

# Regine Basseguy

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Marine microbial fuel cell: Use of stainless steel electrodes as anode and cathode materials. <i>Electrochimica Acta</i> , 2007, 53, 468-473.	5.2	243
2	Microbial electrolysis cell (MEC): Strengths, weaknesses and research needs from electrochemical engineering standpoint. <i>Applied Energy</i> , 2020, 257, 113938.	10.1	150
3	Microbial electrocatalysis with <i>Geobacter sulfurreducens</i> biofilm on stainless steel cathodes. <i>Electrochimica Acta</i> , 2008, 53, 2494-2500.	5.2	148
4	Electrochemical activity of <i>Geobacter sulfurreducens</i> biofilms on stainless steel anodes. <i>Electrochimica Acta</i> , 2008, 53, 5235-5241.	5.2	140
5	Hydrogen production by electrolysis of a phosphate solution on a stainless steel cathode. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 8561-8568.	7.1	89
6	Checking graphite and stainless anodes with an experimental model of marine microbial fuel cell. <i>Bioresource Technology</i> , 2008, 99, 8887-8894.	9.6	84
7	Corrosion behavior of carbon steel in presence of sulfate-reducing bacteria in seawater environment. <i>Electrochimica Acta</i> , 2013, 113, 390-406.	5.2	79
8	Combining phosphate species and stainless steel cathode to enhance hydrogen evolution in microbial electrolysis cell (MEC). <i>Electrochemistry Communications</i> , 2010, 12, 183-186.	4.7	61
9	Electrochemical and surface studies of the ageing of passive layers grown on stainless steel in neutral chloride solution. <i>Corrosion Science</i> , 1994, 36, 171-186.	6.6	60
10	Electron transfer between hydrogenase and 316L stainless steel: identification of a hydrogenase-catalyzed cathodic reaction in anaerobic mic. <i>Journal of Electroanalytical Chemistry</i> , 2004, 561, 93-102.	3.8	60
11	DSA to grow electrochemically active biofilms of <i>Geobacter sulfurreducens</i> . <i>Electrochimica Acta</i> , 2008, 53, 3200-3209.	5.2	60
12	Classic and local analysis of corrosion behaviour of graphite and stainless steels in polluted phosphoric acid. <i>Electrochimica Acta</i> , 2007, 52, 2580-2587.	5.2	59
13	Role of direct microbial electron transfer in corrosion of steels. <i>Electrochemistry Communications</i> , 2009, 11, 568-571.	4.7	53
14	Separator electrode assembly (SEA) with 3-dimensional bioanode and removable air-cathode boosts microbial fuel cell performance. <i>Journal of Power Sources</i> , 2017, 356, 389-399.	7.8	53
15	Effect of <i>Geobacter sulfurreducens</i> on the microbial corrosion of mild steel, ferritic and austenitic stainless steels. <i>Corrosion Science</i> , 2009, 51, 2596-2604.	6.6	48
16	Poly(pyrrole-metallotetraphenylporphyrin)-modified electrodes. <i>Journal of Electroanalytical Chemistry</i> , 1992, 324, 325-337.	3.8	43
17	<i>Geobacter sulfurreducens</i> : An iron reducing bacterium that can protect carbon steel against corrosion?. <i>Corrosion Science</i> , 2015, 94, 104-113.	6.6	39
18	The role of hydrogenases in the anaerobic microbiologically influenced corrosion of steels. <i>Bioelectrochemistry</i> , 2002, 56, 77-79.	4.6	32

#	ARTICLE	IF	CITATIONS
19	Membrane electrochemical reactor (MER): application to NADH regeneration for ADH-catalysed synthesis. <i>Chemical Engineering Science</i> , 2002, 57, 4633-4642.	3.8	31
20	Electrochemical and fractographic analysis of Microbiologically Assisted Stress Corrosion Cracking of carbon steel. <i>Corrosion Science</i> , 2014, 80, 60-70.	6.6	31
21	Local analysis of oxygen reduction catalysis by scanning vibrating electrode technique: A new approach to the study of biocorrosion. <i>Electrochimica Acta</i> , 2008, 54, 60-65.	5.2	28
22	Corrosion of low carbon steel by microorganisms from the "pigging" operation debris in water injection pipelines. <i>Bioelectrochemistry</i> , 2014, 97, 97-109.	4.6	28
23	The resistance to localized corrosion in neutral chloride medium of an AISI 304L stainless steel implanted with nitrogen and neon ions. <i>Corrosion Science</i> , 1992, 33, 1121-1134.	6.6	27
24	Corrosion of carbon steel by bacteria from North Sea offshore seawater injection systems: Laboratory investigation. <i>Bioelectrochemistry</i> , 2014, 97, 76-88.	4.6	27
25	New hypotheses for hydrogenase implication in the corrosion of mild steel. <i>Electrochimica Acta</i> , 2008, 54, 140-147.	5.2	24
26	Catalysis of the hydrogen evolution reaction by hydrogen carbonate to decrease the voltage of microbial electrolysis cell fed with domestic wastewater. <i>Electrochimica Acta</i> , 2018, 275, 32-39.	5.2	24
27	Effect of the semi-conductive properties of the passive layer on the current provided by stainless steel microbial cathodes. <i>Electrochimica Acta</i> , 2011, 56, 2682-2688.	5.2	23
28	Role of the reversible electrochemical deprotonation of phosphate species in anaerobic biocorrosion of steels. <i>Corrosion Science</i> , 2007, 49, 3988-4004.	6.6	19
29	Electrochemical characterization of microbial bioanodes formed on a collector/electrode system in a highly saline electrolyte. <i>Bioelectrochemistry</i> , 2015, 106, 97-104.	4.6	16
30	Geobacter species enhances pit depth on 304L stainless steel in a medium lacking with electron donor. <i>Electrochemistry Communications</i> , 2009, 11, 1476-1481.	4.7	15
31	Geobacter sulfurreducens can protect 304L stainless steel against pitting in conditions of low electron acceptor concentrations. <i>Electrochemistry Communications</i> , 2010, 12, 724-728.	4.7	14
32	Designing membrane electrochemical reactors for oxidoreductase-catalysed synthesis. <i>Bioelectrochemistry</i> , 2002, 55, 93-95.	4.6	13
33	Surface-modified electrodes for NADH oxidation in oxidoreductase-catalysed synthesis. <i>Journal of Applied Electrochemistry</i> , 2001, 31, 1095-1101.	2.9	12
34	Exacerbation of the mild steel corrosion process by direct electron transfer between [Fe-Fe]-hydrogenase and material surface. <i>Corrosion Science</i> , 2016, 111, 199-211.	6.6	12
35	Benchmarking of Industrial Synthetic Graphite Grades, Carbon Felt, and Carbon Cloth as Cost-Efficient Bioanode Materials for Domestic Wastewater Fed Microbial Electrolysis Cells. <i>Frontiers in Energy Research</i> , 2019, 7, .	2.3	12
36	Mass transfer with chemical reaction in thin-layer electrochemical reactors. <i>AIChE Journal</i> , 1995, 41, 1944-1954.	3.6	10

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37	Hydrogenase-catalysed deposition of vivianite on mild steel. <i>Electrochimica Acta</i> , 2004, 49, 2097-2103.	5.2	8
38	Discerning different and opposite effects of hydrogenase on the corrosion of mild steel in the presence of phosphate species. <i>Bioelectrochemistry</i> , 2016, 111, 31-40.	4.6	8
39	Industrially scalable surface treatments to enhance the current density output from graphite bioanodes fueled by real domestic wastewater. <i>IScience</i> , 2021, 24, 102162.	4.1	8
40	Design of 3D microbial anodes for microbial electrolysis cells (MEC) fuelled by domestic wastewater. Part I: Multiphysics modelling. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105476.	6.7	8
41	Glucose oxidase catalysed oxidation of glucose in a dialysis membrane electrochemical reactor (D-MER). <i>Bioprocess and Biosystems Engineering</i> , 2004, 26, 165-168.	3.4	7
42	Electroactive cytochrome cast polyion films on graphite electrodes. <i>Electrochimica Acta</i> , 2006, 52, 979-987.	5.2	7
43	Impact of the chemicals, essential for the purification process of strict Fe-hydrogenase, on the corrosion of mild steel. <i>Bioelectrochemistry</i> , 2016, 109, 9-23.	4.6	7
44	An imaging system for microbial corrosion analysis. , 2019, , .		7
45	Catalyse biotique et abiotique de la rÃ©duction des nitrates en milieu alcalin dans le contexte du stockage profond des dÃ©chets radioactifs. <i>Materiaux Et Techniques</i> , 2013, 101, 104.	0.9	5
46	Low-Cost Electrode Modification to Upgrade the Bioelectrocatalytic Oxidation of Tannery Wastewater Using Acclimated Activated Sludge. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2259.	2.5	5
47	Simple design of cast myoglobin/polyethyleneimine modified electrodes. <i>Journal of Applied Electrochemistry</i> , 2006, 36, 835-842.	2.9	4
48	The electrochemical potential is a key parameter for cell adhesion and proliferation on carbon surface. <i>Bioelectrochemistry</i> , 2022, 144, 108045.	4.6	4
49	Frequency dispersion of passive electrode capacitances. <i>Electrochimica Acta</i> , 1993, 38, 1615-1617.	5.2	1
50	Design and Modelling of a Dialysis Membrane Electrochemical Reactor (D-MER) for Oxidoreductase-Catalysed Synthesis. <i>Journal of Applied Electrochemistry</i> , 2004, 34, 469-476.	2.9	1