Pier-Luc Tremblay

List of Publications by Year in descending order

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60 papers	3,116 citations	172443 29 h-index	161844 54 g-index

63 all docs	63 docs citations	63 times ranked	2661 citing authors

#	Article	IF	Citations
1	The Rnf Complex of Clostridium ljungdahlii Is a Proton-Translocating Ferredoxin:NAD ⁺ Oxidoreductase Essential for Autotrophic Growth. MBio, 2013, 4, e00406-12.	4.1	222
2	Aromatic Amino Acids Required for Pili Conductivity and Long-Range Extracellular Electron Transport in Geobacter sulfurreducens. MBio, 2013, 4, .	4.1	179
3	Structural Basis for Metallic-Like Conductivity in Microbial Nanowires. MBio, 2015, 6, e00084.	4.1	171
4	Extracellular Electron Uptake: Among Autotrophs and Mediated by Surfaces. Trends in Biotechnology, 2017, 35, 360-371.	9.3	163
5	Electrifying microbes for the production of chemicals. Frontiers in Microbiology, 2015, 6, 201.	3.5	157
6	Aromatic Amino Acids Required for Pili Conductivity and Long-Range Extracellular Electron Transport in Geobacter sulfurreducens. MBio, 2013, 4, e00105-13.	4.1	148
7	Performance of different Sporomusa species for the microbial electrosynthesis of acetate from carbon dioxide. Bioresource Technology, 2017, 233, 184-190.	9.6	125
8	Electrosynthesis of acetate from CO₂by a highly structured biofilm assembled with reduced graphene oxideâ€“tetraethylene pentamine. Journal of Materials Chemistry A, 2016, 4, 8395-8401.	10.3	117
9	A Geobacter sulfurreducens Strain Expressing Pseudomonas aeruginosa Type IV Pili Localizes OmcS on Pili but Is Deficient in Fe(III) Oxide Reduction and Current Production. Applied and Environmental Microbiology, 2014, 80, 1219-1224.	3.1	113
10	A genetic system for Geobacter metallireducens: role of the flagellin and pilin in the reduction of Fe(III) oxide. Environmental Microbiology Reports, 2012, 4, 82-88.	2.4	112
11	Enhanced microbial electrosynthesis with three-dimensional graphene functionalized cathodes fabricated via solvothermal synthesis. Electrochimica Acta, 2016, 217, 117-122.	5.2	112
12	Outer Cell Surface Components Essential for Fe(III) Oxide Reduction by Geobacter metallireducens. Applied and Environmental Microbiology, 2013, 79, 901-907.	3.1	100
13	Anaerobic Benzene Oxidation via Phenol in Geobacter metallireducens. Applied and Environmental Microbiology, 2013, 79, 7800-7806.	3.1	99
14	A câ€type cytochrome and a transcriptional regulator responsible for enhanced extracellular electron transfer in Geobacter sulfurreducens revealed by adaptive evolution. Environmental Microbiology, 2011, 13, 13-23.	3.8	89
15	Going Wireless: Fe(III) Oxide Reduction without Pili by Geobacter sulfurreducens Strain JS-1. Applied and Environmental Microbiology, 2014, 80, 4331-4340.	3.1	84
16	Adaptation of the autotrophic acetogen Sporomusa ovata to methanol accelerates the conversion of CO2 to organic products. Scientific Reports, 2015, 5, 16168.	3.3	82
17	Effect of tungstate on acetate and ethanol production by the electrosynthetic bacterium Sporomusa ovata. Biotechnology for Biofuels, 2016, 9, 163.	6.2	70
18	Increased carbon dioxide reduction to acetate in a microbial electrosynthesis reactor with a reduced graphene oxide-coated copper foam composite cathode. Bioelectrochemistry, 2019, 128, 83-93.	4.6	67

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19	Freestanding and flexible graphene papers as bioelectrochemical cathode for selective and efficient CO2 conversion. Scientific Reports, 2017, 7, 9107.	3.3	55
20	Decorating the Outer Surface of Microbially Produced Protein Nanowires with Peptides. ACS Synthetic Biology, 2019, 8, 1809-1817.	3.8	54
21	Graphene: An Antibacterial Agent or a Promoter of Bacterial Proliferation?. IScience, 2020, 23, 101787.	4.1	47
22	Of blood, brains and bacteria, the Amt/Rh transporter family: emerging role of Amt as a unique microbial sensor. Molecular Microbiology, 2009, 71, 12-22.	2.5	45
23	Stimulating bioplastic production with light energy by couplingRalstonia eutrophawith the photocatalyst graphitic carbon nitride. Green Chemistry, 2019, 21, 2392-2400.	9.0	43
24	Nonmetallic Abiotic-Biological Hybrid Photocatalyst for Visible Water Splitting and Carbon Dioxide Reduction. IScience, 2020, 23, 100784.	4.1	42
25	Production of long chain alkyl esters from carbon dioxide and electricity by a two-stage bacterial process. Bioresource Technology, 2017, 243, 30-36.	9.6	39
26	Constraint-Based Modeling of Carbon Fixation and the Energetics of Electron Transfer in Geobacter metallireducens. PLoS Computational Biology, 2014, 10, e1003575.	3.2	38
27	Highly Conductive Poly(3,4-ethylenedioxythiophene) Polystyrene Sulfonate Polymer Coated Cathode for the Microbial Electrosynthesis of Acetate From Carbon Dioxide. Frontiers in Energy Research, 2018, 6, .	2.3	38
28	Role of the NiFe Hydrogenase Hya in Oxidative Stress Defense in Geobacter sulfurreducens. Journal of Bacteriology, 2012, 194, 2248-2253.	2.2	36
29	Photo-augmented PHB production from CO2 or fructose by Cupriavidus necator and shape-optimized CdS nanorods. Science of the Total Environment, 2021, 753, 142050.	8.0	34
30	Hybrid photosynthesis-powering biocatalysts with solar energy captured by inorganic devices. Biotechnology for Biofuels, 2017, 10, 249.	6.2	30
31	Membrane Sequestration of PII Proteins and Nitrogenase Regulation in the Photosynthetic Bacterium Rhodobacter capsulatus. Journal of Bacteriology, 2007, 189, 5850-5859.	2.2	28
32	Accelerated H2 Evolution during Microbial Electrosynthesis with Sporomusa ovata. Catalysts, 2019, 9, 166.	3.5	28
33	The hidden chemolithoautotrophic metabolism of Geobacter sulfurreducens uncovered by adaptation to formate. ISME Journal, 2020, 14, 2078-2089.	9.8	27
34	Identification of genes specifically required for the anaerobic metabolism of benzene in Geobacter metallireducens. Frontiers in Microbiology, 2014, 5, 245.	3.5	26
35	Efficient photocatalytic hydrogen evolution with high-crystallinity and noble metal-free red phosphorus-CdS nanorods. International Journal of Hydrogen Energy, 2020, 45, 17354-17366.	7.1	25
36	The facile and controllable synthesis of a bacterial cellulose/polyhydroxybutyrate composite by co-culturing Gluconacetobacter xylinus and Ralstonia eutropha. Carbohydrate Polymers, 2021, 252, 117137.	10.2	22

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37	The one-pot synthesis of a ZnSe/ZnS photocatalyst for H2 evolution and microbial bioproduction. International Journal of Hydrogen Energy, 2021, 46, 21901-21911.	7.1	22
38	Ammonia-Induced Formation of an AmtB-GlnK Complex Is Not Sufficient for Nitrogenase Regulation in the Photosynthetic Bacterium Rhodobacter capsulatus. Journal of Bacteriology, 2008, 190, 1588-1594.	2.2	19
39	Crystalline CdS/MoS2 shape-controlled by a bacterial cellulose scaffold for enhanced photocatalytic hydrogen evolution. Carbohydrate Polymers, 2020, 250, 116909.	10.2	19
40	Optimizing the electrical conductivity of polyacrylonitrile/polyaniline with nickel nanoparticles for the enhanced electrostimulation of Schwann cells proliferation. Bioelectrochemistry, 2021, 140, 107750.	4.6	19
41	Escherichia coli adaptation and response to exposure to heavy atmospheric pollution. Scientific Reports, 2019, 9, 10879.	3.3	17
42	Improved robustness of microbial electrosynthesis by adaptation of a strict anaerobic microbial catalyst to molecular oxygen. Science of the Total Environment, 2021, 754, 142440.	8.0	17
43	The one-step hydrothermal synthesis of CdS nanorods modified with carbonized leaves from Japanese raisin trees for photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2022, 47, 15516-15527.	7.1	17
44	An electrochemiluminescence resonance energy transfer biosensor for the detection of circulating tumor DNA from blood plasma. IScience, 2021, 24, 103019.	4.1	13
45	Fast removal of toxic hexavalent chromium from an aqueous solution by high-density Geobacter sulfurreducens. Chemosphere, 2021, 263, 128281.	8.2	12
46	A recyclable colorimetric sensor made of waste cotton fabric for the detection of copper ions. Cellulose, 2022, 29, 5103-5115.	4.9	12
47	A counter electrode modified with renewable carbonized biomass for an all-inorganic CsPbBr3 perovskite solar cell. Journal of Alloys and Compounds, 2022, 902, 163725.	5.5	11
48	Genetic evidence that the degradation ofpara-cresol byGeobacter metallireducensis catalyzed by the periplasmicpara-cresol methylhydroxylase. FEMS Microbiology Letters, 2015, 362, fnv145.	1.8	9
49	Impact of electron scavenging during electric current generation from propionate by a Geobacter co-culture. Chemical Engineering Journal, 2021, 418, 129357.	12.7	9
50	Enhanced hydrogen evolution under visible light by a ternary composite photocatalyst made of CdS and MoS2 modified with bacterial cellulose aerogel. Cellulose, 2022, 29, 175-191.	4.9	8
51	Selective electrocatalytic reduction of carbon dioxide to formate by a trimetallic Sn-Co/Cu foam electrode. Journal of Electroanalytical Chemistry, 2020, 877, 114623.	3.8	7
52	Possible Industrial Applications for Microbial Electrosynthesis From Carbon Dioxide. , 2019, , 825-842.		6
53	Fumarate disproportionation by Geobacter sulfurreducens and its involvement in biocorrosion and interspecies electron transfer. Science of the Total Environment, 2022, 827, 154251.	8.0	6
54	Editorial: Current Challenges and Future Perspectives on Emerging Bioelectrochemical Technologies. Frontiers in Microbiology, 2016, 7, 860.	3.5	5

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55	Improved polyhydroxybutyrate production by Cupriavidus necator and the photocatalyst graphitic carbon nitride from fructose under low light intensity. International Journal of Biological Macromolecules, 2022, 203, 526-534.	7.5	5
56	Fast-growing cyanobacteria bio-embedded into bacterial cellulose for toxic metal bioremediation. Carbohydrate Polymers, 2022, 295, 119881.	10.2	5
57	Anode Catalysts and Biocatalysts for Microbial Fuel Cells. , 2018, , 143-165.		2
58	An Adaptive Laboratory Evolution Method to Accelerate Autotrophic Metabolism. Methods in Molecular Biology, 2018, 1671, 149-161.	0.9	2
59	Functional Genomics of Metal-Reducing Microbes Degrading Hydrocarbons. , 2017, , 1-21.		2
60	Functional Genomics of Metal-Reducing Microbes Degrading Hydrocarbons. , 2020, , 233-253.		0