Derek Pletcher

List of Publications by Year
in descending order

64 papers	4,072 citations	101543 36 h-index	114465 63 g-index
68 all docs	68 docs citations	68 times ranked	3289 citing authors

#	Article	IF	Citations
1	Flow Electrolysis Cells for the Synthetic Organic Chemistry Laboratory. Chemical Reviews, 2018, 118, 4573-4591.	47.7	355
2	Electrodeposited lead dioxide coatings. Chemical Society Reviews, 2011, 40, 3879.	38.1	310
3	Electrode materials for electrosynthesis. Chemical Reviews, 1990, 90, 837-865.	47.7	232
4	Electrocatalysis: present and future. Journal of Applied Electrochemistry, 1984, 14, 403-415.	2.9	188
5	A novel flow battery: A lead acid battery based on an electrolyte with soluble lead(ii). Physical Chemistry Chemical Physics, 2004, 6, 1773.	2.8	179
6	The study of aluminium anodes for high power density Al/air batteries with brine electrolytes. Journal of Power Sources, 2008, 178, 445-455.	7.8	174
7	A novel flow battery: A lead acid battery based on an electrolyte with soluble lead(ii). Physical Chemistry Chemical Physics, 2004, 6, 1779.	2.8	162
8	A novel flow batteryâ€"A lead acid battery based on an electrolyte with soluble lead(II). Journal of Power Sources, 2005, 149, 96-102.	7.8	120
9	A novel flow battery: A lead acid battery based on an electrolyte with soluble lead(II). Electrochimica Acta, 2009, 54, 4688-4695.	5.2	118
10	A novel flow batteryâ€"A lead-acid battery based on an electrolyte with soluble lead(II). Journal of Power Sources, 2008, 180, 630-634.	7.8	106
11	A novel flow batteryâ€"A lead acid battery based on an electrolyte with soluble lead(II). Journal of Power Sources, 2005, 149, 103-111.	7.8	105
12	A novel flow batteryâ€"A lead-acid battery based on an electrolyte with soluble lead(II). Journal of Power Sources, 2008, 180, 621-629.	7.8	102
13	The cathodic reduction of carbon dioxideâ€"What can it realistically achieve? A mini review. Electrochemistry Communications, 2015, 61, 97-101.	4.7	91
14	The Oxidation of Alcohols at a Nickel Anode in Alkaline tâ€Butanol/Water Mixtures. Journal of the Electrochemical Society, 1977, 124, 203-206.	2.9	81
15	A novel flow battery: A lead acid battery based on an electrolyte with soluble lead(II) Part VIII. The cycling of a 10cmÃ—10cm flow cell. Journal of Power Sources, 2010, 195, 1731-1738.	7.8	79
16	TEMPOâ€Mediated Electrooxidation of Primary and Secondary Alcohols in a Microfluidic Electrolytic Cell. ChemSusChem, 2012, 5, 326-331.	6.8	76
17	<i>N</i>-Heterocyclic Carbene-Mediated Microfluidic Oxidative Electrosynthesis of Amides from Aldehydes. Organic Letters, 2016, 18, 1198-1201.	4.6	76
18	A Microflow Electrolysis Cell for Laboratory Synthesis on the Multigram Scale. Organic Process Research and Development, 2015, 19, 1424-1427.	2.7	74

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19	A novel flow battery: A lead acid battery based on an electrolyte with soluble lead(II). Part IX: Electrode and electrolyte conditioning with hydrogen peroxide. Journal of Power Sources, 2010, 195, 2975-2978.	7.8	70
20	The influence of support and particle size on the platinum catalysed oxygen reduction reaction. Physical Chemistry Chemical Physics, 2009, 11, 9141.	2.8	64
21	Platinum catalysed nanoporous titanium dioxide electrodes in H2SO4 solutions. Electrochemistry Communications, 2001, 3, 395-399.	4.7	59
22	CO Oxidation on Gold in Acidic Environments:â€‰ Particle Size and Substrate Effects. Journal of Physical Chemistry C, 2007, 111, 17044-17051.	3.1	59
23	Mesoporous palladiumâ€"the surface electrochemistry of palladium in aqueous sodium hydroxide and the cathodic reduction of nitrite. Physical Chemistry Chemical Physics, 2005, 7, 3545.	2.8	55
24	Understanding the Performance of a Microfluidic Electrolysis Cell for Routine Organic Electrosynthesis. Journal of Flow Chemistry, 2015, 5, 31-36.	1.9	54
25	A microelectrode study of the catalysis of alkyl halide reduction by Co(II)(salen). Journal of Electroanalytical Chemistry, 1999, 464, 168-175.	3.8	52
26	N-Heterocyclic Carbene-Mediated Oxidative Electrosynthesis of Esters in a Microflow Cell. Organic Letters, 2015, 17, 3290-3293.	4.6	52
27	Organic electrosynthesis â€" A road to greater application. A mini review. Electrochemistry Communications, 2018, 88, 1-4.	4.7	52
28	The electrodeposition and electrocatalytic properties of copperâ€"palladium alloys. Journal of Electroanalytical Chemistry, 2008, 614, 24-30.	3.8	51
29	The fabrication of lead dioxide layers on a titanium substrate. Electrochimica Acta, 2006, 52, 786-793.	5.2	50
30	Electrosynthesis in extended channel length microfluidic electrolysis cells. Journal of Flow Chemistry, 2016, 6, 191-197.	1.9	45
31	The influence of Pt particle size on the surface oxidation of titania supported platinum. Physical Chemistry Chemical Physics, 2009, 11, 1564.	2.8	44
32	A simple and inexpensive microfluidic electrolysis cell. Electrochimica Acta, 2011, 56, 4322-4326.	5.2	44
33	The methoxylation of N-formylpyrrolidine in a microfluidic electrolysis cell for routine synthesis. Electrochimica Acta, 2012, 69, 197-202.	5.2	44
34	An extended channel length microflow electrolysis cell for convenient laboratory synthesis. Electrochemistry Communications, 2016, 73, 63-66.	4.7	44
35	Microelectrode procedures for the determination of silicate and phosphate in waters - fundamental studies. Electroanalysis, 1997, 9, 1311-1317.	2.9	39
36	Electrochemical Deprotection of <i>para</i>-Methoxybenzyl Ethers in a Flow Electrolysis Cell. Organic Letters, 2017, 19, 2050-2053.	4.6	39

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37	Approaches to the Integration of Electrochemistry and Biotechnology: I. Enzymeâ€Modified Reticulated Vitreous Carbon Electrodes. Journal of the Electrochemical Society, 1997, 144, 3705-3710.	2.9	38
38	A Potential Step Study of the Influence of Metal Adatoms and Solution pH on the Rate of Formic Acid Oxidation at Pt Electrodes. Journal of the Electrochemical Society, 1983, 130, 2187-2192.	2.9	37
39	Electrode coatings from sprayed titanium dioxide nanoparticles â€“ behaviour in NaOH solutions. Electrochemistry Communications, 2001, 3, 390-394.	4.7	35
40	Speciation and electrochemistry of brines containing acetate ion and carbon dioxide. Journal of Electroanalytical Chemistry, 2002, 538-539, 285-297.	3.8	35
41	Cubane Electrochemistry: Direct Conversion of Cubane Carboxylic Acids to Alkoxy Cubanes Using the Hoferâ€“Moest Reaction under Flow Conditions. Chemistry - A European Journal, 2020, 26, 374-378.	3.3	34
42	The electrosynthesis of diaryliodonium salts. Tetrahedron Letters, 2000, 41, 8995-8998.	1.4	30
43	Amperometric sensor for carbon dioxide: design, characteristics, and performance. Analytical Chemistry, 1989, 61, 577-580.	6.5	29
44	Further studies of the anodic dissolution in sodium chloride electrolyte of aluminium alloys containing tin and gallium. Journal of Power Sources, 2009, 193, 895-898.	7.8	29
45	The Influence of Deposition Conditions and Dopant Ions on the Structure, Activity, and Stability of Lead Dioxide Anode Coatings. Journal of the Electrochemical Society, 2005, 152, D97.	2.9	23
46	Electrolytic removal of cupric ions from dilute liquors using reticulated vitreous carbon cathodes. Journal of Chemical Technology and Biotechnology, 1992, 55, 147-155.	3.2	23
47	A microelectrode study of the influence of electrolyte on the reduction of quinones in aprotic solvents. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3445-3450.	1.7	21
48	A design of flow electrolysis cell for â€˜Homeâ€™ fabrication. Reaction Chemistry and Engineering, 2020, 5, 712-718.	3.7	21
49	Studies of the anodic dissolution of aluminium alloys containing tin and gallium using imaging with a high-speed camera. Electrochimica Acta, 2009, 54, 6668-6673.	5.2	19
50	The reduction of bromate at molybdenum oxide film cathodes. Electroanalysis, 1996, 8, 1105-1111.	2.9	16
51	Influence of electrolyte concentration on coupled chemical reactions Part 1Reduction of CoII(salen)in aprotic solvents. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 3669-3675.	1.7	16
52	Electrosyntheses from Aromatic Aldehydes in a Flow Cell. Part I. The Reduction of Benzaldehyde.. Acta Chemica Scandinavica, 1998, 52, 23-31.	0.7	15
53	Ytterbium(II) as a mediator in organic electrosynthesisâ€"possibilities and limitations. Electrochimica Acta, 2003, 48, 1065-1071.	5.2	14
54	The Electrochemistry and Electrochemical Technology of Nitrate. Modern Aspects of Electrochemistry, 2009, , 1-61.	0.2	14

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55	The Synthesis of Diaryliodonium Salts by the Anodic Oxidation of Aryl Iodide/Arene Mixtures. Journal of the Electrochemical Society, 2001, 148, D37.	2.9	13
56	Approaches to the Integration of Electrochemistry and Biotechnology II. The Horseradish Peroxidase Catalyzed Oxidation of 2,4,6â€Trimethylphenol by Electrogenerated Hydrogen Peroxide. Journal of the Electrochemical Society, 1999, 146, 1088-1092.	2.9	11
57	The reduction of carbonyl compounds at carbon electrodes in acidic water/methanol mixtures. Electrochemistry Communications, 2000, 2, 141-144.	4.7	10
58	Electrolysis cells for laboratory organic synthesis. Current Opinion in Electrochemistry, 2020, 24, 1-5.	4.8	10
59	The Partial Anodic Oxidation of Aliphatic Hydrocarbons. Chemie-Ingenieur-Technik, 1972, 44, 187-191.	0.8	8
60	The influence of non-ionic surfactants on electrosynthesis in extended channel, narrow gap electrolysis cells. Electrochemistry Communications, 2019, 100, 6-10.	4.7	7
61	Electrosyntheses from Aromatic Aldehydes in a Flow Cell. Part II. The Cross-Coupling of Benzaldehydes to Unsymmetrical Diols.. Acta Chemica Scandinavica, 1998, 52, 32-36.	0.7	7
62	The catalysis of carbon dioxide hydration by acetate ion. Journal of Electroanalytical Chemistry, 2008, 619-620, 83-86.	3.8	6
63	The Rates of Oxidation of â€‰HCOOHâ€‰ and â€‰DCOOHâ€‰ at Lead Adatomâ€Covered Pt Anodes. Journal of the Electrochemical Society, 1984, 131, 957-958.	2.9	2
64	Bioelectrosynthesisâ€“Electrolysis and Electrodialysis. , 0, , 327-358.		0