# Donal Leech

List of Publications by Year
in descending order



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|---|---|---|---|
| 157 papers | 7,453 citations | 47006 47 h-index | 64796 79 g-index |
| 163 all docs | 163 docs citations | 163 times ranked | 6818 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Electrochemical analysis of the interactions of laccase mediators with lignin model compounds. Biochimica Et Biophysica Acta - General Subjects, 1998, 1379, 381-390. | 2.4 | 402 |
| 2 | Enzymatic fuel cells: Recent progress. Electrochimica Acta, 2012, 84, 223-234. | 5.2 | 400 |
| 3 | The ins and outs of microorganismâ€"electrode electron transfer reactions. Nature Reviews Chemistry, 2017, 1, . | 30.2 | 385 |
| 4 | Bioelectrochemical Haberâ€"Bosch Process: An Ammoniaâ€Producing H<sub>2</sub>/N<sub>2</sub> Fuel Cell. Angewandte Chemie - International Edition, 2017, 56, 2680-2683. | 13.8 | 218 |
| 5 | A laccaseâ€"glucose oxidase biofuel cell prototype operating in a physiological buffer. Electrochimica Acta, 2006, 51, 5187-5192. | 5.2 | 195 |
| 6 | Nitrogenase bioelectrocatalysis: heterogeneous ammonia and hydrogen production by MoFe protein. Energy and Environmental Science, 2016, 9, 2550-2554. | 30.8 | 187 |
| 7 | Application of Colloidal Gold in Protein Immobilization, Electron Transfer, and Biosensing. Analytical Letters, 2003, 36, 1-19. | 1.8 | 178 |
| 8 | Geobacter sulfurreducens biofilms developed under different growth conditions on glassy carbon electrodes: insights using cyclic voltammetry. Chemical Communications, 2010, 46, 4758. | 4.1 | 160 |
| 9 | Targetting redox polymers as mediators for laccase oxygen reduction in a membrane-less biofuel cell. Electrochemistry Communications, 2004, 6, 237-241. | 4.7 | 150 |
| 10 | Amperometric determination of epinephrine with an osmium complex and Nafion double-layer membrane modified electrode. Analytica Chimica Acta, 1999, 378, 151-157. | 5.4 | 116 |
| 11 | Characterisation of an antibody coated microcantilever as a potential immuno-based biosensor. Biosensors and Bioelectronics, 2002, 17, 201-207. | 10.1 | 116 |
| 12 | Three-dimensional microchanelled electrodes in flow-through configuration for bioanode formation and current generation. Energy and Environmental Science, 2011, 4, 4201. | 30.8 | 112 |
| 13 | Characterization of different FAD-dependent glucose dehydrogenases for possible use in glucose-based biosensors and biofuel cells. Analytical and Bioanalytical Chemistry, 2012, 402, 2069-2077. | 3.7 | 107 |
| 14 | Mediated electron transfer in glucose oxidising enzyme electrodes for application to biofuel cells: recent progress and perspectives. Physical Chemistry Chemical Physics, 2013, 15, 4859. | 2.8 | 107 |
| 15 | Nanoporous Gold-Based Biofuel Cells on Contact Lenses. ACS Applied Materials & Interfaces, 2018, 10, 7107-7116. | 8.0 | 102 |
| 16 | Microbial analysis of anodic biofilm in a microbial fuel cell using slaughterhouse wastewater. Bioelectrochemistry, 2012, 87, 164-171. | 4.6 | 99 |
| 17 | Characterization of Nanoporous Gold Electrodes for Bioelectrochemical Applications. Langmuir, 2012, 28, 2251-2261. | 3.5 | 96 |
| 18 | Increasing Redox Potential, Redox Mediator Activity, and Stability in a Fungal Laccase by Computer-Guided Mutagenesis and Directed Evolution. ACS Catalysis, 2019, 9, 4561-4572. | 11.2 | 96 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Redox Polymer and Probe DNA Tethered to Gold Electrodes for Enzyme-Amplified Amperometric Detection of DNA Hybridization. Analytical Chemistry, 2006, 78, 2710-2716. | 6.5 | 95 |
| 20 | Effect of electrolytes on the electrochemical behaviour of 11-(ferrocenylcarbonyloxy)undecanethiol SAMs on gold disk electrodes. Physical Chemistry Chemical Physics, 1999, 1, 1549-1554. | 2.8 | 89 |
| 21 | Extracellular Electron Transfer by the Gram-Positive Bacterium Enterococcus faecalis. Biochemistry, 2018, 57, 4597-4603. | 2.5 | 89 |
| 22 | Electron-Transfer Studies with a New Flavin Adenine Dinucleotide Dependent Glucose Dehydrogenase and Osmium Polymers of Different Redox Potentials. Analytical Chemistry, 2012, 84, 334-341. | 6.5 | 86 |
| 23 | Reagentless Mediated Laccase Electrode for the Detection of Enzyme Modulators. Analytical Chemistry, 1997, 69, 882-886. | 6.5 | 85 |
| 24 | Photo-electrochemical communication between cyanobacteria (Leptolyngbia sp.) and osmium redox polymer modified electrodes. Physical Chemistry Chemical Physics, 2014, 16, 24676-24680. | 2.8 | 79 |
| 25 | Designing Stable Redox-Active Surfaces: Chemical Attachment of an Osmium Complex to Glassy Carbon Electrodes Prefunctionalized by Electrochemical Reduction of an In Situ-Generated Aryldiazonium Cation. Langmuir, 2008, 24, 6351-6358. | 3.5 | 77 |
| 26 | A symmetric supercapacitor/biofuel cell hybrid device based on enzyme-modified nanoporous gold: An autonomous pulse generator. Biosensors and Bioelectronics, 2017, 90, 96-102. | 10.1 | 75 |
| 27 | Electrochemical study of a metallothionein modified gold disk electrode and its action on Hg2+ cations. Journal of Electroanalytical Chemistry, 2000, 484, 150-156. | 3.8 | 74 |
| 28 | Improved stability of redox enzyme layers on glassy carbon electrodes via covalent grafting. Electrochemistry Communications, 2008, 10, 835-838. | 4.7 | 65 |
| 29 | Affinity biosensors. Chemical Society Reviews, 1994, 23, 205. | 38.1 | 64 |
| 30 | Reagentless Tyrosinase Enzyme Electrodes:â€‰ Effects of Enzyme Loading, Electrolyte pH, Ionic Strength, and Temperature. Analytical Chemistry, 1997, 69, 4108-4112. | 6.5 | 64 |
| 31 | Performance of a Glucose/O<sub>2</sub> Enzymatic Biofuel Cell Containing a Mediated Melanocarpus albomyces Laccase Cathode in a Physiological Buffer. Fuel Cells, 2009, 9, 79-84. | 2.4 | 63 |
| 32 | Photoelectrochemical Wiring of Paulschulzia pseudovolvox (Algae) to Osmium Polymer Modified Electrodes for Harnessing Solar Energy. Advanced Energy Materials, 2015, 5, 1501100. | 19.5 | 63 |
| 33 | Charge Transport through Geobacter sulfurreducens Biofilms Grown on Graphite Rods. Langmuir, 2012, 28, 7904-7913. | 3.5 | 62 |
| 34 | Self-Powered Wireless Carbohydrate/Oxygen Sensitive Biodevice Based on Radio Signal Transmission. PLoS ONE, 2014, 9, e109104. | 2.5 | 62 |
| 35 | Wiring of pyranose dehydrogenase with osmium polymers of different redox potentials. Bioelectrochemistry, 2010, 80, 38-42. | 4.6 | 60 |
| 36 | Photocurrent Generation from Thylakoid Membranes on Osmiumâ€Redoxâ€Polymerâ€Modified Electrodes. ChemSusChem, 2015, 8, 990-993. | 6.8 | 60 |

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| 37 | Fully Enzymatic Membraneless Glucose|Oxygen Fuel Cell That Provides 0.275 mA cm<sup>â€“2</sup> in 5 mM Glucose, Operates in Human Physiological Solutions, and Powers Transmission of Sensing Data. Analytical Chemistry, 2016, 88, 2156-2163. | 6.5 | 59 |
| 38 | A comparison of redox polymer and enzyme co-immobilization on carbon electrodes to provide membrane-less glucose/O2 enzymatic fuel cells with improved power output and stability. Biosensors and Bioelectronics, 2011, 30, 294-299. | 10.1 | 56 |
| 39 | Charge transport in films of Geobacter sulfurreducens on graphite electrodes as a function of film thickness. Physical Chemistry Chemical Physics, 2014, 16, 9039-9046. | 2.8 | 56 |
| 40 | Oxidative detection of nitrite at an electrocatalytic [Ru(bipy)2poly-(4-vinylpyridine)10Cl]Cl electrochemical sensor applied for the flow injection determination of nitrate using a Cu/Cd reductor column. Analytica Chimica Acta, 1996, 319, 111-120. | 5.4 | 55 |
| 41 | Optimisation of a reagentless laccase electrode for the detection of the inhibitor azideâ€. Analyst, The, 1998, 123, 1971-1974. | 3.5 | 53 |
| 42 | Amperometric Detection of Catecholamine Neurotransmitters Using Electrocatalytic Substrate Recycling at a Laccase Electrode. Electroanalysis, 2005, 17, 113-119. | 2.9 | 53 |
| 43 | Supercapacitive Photoâ€Bioanodes and Biosolar Cells: A Novel Approach for Solar Energy Harnessing. Advanced Energy Materials, 2017, 7, 1602285. | 19.5 | 53 |
| 44 | Paper-based microfluidic biofuel cell operating under glucose concentrations within physiological range. Biosensors and Bioelectronics, 2017, 90, 475-480. | 10.1 | 53 |
| 45 | Wiring of Photosystemâ€…I and Hydrogenase on an Electrode for Photoelectrochemical H 2 Production by using Redox Polymers for Relatively Positive Onset Potential. ChemElectroChem, 2017, 4, 90-95. | 3.4 | 53 |
| 46 | Hostâˆ'Guest Interaction at a Self-Assembled Monolayer/Solution Interface:Â An Electrochemical Analysis of the Inclusion of 11-(Ferrocenylcarbonyloxy)undecanethiol by Cyclodextrins. Langmuir, 1998, 14, 300-306. | 3.5 | 52 |
| 47 | Synthesis by Radical Cyclization and Cytotoxicity of Highly Potent Bioreductive Alicyclic Ring Fused [1,2-a]Benzimidazolequinones. Chemistry - A European Journal, 2007, 13, 3218-3226. | 3.3 | 52 |
| 48 | Biocatalytic anode for glucose oxidation utilizing carbon nanotubes for direct electron transfer with glucose oxidase. Electrochemistry Communications, 2009, 11, 2004-2007. | 4.7 | 46 |
| 49 | Optimization of a Membraneless Glucose/Oxygen Enzymatic Fuel Cell Based on a Bioanode with High Coulombic Efficiency and Current Density. ChemPhysChem, 2013, 14, 2260-2269. | 2.1 | 46 |
| 50 | Electrochemical communication between heterotrophically grown Rhodobacter capsulatus with electrodes mediated by an osmium redox polymer. Bioelectrochemistry, 2013, 93, 30-36. | 4.6 | 46 |
| 51 | Evaluation of performance and stability of biocatalytic redox films constructed with different copper oxygenases and osmium-based redox polymers. Bioelectrochemistry, 2009, 76, 162-168. | 4.6 | 45 |
| 52 | Electrochemical communication between microbial cells and electrodes via osmium redox systems. Biochemical Society Transactions, 2012, 40, 1330-1335. | 3.4 | 44 |
| 53 | High-performance liquid chromatographic determination of phenols using a tyrosinase-based amperometric biosensor detection system. Analyst, The, 1996, 121, 1885. | 3.5 | 42 |
| 54 | A comparison of glucose oxidase and aldose dehydrogenase as mediated anodes in printed glucose/oxygen enzymatic fuel cells using ABTS/laccase cathodes. Bioelectrochemistry, 2012, 87, 172-177. | 4.6 | 42 |

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| 55 | Electrochemical Communication Between Electrodes and Rhodobacter capsulatus Grown in Different Metabolic Modes. Electroanalysis, 2015, 27, 118-127. | 2.9 | 42 |
| 56 | Electroreduction of O2 at a mediated Melanocarpus albomyces laccase cathode in a physiological buffer. Electrochemistry Communications, 2008, 10, 970-972. | 4.7 | 41 |
| 57 | Improved microbial electrocatalysis with osmium polymer modified electrodes. Chemical Communications, 2012, 48, 10183. | 4.1 | 41 |
| 58 | Oxidation of lignin model compounds by organic and transition metal-based electron transfer mediators. Chemical Communications, 2002, , 1182-1183. | 4.1 | 39 |
| 59 | An oxygen-independent and membrane-less glucose biobattery/supercapacitor hybrid device. Biosensors and Bioelectronics, 2017, 98, 421-427. | 10.1 | 39 |
| 60 | Evaluation of Photocurrent Generation from Different Photosynthetic Organisms. ChemElectroChem, 2017, 4, 412-417. | 3.4 | 38 |
| 61 | One-step fabrication of glucose sensors based on entrapment of glucose oxidase within poly(ester-sulfonic acid) coatings. Analytica Chimica Acta, 1991, 245, 139-143. | 5.4 | 37 |
| 62 | Electron transfer from Proteus vulgaris to a covalently assembled, single walled carbon nanotube electrode functionalised with osmium bipyridine complex: Application to a whole cell biosensor. Biosensors and Bioelectronics, 2011, 26, 2383-2389. | 10.1 | 37 |
| 63 | Mediated reagentless enzyme inhibition electrodes. Biosensors and Bioelectronics, 1998, 13, 417-425. | 10.1 | 36 |
| 64 | Crosslinked redox polymer enzyme electrodes containing carbon nanotubes for high and stable glucose oxidation current. Physical Chemistry Chemical Physics, 2012, 14, 14667. | 2.8 | 36 |
| 65 | Catalytic response of microbial biofilms grown under fixed anode potentials depends on electrochemical cell configuration. Chemical Engineering Journal, 2013, 230, 532-536. | 12.7 | 36 |
| 66 | Coupling osmium complexes to epoxy-functionalised polymers to provide mediated enzyme electrodes for glucose oxidation. Biosensors and Bioelectronics, 2013, 43, 30-37. | 10.1 | 36 |
| 67 | The In Vivo Potential-Regulated Protective Protein of Nitrogenase in Azotobacter vinelandii Supports Aerobic Bioelectrochemical Dinitrogen Reduction In Vitro. Journal of the American Chemical Society, 2017, 139, 9044-9052. | 13.7 | 36 |
| 68 | Electroactive biofilms on surface functionalized anodes: The anode respiring behavior of a novel electroactive bacterium, Desulfuromonas acetexigens. Water Research, 2020, 185, 116284. | 11.3 | 36 |
| 69 | Improved synthesis of 4,4â€²-diamino-2,2â€²-bipyridine from 4,4â€²-dinitro-2,2â€²-bipyridine-N,Nâ€²-dioxide. Tetrahedron Letters, 2004, 45, 121-123. | 1.4 | 33 |
| 70 | Electrocatalytic detection of streptomycin and related antibiotics at ruthenium dioxide modified graphite-epoxy composite electrodes. Analyst, The, 1990, 115, 1447. | 3.5 | 32 |
| 71 | Generation of electricity in microbial fuel cells at sub-ambient temperatures. Journal of Power Sources, 2011, 196, 2676-2681. | 7.8 | 32 |
| 72 | A mediated glucose/oxygen enzymatic fuel cell based on printed carbon inks containing aldose dehydrogenase and laccase as anode and cathode. Enzyme and Microbial Technology, 2012, 50, 181-187. | 3.2 | 32 |

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| 73 | Mediated electron transfer of cellobiose dehydrogenase and glucose oxidase at osmium polymer-modified nanoporous gold electrodes. Analytical and Bioanalytical Chemistry, 2013, 405, 3823-3830. | 3.7 | 32 |
| 74 | Glucose biosensor based on open-source wireless microfluidic potentiostat. Sensors and Actuators B: Chemical, 2019, 290, 616-624. | 7.8 | 32 |
| 75 | A glucose/oxygen enzymatic fuel cell based on redox polymer and enzyme immobilisation at highly-ordered macroporous gold electrodes. Analyst, The, 2012, 137, 113-117. | 3.5 | 31 |
| 76 | Electrocatalysis and flow detection of alcohols at ruthenium dioxide-modified electrodes. Electroanalysis, 1991, 3, 37-42. | 2.9 | 29 |
| 77 | A membrane-less enzymatic fuel cell with layer-by-layer assembly of redox polymer and enzyme over graphite electrodes. Chemical Communications, 2011, 47, 11861. | 4.1 | 29 |
| 78 | Electricity generation in single-chamber microbial fuel cells using a carbon source sampled from anaerobic reactors utilizing grass silage. Bioresource Technology, 2011, 102, 404-410. | 9.6 | 29 |
| 79 | Recombinant pyranose dehydrogenaseâ€"A versatile enzyme possessing both mediated and direct electron transfer. Electrochemistry Communications, 2012, 24, 120-122. | 4.7 | 29 |
| 80 | Membraneless Glucose/Oxygen Enzymatic Fuel Cells Using Redox Hydrogel Films Containing Carbon Nanotubes. ChemPhysChem, 2013, 14, 2302-2307. | 2.1 | 29 |
| 81 | Electrochemical wiring of the Gram-positive bacterium Enterococcus faecalis with osmium redox polymer modified electrodes. Electrochemistry Communications, 2017, 75, 56-59. | 4.7 | 29 |
| 82 | Adsorption and Desorption of Electroactive Self-Assembled Thiolate Monolayers on Gold. Langmuir, 1999, 15, 8170-8177. | 3.5 | 28 |
| 83 | A stability comparison of redox-active layers produced by chemical coupling of an osmium redox complex to pre-functionalized gold and carbon electrodes. Electrochimica Acta, 2009, 54, 1986-1991. | 5.2 | 28 |
| 84 | Electrochemistry of poly(vinylferrocene) formed by direct electrochemical reduction at a glassy carbon electrode. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1371-1375. | 1.7 | 27 |
| 85 | An enzyme-amplified amperometric DNA hybridisation assay using DNA immobilised in a carboxymethylated dextran film anchored to a graphite surface. Biosensors and Bioelectronics, 2010, 25, 1037-1042. | 10.1 | 27 |
| 86 | Does bioelectrochemical cell configuration and anode potential affect biofilm response?. Biochemical Society Transactions, 2012, 40, 1308-1314. | 3.4 | 27 |
| 87 | Bioelectrochemical Haberâ€"Bosch Process: An Ammoniaâ€Producing H<sub>2</sub>/N<sub>2</sub> Fuel Cell. Angewandte Chemie, 2017, 129, 2724-2727. | 2.0 | 27 |
| 88 | Sunlight photocurrent generation from thylakoid membranes on gold nanoparticle modified screen-printed electrodes. Journal of Electroanalytical Chemistry, 2018, 816, 259-264. | 3.8 | 27 |
| 89 | Effect of composition of polymer backbone on spectroscopic and electrochemical properties of ruthenium(II) bis(2,2â€²-bipyridyl)containing 4-vinylpyridine/styrene copolymers. Journal of Materials Chemistry, 1991, 1, 629-635. | 6.7 | 26 |
| 90 | Determination of nitrite based on mediated oxidation at a carbon paste electrode modified with a ruthenium polymer. Talanta, 1992, 39, 443-447. | 5.5 | 26 |

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| 91 | Biocatalytic fuel cells: A comparison of surface pre-treatments for anchoring biocatalytic redox films on electrode surfaces. Journal of Electroanalytical Chemistry, 2009, 626, 111-115. | 3.8 | 26 |
| 92 | Effect of Multiâ€Walled Carbon Nanotubes on Glucose Oxidation by Glucose Oxidase or a Flavinâ€Dependent Glucose Dehydrogenase in Redoxâ€Polymerâ€Mediated Enzymatic Fuel Cell Anodes. ChemElectroChem, 2014, 1, 1988-1993. | 3.4 | 25 |
| 93 | Electrically â€˜wiredâ€™ tyrosinase enzyme inhibition electrode for the detection of respiratory poisons. Electroanalysis, 1995, 7, 952-957. | 2.9 | 24 |
| 94 | [Os(bpy)2(PVI)10Cl]Cl polymer-modified carbon fiber electrodes for the electrocatalytic oxidation of NADH. Analytica Chimica Acta, 1997, 345, 51-58. | 5.4 | 24 |
| 95 | Electrocatalytical Oxidation and Determination of Dopamine at Redox Polymer/Nafion Modified Electrodes. Analytical Letters, 1999, 32, 2951-2964. | 1.8 | 23 |
| 96 | Mediated glucose enzyme electrodes by cross-linking films of osmium redox complexes and glucose oxidase on electrodes. Analytical and Bioanalytical Chemistry, 2013, 405, 3807-3812. | 3.7 | 23 |
| 97 | Tethering Osmium Complexes within Enzyme Films on Electrodes to Provide a Fully Enzymatic Membrane-Less Glucose/Oxygen Fuel Cell. Journal of the Electrochemical Society, 2013, 160, G3165-G3170. | 2.9 | 23 |
| 98 | Highly sensitive, stable and selective hydrogen peroxide amperometric biosensors based on peroxidases from different sources wired by Os-polymer: A comparative study. Solid State Ionics, 2018, 314, 178-186. | 2.7 | 23 |
| 99 | Electrochemical glucose biosensor based on an osmium redox polymer and glucose oxidase grafted to carbon nanotubes: A design-of-experiments optimisation of current density and stability. Electrochimica Acta, 2021, 371, 137845. | 5.2 | 23 |
| 100 | Glucose oxidation by osmium redox polymer mediated enzyme electrodes operating at low potential and in oxygen, for application to enzymatic fuel cells. Electrochimica Acta, 2015, 182, 320-326. | 5.2 | 22 |
| 101 | Diazonium salt derivatives of osmium bipyridine complexes: Electrochemical grafting and characterisation of modified surfaces. Electrochimica Acta, 2011, 56, 2213-2220. | 5.2 | 21 |
| 102 | The influence of surface composition of carbon nanotubes on the photobioelectrochemical activity of thylakoid bioanodes mediated by osmium-complex modified redox polymer. Electrochimica Acta, 2019, 310, 20-25. | 5.2 | 21 |
| 103 | Improved operational stability of mediated glucose enzyme electrodes for operation in human physiological solutions. Bioelectrochemistry, 2020, 133, 107460. | 4.6 | 21 |
| 104 | Comparison of Glucose Oxidation by Crosslinked Redox Polymer Enzyme Electrodes Containing Carbon Nanotubes and a Range of Glucose Oxidising Enzymes. Electroanalysis, 2013, 25, 94-100. | 2.9 | 20 |
| 105 | Engineering of pyranose dehydrogenase for application to enzymatic anodes in biofuel cells. Physical Chemistry Chemical Physics, 2015, 17, 9074-9081. | 2.8 | 20 |
| 106 | Development of an Osmium Redox Polymer Mediated Bioanode and Examination of its Performance in Gluconobacter oxydans Based Microbial Fuel Cell. Electroanalysis, 2017, 29, 1651-1657. | 2.9 | 19 |
| 107 | Effect of individual plasma components on the performance of a glucose enzyme electrode based on redox polymer mediation of a flavin adenine dinucleotide-dependent glucose dehydrogenase. Electrochimica Acta, 2019, 302, 270-276. | 5.2 | 18 |
| 108 | [Os(bpy)2(PVP)10Cl]Cl polymer and Nafion dual-film modified graphite electrode for the amperometric determination of trace amounts of norepinephrine. Analyst, The, 1998, 123, 2895-2898. | 3.5 | 17 |

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| 109 | Mediated Enzyme Electrodes for Biological Fuel Cell and Biosensor Applications. ECS Transactions, 2008, 13, 77-87. | 0.5 | 17 |
| 110 | Further Insights into the Catalytical Properties of Deglycosylated Pyranose Dehydrogenase from Agaricus meleagris Recombinantly Expressed in Pichia pastoris. Analytical Chemistry, 2013, 85, 9852-9858. | 6.5 | 16 |
| 111 | A glucose anode for enzymatic fuel cells optimized for current production under physiological conditions using a design of experiment approach. Bioelectrochemistry, 2015, 106, 41-46. | 4.6 | 16 |
| 112 | Development of a Bioanode for Microbial Fuel Cells Based on the Combination of a MWCNTâ€Auâ€Pt Hybrid Nanomaterial, an Osmium Redox Polymer and Gluconobacter oxydans DSM 2343 Cells. ChemistrySelect, 2017, 2, 12034-12040. | 1.5 | 16 |
| 113 | Amperometric Flow Injection Analysis of Glucose and Galactose Based on Engineered Pyranose 2â€Oxidases and Osmium Polymers for Biosensor Applications. Electroanalysis, 2018, 30, 1496-1504. | 2.9 | 16 |
| 114 | Micropatterned Carbon-on-Quartz Electrode Chips for Photocurrent Generation from Thylakoid Membranes. ACS Applied Energy Materials, 2018, 1, 3313-3322. | 5.1 | 16 |
| 115 | Use of Polymer Coatings to Enhance the Response of Redoxâ€Polymerâ€Mediated Electrodes. ChemElectroChem, 2019, 6, 1344-1349. | 3.4 | 16 |
| 116 | Crayfish walking leg neuronal biosensor for the detection of pyrazinamide and selected local anesthetics. Analytica Chimica Acta, 1993, 274, 25-35. | 5.4 | 15 |
| 117 | Enzymeâ€Amplified Amperometric Detection of DNA Using Redox Mediating Films on Gold Microelectrodes. Electroanalysis, 2009, 21, 342-350. | 2.9 | 15 |
| 118 | Self-Powered Detection of Glucose by Enzymatic Glucose/Oxygen Fuel Cells on Printed Circuit Boards. ACS Applied Materials & Interfaces, 2021, 13, 26704-26711. | 8.0 | 15 |
| 119 | Effect of deglycosylation on the mediated electrocatalytic activity of recombinantly expressed Agaricus meleagris pyranose dehydrogenase wired by osmium redox polymer. Electrochimica Acta, 2014, 126, 61-67. | 5.2 | 13 |
| 120 | Inexpensive Miniature Programmable Magnetic Stirrer from Reconfigured Computer Parts. Journal of Chemical Education, 2017, 94, 816-818. | 2.3 | 13 |
| 121 | Redox-Polymers Enable Uninterrupted Day/Night Photo-Driven Electricity Generation in Biophotovoltaic Devices. Journal of the Electrochemical Society, 2017, 164, H3037-H3040. | 2.9 | 13 |
| 122 | Multiplexed Electrochemical Cancer Diagnostics With Automated Microfluidics. Electroanalysis, 2019, 31, 208-211. | 2.9 | 13 |
| 123 | Coupling of Amine-Containing Osmium Complexes and Glucose Oxidase with Carboxylic Acid Polymer and Carbon Nanotube Matrix to Provide Enzyme Electrodes for Glucose Oxidation. Journal of the Electrochemical Society, 2014, 161, H3005-H3010. | 2.9 | 12 |
| 124 | Comparative Proteomics Implicates a Role for Multiple Secretion Systems in Electrode-Respiring Geobacter sulfurreducens Biofilms. Journal of Proteome Research, 2016, 15, 4135-4145. | 3.7 | 12 |
| 125 | Cost-Effective Wireless Microcontroller for Internet Connectivity of Open-Source Chemical Devices. Journal of Chemical Education, 2018, 95, 1221-1225. | 2.3 | 12 |
| 126 | Arylamine functionalization of carbon anodes for improved microbial electrocatalysis. RSC Advances, 2013, 3, 18759. | 3.6 | 11 |

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| 127 | A BRIEF REVIEW ON RECENT ADVANCES IN AIR-CATHODE MICROBIAL FUEL CELLS. Environmental Engineering and Management Journal, 2018, 17, 1531-1544. | 0.6 | 11 |
| 128 | An Oxygen Insensitive Amperometric Glucose Biosensor Based on An Engineered Cellobiose Dehydrogenase: Direct versus Mediated Electron Transfer Responses. ChemElectroChem, 2022, 9, . | 3.4 | 11 |
| 129 | Composite Material Based on Macroporous Polyaniline and Osmium Redox Complex for Biosensor Development. Electroanalysis, 2014, 26, 1623-1630. | 2.9 | 10 |
| 130 | Electron Transfer between the Gramâ€Positive Enterococcus faecalis Bacterium and Electrode Surface through Osmium Redox Polymers. ChemElectroChem, 2019, 6, 110-113. | 3.4 | 10 |
| 131 | Aqueous-Eutectic-in-Salt Electrolytes for High-Energy-Density Supercapacitors with an Operational Temperature Window of 100 Â°C, from â˜35 to +65 Â°C. ACS Applied Materials & Interfaces, 2020, 12, 29181-29193. | 8.0 | 10 |
| 132 | Glucose oxidation by enzyme electrodes using genipin to crosslink chitosan, glucose oxidase and amine-containing osmium redox complexes. Electrochemistry Communications, 2020, 113, 106703. | 4.7 | 10 |
| 133 | Oxygen Electroreduction Catalyzed by Bilirubin Oxidase Does Not Release Hydrogen Peroxide. Electrocatalysis, 2011, 2, 268-272. | 3.0 | 9 |
| 134 | Antimicrobial enzymatic biofuel cells. Chemical Communications, 2020, 56, 15589-15592. | 4.1 | 9 |
| 135 | An oxygen-reducing biocathode with â€œoxygen tanksâ€. Chemical Communications, 2020, 56, 9767-9770. | 4.1 | 9 |
| 136 | Immobilisation of Alkylamine-Functionalised Osmium Redox Complex on Glassy Carbon using Electrochemical Oxidation. Electrochimica Acta, 2014, 140, 209-216. | 5.2 | 8 |
| 137 | Design of Experiments Approach to Provide Enhanced Glucoseâ€oxidising Enzyme Electrode for Membraneâ€less Enzymatic Fuel Cells Operating in Human Physiological Fluids. Electroanalysis, 2018, 30, 1438-1445. | 2.9 | 8 |
| 138 | Substrate Preference Pattern of Agaricus meleagris Pyranose Dehydrogenase Evaluated through Bioelectrochemical Flow Injection Amperometry. ChemElectroChem, 2019, 6, 801-809. | 3.4 | 7 |
| 139 | Use of a Thermophile Desiccation-Tolerant Cyanobacterial Culture and Os Redox Polymer for the Preparation of Photocurrent Producing Anodes. Frontiers in Bioengineering and Biotechnology, 2020, 8, 900. | 4.1 | 7 |
| 140 | Analysis of inorganic solids by laser ablation inductively coupled plasma spectrometry. Analytical Proceedings, 1992, 29, 23. | 0.4 | 6 |
| 141 | Analysis of Agaricus meleagris pyranose dehydrogenase N-glycosylation sites and performance of partially non-glycosylated enzymes. Enzyme and Microbial Technology, 2017, 99, 57-66. | 3.2 | 6 |
| 142 | Neuronal biosensors: A progress report. Electroanalysis, 1993, 5, 103-111. | 2.9 | 5 |
| 143 | Biomagnetic neurosensors. Analytical Chemistry, 1993, 65, 3262-3266. | 6.5 | 5 |
| 144 | Neuronal-Based Assay and Detection of Local Anesthetics Using Electrically Stimulated Crayfish Walking Leg Nerves. Analytical Letters, 1993, 26, 1259-1279. | 1.8 | 5 |

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| 145 | Substantial Influence of Temperature on Anchoring of Goldâ€Nanoparticle Monolayer for Performance of DNA Biosensors. Electroanalysis, 2010, 22, 2323-2329. | 2.9 | 5 |
| 146 | Preparation and reactivity of carboxylic acid-terminated boron-doped diamond electrodes. Electrochimica Acta, 2010, 55, 959-964. | 5.2 | 5 |
| 147 | A Voltammetric Assay of Antioxidants and Inhibitors of Soybean Lipoxygenase. Electroanalysis, 2003, 15, 573-578. | 2.9 | 4 |
| 148 | Acetic anhydride mediated condensation of aromatic o-diacid dichlorides with benzimidazoles to provide electro-reducible p-dione adducts. Tetrahedron Letters, 2012, 53, 3788-3791. | 1.4 | 4 |
| 149 | Analytical Applications of Polymer-Modified Electrodes. , 1996, , 269-296. | | 4 |
| 150 | Electrochemical determination of electroinactive guests of ?-cyclodextrin at a self-assembled monolayer interface. Science in China Series B: Chemistry, 2002, 45, 46. | 0.8 | 3 |
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