> , 2019, 199, 107-115.	2.9	47
34	Cold atmospheric plasma-induced chemical vapor generation in trace element analysis by spectrometric methods. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 113, 234-245.	5.8	26
35	Preparation and characterization of gold nanoparticles prepared with aqueous extracts of Lamiaceae plants and the effect of follow-up treatment with atmospheric pressure glow microdischarge. <i>Arabian Journal of Chemistry</i> , 2019, 12, 4118-4130.	2.3	54
36	Comparison of the characteristics of gold nanoparticles synthesized using aqueous plant extracts and natural plant essential oils of <i>Eucalyptus globulus</i> and <i>Rosmarinus officinalis</i> . <i>Arabian Journal of Chemistry</i> , 2019, 12, 4795-4805.	2.3	40

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37	Microwave plasma treatment of simulated biomass syngas: Interactions between the permanent syngas compounds and their influence on the model tar compound conversion. <i>Fuel Processing Technology</i> , 2018, 173, 229-242.	3.7	42
38	Rapid eradication of bacterial phytopathogens by atmospheric pressure glow discharge generated in contact with a flowing liquid cathode. <i>Biotechnology and Bioengineering</i> , 2018, 115, 1581-1593.	1.7	15
39	Influence of pH and low-molecular weight organic compounds in solution on selected spectroscopic and analytical parameters of flowing liquid anode atmospheric pressure glow discharge (FLA-APGD) for the optical emission spectrometric (OES) determination of Ag, Cd, and Pb. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 437-451.	1.6	37
40	Fermented juices as reducing and capping agents for the biosynthesis of size-defined spherical gold nanoparticles. <i>Journal of Saudi Chemical Society</i> , 2018, 22, 767-776.	2.4	5
41	Determination of Elements in Fruit Juices. , 2018, , 739-761.		2
42	HR-CS FAAS based method for direct determination of total concentrations of Ca, Fe, Mg and Mn in functional apple beverages and evaluation of contributions of the bioaccessible fraction of these elements by in vitro gastrointestinal digestion and chemical fractionation. <i>Microchemical Journal</i> , 2018, 140, 248-255.	2.3	3
43	Microwave plasma application in decomposition and steam reforming of model tar compounds. <i>Fuel Processing Technology</i> , 2018, 169, 1-14.	3.7	77
44	Impact and practicability of recently introduced requirements on elemental impurities. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 101, 43-55.	5.8	21
45	Decolorization of organic dyes solution by atmospheric pressure glow discharge system working in a liquid flow-through mode. <i>Plasma Processes and Polymers</i> , 2018, 15, 1700083.	1.6	15
46	Modular Ceramic-Polymeric Device for Analysis of Selected Elements in Liquid Using Microplasma. <i>Proceedings (mdpi)</i> , 2018, 2, 822.	0.2	2
47	Antibacterial Activity of Fructose-Stabilized Silver Nanoparticles Produced by Direct Current Atmospheric Pressure Glow Discharge towards Quarantine Pests. <i>Nanomaterials</i> , 2018, 8, 751.	1.9	29
48	Atmospheric Pressure Plasma-Mediated Synthesis of Platinum Nanoparticles Stabilized by Poly(vinylpyrrolidone) with Application in Heat Management Systems for Internal Combustion Chambers. <i>Nanomaterials</i> , 2018, 8, 619.	1.9	10
49	Development and optimization of simplified method of fast sequential HR-CS-FAAS analysis of apple juices on the content of Ca, Fe, K, Mg, Mn and Na with the aid of response surface methodology. <i>Talanta</i> , 2018, 189, 182-189.	2.9	9
50	Understanding element composition of medicinal plants used in herbalism – A case study by analytical atomic spectrometry. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2018, 159, 262-271.	1.4	13
51	Application of Silver Nanostructures Synthesized by Cold Atmospheric Pressure Plasma for Inactivation of Bacterial Phytopathogens from the Genera <i>Dickeya</i> and <i>Pectobacterium</i> . <i>Materials</i> , 2018, 11, 331.	1.3	21
52	Pulse-Modulated Radio-Frequency Alternating-Current-Driven Atmospheric-Pressure Glow Discharge for Continuous-Flow Synthesis of Silver Nanoparticles and Evaluation of Their Cytotoxicity toward Human Melanoma Cells. <i>Nanomaterials</i> , 2018, 8, 398.	1.9	15
53	Polymerization-Driven Immobilization of dc-APGD Synthesized Gold Nanoparticles into a Quaternary Ammonium-Based Hydrogel Resulting in a Polymeric Nanocomposite with Heat-Transfer Applications. <i>Polymers</i> , 2018, 10, 377.	2.0	10
54	Critical evaluation of recent achievements in low power glow discharge generated at atmospheric pressure between a flowing liquid cathode and a metallic anode for element analysis by optical emission spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 88, 119-133.	5.8	67

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55	Sensitive Determination of Cd in Small-Volume Samples by Miniaturized Liquid Drop Anode Atmospheric Pressure Glow Discharge Optical Emission Spectrometry. <i>Analytical Chemistry</i> , 2017, 89, 5729-5733.	3.2	53
56	Direct current atmospheric pressure glow discharge generated between a pin-type solid cathode and a flowing liquid anode as a new tool for silver nanoparticles production. <i>Plasma Processes and Polymers</i> , 2017, 14, 1600251.	1.6	16
57	Recent achievements in element analysis of bee honeys by atomic and mass spectrometry methods. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 93, 67-77.	5.8	22
58	Reduction of spectral interferences in atmospheric pressure glow discharge optical emission spectrometry. <i>Microchemical Journal</i> , 2017, 130, 7-13.	2.3	23
59	10. Solid-Phase Extraction in Fractionation of Trace Elements. , 2017, , 419-436.		0
60	Ceramic atmospheric pressure micro glow discharge device with evaporating liquid flowing cathode for analytical purposes. , 2017, , .		2
61	Examination of the interactions occurring in the gas and liquid phases of atmospheric pressure glow discharge generated in contact with a liquid electrode leading to production of size-defined gold nanostructures. , 2017, , .		0
62	Portable reactor with LTCC electrodes for production of plasma activated water. , 2017, , .		1
63	Application of Direct Current Atmospheric Pressure Glow Microdischarge Generated in Contact with a Flowing Liquid Solution for Synthesis of Au-Ag Core-Shell Nanoparticles. <i>Materials</i> , 2016, 9, 268.	1.3	22
64	Electron Density from Balmer Series Hydrogen Lines and Ionization Temperatures in Inductively Coupled Argon Plasma Supplied by Aerosol and Volatile Species. <i>International Journal of Spectroscopy</i> , 2016, 2016, 1-9.	1.4	4
65	Ultrasonic nebulization atmospheric pressure glow discharge " Preliminary study. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 121, 22-27.	1.5	17
66	Flowing Liquid Anode Atmospheric Pressure Glow Discharge as an Excitation Source for Optical Emission Spectrometry with the Improved Detectability of Ag, Cd, Hg, Pb, Tl, and Zn. <i>Analytical Chemistry</i> , 2016, 88, 8812-8820.	3.2	111
67	Size-controlled synthesis of gold nanoparticles by a novel atmospheric pressure glow discharge system with a metallic pin electrode and a flowing liquid electrode. <i>RSC Advances</i> , 2016, 6, 80773-80783.	1.7	25
68	The determination of elements in herbal teas and medicinal plant formulations and their tisanes. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 130, 326-335.	1.4	60
69	On the coupling of hydride generation with atmospheric pressure glow discharge in contact with the flowing liquid cathode for the determination of arsenic, antimony and selenium with optical emission spectrometry. <i>Talanta</i> , 2015, 137, 11-17.	2.9	52
70	Direct elemental analysis of honeys by atmospheric pressure glow discharge generated in contact with a flowing liquid cathode. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 154-161.	1.6	44
71	The influence of stabilizers on the production of gold nanoparticles by direct current atmospheric pressure glow microdischarge generated in contact with liquid flowing cathode. <i>Journal of Nanoparticle Research</i> , 2015, 17, 185.	0.8	33
72	Determination of mercury in mosses by novel cold vapor generation atmospheric pressure glow microdischarge optical emission spectrometry after multivariate optimization. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 1743-1751.	1.6	15

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73	Production of gold nanoparticles using atmospheric pressure glow microdischarge generated in contact with a flowing liquid cathode – a design of experiments study. <i>RSC Advances</i> , 2015, 5, 90534-90541.	1.7	15
74	Advances in assessing the elemental composition of distilled spirits using atomic spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2015, 64, 127-135.	5.8	18
75	Coupling of cold vapor generation with an atmospheric pressure glow microdischarge sustained between a miniature flow helium jet and a flowing liquid cathode for the determination of mercury by optical emission spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 893-902.	1.6	26
76	Interference-Free Determination of Trace Copper in Freshly Ripened Honeys by Flame Atomic Absorption Spectrometry Following a Preconcentration by Solid-Phase Extraction and a Two-Step Elution Process. <i>Archives of Environmental Contamination and Toxicology</i> , 2014, 66, 287-294.	2.1	2
77	Atmospheric Pressure Glow Discharges Generated in Contact with Flowing Liquid Cathode: Production of Active Species and Application in Wastewater Purification Processes. <i>Plasma Chemistry and Plasma Processing</i> , 2014, 34, 25-37.	1.1	68
78	Direct Current Atmospheric Pressure Microdischarge Generated between a Miniature Flow Helium Microjet and a Flowing Liquid Cathode. <i>Plasma Processes and Polymers</i> , 2014, 11, 755-762.	1.6	13
79	Chemical-vapor generation of transition metals through the reaction with tetrahydroborate in recent achievements in analytical atomic spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2014, 59, 144-155.	5.8	39
80	Comparison of the performance of direct current atmospheric pressure glow microdischarges operated between a small sized flowing liquid cathode and miniature argon or helium flow microjets. <i>Journal of Analytical Atomic Spectrometry</i> , 2013, 28, 1233.	1.6	34
81	The improvement of the analytical performance of direct current atmospheric pressure glow discharge generated in contact with the small-sized liquid cathode after the addition of non-ionic surfactants to electrolyte solutions. <i>Talanta</i> , 2013, 108, 74-82.	2.9	79
82	Effect of the addition of non-ionic surfactants on the emission characteristic of direct current atmospheric pressure glow discharge generated in contact with a flowing liquid cathode. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 28, 134-141.	1.6	39
83	Solid phase extraction and sequential elution for pre-concentration of traces of Mn and Zn in analysis of honey by flame atomic absorption spectrometry. <i>Analytical Methods</i> , 2012, 4, 125-131.	1.3	9
84	The effect of a miniature argon flow rate on the spectral characteristics of a direct current atmospheric pressure glow micro-discharge between an argon microjet and a small sized flowing liquid cathode. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012, 73, 26-34.	1.5	29
85	Spectroscopic evaluation of a low power atmospheric pressure mixed argon-helium microwave induced plasma combined with the chemical generation of volatile species for the optical emission spectrometric determination of arsenic, antimony and mercury. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 27, 1772.	1.6	20
86	Development of direct-current, atmospheric-pressure, glow discharges generated in contact with flowing electrolyte solutions for elemental analysis by optical emission spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2012, 41, 105-121.	5.8	87
87	Application of Ion Exchangers in Speciation and Fractionation of Elements in Food and Beverages. , 2012, , 65-95.		0
88	Determination of the hydrophobic fraction of Ca, Fe, Mg and Zn in dark color honeys using solid phase extraction and flame atomic absorption spectrometry. <i>Journal of the Brazilian Chemical Society</i> , 2012, 23, 1098-1103.	0.6	5
89	Fast and interference free determination of calcium and magnesium in honeys by solid phase extraction followed by flame atomic absorption spectrometry. <i>Journal of the Brazilian Chemical Society</i> , 2012, , .	0.6	2
90	An analytical performance of atmospheric pressure glow discharge generated in contact with flowing small size liquid cathode. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 27, 1032.	1.6	61

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91	Different Aspects of the Elemental Analysis of Honey by Flame Atomic Absorption and Emission Spectrometry: A Review. <i>Food Analytical Methods</i> , 2012, 5, 737-751.	1.3	34
92	Solid phase extraction with flame atomic absorption spectrometry for determination of traces of Ca, K, Mg and Na in quality control of white sugar. <i>Food Chemistry</i> , 2012, 130, 441-446.	4.2	19
93	Bioaccessibility of Ca, Cu, Fe, Mg, Mn and Zn from commercial bee honeys. <i>Food Chemistry</i> , 2012, 134, 392-396.	4.2	41
94	Recent achievements in chemical hydride generation inductively coupled and microwave induced plasmas with optical emission spectrometry detection. <i>Journal of Analytical Atomic Spectrometry</i> , 2011, 26, 1317.	1.6	56
95	Spectroscopic Characterization of Miniaturized Atmospheric-Pressure dc Glow Discharge Generated in Contact with Flowing Small Size Liquid Cathode. <i>Plasma Chemistry and Plasma Processing</i> , 2011, 31, 681-696.	1.1	42
96	An Analysis of Low Frequency Discharge in a CH <sub>3</sub> SiCl <sub>3</sub> -Ar-H <sub>2</sub> Mixture by Optical Emission Spectroscopy and Actinometry. <i>Plasma Chemistry and Plasma Processing</i> , 2010, 30, 641-661.	1.1	2
97	Optical emission spectroscopy study for nitrogen-acetylene-argon and nitrogen-acetylene-helium 100kHz and dc discharges. <i>Vacuum</i> , 2010, 84, 940-946.	1.6	19
98	A spectroscopic study into the decomposition process of titanium isopropoxide in the nitrogen-hydrogen 100kHz low-pressure plasma. <i>Vacuum</i> , 2008, 82, 651-656.	1.6	7
99	Optical emission characteristics of glow discharge in the N <sub>2</sub> -H <sub>2</sub> -Sn(CH <sub>3</sub> ) <sub>4</sub> and N <sub>2</sub> -Ar-Sn(CH <sub>3</sub> ) <sub>4</sub> mixtures. <i>Surface and Coatings Technology</i> , 2006, 201, 1444-1453.	2.2	9
100	Spectroscopic study of the decomposition process of tetramethylsilane in the N <sub>2</sub> -H <sub>2</sub> and N <sub>2</sub> -Ar low pressure plasma. <i>Diamond and Related Materials</i> , 2005, 14, 1498-1507.	1.8	9
101	Study of the dc and 100kHz glow discharges in acetylene-nitrogen mixture by means of optical emission spectroscopy. <i>EPJ Applied Physics</i> , 2002, 19, 201-209.	0.3	10