Regine Basseguy

List of Publications by Year
in descending order

50 papers	1,947 citations	257450 24 h-index	243625 44 g-index
51 all docs	51 docs citations	51 times ranked	1911 citing authors

#	Article	IF	Citations
1	The electrochemical potential is a key parameter for cell adhesion and proliferation on carbon surface. Bioelectrochemistry, 2022, 144, 108045.	4.6	4
2	Industrially scalable surface treatments to enhance the current density output from graphite bioanodes fueled by real domestic wastewater. IScience, 2021, 24, 102162.	4.1	8
3	Design of 3D microbial anodes for microbial electrolysis cells (MEC) fuelled by domestic wastewater. Part I: Multiphysics modelling. Journal of Environmental Chemical Engineering, 2021, 9, 105476.	6.7	8
4	Microbial electrolysis cell (MEC): Strengths, weaknesses and research needs from electrochemical engineering standpoint. Applied Energy, 2020, 257, 113938.	10.1	150
5	Low-Cost Electrode Modification to Upgrade the Bioelectrocatalytic Oxidation of Tannery Wastewater Using Acclimated Activated Sludge. Applied Sciences (Switzerland), 2019, 9, 2259.	2.5	5
6	Benchmarking of Industrial Synthetic Graphite Grades, Carbon Felt, and Carbon Cloth as Cost-Efficient Bioanode Materials for Domestic Wastewater Fed Microbial Electrolysis Cells. Frontiers in Energy Research, 2019, 7, .	2.3	12
7	An imaging system for microbial corrosion analysis. , 2019, , .		7
8	Catalysis of the hydrogen evolution reaction by hydrogen carbonate to decrease the voltage of microbial electrolysis cell fed with domestic wastewater. Electrochimica Acta, 2018, 275, 32-39.	5.2	24
9	Separator electrode assembly (SEA) with 3-dimensional bioanode and removable air-cathode boosts microbial fuel cell performance. Journal of Power Sources, 2017, 356, 389-399.	7.8	53
10	Discerning different and opposite effects of hydrogenase on the corrosion of mild steel in the presence of phosphate species. Bioelectrochemistry, 2016, 111, 31-40.	4.6	8
11	Exacerbation of the mild steel corrosion process by direct electron transfer between [Fe-Fe]-hydrogenase and material surface. Corrosion Science, 2016, 111, 199-211.	6.6	12
12	Impact of the chemicals, essential for the purification process of strict Fe-hydrogenase, on the corrosion of mild steel. Bioelectrochemistry, 2016, 109, 9-23.	4.6	7
13	Geobacter sulfurreducens: An iron reducing bacterium that can protect carbon steel against corrosion?. Corrosion Science, 2015, 94, 104-113.	6.6	39
14	Electrochemical characterization of microbial bioanodes formed on a collector/electrode system in a highly saline electrolyte. Bioelectrochemistry, 2015, 106, 97-104.	4.6	16
15	Corrosion of carbon steel by bacteria from North Sea offshore seawater injection systems: Laboratory investigation. Bioelectrochemistry, 2014, 97, 76-88.	4.6	27
16	Electrochemical and fractographic analysis of Microbiologically Assisted Stress Corrosion Cracking of carbon steel. Corrosion Science, 2014, 80, 60-70.	6.6	31
17	Corrosion of low carbon steel by microorganisms from the â€˜piggingâ€™ operation debris in water injection pipelines. Bioelectrochemistry, 2014, 97, 97-109.	4.6	28
18	Corrosion behavior of carbon steel in presence of sulfate-reducing bacteria in seawater environment. Electrochimica Acta, 2013, 113, 390-406.	5.2	79

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19	Catalyse biotique et abiotique de la rÃ©duction des nitrates en milieu alcalin dans le contexte du stockage profond des dÃ©chets radioactifs. Materiaux Et Techniques, 2013, 101, 104.	0.9	5
20	Effect of the semi-conductive properties of the passive layer on the current provided by stainless steel microbial cathodes. Electrochimica Acta, 2011, 56, 2682-2688.	5.2	23
21	Hydrogen production by electrolysis of a phosphate solution on a stainless steel cathode. International Journal of Hydrogen Energy, 2010, 35, 8561-8568.	7.1	89
22	Geobacter sulfurreducens can protect 304L stainless steel against pitting in conditions of low electron acceptor concentrations. Electrochemistry Communications, 2010, 12, 724-728.	4.7	14
23	Combining phosphate species and stainless steel cathode to enhance hydrogen evolution in microbial electrolysis cell (MEC). Electrochemistry Communications, 2010, 12, 183-186.	4.7	61
24	Role of direct microbial electron transfer in corrosion of steels. Electrochemistry Communications, 2009, 11, 568-571.	4.7	53
25	Geobacter species enhances pit depth on 304L stainless steel in a medium lacking with electron donor. Electrochemistry Communications, 2009, 11, 1476-1481.	4.7	15
26	Effect of Geobacter sulfurreducens on the microbial corrosion of mild steel, ferritic and austenitic stainless steels. Corrosion Science, 2009, 51, 2596-2604.	6.6	48
27	New hypotheses for hydrogenase implication in the corrosion of mild steel. Electrochimica Acta, 2008, 54, 140-147.	5.2	24
28	DSA to grow electrochemically active biofilms of Geobacter sulfurreducens. Electrochimica Acta, 2008, 53, 3200-3209.	5.2	60
29	Electrochemical activity of Geobacter sulfurreducens biofilms on stainless steel anodes. Electrochimica Acta, 2008, 53, 5235-5241.	5.2	140
30	Checking graphite and stainless anodes with an experimental model of marine microbial fuel cell. Bioresource Technology, 2008, 99, 8887-8894.	9.6	84
31	Microbial electrocatalysis with Geobacter sulfurreducens biofilm on stainless steel cathodes. Electrochimica Acta, 2008, 53, 2494-2500.	5.2	148
32	Local analysis of oxygen reduction catalysis by scanning vibrating electrode technique: A new approach to the study of biocorrosion. Electrochimica Acta, 2008, 54, 60-65.	5.2	28
33	Role of the reversible electrochemical deprotonation of phosphate species in anaerobic biocorrosion of steels. Corrosion Science, 2007, 49, 3988-4004.	6.6	19
34	Classic and local analysis of corrosion behaviour of graphite and stainless steels in polluted phosphoric acid. Electrochimica Acta, 2007, 52, 2580-2587.	5.2	59
35	Marine microbial fuel cell: Use of stainless steel electrodes as anode and cathode materials. Electrochimica Acta, 2007, 53, 468-473.	5.2	243
36	Simple design of cast myoglobin/polyethyleneimine modified electrodes. Journal of Applied Electrochemistry, 2006, 36, 835-842.	2.9	4

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37	Electroactive cytochrome cast polyion films on graphite electrodes. Electrochimica Acta, 2006, 52, 979-987.	5.2	7
38	Design and Modelling of a Dialysis Membrane Electrochemical Reactor (D-MER) for Oxidoreductase-Catalysed Synthesis. Journal of Applied Electrochemistry, 2004, 34, 469-476.	2.9	1
39	Glucose oxidase catalysed oxidation of glucose in a dialysis membrane electrochemical reactor (D-MER). Bioprocess and Biosystems Engineering, 2004, 26, 165-168.	3.4	7
40	Electron transfer between hydrogenase and 316L stainless steel: identification of a hydrogenase-catalyzed cathodic reaction in anaerobic mic. Journal of Electroanalytical Chemistry, 2004, 561, 93-102.	3.8	60
41	Hydrogenase-catalysed deposition of vivianite on mild steel. Electrochimica Acta, 2004, 49, 2097-2103.	5.2	8
42	The role of hydrogenases in the anaerobic microbiologically influenced corrosion of steels. Bioelectrochemistry, 2002, 56, 77-79.	4.6	32
43	Designing membrane electrochemical reactors for oxidoreductase-catalysed synthesis. Bioelectrochemistry, 2002, 55, 93-95.	4.6	13
44	Membrane electrochemical reactor (MER): application to NADH regeneration for ADH-catalysed synthesis. Chemical Engineering Science, 2002, 57, 4633-4642.	3.8	31
45	Surface-modified electrodes for NADH oxidation in oxidoreductase-catalysed synthesis. Journal of Applied Electrochemistry, 2001, 31, 1095-1101.	2.9	12
46	Mass transfer with chemical reaction in thin-layer electrochemical reactors. AICHE Journal, 1995, 41, 1944-1954.	3.6	10
47	Electrochemical and surface studies of the ageing of passive layers grown on stainless steel in neutral chloride solution. Corrosion Science, 1994, 36, 171-186.	6.6	60
48	Frequency dispersion of passive electrode capacitances. Electrochimica Acta, 1993, 38, 1615-1617.	5.2	1
49	The resistance to localized corrosion in neutral chloride medium of an AISI 304l stainless steel implanted with nitrogen and neon ions. Corrosion Science, 1992, 33, 1121-1134.	6.6	27
50	Poly(pyrrole-metallotetraphenylporphyrin)-modified electrodes. Journal of Electroanalytical Chemistry, 1992, 324, 325-337.	3.8	43