Antonio Riul Jr

List of Publications by Year in descending order

98 papers	2,900 citations	185998 28 h-index	189595 50 g-index
99 all docs	99 docs citations	99 times ranked	2604 citing authors

#	Article	IF	Citations
1	Recent advances in electronic tongues. Analyst, The, 2010, 135, 2481.	1.7	235
2	An electronic tongue using polypyrrole and polyaniline. Synthetic Metals, 2003, 132, 109-116.	2.1	203
3	Artificial Taste Sensor:Â Efficient Combination of Sensors Made from Langmuirâ"Blodgett Films of Conducting Polymers and a Ruthenium Complex and Self-Assembled Films of an Azobenzene-Containing Polymer. Langmuir, 2002, 18, 239-245.	1.6	165
4	Wine classification by taste sensors made from ultra-thin films and using neural networks. Sensors and Actuators B: Chemical, 2004, 98, 77-82.	4.0	143
5	An artificial taste sensor based on conducting polymers. Biosensors and Bioelectronics, 2003, 18, 1365-1369.	5.3	140
6	Simplified fabrication of integrated microfluidic devices using fused deposition modeling 3D printing. Sensors and Actuators B: Chemical, 2017, 242, 35-40.	4.0	112
7	Hybrid layer-by-layer (LbL) films of polyaniline, graphene oxide and zinc oxide to detect ammonia. Sensors and Actuators B: Chemical, 2017, 238, 795-801.	4.0	81
8	High-Performance Taste Sensor Made from Langmuirâ"Blodgett Films of Conducting Polymers and a Ruthenium Complex. Analytical Chemistry, 2003, 75, 953-955.	3.2	77
9	Lignin from Sugar Cane Bagasse:â€‰ Extraction, Fabrication of Nanostructured Films, and Application. Langmuir, 2007, 23, 6652-6659.	1.6	67
10	Catechol biosensing using a nanostructured layer-by-layer film containing Cl-catechol 1,2-dioxygenase. Biosensors and Bioelectronics, 2006, 21, 1320-1326.	5.3	64
11	Microfluidic electronic tongue. Sensors and Actuators B: Chemical, 2015, 207, 1129-1135.	4.0	62
12	Using Capacitance Measurements as the Detection Method in Antigen-Containing Layer-by-Layer Films for Biosensing. Analytical Chemistry, 2007, 79, 2163-2167.	3.2	59
13	Exploiting Distinct Molecular Architectures of Ultrathin Films Made with Iron Phthalocyanine for Sensing. Journal of Physical Chemistry B, 2008, 112, 15275-15282.	1.2	53
14	Layer-by-Layer Technique as a New Approach to Produce Nanostructured Films Containing Phospholipids as Transducers in Sensing Applications. Langmuir, 2009, 25, 2331-2338.	1.6	49
15	Information Visualization and Feature Selection Methods Applied to Detect Gliadin in Gluten-Containing Foodstuff with a Microfluidic Electronic Tongue. ACS Applied Materials & Interfaces, 2017, 9, 19646-19652.	4.0	47
16	Langmuir and Langmuir-Blodgett films of parent polyaniline doped with functionalized acids. Synthetic Metals, 1995, 71, 2067-2068.	2.1	44
17	A Layer-by-Layer Film of Chitosan in a Taste Sensor Application. Macromolecular Bioscience, 2003, 3, 591-595.	2.1	44
18	Immobilization of cholesterol oxidase in LbL films and detection of cholesterol using ac measurements. Materials Science and Engineering C, 2009, 29, 442-447.	3.8	42

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19	Heavy Metal/Toxins Detection Using Electronic Tongues. Chemosensors, 2019, 7, 36.	1.8	40
20	Insights into nano-heterostructured materials for gas sensing: a review. Multifunctional Materials, 2021, 4, 032002.	2.4	40
21	Dendrimer-assisted immobilization of alcohol dehydrogenase in nanostructured films for biosensing: Ethanol detection using electrical capacitance measurements. Thin Solid Films, 2008, 516, 9002-9005.	0.8	35
22	Composite Langmuirâ€“Blodgett (LB) films of polyaniline and cadmium stearate. Supramolecular Science, 1998, 5, 75-81.	0.7	34
23	Preparation, characterization and taste sensing properties of Langmuirâ€“Blodgett Films from mixtures of polyaniline and a ruthenium complex. Polymer, 2003, 44, 4205-4211.	1.8	34
24	Mapping of adhesion forces on soil minerals in air and water by atomic force spectroscopy (AFS). Journal of Adhesion Science and Technology, 2003, 17, 2141-2156.	1.4	34
25	Detection of phenolic compounds using impedance spectroscopy measurements. Bioprocess and Biosystems Engineering, 2009, 32, 41-46.	1.7	33
26	Characterization of Langmuir-Blodgett films of parent polyaniline. Thin Solid Films, 1996, 284-285, 177-180.	0.8	32
27	Ultrathin films of lignins as a potential transducer in sensing applications involving heavy metal ions. Sensors and Actuators B: Chemical, 2008, 129, 525-530.	4.0	31
28	Layer-by-layer assembly of functionalized reduced graphene oxide for direct electrochemistry and glucose detection. Materials Science and Engineering C, 2016, 68, 739-745.	3.8	31
29	3D Printed e-Tongue. Frontiers in Chemistry, 2018, 6, 151.	1.8	30
30	Coupling Surface-Enhanced Resonance Raman Scattering and Electronic Tongue as Characterization Tools to Investigate Biological Membrane Mimetic Systems. Analytical Chemistry, 2010, 82, 3537-3546.	3.2	28
31	Femtosecond laser micromachining of polylactic acid/graphene composites for designing interdigitated microelectrodes for sensor applications. Optics and Laser Technology, 2018, 101, 74-79.	2.2	28
32	Langmuir and Langmuirâ€“Blodgett films of a homopolymer of Disperse Red-13. Thin Solid Films, 1998, 323, 257-264.	0.8	27
33	Effects of space charge at the conjugated polymer/electrode interface. Journal of Applied Physics, 2002, 91, 5182-5189.	1.1	26
34	Microfluidic Electronic Tongue Applied to Soil Analysis. Chemosensors, 2017, 5, 14.	1.8	26
35	Exploiting the Versatility of Taste Sensors Based on Impedance Spectroscopy. Instrumentation Science and Technology, 2004, 32, 21-30.	0.9	25
36	Nano-Assembled Films for Taste Sensor Application. Artificial Organs, 2003, 27, 469-472.	1.0	24

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37	Strategies to Optimize Biosensors Based on Impedance Spectroscopy to Detect Phytic Acid Using Layer-by-Layer Films. Analytical Chemistry, 2010, 82, 3239-3246.	3.2	24
38	The use of an e-tongue for discriminating ethanol/water mixtures and determination of their water content. Sensors and Actuators B: Chemical, 2016, 230, 566-570.	4.0	23
39	Efficient Aerobic Oxidation of ‹i›trans‹/i›â€2â€Hexenâ€1â€ol using the Aryl Alcohol Oxidase from ‹i›Pleurotus eryngii‹/i›. Advanced Synthesis and Catalysis, 2019, 361, 2668-2672.	2.1	23
40	Water at interfaces and its influence on the electrical properties of adsorbed films. Brazilian Journal of Physics, 2004, 34, 73-83.	0.7	21
41	Spray layer-by-layer films based on phospholipid vesicles aiming sensing application via e-tongue system. Materials Science and Engineering C, 2012, 32, 862-871.	3.8	21
42	Sensor Array Made with Nanostructured Films to Detect a Phenothiazine Compound. Journal of Nanoscience and Nanotechnology, 2008, 8, 4341-4348.	0.9	20
43	Impedance e-tongue instrument for rapid liquid assessment. Review of Scientific Instruments, 2009, 80, 026107.	0.6	20
44	Physical and micro-nano-structure properties of chromium nitride coating deposited by RF sputtering using dynamic glancing angle deposition. Surface and Coatings Technology, 2019, 372, 268-277.	2.2	20
45	Synthesis and characterization of poly(o-phenetidine) for the fabrication of Langmuir and Langmuir-Blodgett films. Thin Solid Films, 1994, 244, 714-717.	0.8	18
46	Toward the Optimization of an e-Tongue System Using Information Visualization: A Case Study with Perylene Tetracarboxylic Derivative Films in the Sensing Units. Langmuir, 2012, 28, 1029-1040.	1.6	18
47	Electronic Tongues for Inedible Media. Sensors, 2019, 19, 5113.	2.1	18
48	Interactions at the Molecular Level between Biphosphine Ruthenium Complexes and Stearic Acid in Langmuir and Langmuirâ”Blodgett Films. Journal of Physical Chemistry B, 2002, 106, 7272-7277.	1.2	17
49	The use of Langmuirâ€“Blodgett films of a perylene derivative and polypyrrole in the detection of trace levels of Cu2+ ions. Synthetic Metals, 2005, 148, 21-24.	2.1	17
50	3D-Printed Graphene Electrodes Applied in an Impedimetric Electronic Tongue for Soil Analysis. Chemosensors, 2019, 7, 50.	1.8	17
51	Nanostructured Films of Perylene Derivatives: High Performance Materials for Taste Sensor Applications. Sensor Letters, 2004, 2, 95-101.	0.4	16
52	Surface potentials of polyaniline lb films. Synthetic Metals, 1999, 101, 688-689.	2.1	15
53	Microfluidic Mixer with Automated Electrode Switching for Sensing Applications. Chemosensors, 2020, 8, 13.	1.8	15
54	Reorganization Energy upon Controlled Intermolecular Chargeâ€Transfer Reactions in Monolithically Integrated Nanodevices. Small, 2021, 17, e2103897.	5.2	15

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55	Surface potentials of mixed Langmuir films: a model consistent with a domain-structured monolayer. Thin Solid Films, 1994, 242, 239-242.	0.8	14
56	Tuning the nanostructure of DODAB/nickel tetrasulfonated phthalocyanine bilayers in LbL films. Materials Science and Engineering C, 2013, 33, 2937-2946.	3.8	14
57	Charge carrier transport in defective reduced graphene oxide as quantum dots and nanoplatelets in multilayer films. Nanotechnology, 2017, 28, 495711.	1.3	14
58	Experimental and computational investigation of reduced graphene oxide nanoplatelets stabilized in poly(styrene sulfonate) sodium salt. Journal of Materials Science, 2018, 53, 10049-10058.	1.7	14
59	Protonation effects in polyaniline langmuir films investigated by surface potential measurements. Synthetic Metals, 1997, 84, 773-774.	2.1	13
60	Implications of using m-cresol in the Langmuirâ€“Blodgett processing of polyaniline. Thin Solid Films, 1998, 327-329, 60-64.	0.8	12
61	Fabrication, Structural Characterization, and Applications of Langmuir and Langmuirâ€™Blodgett Films of a Poly(azo)urethane. Langmuir, 2008, 24, 4729-4737.	1.6	12
62	Chemical sensors based onÂhybrid nanomaterials for food analysis. , 2017, , 205-244.		12
63	Pooleâ€“Frenkel emission on functionalized, multilayered-packed reduced graphene oxide nanoplatelets. Nanotechnology, 2018, 29, 505703.	1.3	12
64	A study on X-ray irradiation of composite polyaniline LB films. Thin Solid Films, 1998, 327-329, 808-812.	0.8	11
65	AFM studies of composite 16-mer polyaniline Langmuir-Blodgett (LB) Films. Synthetic Metals, 1999, 101, 830-831.	2.1	11
66	PEDOT:PSS self-assembled films to methanol crossover reduction in Nafion Â® membranes. Applied Surface Science, 2014, 323, 7-12.	3.1	11
67	On the distinct molecular architectures of dipping- and spray-LbL films containing lipid vesicles. Materials Science and Engineering C, 2014, 41, 363-371.	3.8	11
68	Femtosecond laser ablation of gold interdigitated electrodes for electronic tongues. Optics and Laser Technology, 2015, 69, 148-153.	2.2	11
69	Enhanced mobility and controlled transparency in multilayered reduced graphene oxide quantum dots: a charge transport study. Nanotechnology, 2019, 30, 275701.	1.3	11
70	Langmuir monolayers from parent polyaniline. Synthetic Metals, 1999, 101, 690.	2.1	9
71	Bending of Layer-by-Layer Films Driven by an External Magnetic Field. International Journal of Molecular Sciences, 2013, 14, 12953-12969.	1.8	9
72	Automated self-assembly and electrical characterization of nanostructured films. MRS Communications, 2018, 8, 283-288.	0.8	9

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73	Two-Dimensional Transition Metal Dichalcogenides for Gas Sensing Applications. Environmental Chemistry for A Sustainable World, 2020, , 131-155.	0.3	9
74	Polyethyleneimine-Functionalized Carbon Nanotube/Graphene Oxide Composite: A Novel Sensing Platform for Pb(II) Acetate in Aqueous Solution. ACS Omega, 2021, 6, 18190-18199.	1.6	9
75	Characterization of 16-mer polyaniline composite Langmuirâ€“Blodgett films. Thin Solid Films, 1998, 327-329, 576-580.	0.8	8
76	Nanostructured Films Employed as Sensing Units in an "Electronic Tongue" System. Journal of Nanoscience and Nanotechnology, 2007, 7, 510-514.	0.9	8
77	Polyaniline mixed LB films exposed to X-rays. Synthetic Metals, 1999, 101, 801-802.	2.1	6
78	The electrical characteristics of a heterojunction diode formed from an aniline oligomer LB-deposited onto poly(3-methylthiophene). Journal of Materials Chemistry, 2000, 10, 91-97.	6.7	6
79	Influence of the Flow Rate in an Automated Microfluidic Electronic Tongue Tested for Sucralose Differentiation. Sensors, 2020, 20, 6194.	2.1	6
80	Langmuir and Langmuirâ€“Blodgett (LB) films of 4-dicyanomethylene,4H-cyclopenta[2,1â€“b,3,4â€“bâ€²]dithiophene. Thin Solid Films, 2000, 366, 249-254.	0.8	5
81	Using MLP networks to classify red wines and water readings of an electronic tongue. , 0, , .		5
82	Dielectric Permittivity and Surface Charge Density in Layer-by-Layer Poly(diallyldimethylammonium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Nano Materials, 2020, 3, 1749-1754.	2.4	5
83	Analysis of Coffees Using Electronic Tongues. , 2016, , 171-177.		4
84	Monitoring the dispersion and agglomeration of silver nanoparticles in polymer thin films using localized surface plasmons and Ferrell plasmons. Applied Physics Letters, 2020, 116, .	1.5	4
85	Controlled Incorporation of Silver Nanoparticles into Layer-by-Layer Polymer Films for Reusable Electronic Tongues. ACS Applied Nano Materials, 2021, 4, 14231-14240.	2.4	4
86	A Study on Langmuir Monolayers of Methacrylate Homo- and Copolymers Derivatized with Disperse Red Dyes. Materials Research Society Symposia Proceedings, 1997, 488, 927.	0.1	3
87	Influence of water on electrical and mechanical properties of self-assembled and self-healing PEM films. Progress in Organic Coatings, 2021, 150, 105980.	1.9	3
88	High Electrical Anisotropic Multilayered Selfâ€Assembled Organic Films Based on Graphene Oxide and PEDOT:PSS. Advanced Electronic Materials, 2021, 7, 2100255.	2.6	3
89	Electrical Impedance-Based Electronic Tongues. , 2023, , 567-590.		3
90	Molecular Dynamics of H₂ Storage in Carbon Nanotubes Under External Electric Field Effects: A Sensor Proposal. Journal of Nanoscience and Nanotechnology, 2017, 17, 4858-4863.	0.9	2

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91	Low-Dimensional Systems: Nanoparticles. , 2017, , 125-146.		2
92	A Microfluidic E-Tongue System Using Layer-by-Layer Films Deposited onto Interdigitated Electrodes Inside a Polydimethylsiloxane Microchannel. Methods in Molecular Biology, 2019, 2027, 141-150.	0.4	2
93	Monitoring and modeling the deposition of metal nanoparticles on surfaces by impedance. Applied Surface Science, 2021, 544, 148806.	3.1	2
94	FDM 3D Printing in Biomedical and Microfluidic Applications. Materials Horizons, 2020, , 127-145.	0.3	2
95	Multilayered Nanostructures Integrated with Emerging Technologies. , 0, , .		1
96	Langmuir-Blodgett films from conjugated polymers. , 0, , .		0
97	Water enabled self-healing polymeric coating with reduced graphene oxide-reinforcement for sensors. Sensors and Actuators Reports, 2021, , 100059.	2.3	0
98	Electronic Nose based on Poly(vinylidene fluoride)-modified Nanofibers for Discriminative Detection of Volatile Organic Compounds. , 2022, , .		0