Wendell Karlos Tomazelli Coltro

List of Publications by Year
in descending order

127 papers	4,424 citations	81743 39 h-index	123241 61 g-index
133 all docs	133 docs citations	133 times ranked	3808 citing authors

#	Article	IF	Citations
1	Paper-based separation devices. , 2022, , 41-57.		0
2	Colorimetric paper-based analytical devices. , 2022, , 59-79.		3
3	3D printed microfluidic mixer for real-time monitoring of organic reactions by direct infusion mass spectrometry. Analytica Chimica Acta, 2022, 1190, 339252.	2.6	17
4	Different approaches for fabrication of low-cost electrochemical sensors. Current Opinion in Electrochemistry, 2022, 32, 100893.	2.5	43
5	Wearable hybrid sensors. , 2022, , 255-274.		0
6	3D printing of compact electrochemical cell for sequential analysis of steroid hormones. Sensors and Actuators B: Chemical, 2022, 364, 131850.	4.0	22
7	Reviewâ€"A Pencil Drawing Overview: From Graphite to Electrochemical Sensors/Biosensors Applications. Journal of the Electrochemical Society, 2022, 169, 047524.	1.3	10
8	Portable Analytical Platforms Associated with Chemometrics for Rapid Screening of Whisky Adulteration. Food Analytical Methods, 2022, 15, 2451-2461.	1.3	3
9	3D-printed electrochemical platform with multi-purpose carbon black sensing electrodes. Mikrochimica Acta, 2022, 189, .	2.5	15
10	Determination of naphthenic acids in produced water by using microchip electrophoresis with integrated contactless conductivity detection. Journal of Chromatography A, 2022, 1677, 463307.	1.8	5
11	Wearable and Biodegradable Sensors for Clinical and Environmental Applications. ACS Applied Electronic Materials, 2021, 3, 68-100.	2.0	46
12	Sensing Materials: Paper Substrate - Color Detection. , 2021, , .		1
13	Lead toxicity in Lucilia cuprina and electrochemical analysis: a simple and low-cost alternative for forensic investigation. Analytical and Bioanalytical Chemistry, 2021, 413, 3201-3208.	1.9	8
14	Towards a versatile and economic Chagas Disease point-of-care testing system, by integrating loop-mediated isothermal amplification and contactless/label-free conductivity detection. PLoS Neglected Tropical Diseases, 2021, 15, e0009406.	1.3	6
15	Disposable stencil-printed carbon electrodes for electrochemical analysis of sildenafil citrate in commercial and adulterated tablets. Brazilian Journal of Analytical Chemistry, 2021, , .	0.3	5
16	Paper-based analytical device with colorimetric detection for urease activity determination in soils and evaluation of potential inhibitors. Talanta, 2021, 230, 122301.	2.9	22
17	Chip-based separation of organic and inorganic anions and multivariate analysis of wines according to grape varieties. Talanta, 2021, 231, 122381.	2.9	7
18	Sandpaper-based electrochemical devices assembled on a reusable 3D-printed holder to detect date rape drug in beverages. Talanta, 2021, 232, 122408.	2.9	28

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19	Fully 3D printing of carbon black-thermoplastic hybrid materials and fast activation for development of highly stable electrochemical sensors. Sensors and Actuators B: Chemical, 2021, 349, 130721.	4.0	24
20	Plug-and-play assembly of paper-based colorimetric and electrochemical devices for multiplexed detection of metals. Analyst, The, 2021, 146, 3463-3473.	1.7	31
21	Simultaneous analysis of multiple adulterants in milk using microfluidic paper-based analytical devices. Analytical Methods, 2021, 13, 5383-5390.	1.3	11
22	Nonaqueous electrophoresis on microchips: A review. Electrophoresis, 2020, 41, 434-448.	1.3	18
23	Droplet length and generation rate investigation inside microfluidic devices by means of CFD simulations and experiments. Chemical Engineering Research and Design, 2020, 161, 260-270.	2.7	8
24	Inexpensive and nonconventional fabrication of microfluidic devices in PMMA based on a softâ€embossing protocol. Electrophoresis, 2020, 41, 1641-1650.	1.3	7
25	Contactless conductivity detection on lab-on-a-chip devices: A simple, inexpensive, and powerful analytical tool for microfluidic applications. , 2020, , 155-183.		0
26	Laser-engraved ammonia sensor integrating a natural deep eutectic solvent. Microchemical Journal, 2020, 157, 105067.	2.3	22
27	Microfluidic paper-based device integrated with smartphone for point-of-use colorimetric monitoring of water quality index. Measurement: Journal of the International Measurement Confederation, 2020, 164, 108085.	2.5	36
28	Determination of the alcoholic content in whiskeys using micellar electrokinetic chromatography on microchips. Food Chemistry, 2020, 329, 127175.	4.2	7
29	Instrument-free fabrication of microfluidic paper-based analytical devices through 3D pen drawing. Sensors and Actuators B: Chemical, 2020, 312, 128018.	4.0	49
30	Fabrication of microwell plates and microfluidic devices in polyester films using a cutting printer. Analytica Chimica Acta, 2020, 1119, 1-10.	2.6	19
31	Wearable electrochemical sensors for forensic and clinical applications. TrAC - Trends in Analytical Chemistry, 2019, 119, 115622.	5.8	104
32	Paper-based analytical devices with colorimetric detection for determining levoglucosan in atmospheric particulate matter. Atmospheric Environment, 2019, 213, 463-469.	1.9	5
33	Determination of bioavailable lead in atmospheric aerosols using unmodified screen-printed carbon electrodes. Analytical Methods, 2019, 11, 4875-4881.	1.3	6
34	Environmentally Friendly Manufacturing of Flexible Graphite Electrodes for a Wearable Device Monitoring Zinc in Sweat. ACS Applied Materials & Interfaces, 2019, 11, 39484-39492.	4.0	36
35	Integrated microfluidic device for the separation, decomposition and detection of low molecular weight S-nitrosothiols. Analyst, The, 2019, 144, 180-185.	1.7	6
36	Label-free counting of Escherichia coli cells in nanoliter droplets using 3D printed microfluidic devices with integrated contactless conductivity detection. Analytica Chimica Acta, 2019, 1071, 36-43.	2.6	38

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37	Organic beet leaves and stalk juice attenuates HDL-C reduction induced by high-fat meal in dyslipidemic patients: A pilot randomized controlled trial. Nutrition, 2019, 65, 68-73.	1.1	6
38	Salivary diagnostics on paper microfluidic devices and their use as wearable sensors for glucose monitoring. Analytical and Bioanalytical Chemistry, 2019, 411, 4919-4928.	1.9	121
39	Separation of carbohydrates on electrophoresis microchips with controlled electrolysis. Electrophoresis, 2019, 40, 693-698.	1.3	18
40	Paper-Based Electrophoresis Microchip as a Powerful Tool for Bioanalytical Applications. Methods in Molecular Biology, 2019, 1906, 133-142.	0.4	2
41	Rapid separation of postâ€blast explosive residues on glass electrophoresis microchips. Electrophoresis, 2019, 40, 462-468.	1.3	16
42	Redox titration on foldable paper-based analytical devices for the visual determination of alcohol content in whiskey samples. Talanta, 2019, 194, 363-369.	2.9	36
43	Future Challenges and Point-of-view. RSC Detection Science, 2019, , 275-280.	0.0	0
44	Introduction to Chemical Analysis Focusing on Forensic Chemical Sensing and Detection. RSC Detection Science, 2019, , 1-6.	0.0	0
45	19th ENQA & 7th CIAQA - Innovation for Sustainable Analytical Chemistry. Brazilian Journal of Analytical Chemistry, 2019, 6, .	0.3	0
46	Paper spray ionization mass spectrometry allied to chemometric tools for quantification of whisky adulteration with additions of sugarcane spirit. Analytical Methods, 2018, 10, 1952-1960.	1.3	28
47	Determination of Ascorbic Acid in Commercial Tablets Using Pencil Drawn Electrochemical Paper-based Analytical Devices. Analytical Sciences, 2018, 34, 91-95.	0.8	41
48	Amperometric detection of salivary Î±-amylase on screen-printed carbon electrodes as a simple and inexpensive alternative for point-of-care testing. Sensors and Actuators B: Chemical, 2018, 258, 342-348.	4.0	47
49	Role of the Carotid Bodies in the Hypertensive and Natriuretic Responses to NaCl Load in Conscious Rats. Frontiers in Physiology, 2018, 9, 1690.	1.3	2
50	Uncovering the Formation of Color Gradients for Glucose Colorimetric Assays on Microfluidic Paper-Based Analytical Devices by Mass Spectrometry Imaging. Analytical Chemistry, 2018, 90, 11949-11954.	3.2	46
51	Batch injection analysis towards auxiliary diagnosis of periodontal diseases based on indirect amperometric detection of salivary Î±-amylase on a cupric oxide electrode. Analytica Chimica Acta, 2018, 1041, 50-57.	2.6	14
52	Detection of Analgesics and Sedation Drugs in Whiskey Using Electrochemical Paperâ€based Analytical Devices. Electroanalysis, 2018, 30, 2250-2257.	1.5	54
53	Determination of inorganic cations in biological fluids using a hybrid capillary electrophoresis device coupled with contactless conductivity detection. Journal of Separation Science, 2018, 41, 3310-3317.	1.3	9
54	Screening of seized cocaine samples using electrophoresis microchips with integrated contactless conductivity detection. Electrophoresis, 2018, 39, 2188-2194.	1.3	12

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55	Fast determination of cocaine and some common adulterants in seized cocaine samples by capillary electrophoresis with capacitively coupled contactless conductivity detection. Analytical Methods, 2018, 10, 2875-2880.	1.3	13
56	Recent advances in toner-based microfluidic devices for bioanalytical applications. Analytical Methods, 2018, 10, 2952-2962.	1.3	20
57	Portable analytical platforms for forensic chemistry: A review. Analytica Chimica Acta, 2018, 1034, 1-21.	2.6	196
58	Instrumental Platforms for Capillary and Microchip Electromigration Separation Techniques. , 2018, , 269-292.		3
59	3D printing of microfluidic devices with embedded sensing electrodes for generating and measuring the size of microdroplets based on contactless conductivity detection. Sensors and Actuators B: Chemical, 2017, 251, 427-432.	4.0	77
60	Paper-based microfluidic devices on the crime scene: A simple tool for rapid estimation of post-mortem interval using vitreous humour. Analytica Chimica Acta, 2017, 974, 69-74.	2.6	36
61	High performance separation of quaternary amines using microchip non-aqueous electrophoresis coupled with contactless conductivity detection. Journal of Chromatography A, 2017, 1499, 190-195.	1.8	13
62	Versatile fabrication of paper-based microfluidic devices with high chemical resistance using scholar glue and magnetic masks. Analytica Chimica Acta, 2017, 974, 63-68.	2.6	51
63	Enhanced Performance of Colorimetric Biosensing on Paper Microfluidic Platforms Through Chemical Modification and Incorporation of Nanoparticles. Methods in Molecular Biology, 2017, 1571, 327-341.	0.4	1
64	A paper-based colorimetric spot test for the identification of adulterated whiskeys. Chemical Communications, 2017, 53, 7957-7960.	2.2	38
65	Simple, rapid and, costâ€effective fabrication of PDMS electrophoresis microchips using poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock	1.3	10
66	High adhesion strength and hybrid irreversible/reversible full-PDMS microfluidic chips. Analytica Chimica Acta, 2017, 951, 116-123.	2.6	15
67	Hydrodynamic injection on electrophoresis microchips using an electronic micropipette. Talanta, 2017, 162, 19-23.	2.9	13
68	Guest Editorial Special Issue on Microfluidics Engineering for Point-of-Care Diagnostics. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1377-1379.	2.7	4
69	Paper-Based Colorimetric Biosensor for Tear Glucose Measurements. Micromachines, 2017, 8, 104.	1.4	74
70	Monitoring Acidâ€“Base Titrations on Wax Printed Paper Microzones Using a Smartphone. Micromachines, 2017, 8, 139.	1.4	33
71	Colorimetric Detection of Glucose in Biological Fluids Using Toner-Based Microzone Plates. Journal of the Brazilian Chemical Society, 2016, , .	0.6	3
72	Highly sensitive colorimetric detection of glucose and uric acid in biological fluids using chitosan-modified paper microfluidic devices. Analyst, The, 2016, 141, 4749-4756.	1.7	153

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73	Simple and Sensitive Paper-Based Device Coupling Electrochemical Sample Pretreatment and Colorimetric Detection. Analytical Chemistry, 2016, 88, 5145-5151.	3.2	66
74	Colorimetric analysis of the decomposition of S-nitrosothiols on paper-based microfluidic devices. Analyst, The, 2016, 141, 6314-6320.	1.7	14
75	Authenticity screening of seized whiskey samples using electrophoresis microchips coupled with contactless conductivity detection. Electrophoresis, 2016, 37, 2891-2895.	1.3	26
76	Dengue diagnosis on laser printed microzones using smartphone-based detection and multivariate image analysis. Analytical Methods, 2016, 8, 6506-6511.	1.3	23
77	A fully disposable paper-based electrophoresis microchip with integrated pencil-drawn electrodes for contactless conductivity detection. Analytical Methods, 2016, 8, 6682-6686.	1.3	46
78	Self-regenerating and hybrid irreversible/reversible PDMS microfluidic devices. Scientific Reports, 2016, 6, 26032.	1.6	44
79	A new insert sample approach to paper spray mass spectrometry: a paper substrate with paraffin barriers. Analyst, The, 2016, 141, 1707-1713.	1.7	57
80	3D printing of microfluidic devices for paper-assisted direct spray ionization mass spectrometry. Analytical Methods, 2016, 8, 496-503.	1.3	41
81	Paper-based enzymatic reactors for batch injection analysis of glucose on 3D printed cell coupled with amperometric detection. Sensors and Actuators B: Chemical, 2016, 226, 196-203.	4.0	57
82	Enhanced Analytical Performance of Paper Microfluidic Devices by Using Fe₃O₄ Nanoparticles, MWCNT, and Graphene Oxide. ACS Applied Materials & Interfaces, 2016, 8, 11-15.	4.0	87
83	Monitoring of nitrite, nitrate, chloride and sulfate in environmental samples using electrophoresis microchips coupled with contactless conductivity detection. Talanta, 2016, 147, 335-341.	2.9	47
84	Electrodeposition of reduced graphene oxide on a Pt electrode and its use as amperometric sensor in microchip electrophoresis. Electrophoresis, 2015, 36, 1886-1893.	1.3	24
85	Triboelectric effect as a new strategy for sealing and controlling the flow in paper-based devices. Lab on A Chip, 2015, 15, 1651-1655.	3.1	43
86	Hand drawing of pencil electrodes on paper platforms for contactless conductivity detection of inorganic cations in human tear samples using electrophoresis chips. Electrophoresis, 2015, 36, 1837-1844.	1.3	59
87	Colorimetric determination of nitrite in clinical, food and environmental samples using microfluidic devices stamped in paper platforms. Analytical Methods, 2015, 7, 7311-7317.	1.3	132
88	Metalless electrodes for capacitively coupled contactless conductivity detection on electrophoresis microchips. Electrophoresis, 2015, 36, 1935-1940.	1.3	14
89	High fidelity prototyping of PDMS electrophoresis microchips using laser-printed masters. Microsystem Technologies, 2015, 21, 1345-1352.	1.2	12
90	Microfluidic Toner-Based Analytical Devices: Disposable, Lightweight, and Portable Platforms for Point-of-Care Diagnostics with Colorimetric Detection. Methods in Molecular Biology, 2015, 1256, 85-98.	0.4	3

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91	Separation of natural antioxidants using PDMS electrophoresis microchips coupled with amperometric detection and reverse polarity. Electrophoresis, 2014, 35, 3363-3370.	1.3	16
92	Fast and versatile fabrication of PMMA microchip electrophoretic devices by laser engraving. Electrophoresis, 2014, 35, NA-NA.	1.3	9
93	EVALUATION OF DIGITAL IMAGE CAPTURE DEVICES FOR COLORIMETRIC DETECTION ON PRINTED MICROZONES. Quimica Nova, 2014, , .	0.3	4
94	Fast and versatile fabrication of PMMA microchip electrophoretic devices by laser engraving. Electrophoresis, 2014, 35, 2325-2332.	1.3	39
95	Recent advances in lowâ€cost microfluidic platforms for diagnostic applications. Electrophoresis, 2014, 35, 2309-2324.	1.3	124
96	Microfluidic devices with integrated dual-capacitively coupled contactless conductivity detection to monitor binding events in real time. Sensors and Actuators B: Chemical, 2014, 192, 239-246.	4.0	25
97	Modification of microfluidic paper-based devices with silica nanoparticles. Analyst, The, 2014, 139, 5560-5567.	1.7	140
98	A handheld stamping process to fabricate microfluidic paper-based analytical devices with chemically modified surface for clinical assays. RSC Advances, 2014, 4, 37637-37644.	1.7	198
99	Rational selection of substrates to improve color intensity and uniformity on microfluidic paper-based analytical devices. Analyst, The, 2014, 139, 2127-2132.	1.7	148
100	Kinetic study of glucose oxidase on microfluidic toner-based analytical devices for clinical diagnostics with image-based detection. Analytical Methods, 2014, 6, 4995-5000.	1.3	21
101	Laser-printing of toner-based 96-microzone plates for immunoassays. Analyst, The, 2013, 138, 1114-1121.	1.7	21
102	Determination of glyphosate and AMPA on polyesterâ€toner electrophoresis microchip with contactless conductivity detection. Electrophoresis, 2013, 34, 2107-2111.	1.3	15
103	Characterization of microchip electrophoresis devices fabricated by directâ€printing process with colored toner. Electrophoresis, 2013, 34, 2169-2176.	1.3	16
104	Capacitively coupled contactless conductivity detection on microfluidic systemsâ€”ten years of development. Analytical Methods, 2012, 4, 25-33.	1.3	137
105	Polyesterâ€toner electrophoresis microchips with improved analytical performance and extended lifetime. Electrophoresis, 2012, 33, 2660-2667.	1.3	22
106	Instrumentation design for hydrodynamic sample injection in microchip electrophoresis: A review. Electrophoresis, 2012, 33, 2614-2623.	1.3	23
107	Disposable polyesterâ€“toner electrophoresis microchips for DNA analysis. Analyst, The, 2012, 137, 2692.	1.7	32
108	Capillary-Driven Toner-Based Microfluidic Devices for Clinical Diagnostics with Colorimetric Detection. Analytical Chemistry, 2012, 84, 9002-9007.	3.2	49

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109	Contactless conductivity biosensor in microchip containing folic acid as bioreceptor. Lab on A Chip, 2012, 12, 1963.	3.1	24
110	Highâ€voltage power supplies to capillary and microchip electrophoresis. Electrophoresis, 2012, 33, 893-898.	1.3	13
111	Rapid prototyping of polymeric electrophoresis microchips with integrated copper electrodes for contactless conductivity detection. Analytical Methods, 2011, 3, 168-172.	1.3	30
112	Doping of a dielectric layer as a new alternative for increasing sensitivity of the contactless conductivity detection in microchips. Lab on A Chip, 2011, 11, 4148.	3.1	20
113	Visible LED-Based Instrumentation for Photometric Determination of Electroosmotic Flow in Microchannels. Journal of the Brazilian Chemical Society, 2011, 22, 736-740.	0.6	2
114	Toner and paperâ€based fabrication techniques for microfluidic applications. Electrophoresis, 2010, 31, 2487-2498.	1.3	136
115	A rapid and reliable bonding process for microchip electrophoresis fabricated in glass substrates. Electrophoresis, 2010, 31, 2526-2533.	1.3	35
116	Dual contactless conductivity and amperometric detection on hybrid PDMS/glass electrophoresis microchips. Analyst, The, 2010, 135, 96-103.	1.7	63
117	Fabrication and integration of planar electrodes for contactless conductivity detection on polyesterâ€toner electrophoresis microchips. Electrophoresis, 2008, 29, 2260-2265.	1.3	42
118	Comparison of the analytical performance of electrophoresis microchannels fabricated in PDMS, glass, and polyesterâ€toner. Electrophoresis, 2008, 29, 4928-4937.	1.3	54
119	A toner-mediated lithographic technology for rapid prototyping of glass microchannels. Lab on A Chip, 2007, 7, 931.	3.1	52
120	Microssistemas de anÃ¡lises quÃmicas: introduÃ§Ã£o, tecnologias de fabricaÃ§Ã£o, instrumentaÃ§Ã£o e aplicaÃ§Ãµes. Quimica Nova, 2007, 30, 1986-2000.	0.3	14
121	Terminologia para as tÃ©cnicas analÃticas de eletromigraÃ§Ã£o em capilares. Quimica Nova, 2007, 30, 740-744.	0.3	10
122	Polyurethane from biosource as a new material for fabrication of microfluidic devices by rapid prototyping. Journal of Chromatography A, 2007, 1173, 151-158.	1.8	41
123	Electrokinetic control of fluid in plastified laser-printed poly(ethylene terephthalate)-toner microchips. Analytical and Bioanalytical Chemistry, 2005, 382, 192-197.	1.9	33
124	Correlation of animal diet and fatty acid content in young goat meat by gas chromatography and chemometrics. Meat Science, 2005, 71, 358-363.	2.7	14
125	Electrophoresis microchip fabricated by a direct-printing process with end-channel amperometric detection. Electrophoresis, 2004, 25, 3832-3839.	1.3	58
126	Characteristic Levels of Some Heavy Metals from Brazilian Canned Sardines (Sardinella brasiliensis). Journal of Food Composition and Analysis, 2001, 14, 611-617.	1.9	67

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127	Rapid and Inexpensive Colorimetric Detection of Total Serum Protein Using Microzone Plates Wax-Printed on Polyester Films. Journal of the Brazilian Chemical Society, 0, , .	0.6	2