Carmel B Breslin

List of Publications by Year
in descending order

108	3,856	126907	133252
papers	citations	33 h-index	59 g-index

109	109	109	3632
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Electrochemical Detection of 4-chloro-2-methylphenoxyacetic Acid (MCPA) Using a Simple Activated Glassy Carbon Electrode. Journal of the Electrochemical Society, 2022, 169, 037514.	2.9	3
2	Emerging Layered Materials and Their Applications in the Corrosion Protection of Metals and Alloys. Sustainability, 2022, 14, 4079.	3.2	8
3	Heterostructures of mixed metal oxides (ZnMnO3/ZnO) synthesized by a wet-chemical approach and their application for the electrochemical detection of the drug chlorpromazine. Composites Part B: Engineering, 2022, 236, 109822.	12.0	13
4	Reviewâ€"Recent Developments in the Applications of 2D Transition Metal Dichalcogenides as Electrocatalysts in the Generation of Hydrogen for Renewable Energy Conversion. Journal of the Electrochemical Society, 2022, 169, 064504.	2.9	19
5	Recent Developments in Chitosan-Based Adsorbents for the Removal of Pollutants from Aqueous Environments. Molecules, 2021, 26, 594.	3.8	153
6	Synthesis and Characterization of Pyrochlore-Type Praseodymium Stannate Nanoparticles: An Effective Electrocatalyst for Detection of Nitrofurazone Drug in Biological Samples. Inorganic Chemistry, 2021, 60, 2464-2476.	4.0	33
7	Cyclodextrins as Supramolecular Recognition Systems: Applications in the Fabrication of Electrochemical Sensors. Materials, 2021, 14, 1668.	2.9	26
8	Graphene-Based Materials Immobilized within Chitosan: Applications as Adsorbents for the Removal of Aquatic Pollutants. Materials, 2021, 14, 3655.	2.9	31
9	Preparation and Antimicrobial Properties of Alginate and Serum Albumin/Glutaraldehyde Hydrogels Impregnated with Silver(I) Ions. Chemistry, 2021, 3, 672-686.	2.2	8
10	Electrochemical determination of acetaminophen at a carbon electrode modified in the presence of Î²-cyclodextrin: role of the activated glassy carbon and the electropolymerised Î²-cyclodextrin. Journal of Solid State Electrochemistry, 2021, 25, 2599-2609.	2.5	5
11	Electrochemical formation of Nâ€"substituted polypyrrole nanowires, microwires and open microtubes and their decoration with copper structures. Synthetic Metals, 2021, 280, 116881.	3.9	2
12	Fabrication of a Selective Sensor Amplification Probe Modified with Multi-Component Zn2SnO4/SnO2 Heterostructured Microparticles as a Robust Electrocatalyst for Electrochemical Detection of Antibacterial Drug Secnidazole. Materials, 2021, 14, 6700.	2.9	6
13	Electrocatalytic Studies of Coral-Shaped Samarium Stannate Nanoparticles for Selective Detection of Azathioprine in Biological Samples. ACS Applied Nano Materials, 2021, 4, 13048-13059.	5.0	11
14	Electrostatic interactions between viologens and a sulfated Î²-cyclodextrin; formation of insoluble aggregates with benzyl viologens. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2020, 96, 155-167.	1.6	1
15	Electrochemical formation of silver nanoparticles and their applications in the reduction and detection of nitrates at neutral pH. Journal of Applied Electrochemistry, 2020, 50, 125-138.	2.9	15
16	Reviewâ€"Two-Dimensional Titanium Carbide MXenes and Their Emerging Applications as Electrochemical Sensors. Journal of the Electrochemical Society, 2020, 167, 037514.	2.9	49
17	Formation of benzyl viologen-containing films at copper and their protective properties. Electrochimica Acta, 2020, 342, 136071.	5.2	1
18	Review of Recent Developments in the Formulation of Graphene-Based Coatings for the Corrosion Protection of Metals and Alloys. Corrosion and Materials Degradation, 2020, 1, 296-327.	2.4	26

#	Article	IF	Citations
19	Graphene-Modified Composites and Electrodes and Their Potential Applications in the Electro-Fenton Process. Materials, 2020, 13, 2254.	2.9	28
20	Electrochemical formation of silver nanoparticles and their catalytic activity immobilised in a hydrogel matrix. Colloid and Polymer Science, 2020, 298, 549-558.	2.1	3
21	Reviewâ€"2D Graphene and Graphene-Like Materials and Their Promising Applications in the Generation of Hydrogen Peroxide. Journal of the Electrochemical Society, 2020, 167, 126502.	2.9	20
22	The Influence of Carbon Nanotubes on the Protective Properties of Polypyrrole Formed at Copper. Materials, 2019, 12, 2587.	2.9	4
23	The removal of phosphates using electrocoagulation with Alâ^'Mg anodes. Journal of Electroanalytical Chemistry, 2019, 846, 113161.	3.8	30
24	Evaluating the ability of energy dispersive X-ray analysis to monitor binding oil content of carbon paste electrodes exposed to biofouling agents. Journal of Electroanalytical Chemistry, 2019, 847, 113237.	3.8	1
25	The formation and properties of polypyrrole doped with an immobile antibiotic. Journal of Solid State Electrochemistry, 2019, 23, 2031-2042.	2.5	3
26	Electrocoagulation using stainless steel anodes: Simultaneous removal of phosphates, Orange II and zinc ions. Journal of Hazardous Materials, 2019, 374, 152-158.	12.4	23
27	The incorporation and controlled release of dopamine from a sulfonated Î²â€"cyclodextrinâ€"doped conducting polymer. Journal of Polymer Research, 2019, 26, 1.	2.4	6
28	The selective electrochemical sensing of dopamine at a polypyrrole film doped with an anionic Î²â^'cyclodextrin. Journal of Electroanalytical Chemistry, 2019, 855, 113614.	3.8	19
29	Studies on the formation and properties of polypyrrole doped with ionised Î²-cyclodextrins: influence of the anionic pendants. Journal of Solid State Electrochemistry, 2019, 23, 615-626.	2.5	3
30	Electrochemistry of viologens at polypyrrole doped with sulfonated Î²â€"cyclodextrin. Journal of Electroanalytical Chemistry, 2019, 832, 399-407.	3.8	9
31	The incorporation of drug molecules with poor water solubility into polypyrrole as dopants: Indomethacin and sulindac. Electrochimica Acta, 2019, 296, 848-855.	5.2	12
32	Electrocoagulation using aluminium anodes activated with Mg, In and Zn alloying elements. Journal of Hazardous Materials, 2019, 366, 39-45.	12.4	18
33	Physiological monitoring of tissue pH: InÂvitro characterisation and inÂvivo validation of a quinone-modified carbon paste electrode. Electrochimica Acta, 2019, 298, 484-495.	5.2	9
34	Electrochemical detection of Cr(VI) with carbon nanotubes decorated with gold nanoparticles. Journal of Applied Electrochemistry, 2019, 49, 195-205.	2.9	51
35	Electrochemical detection of glucose at physiological pH using gold nanoparticles deposited on carbon nanotubes. Sensors and Actuators B: Chemical, 2019, 282, 490-499.	7.8	49
36	The aqueous deposition of a pH sensitive quinone on carbon paste electrodes using linear sweep voltammetry. Journal of Electroanalytical Chemistry, 2018, 828, 137-143.	3.8	5

#	Article	IF	Citations
37	Polypyrrole doped with dodecylbenzene sulfonate as a protective coating for copper. Electrochimica Acta, 2018, 291, 362-372.	5.2	18
38	Formation of polypyrrole with dexamethasone as a dopant: Its cation and anion exchange properties. Journal of Electroanalytical Chemistry, 2018, 824, 188-194.	3.8	13
39	Amendment of cattle slurry with the nitrification inhibitor dicyandiamide during storage: A new effective and practical N2O mitigation measure for landspreading. Agriculture, Ecosystems and Environment, 2016, 215, 68-75.	5.3	15
40	Non-Enzymatic Selective Detection of Glucose Based on a Gold Nanoparticle- Carbon Nanotube Composite Film. ECS Transactions, 2014, 58, 59-65.	0.5	0
41	The Incorporation of Bovine Serum Albumin into a Polypyrrole Film in One Simple Step. ECS Transactions, 2014, 58, 1-13.	0.5	0
42	An Electrochemical Study of Bulk and Nanowire Morphologies of Electrodeposited Polypyrrole. ECS Transactions, 2014, 58, 51-58.	0.5	1
43	The development of a novel urea sensor using polypyrrole. Electrochimica Acta, 2014, 145, 19-26.	5.2	24
44	The development of a highly sensitive urea sensor due to the formation of an inclusion complex between urea and sulfonated-Î²-cyclodextrin. Electrochimica Acta, 2014, 125, 250-257.	5.2	14
45	Slow delivery of a nitrification inhibitor (dicyandiamide) to soil using a biodegradable hydrogel of chitosan. Chemosphere, 2013, 93, 2854-2858.	8.2	29
46	The effect of dopant pKa and the solubility of corresponding acid on the electropolymerisation of pyrrole. Electrochimica Acta, 2013, 92, 276-284.	5.2	6
47	Electrochemical Deposition of Hollow N-Substituted Polypyrrole Microtubes from an Acoustically Formed Emulsion. Macromolecules, 2013, 46, 1008-1016.	4.8	15
48	Investigation of the Electrochemical Behaviour of MWCNTs in the Detection of Cr(VI). ECS Transactions, 2012, 41, 1-7.	0.5	3
49	Electrochemical Sensing of Dopamine Using a Dodecylsulfate Doped Polypyrrole Film. ECS Transactions, 2012, 41, 15-21.	0.5	0
50	Electrodeposition of Zinc Hydroxysulfate Nanosheets and Reduction to Zinc Metal Microdendrites on Polypyrrole Films. Journal of Nanoscience and Nanotechnology, 2012, 12, 338-349.	0.9	11
51	Simultaneous electrochemical detection of the catecholamines and ascorbic acid at PEDOT/S-Î²-CD modified gold electrodes. Journal of Electroanalytical Chemistry, 2012, 667, 30-37.	3.8	26
52	Corrosion protection of copper using polypyrrole electrosynthesised from a salicylate solution. Corrosion Science, 2012, 59, 179-185.	6.6	64
53	Facile template-free electrochemical preparation of poly[N-(2-cyanoethyl)pyrrole] nanowires. Electrochemistry Communications, 2012, 20, 79-82.	4.7	9
54	An electrochemical study in aqueous solutions on the binding of dopamine to a sulfonated cyclodextrin host. Electrochimica Acta, 2012, 59, 290-295.	5.2	6

#	Article	IF	Citations
55	Complexation study and spectrofluorometric determination of the binding constant for diquat and p-sulfonatocalix[4]arene. Tetrahedron, 2012, 68, 3815-3821.	1.9	12
56	Electrochemical Characterisation of Polypyrrole Doped with pâ€Sulfonatocalix[4]arene. Electroanalysis, 2012, 24, 293-302.	2.9	7
57	Electrocoagulation for the Effective Removal of Pollutants. ECS Meeting Abstracts, 2012, , .	0.0	1
58	Electrochemical Fabrication of Copper-Based Hybrid Microstructures and Mechanism of Formation of Related Hierarchical Structures on Polypyrrole Films. Journal of Physical Chemistry C, 2011, 115, 20076-20083.	3.1	13
59	Electrochemical Deposition of Hierarchical Micro/Nanostructures of Copper Hydroxysulfates on Polypyrroleâ"Polystyrene Sulfonate Films. Journal of Physical Chemistry C, 2011, 115, 8725-8734.	3.1	38
60	A spectrophotometric and NMR study on the formation of an inclusion complex between dopamine and a sulfonated cyclodextrin host. Journal of Electroanalytical Chemistry, 2011, 661, 179-185.	3.8	18
61	Electrochemical Conversion of Copperâ€Based Hierarchical Micro/Nanostructures to Copper Metal Nanoparticles and Their Testing in Nitrate Sensing. Electroanalysis, 2011, 23, 2164-2173.	2.9	27
62	Application of Carbon Modified Materials in the Detection of Cr(VI). ECS Meeting Abstracts, 2011, , .	0.0	0
63	The selective detection of dopamine at a polypyrrole film doped with sulfonated Î²-cyclodextrins. Sensors and Actuators B: Chemical, 2010, 150, 498-504.	7.8	82
64	Remediation of chromium(VI) at polypyrrole-coated titanium. Journal of Applied Electrochemistry, 2009, 39, 1251-1257.	2.9	12
65	Polypyrrole electrodeposited on copper from an aqueous phosphate solution: Corrosion protection properties. Corrosion Science, 2007, 49, 1765-1776.	6.6	101
66	Polyaniline-coated iron: studies on the dissolution and electrochemical activity as a function of pH. Surface and Coatings Technology, 2005, 190, 264-270.	4.8	54
67	Enantioselective Detection of D- and L-Phenylalanine Using Optically Active Polyaniline. Electroanalysis, 2005, 17, 532-537.	2.9	34
68	Surface engineering: corrosion protection using conducting polymers. Materials & Design, 2005, 26, 233-237.	5.1	96
69	The Formation of Polypyrrole at Iron from 1-Butyl-3-methylimidazolium Hexafluorophosphate. Journal of the Electrochemical Society, 2005, 152, D6.	2.9	25
70	Formation of adherent polypyrrole coatings on Ti and Tiâ€"6Alâ€"4V alloy. Synthetic Metals, 2005, 148, 111-118.	3.9	24
71	Reduction of hexavalent chromium at a polypyrrole-coated aluminium electrode: Synergistic interactions. Journal of Applied Electrochemistry, 2004, 34, 191-195.	2.9	29
72	Oxidation and photo-induced oxidation of glucose at a polyaniline film modified by copper particles. Electrochimica Acta, 2004, 49, 4497-4503.	5.2	111

#	Article	IF	Citations
73	Reduction of Cr(VI) at a Polyaniline Film:Â Influence of Film Thickness and Oxidation State. Environmental Science & Technology, 2004, 38, 4671-4676.	10.0	64
74	An investigation into the degradation of polyaniline films grown on iron from oxalic acid. Synthetic Metals, 2004, 144, 125-131.	3.9	40
75	The electrochemical deposition of polyaniline at pure aluminium: electrochemical activity and corrosion protection properties. Electrochimica Acta, 2003, 48, 721-732.	5.2	120
76	The electropolymerization of pyrrole at a CuNi electrode: corrosion protection properties. Corrosion Science, 2003, 45, 2837-2850.	6.6	67
77	Corrosion Protection Properties Afforded by an In Situ Electropolymerized Polypyrrole Layer on CuZn. Journal of the Electrochemical Society, 2003, 150, B540.	2.9	13
78	The electrochemical synthesis of polypyrrole at a copper electrode: corrosion protection properties. Electrochimica Acta, 2002, 47, 4467-4476.	5.2	161
79	Electrochemical studies on the stability and corrosion resistance of titanium-based implant materials. Biomaterials, 2001, 22, 1531-1539.	11.4	290
80	Title is missing!. Journal of Applied Electrochemistry, 2001, 31, 509-516.	2.9	90
81	The electrochemical behaviour of CuZn under conditions of illumination. Electrochimica Acta, 2000, 45, 4015-4023.	5.2	10
82	Photo-induced dissolution of zinc in alkaline solutions. Electrochimica Acta, 2000, 45, 1571-1579.	5.2	80
83	Electrochemical behaviour of aluminium in the presence of EDTA-containing chloride solutions. Journal of Applied Electrochemistry, 2000, 30, 675-683.	2.9	37
84	The Influence of Ultraviolet Illumination on the Passive Behavior of Zinc. Journal of the Electrochemical Society, 2000, 147, 1401.	2.9	8
85	The corrosion protection afforded by rare earth conversion coatings applied to magnesium. Corrosion Science, 2000, 42, 275-288.	6.6	399
86	Activation of pure Al in an indium-containing electrolyte â€" an electrochemical noise and impedance study. Corrosion Science, 2000, 42, 1023-1039.	6.6	40
87	Electrochemical studies on single-crystal aluminium surfaces. Electrochimica Acta, 1998, 43, 1715-1720.	5.2	55
88	The influence of UV light on the dissolution and passive behavior of copper-containing alloys in chloride solutions. Electrochimica Acta, 1998, 44, 643-651.	5.2	54
89	Scanning Kelvin probe analysis of the potential distribution under small drops of electrolyte. Materials and Corrosion - Werkstoffe Und Korrosion, 1998, 49, 569-575.	1.5	24
90	Sealing of Anodized Aluminum Alloys with Rare Earth Metal Salt Solutions. Journal of the Electrochemical Society, 1998, 145, 2792-2798.	2.9	51

#	Article	IF	Citations
91	Influence of Rare-Earth Metal Passivation Treatments on the Dissolution of Tin-Zinc Coatings. Corrosion, 1998, 54, 964-971.	1.1	6
92	Electronic Structures of Aluminum and Aluminum Clusters Doped with Other Atoms. Journal of the Electrochemical Society, 1997, 144, L217-L218.	2.9	0
93	The electrochemical behaviour of stainless steels following surface modification in ceriumcontaining solutions. Corrosion Science, 1997, 39, 1061-1073.	6.6	28
94	The influence of dichromate and cerium passivation treatments on the dissolution of coatings. Corrosion Science, 1997, 39, 1341-1350.	6.6	19
95	Surface modification of stainless steels: green technology for corrosion protection. Surface and Coatings Technology, 1997, 90, 224-228.	4.8	32
96	Influence of uv light on the passive behaviour of SS316â€"effect of prior illumination. Electrochimica Acta, 1997, 42, 127-136.	5.2	55
97	Photo-inhibition of pitting corrosion on types 304 and 316 stainless steels in chloride-containing solutions. Electrochimica Acta, 1997, 42, 137-144.	5.2	51
98	An efficient MSXÎ± technique for the study of large clusters. Computational and Theoretical Chemistry, 1995, 331, 139-145.	1.5	0
99	The electrochemical behaviour of Alî—¸Znî—¸In and Alî—¸Znî—¸Hg alloys in aqueous halide solutions. Corrosion Science, 1994, 36, 85-97.	6.6	27
100	Studies on the passivation of aluminium in chromate and molybdate solutions. Corrosion Science, 1994, 36, 1143-1154.	6.6	98
101	The synergistic interaction between indium and zinc in the activation of aluminium in aqueous electrolytes. Corrosion Science, 1994, 36, 231-240.	6.6	25
102	The activation of aluminium by indium ions in chloride, bromide and iodide solutions. Corrosion Science, 1993, 34, 327-341.	6.6	61
103	The activation of aluminium by activator elements. Corrosion Science, 1993, 35, 197-203.	6.6	13
104	The corrosion/dissolution behaviour of aluminium in solutions containing both chloride and fluoride ions. Corrosion Science, 1993, 34, 1495-1507.	6.6	16
105	The effects of indium precipitates on the electrochemical dissolution of Al-In alloys. Corrosion Science, 1993, 34, 1099-1109.	6.6	22
106	The electrochemical behaviour of aluminium activated by gallium in aqueous electrolytes. Corrosion Science, 1992, 33, 1735-1746.	6.6	54
107	Activation of aluminium in halide solutions containing â€˜activator ionsâ€™. Corrosion Science, 1992, 33, 1161-1177.	6.6	56
108	Stability of passive films formed on aluminium in aqueous halide solutions. Corrosion Engineering Science and Technology, 1991, 26, 255-259.	0.3	49