

Sonia R Biaggio

List of Publications by Year in descending order

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3598
citing authors

#	ARTICLE	IF	CITATIONS
1	Steady-State Passive Films: Interfacial Kinetic Effects and Diagnostic Criteria. <i>Journal of the Electrochemical Society</i> , 1992, 139, 170-177.	2.9	242
2	Electrochemical degradation of a real textile wastewater using PbO_2 and DSA [®] anodes. <i>Chemical Engineering Journal</i> , 2014, 251, 138-145.	12.7	201
3	On the performance of Fe and Fe,F doped $\text{Ti}/\text{Pt}/\text{PbO}_2$ electrodes in the electrooxidation of the Blue Reactive 19 dye in simulated textile wastewater. <i>Chemosphere</i> , 2007, 66, 2035-2043.	8.2	161
4	On the stability of thin-anodic-oxide films of titanium in acid phosphoric media. <i>Corrosion Science</i> , 2001, 43, 1465-1476.	6.6	148
5	Electrochemical degradation of a real textile effluent using boron-doped diamond or PbO_2 as anode. <i>Journal of Hazardous Materials</i> , 2011, 192, 1275-1282.	12.4	119
6	Synthesis and characterization of MnO_2 nanoneedles for electrochemical supercapacitors. <i>Electrochimica Acta</i> , 2018, 261, 428-435.	5.2	116
7	Degradation of phenol using Co- and Co,F-doped PbO_2 anodes in electrochemical filter-press cells. <i>Journal of Hazardous Materials</i> , 2008, 153, 252-260.	12.4	109
8	Corrosion resistance of anodic oxides on the Ti/Zr and $\text{Ti}/\text{Nb}/\text{Zr}$ alloys. <i>Electrochimica Acta</i> , 2006, 51, 2068-2075.	5.2	104
9	On the performances of lead dioxide and boron-doped diamond electrodes in the anodic oxidation of simulated wastewater containing the Reactive Orange 16 dye. <i>Electrochimica Acta</i> , 2009, 54, 2024-2030.	5.2	96
10	Electrochemical determination of bisphenol A using a boron-doped diamond electrode. <i>Electrochimica Acta</i> , 2012, 82, 3-8.	5.2	95
11	XPS characterization of anodic titanium oxide films grown in phosphate buffer solutions. <i>Thin Solid Films</i> , 2004, 468, 109-112.	1.8	94
12	Electrochemical degradation of bisphenol A using a flow reactor with a boron-doped diamond anode. <i>Chemical Engineering Journal</i> , 2012, 198-199, 282-288.	12.7	82
13	Electrochemical reduction of CO_2 mediated by poly-M-aminophthalocyanines (M=Co, Ni, Fe): poly-Co-tetraaminophthalocyanine, a selective catalyst. <i>Journal of Molecular Catalysis A</i> , 2005, 229, 249-257.	4.8	76
14	Surface characterization of oxides grown on the $\text{Ti}/\text{Nb}/\text{Zr}$ alloy and their corrosion protection. <i>Corrosion Science</i> , 2013, 72, 35-40.	6.6	75
15	Lead recovery from a typical Brazilian sludge of exhausted lead-acid batteries using an electrohydrometallurgical process. <i>Hydrometallurgy</i> , 2002, 65, 137-144.	4.3	72
16	Electrochemical studies on zirconium and its biocompatible alloys Ti-50Zr at.% and Zr-2.5Nb wt.% in simulated physiologic media. <i>Journal of Biomedical Materials Research - Part A</i> , 2005, 74A, 397-407.	4.0	70
17	Electrochemical and physical properties of poly(acrylonitrile)/poly(vinyl acetate)-based gel electrolytes for lithium ion batteries. <i>Journal of Power Sources</i> , 2007, 164, 379-385.	7.8	61
18	Spectroelectrochemical and electrical characterization of poly(cobalt-tetraaminophthalocyanine)-modified electrodes: electrocatalytic oxidation of hydrazine. <i>Polyhedron</i> , 2000, 19, 2303-2312.	2.2	57

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19	Flexible and high surface area composites of carbon fiber, polypyrrole, and poly(DMCT) for supercapacitor electrodes. <i>Electrochimica Acta</i> , 2013, 93, 93-100.	5.2	56
20	A study of thin anodic WO ₃ films by electrochemical impedance spectroscopy. <i>Electrochimica Acta</i> , 1997, 42, 1751-1758.	5.2	55
21	Photo-electrochemical and impedance investigation of passive layers grown anodically on titanium alloys. <i>Electrochimica Acta</i> , 2004, 49, 4563-4576.	5.2	54
22	Structural and electrochemical properties of the doped spinels Li _{1.05} M _{0.02} Mn _{1.98} O _{3.98} N _{0.02} (M =) Tj ETQq0 0 0 rgBT /Overlock 10 T Sources, 2010, 195, 3293-3299.	7.8	51
23	Influence of the first potential scan on the morphology and electrical properties of potentiodynamically grown polyaniline films. <i>Electrochimica Acta</i> , 1998, 44, 633-642.	5.2	48
24	Growth of aluminum-free porous oxide layers on titanium and its alloys Ti-6Al-4V and Ti-6Al-7Nb by micro-arc oxidation. <i>Materials Science and Engineering C</i> , 2014, 41, 343-348.	7.3	47
25	Voltammetric stability of anodic films on the Ti6Al4V alloy in chloride medium. <i>Electrochimica Acta</i> , 2006, 51, 6580-6583.	5.2	46
26	Thermal synthesis, characterization and electrochemical study of high-temperature (HT) LiCoO ₂ obtained from Co(OH) ₂ recycled of spent lithium ion batteries. <i>Materials Research Bulletin</i> , 2017, 86, 5-9.	5.2	46
27	Electrochemical degradation of the herbicide picloram using a filter-press flow reactor with a boron-doped diamond or $\hat{2}$ -PbO ₂ anode. <i>Electrochimica Acta</i> , 2015, 179, 588-598.	5.2	45
28	Electropolymerization of polyaniline on high surface area carbon substrates. <i>Journal of Electroanalytical Chemistry</i> , 2005, 578, 9-15.	3.8	43
29	Microwave-Assisted Synthesis of Pt-Au Nanoparticles with Enhanced Electrocatalytic Activity for the Oxidation of Formic Acid. <i>Electrochimica Acta</i> , 2017, 224, 56-63.	5.2	43
30	Corrosion resistance of the Ti \hat{e} 50Zr at.% alloy after anodization in different acidic electrolytes. <i>Corrosion Science</i> , 2010, 52, 4058-4063.	6.6	42
31	Performance of a polyaniline(DMCT)/carbon fiber composite as cathode for rechargeable lithium batteries. <i>Journal of Power Sources</i> , 2006, 154, 281-286.	7.8	40
32	Preparation and characterization of biomimetically and electrochemically deposited hydroxyapatite coatings on micro-arc oxidized Ti \hat{e} 13Nb \hat{e} 13Zr. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 1663-1670.	3.6	40
33	Electrochemical degradation of the Disperse Orange 29 dye on a $\hat{2}$ -PbO ₂ anode assessed by the response surface methodology. <i>Journal of Environmental Chemical Engineering</i> , 2013, 1, 954-961.	6.7	40
34	Electrochemical degradation of the reactive red 141 dye on a $\hat{2}$ -PbO ₂ anode assessed by the response surface methodology. <i>Journal of the Brazilian Chemical Society</i> , 2010, 21, 324-330.	0.6	40
35	Electropolishing of AISI-304 stainless steel using an oxidizing solution originally used for electrochemical coloration. <i>Electrochimica Acta</i> , 2005, 50, 2623-2627.	5.2	35
36	Electrochemical degradation of estrone using a boron-doped diamond anode in a filter-press reactor. <i>Electrochimica Acta</i> , 2016, 197, 186-193.	5.2	35

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37	The electrochemical behaviour of cobalt in carbonate-bicarbonate solutions. <i>Corrosion Science</i> , 1989, 29, 427-443.	6.6	31
38	Chemical and electrochemical coloration of stainless steel and pitting corrosion resistance studies. <i>Journal of the Brazilian Chemical Society</i> , 2004, 15, 472-480.	0.6	31
39	Electrochemical degradation of the Acid Blue 62 dye on a Ti/PbO_2 anode assessed by the response surface methodology. <i>Journal of Applied Electrochemistry</i> , 2010, 40, 1751-1757.	2.9	31
40	Bilayered nanofilm of polypyrrole and poly(DMCt) for high-performance battery cathodes. <i>Journal of Power Sources</i> , 2010, 195, 2924-2927.	7.8	31
41	A comparison of electrodeposited Ti/PbO_2 and Ti-Pt/PbO_2 anodes in the electrochemical degradation of the direct yellow 86 dye. <i>Quimica Nova</i> , 2010, 33, 2124-2129.	0.3	31
42	Corrosion resistance of colored films grown on stainless steel by the alternating potential pulse method. <i>Electrochimica Acta</i> , 2003, 48, 2417-2424.	5.2	29
43	Electrical properties of polyaniline films formed in acid with and without Cs^+ ions in the electrolyte. <i>Journal of Applied Electrochemistry</i> , 1994, 24, 1059-1065.	2.9	24
44	Effect of Specific Active Chlorine Species and Temperature on the Electrochemical Degradation of the Reactive Blue 19 Dye Using a Boron-Doped Diamond or DSA Anode in a Flow Reactor. <i>Electrocatalysis</i> , 2014, 5, 8-15.	3.0	24
45	Comparative electrochemical degradation of the herbicide tebuthiuron using a flow cell with a boron-doped diamond anode and identifying degradation intermediates. <i>Electrochimica Acta</i> , 2017, 247, 860-870.	5.2	22
46	Reactivation of passive titanium: the enhancement of O_2 evolution after potentiodynamic cyclings. <i>Electrochemistry Communications</i> , 2000, 2, 254-258.	4.7	21
47	Preparation, electrochemical characterization and charge/discharge of reticulated vitreous carbon/polyaniline composite electrodes. <i>Electrochimica Acta</i> , 2009, 55, 227-233.	5.2	20
48	Alternative route for LiFePO_4 synthesis: Carbothermal reduction combined with microwave-assisted solid-state reaction. <i>Materials Research Bulletin</i> , 2017, 86, 209-214.	5.2	20
49	Electrochemical characterization of thin passive films on Nb electrodes in H_3PO_4 solutions. <i>Journal of the Brazilian Chemical Society</i> , 1997, 8, 615-620.	0.6	19
50	DPV and SWV Determination of Estrone Using a Cathodically Pretreated Boron-Doped Diamond Electrode. <i>Electroanalysis</i> , 2014, 26, 1588-1597.	2.9	19
51	Electrodegradation of the Acid Green 28 dye using Ti/PbO_2 and Ti-Pt/PbO_2 anodes. <i>Journal of Environmental Management</i> , 2016, 183, 306-313.	7.8	19
52	Estudo de efeito dos sais precursores sobre as propriedades eletrocatalíticas de eletrodos de $\text{Ti-SnO}_2/\text{Sb}$ preparados por decomposição térmica. <i>Quimica Nova</i> , 2004, 27, 866-872.	0.3	18
53	The effect of thickness on the composition of passive films on a Ti-50Zr at% alloy. <i>Electrochimica Acta</i> , 2006, 51, 3506-3515.	5.2	18
54	Modification of the titanium oxide morphology and composition by a combined chemical-electrochemical treatment on cp Ti. <i>Materials Research</i> , 2012, 15, 159-165.	1.3	18

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55	A kinetic study of the electroreduction of anodically formed cobalt oxide layers. <i>Electrochimica Acta</i> , 1991, 36, 2147-2152.	5.2	17
56	Effects of alkaline cations on polyaniline electrochemical synthesis. <i>Journal of Electroanalytical Chemistry</i> , 1992, 328, 349-354.	3.8	17
57	Semiconducting properties of TiO ₂ films thermally formed at 400°C. <i>Journal of Applied Electrochemistry</i> , 1995, 25, 247-251.	2.9	17
58	Combined Coagulation and Electrochemical Process to Treat and Detoxify a Real Textile Effluent. <i>Water, Air, and Soil Pollution</i> , 2016, 227, 1.	2.4	17
59	Reticulated vitreous carbon/polypyrrole composites as electrodes for lithium batteries: Preparation, electrochemical characterization and charge/discharge performance. <i>Synthetic Metals</i> , 2010, 160, 173-179.	3.9	16
60	Removal of Pb(II) from simulated wastewaters using a stainless-steel wool cathode in a flow-through cell. <i>Journal of Applied Electrochemistry</i> , 2006, 36, 677-683.	2.9	15
61	Influence of hydroxyapatite on the corrosion resistance of the Ti-13Nb-13Zr alloy. <i>Journal of Materials Science: Materials in Medicine</i> , 2009, 20, 1009-1015.	3.6	15
62	Microwave-assisted crystallization into anatase of amorphous TiO ₂ nanotubes electrochemically grown on a Ti substrate. <i>Materials Letters</i> , 2014, 126, 52-54.	2.6	15
63	Changes of electrochemical properties of polypyrrole when synthesized in a room-temperature ionic liquid. <i>Materials Chemistry and Physics</i> , 2014, 147, 99-104.	4.0	15
64	Studies on the stability of anodic oxides on zirconium biocompatible alloys. <i>Journal of the Brazilian Chemical Society</i> , 2002, 13, .	0.6	13
65	Galvanostatic Pb(II) removal from a simulated wastewater by using a stainless-steel wool cathode in a flow-through cell: a factorial-design study. <i>Journal of Applied Electrochemistry</i> , 2008, 38, 167-173.	2.9	13
66	Understanding the loss of electrochemical activity of nanosized LiMn ₂ O ₄ particles: a combined experimental and <i>ab initio</i> DFT study. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14967-14974.	10.3	13
67	Stability and electrical properties of polyaniline films formed with EDTA and FeEDTA in the electrolyte. <i>Journal of Applied Electrochemistry</i> , 1996, 26, 95-101.	2.9	12
68	Practical microwave-assisted solid-state synthesis of the spinel LiMn ₂ O ₄ . <i>Solid State Ionics</i> , 2014, 268, 42-47.	2.7	12
69	Influence of the preparation procedure on the electrochemical properties of Pani(DMcT-Cu) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5	8.6	11
70	XPS characterization of anodic oxides grown on biocompatible Ti-50Zr alloy in different acid electrolytes. <i>Surface and Interface Analysis</i> , 2006, 38, 417-421.	1.8	11
71	High-purity LiFePO ₄ prepared by a rapid one-step microwave-assisted hydrothermal synthesis. <i>Journal of Materials Science</i> , 2021, 56, 10018-10029.	3.7	11
72	A new strategy to quickly synthesize true nanoparticles of the spinel LiMn ₂ O ₄ by using a microwave-assisted hydrothermal route. <i>Journal of Alloys and Compounds</i> , 2022, , 164856.	5.5	11

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73	Changes in Some Properties of Polyaniline Films with the Anion in the Electrolyte. Journal of the Brazilian Chemical Society, 1994, 5, 203-208.	0.6	10
74	Investigation of passive films grown on biocompatible Ti-50Zr and Ti-13Zr-13Nb alloys by XPS. Surface and Interface Analysis, 2006, 38, 410-412.	1.8	9
75	Comparison between microwave and muffle annealing of self-organized TiO ₂ nanotubes into crystalline anatase. Materials Letters, 2016, 167, 209-212.	2.6	8
76	N ₂ /H ₂ plasma functionalization of carbon fiber fabric for polyaniline grafting. Plasma Processes and Polymers, 2020, 17, 1900166.	3.0	8
77	An Environmentally Friendly and Practical Method for Obtaining Color on Stainless Steel by Interference. Journal of the Electrochemical Society, 2005, 152, B491.	2.9	7
78	Semiconducting Properties of Thin Anodic WO ₃ Films Grown in Different Electrolytes. Journal of the Brazilian Chemical Society, 1994, 5, 123-126.	0.6	7
79	Synthesis and characterization of a composite of polyaniline and carbon black. Journal of Applied Electrochemistry, 1999, 29, 763-768.	2.9	6
80	On understanding the effect of benzotriazole during barrier-film growth on Al-Cu alloys. Journal of Solid State Electrochemistry, 2003, 7, 442-449.	2.5	6
81	Influence of heat treatment temperature on the morphological and structural aspects of reticulated vitreous carbon used in polyaniline electrosynthesis. Applied Surface Science, 2007, 253, 8340-8344.	6.1	6
82	Deposition of polyaniline on RVC electrodes: effect of substrate thickness. Journal of Solid State Electrochemistry, 2007, 11, 609-618.	2.5	6
83	Carbon-fiber composites of organometallic intercalated polyaniline and polypyrrole doped with sodium polystyrene sulfonate as electrodes for lithium-ion batteries. Materials Chemistry and Physics, 2013, 139, 47-54.	4.0	4
84	Properties of colored oxide films formed electrochemically on titanium in green electrolytes under ultrasonic stirring. Journal of Materials Science, 2018, 53, 7294-7304.	3.7	4
85	Physical characterization and biological tests of bioactive titanium surfaces prepared by short-time micro-arc oxidation in green electrolyte. Materials Research Express, 2022, 9, 025401.	1.6	4
86	INFLUENCE OF CHLORIDE-MEDIATED OXIDATION ON THE ELECTROCHEMICAL DEGRADATION OF THE DIRECT BLACK 22 DYE USING BORON-DOPED DIAMOND AND Î ² -PbO ₂ ANODES. Quimica Nova, 2014, . .	0.3	3
87	Modification of composites of block copolymers-gold nanoparticles with enzymes and their characterization by electrochemical techniques. Journal of Solid State Electrochemistry, 2011, 15, 697-702.	2.5	2
88	Direct conversion of electrodeposited nanocrystalline Î _μ -MnO ₂ into LiMn ₂ O ₄ by microwave calcination. Journal of Solid State Electrochemistry, 2016, 20, 2019-2027.	2.5	2
89	Galvanostatic removal of Pb ²⁺ ions from diluted solutions by the use of a membrane-less flow-through cell with stainless steel wool electrodes. Journal of the Brazilian Chemical Society, 2011, 22, 1686-1694.	0.6	1
90	Rapid microwave-assisted solid-state obtention of Mn ₃ O ₄ and its electrochemical characterization for application as supercapacitor electrodes. Ionics, 2022, 28, 3963-3974.	2.4	1

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91	Organic Pollutants in Water, Direct Electrochemical Oxidation Using PbO ₂ . , 2014, , 1418-1423.		0
92	As primeiras vinte reuniões anuais da SBQ: uma visão da evolução da química no Brasil. Quimica Nova, 1997, 20, 66-74.	0.3	0