Mathieu Etienne

List of Publications by Year
in descending order

125 papers	4,498 citations	125106 35 h-index	129628 63 g-index
127 all docs	127 docs citations	127 times ranked	4526 citing authors

#	Article	IF	Citations
1	A hybrid electrochemical flow reactor to couple H₂ oxidation to NADH regeneration for biochemical reactions. Electrochemical Science Advances, 2022, 2, e202100012.	1.2	3
2	Multiphase chemical engineering as a tool in modelling electromediated reactions- example of Rh complex-mediated regeneration of NADH. Chemical Engineering Science, 2022, 247, 117055.	1.9	2
3	Amperometric Sensor for Selective On-Site Analysis of Free Sulfite in Wines. ACS Sensors, 2022, 7, 2209-2217.	4.0	2
4	Electrochemical Activity of Cytochrome P450 1A2: The Relevance of O₂ Control and the Natural Electron Donor. ChemElectroChem, 2021, 8, 500-507.	1.7	2
5	Electrochemical Activity of Cytochrome P450 1A2: The Relevance of O 2 Control and the Natural Electron Donor. ChemElectroChem, 2021, 8, 430-430.	1.7	0
6	Composite Anion-Exchange Membrane Fabricated by UV Cross-Linking Vinyl Imidazolium Poly(Phenylene) Tj ETQq0 0 0 rgBT /Overlock 1 436.	1.4	6
7	Composite Anion Exchange Membranes Fabricated by Coating and UV Crosslinking of Low-Cost Precursors Tested in a Redox Flow Battery. Polymers, 2021, 13, 2396.	2.0	6
8	Electroanalytical metal sensor with built-in oxygen filter. Analytica Chimica Acta, 2021, 1167, 338544.	2.6	5
9	Carbon Monoliths with Hierarchical Porous Structure for All-Vanadium Redox Flow Batteries. Batteries, 2021, 7, 55.	2.1	7
10	Integrated probe for electrochemical analysis of small volume droplets. Sensors and Actuators B: Chemical, 2021, 347, 130542.	4.0	1
11	Electrochemical analysis of a microbial electrochemical snorkel in laboratory and constructed wetlands. Bioelectrochemistry, 2021, 142, 107895.	2.4	5
12	Molecularly imprinted polymer as a synthetic receptor mimic for capacitive impedimetric selective recognition of Escherichia coli K-12. Analytica Chimica Acta, 2021, 1188, 339177.	2.6	12
13	Local removal of oxygen for NAD(P)+ detection in aerated solutions. Electrochimica Acta, 2020, 353, 136546.	2.6	5
14	Effect of Cathode Material and Its Size on the Abundance of Nitrogen Removal Functional Genes in Microcosms of Integrated Bioelectrochemical-Wetland Systems. Soil Systems, 2020, 4, 47.	1.0	5
15	Scanning Gel Electrochemical Microscopy (SGECM): Lateral Physical Resolution by Current and Shear Force Feedback. Analytical Chemistry, 2020, 92, 6415-6422.	3.2	11
16	Electrochemical Filter To Remove Oxygen Interference Locally, Rapidly, and Temporarily for Sensing Applications. Analytical Chemistry, 2020, 92, 7425-7429.	3.2	9
17	Electrochemical Investigation of <i>Thiobacillus Denitrificans</i> in a Bacterial Composite. Journal of the Electrochemical Society, 2020, 167, 135502.	1.3	7
18	Real-Time Ozone Sensor Based on Selective Oxidation of Methylene Blue in Mesoporous Silica Films. Sensors, 2019, 19, 3508.	2.1	8

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19	Real-Time Optical Ozone Sensor for Occupational Exposure Assessment. , 2019, , .		1
20	Protamine Promotes Direct Electron Transfer BetweenShewanella oneidensisCells and Carbon Nanomaterials in Bacterial Biocomposites. ChemElectroChem, 2019, 6, 2398-2406.	1.7	3
21	Lignin-Based Carbon Nanofibers as Electrodes for Vanadium Redox Couple Electrochemistry. Nanomaterials, 2019, 9, 106.	1.9	25
22	Rapid and reversible adsorption of BTX on mesoporous silica thin films for their real time spectrophotometric detection in air at ppm levels. Talanta, 2019, 203, 269-273.	2.9	9
23	Protamine Promotes Direct Electron Transfer Between <i>Shewanella Oneidensis</i> Cells and Carbon Nanomaterials in Bacterial Biocomposites. ChemElectroChem, 2019, 6, 2349-2349.	1.7	1
24	Layer-by-Layer modification of graphite felt with MWCNT for vanadium redox flow battery. Electrochimica Acta, 2019, 313, 131-140.	2.6	22
25	Voltammetric and microscopic characteristics of MnO2 and silica-MnO2hybrid films electrodeposited on the surface of planar electrodes. Electrochimica Acta, 2019, 306, 680-687.	2.6	12
26	Porous and Transparent Metalâ€oxide Electrodesâ€‰:â€‰ Preparation Methods and Electroanalytical Application Prospects. Electroanalysis, 2018, 30, 1241-1258.	1.5	15
27	Molecular and Biological Catalysts Coimmobilization on Electrode by Combining Diazonium Electrografting and Sequential Click Chemistry. ChemElectroChem, 2018, 5, 2208-2217.	1.7	22
28	Highly Interconnected Macroporous and Transparent Indium Tin Oxide Electrode. ChemElectroChem, 2018, 5, 397-404.	1.7	5
29	Accurate control of the covalent functionalization of single-walled carbon nanotubes for the electro-enzymatically controlled oxidation of biomolecules. Beilstein Journal of Nanotechnology, 2018, 9, 2750-2762.	1.5	4
30	Electrochemistry of Biofilms. , 2018, , 182-189.		1
31	Scanning gel electrochemical microscopy (SGECM): The potentiometric measurements. Electrochemistry Communications, 2018, 97, 64-67.	2.3	14
32	Electrocatalytic Biosynthesis using a Bucky Paper Functionalized by [Cp*Rh(bpy)Cl]⁺ and a Renewable Enzymatic Layer. ChemCatChem, 2018, 10, 4067-4073.	1.8	29
33	Influence of cytochrome charge and potential on the cathodic current of electroactive artificial biofilms. Bioelectrochemistry, 2018, 124, 185-194.	2.4	3
34	Scanning Gel Electrochemical Microscopy for Topography and Electrochemical Imaging. Analytical Chemistry, 2018, 90, 8889-8895.	3.2	14
35	Covalent Immobilization of (2,2â€²-Bipyridyl) (Pentamethylcyclopentadienyl)-Rhodium Complex on a Porous Carbon Electrode for Efficient Electrocatalytic NADH Regeneration. ACS Catalysis, 2017, 7, 4386-4394.	5.5	65
36	A rapid and simple protocol to prepare a living biocomposite that mimics electroactive biofilms. Bioelectrochemistry, 2017, 118, 131-138.	2.4	14

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37	Functional Electrodes for Enzymatic Electrosynthesis. , 2017, , 215-271.		1
38	Electrochemistry and Spectroelectrochemistry with Electrospun Indium Tin Oxide Nanofibers. Electrochimica Acta, 2016, 202, 55-65.	2.6	12
39	Macroporous carbon nanotube-carbon composite electrodes. Carbon, 2016, 109, 106-116.	5.4	18
40	Local Evolution of pH with Time Determined by Shear Forceâ€based Scanning Electrochemical Microscopy: Surface Reactivity of Anodized Aluminium. Electroanalysis, 2016, 28, 2466-2471.	1.5	8
41	Coreâ€"shell alginate@silica microparticles encapsulating probiotics. Journal of Materials Chemistry B, 2016, 4, 7929-7935.	2.9	16
42	Enzymatic bioreactor for simultaneous electrosynthesis and energy production. Electrochimica Acta, 2016, 199, 342-348.	2.6	20
43	Immobilization of Cysteine-Tagged Proteins on Electrode Surfaces by Thiolâ€"Ene Click Chemistry. ACS Applied Materials & Interfaces, 2016, 8, 17591-17598.	4.0	34
44	Local pH changes triggered by photoelectrochemistry for silica condensation at the liquid-liquid interface. Electrochimica Acta, 2016, 188, 71-77.	2.6	10
45	Mesoporous silica nanoparticle film as sorbent for in situ and real-time monitoring of volatile BTX (benzene, toluene and xylenes). Sensors and Actuators B: Chemical, 2016, 223, 904-913.	4.0	28
46	Amperometric Biosensor for Choline Based on Gold Screenâ€Printed Electrode Modified with Electrochemicallyâ€Deposited Silica Biocomposite. Electroanalysis, 2015, 27, 1685-1692.	1.5	22
47	Mesoporous Materialsâ€Based Electrochemical Enzymatic Biosensors. Electroanalysis, 2015, 27, 2028-2054.	1.5	48
48	Shearforce positioning of nanoprobe electrode arrays for scanning electrochemical microscopy experiments. Electrochimica Acta, 2015, 179, 45-56.	2.6	13
49	Immobilization of membrane-bounded (S)-mandelate dehydrogenase in solâ€"gel matrix for electroenzymatic synthesis. Bioelectrochemistry, 2015, 104, 65-70.	2.4	10
50	Electrode Materials (Bulk Materials and Modification). Nanostructure Science and Technology, 2014, , 403-495.	0.1	6
51	Solâ€"gel based â€˜artificialâ€™ biofilm from Pseudomonas fluorescens using bovine heart cytochrome c as electron mediator. Electrochemistry Communications, 2014, 38, 71-74.	2.3	19
52	Combined Raman Microspectrometer and Shearforce Regulated SECM for Corrosion and Self-Healing Analysis. Analytical Chemistry, 2014, 86, 11203-11210.	3.2	28
53	Electro-Assisted Self-Assembly of Cetyltrimethylammonium-Templated Silica Films in Aqueous Media: Critical Effect of Counteranions on the Morphology and Mesostructure Type. Chemistry of Materials, 2014, 26, 1848-1858.	3.2	26
54	An l-glucitol oxidizing dehydrogenase from Bradyrhizobium japonicum USDA 110 for production of d-sorbose with enzymatic or electrochemical cofactor regeneration. Applied Microbiology and Biotechnology, 2014, 98, 3023-3032.	1.7	9

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55	Local pH measurement at wet mineral-bacteria/air interface. Electrochemistry Communications, 2014, 44, 1-3.	2.3	12
56	Reagentless d-sorbitol biosensor based on d-sorbitol dehydrogenase immobilized in a solâ€“gel carbon nanotubesâ€“poly(methylene green) composite. Analytical and Bioanalytical Chemistry, 2013, 405, 3899-3906.	1.9	20
57	Electrochemically assisted self-assembly of ordered and functionalized mesoporous silica films: impact of the electrode geometry and size on film formation and properties. Faraday Discussions, 2013, 164, 259.	1.6	52
58	Electrochemically assisted bacteria encapsulation in thin hybrid solâ€“gel films. Journal of Materials Chemistry B, 2013, 1, 1052.	2.9	26
59	Interest of the Solâ€Gel Approach for Multiscale Tailoring of Porous Bioelectrode Surfaces. Electroanalysis, 2013, 25, 621-629.	1.5	16
60	Clay-mesoporous silica composite films generated by electro-assisted self-assembly. Electrochimica Acta, 2013, 112, 333-341.	2.6	22
61	Accurate control of the electrode shape for high resolution shearforce regulated SECM. Electrochimica Acta, 2013, 110, 16-21.	2.6	20
62	Functionalized carbon nanotubes for bioelectrochemical applications: Critical influence of the linker. Journal of Electroanalytical Chemistry, 2013, 707, 129-133.	1.9	9
63	Bimodal mesoporous titanium dioxide anatase films templated by a block polymer and an ionic liquid: influence of the porosity on the permeability. Nanoscale, 2013, 5, 12316.	2.8	24
64	Optimization of the shearforce signal for scanning electrochemical microscopy and application for kinetic analysis. Electrochimica Acta, 2013, 88, 877-884.	2.6	20
65	Electrophoretic deposition of macroporous carbon nanotube assemblies for electrochemical applications. Carbon, 2013, 53, 302-312.	5.4	14
66	One Step Deposition of Solâ€Gel Carbon Nanotubes Biocomposite for Reagentless Electrochemical Devices. Electroanalysis, 2013, 25, 85-93.	1.5	17
67	Electrochemical approaches for the fabrication and/or characterization of pure and hybrid templated mesoporous oxide thin films: a review. Analytical and Bioanalytical Chemistry, 2013, 405, 1497-1512.	1.9	71
68	Sol-gel Approaches for Elaboration of Polyol Dehydrogenase-Based Bioelectrodes. Zeitschrift Fur Physikalische Chemie, 2013, 227, 667-689.	1.4	6
69	Electrocatalytic effect towards NADH induced by HiPco single-walled carbon nanotubes covalently functionalized by ferrocene derivatives. Materials Research Society Symposia Proceedings, 2013, 1531, 1.	0.1	1
70	Few-wall carbon nanotubes covalently functionalized by ferrocene groups for bioelectrochemical devices.. Materials Research Society Symposia Proceedings, 2012, 1451, 111-116.	0.1	0
71	Covalent functionalization of fewâ€wall carbon nanotubes by ferrocene derivatives for bioelectrochemical devices. Physica Status Solidi (B): Basic Research, 2012, 249, 2349-2352.	0.7	12
72	Site Selective Generation of Solâ€“Gel Deposits in Layered Bimetallic Macroporous Electrode Architectures. Langmuir, 2012, 28, 2323-2326.	1.6	11

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73	Electrophoretically deposited carbon nanotubes as a novel support for electrogenerated silicaâ€“dehydrogenase bioelectrodes. Electrochimica Acta, 2012, 83, 359-366.	2.6	20
74	SECM-based automate equipped with a shearforce detection for the characterization of large and complex samples. Electrochemistry Communications, 2012, 15, 70-73.	2.3	29
75	Durable cofactor immobilization in solâ€“gel bio-composite thin films for reagentless biosensors and bioreactors using dehydrogenases. Biosensors and Bioelectronics, 2012, 32, 111-117.	5.3	47
76	Dehydrogenaseâ€Based Reagentless Biosensors: Electrochemically Assisted Deposition of Solâ€Gel Thin Films on Functionalized Carbon Nanotubes. Electroanalysis, 2012, 24, 376-385.	1.5	27
77	Microscale Controlled Electrogeneration of Patterned Mesoporous Silica Thin Films. Chemistry of Materials, 2011, 23, 5313-5322.	3.2	35
78	Accurate and Simplified Consideration of the Probe Geometrical Defaults in Scanning Electrochemical Microscopy: Theoretical and Experimental Investigations. Analytical Chemistry, 2011, 83, 9669-9675.	3.2	19
79	Controlled Electrochemically-Assisted Deposition of Solâˆ'Gel Biocomposite on Electrospun Platinum Nanofibers. Langmuir, 2011, 27, 7140-7147.	1.6	19
80	Multiscale-Tailored Bioelectrode Surfaces for Optimized Catalytic Conversion Efficiency. Langmuir, 2011, 27, 12737-12744.	1.6	14
81	Local electrocatalytic induction of solâ€“gel deposition at Pt nanoparticles. Electrochemistry Communications, 2011, 13, 759-762.	2.3	17
82	Electrochemically assisted deposition of solâ€“gel bio-composite with co-immobilized dehydrogenase and diaphorase. Electrochimica Acta, 2011, 56, 9032-9040.	2.6	34
83	Factors affecting the electrochemical regeneration of NADH by (2,2â€²-bipyridyl) (pentamethylcyclopentadienyl)-rhodium complexes: Impact on their immobilization onto electrode surfaces. Bioelectrochemistry, 2011, 82, 46-54.	2.4	50
84	Electrogeneration of ultra-thin silica films for the functionalization of macroporous electrodes. Electrochemistry Communications, 2011, 13, 138-142.	2.3	36
85	Critical Effect of Polyelectrolytes on the Electrochemical Response of Dehydrogenases Entrapped in Solâ€Gel Thin Films. Electroanalysis, 2010, 22, 2092-2100.	1.5	14
86	Electrogeneration of highly methylated mesoporous silica thin films with vertically-aligned mesochannels and electrochemical monitoring of mass transport issues. Journal of Materials Chemistry, 2010, 20, 6799.	6.7	62
87	Electrochemical Generation of Thin Silica Films with Hierarchical Porosity. Chemistry of Materials, 2010, 22, 3426-3432.	3.2	48
88	Oriented Mesoporous Organosilica Films on Electrode: A New Class of Nanomaterials for Sensing. Journal of Nanoscience and Nanotechnology, 2009, 9, 2398-2406.	0.9	81
89	Cyclamâ€Functionalized Silicaâ€Modified Electrodes for Selective Determination of Cu(II). Electroanalysis, 2009, 21, 280-289.	1.5	28
90	Electroanalytical properties of haemoglobin in silica-nanocomposite films electrogenerated on pyrolitic graphite electrode. Journal of Electroanalytical Chemistry, 2009, 625, 33-39.	1.9	24

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91	Factors Affecting Copper(II) Binding to Multiarmed Cyclam-Grafted Mesoporous Silica in Aqueous Solution. Langmuir, 2009, 25, 9804-9813.	1.6	36
92	Multiarm Cyclam-Grafted Mesoporous Silica: A Strategy to Improve the Chemical Stability of Silica Materials Functionalized with Amine Ligands. Langmuir, 2009, 25, 3137-3145.	1.6	38
93	Oriented Mesoporous Silica Films Obtained by Electro-Assisted Self-Assembly (EASA). Chemistry of Materials, 2009, 21, 731-741.	3.2	168
94	Orthopositronium annihilation and emission in mesostructured thin silica and silicalite-1 films. Applied Surface Science, 2008, 255, 187-190.	3.1	14
95	A Scheme To Produce The Antihydrogen Ion HÌ„[sup +] For Gravity Measurements. AIP Conference Proceedings, 2008, , .	0.3	7
96	Positronium reemission yield from mesostructured silica films. Applied Physics Letters, 2008, 92, .	1.5	70
97	STRUCTURAL INVESTIGATION OF ORDERED MESOPOROUS SILICAS FUNCTIONALIZED BY DIRECT SYNTHESIS WITH CYCLAM DERIVATIVES. , 2008, , .		0
98	Molecular Transport into Mesostructured Silica Thin Films:Â Electrochemical Monitoring and Comparison betweenp6m, P63/mmc, andPm3nStructures. Chemistry of Materials, 2007, 19, 844-856.	3.2	177
99	Preconcentration Electroanalysis at Surfactant-Templated Thiol-Functionalized Silica Thin Films. Electroanalysis, 2007, 19, 129-138.	1.5	41
100	Constant-Distance Mode Scanning Potentiometry. High Resolution pH Measurements in Three-Dimensions. Electroanalysis, 2007, 19, 318-323.	1.5	28
101	Constant-distance mode AC-SECM for the visualisation of corrosion pits. Electrochemistry Communications, 2007, 9, 1793-1797.	2.3	70
102	Direct electrochemistry of hemoglobin and glucose oxidase in electrodeposited solâ€“gel silica thin films on glassy carbon. Electrochemistry Communications, 2007, 9, 1189-1195.	2.3	131
103	Electrochemically assisted self-assembly of mesoporous silica thin films. Nature Materials, 2007, 6, 602-608.	13.3	487
104	Feedback-Independent Pt Nanoelectrodes for Shear Force-Based Constant-Distance Mode Scanning Electrochemical Microscopy. Analytical Chemistry, 2006, 78, 7317-7324.	3.2	46
105	Evaporation induced self-assembly of templated silica and organosilica thin films on various electrode surfaces. Electrochemistry Communications, 2005, 7, 1449-1456.	2.3	63
106	Solvent-free electrodeposition of polypyrrole as a base for the preparation of carbonised platinum microelectrodes. Electrochimica Acta, 2005, 50, 5001-5008.	2.6	9
107	Improved Resolution of Local Metal Deposition by Means of Constant Distance Mode Scanning Electrochemical Microscopy. Electroanalysis, 2005, 17, 538-542.	1.5	24
108	Electrochemical evidences of morphological transformation in ordered mesoporous titanium oxide thin films. Chemical Communications, 2005, , 4566.	2.2	32

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109	Imaging localised corrosion of NiTi shape memory alloys by means of alternating current scanning electrochemical microscopy (AC-SECM). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 523-526.	2.6	39
110	High resolution constant-distance mode alternating current scanning electrochemical microscopy (AC-SECM). Electrochemistry Communications, 2004, 6, 288-293.	2.3	82
111	Uptake of inorganic HgII by organically modified silicates: influence of pH and chloride concentration on the binding pathways and electrochemical monitoring of the processes. Analytica Chimica Acta, 2004, 508, 87-98.	2.6	65
112	Dual Microelectrodes for Distance Control and Detection of Nitric Oxide from Endothelial Cells by Means of Scanning Electrochemical Microscope. Analytical Chemistry, 2004, 76, 6389-6394.	3.2	67
113	Constant-Distance Mode Scanning Potentiometry. 1. Visualization of Calcium Carbonate Dissolution in Aqueous Solution. Analytical Chemistry, 2004, 76, 3682-3688.	3.2	53
114	Grafted Silicas in Electroanalysis: Amorphous Versus Ordered Mesoporous Materials. Electroanalysis, 2003, 15, 414-421.	1.5	88
115	In situ formation and scanning electrochemical microscopy assisted positioning of NO-sensors above human umbilical vein endothelial cells for the detection of nitric oxide release. Electrochemistry Communications, 2003, 5, 847-852.	2.3	57
116	Rate of Access to the Binding Sites in Organically Modified Silicates. 2. Ordered Mesoporous Silicas Grafted with Amine or Thiol Groups. Chemistry of Materials, 2003, 15, 2161-2173.	3.2	274
117	Analytical investigation of the chemical reactivity and stability of aminopropyl-grafted silica in aqueous medium. Talanta, 2003, 59, 1173-1188.	2.9	264
118	Rate of Access to the Binding Sites in Organically Modified Silicates. 1. Amorphous Silica Gels Grafted with Amine or Thiol Groups. Chemistry of Materials, 2002, 14, 2757-2766.	3.2	151
119	Organically-modified mesoporous silica spheres with MCM-41 architecture as sorbents for heavy metals. Studies in Surface Science and Catalysis, 2002, 141, 615-622.	1.5	20
120	Organically-modified mesoporous silica spheres with MCM-41 architecture. New Journal of Chemistry, 2002, 26, 384-386.	1.4	69
121	Tuning the Sensitivity of Electrodes Modified with an Organic-Inorganic Hybrid by Tailoring the Structure of the Nanocomposite Material. Electroanalysis, 2002, 14, 1521-1525.	1.5	51
122	Voltammetric detection of copper(II) at a carbon paste electrode containing an organically modified silica. Sensors and Actuators B: Chemical, 2001, 76, 531-538.	4.0	124
123	SYNTHÃˆSE ET Ã‰TUDE COMPARÃ‰E DES PROPRIÃ‰TÃ‰S COMPLEXANTES DE DÃ‰RIVÃ‰S DE L'ACIDE METHYLÃˆNE DIPHOSPHONIQUE. Phosphorus, Sulfur and Silicon and the Related Elements, 2000, 161, 75-96.	0.8	10
124	Electrochemistry within template nanosystems. SPR Electrochemistry, 0, , 124-197.	0.7	2
125	Improved productivity of NAD+ reduction under forced convection in aerated solutions. ChemElectroChem, 0, , .	1.7	1