## List of Publications by Year in descending order

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ALAN L CHWY

#	Article	IF	CITATIONS
1	Defining the biomethane potential (BMP) of solid organic wastes and energy crops: a proposed protocol for batch assays. Water Science and Technology, 2009, 59, 927-934.	2.5	1,417
2	The removal of pharmaceuticals, personal care products, endocrine disruptors and illicit drugs during wastewater treatment and its impact on the quality of receiving waters. Water Research, 2009, 43, 363-380.	11.3	1,343
3	The occurrence of pharmaceuticals, personal care products, endocrine disruptors and illicit drugs in surface water in South Wales, UK. Water Research, 2008, 42, 3498-3518.	11.3	921
4	Multi-residue method for the determination of basic/neutral pharmaceuticals and illicit drugs in surface water by solid-phase extraction and ultra performance liquid chromatography–positive electrospray ionisation tandem mass spectrometry. Journal of Chromatography A, 2007, 1161, 132-145.	3.7	343
5	Multiresidue methods for the analysis of pharmaceuticals, personal care products and illicit drugs in surface water and wastewater by solid-phase extraction and ultra performance liquid chromatography–electrospray tandem mass spectrometry. Analytical and Bioanalytical Chemistry, 2008, 391, 1293-1308.	3.7	277
6	An evaluation of the policy and techno-economic factors affecting the potential for biogas upgrading for transport fuel use in the UK. Energy Policy, 2011, 39, 1806-1816.	8.8	233
7	The effect of acid pretreatment on the anaerobic digestion and dewatering of waste activated sludge. Bioresource Technology, 2011, 102, 4076-4082.	9.6	219
8	Development of a tubular microbial fuel cell (MFC) employing a membrane electrode assembly cathode. Journal of Power Sources, 2009, 187, 393-399.	7.8	158
9	Microbial fuel cell type biosensor for specific volatile fatty acids using acclimated bacterial communities. Biosensors and Bioelectronics, 2013, 47, 50-55.	10.1	140
10	Fermentative biohydrogen production systems integration. Bioresource Technology, 2011, 102, 8534-8542.	9.6	134
11	Modular tubular microbial fuel cells for energy recovery during sucrose wastewater treatment at low organic loading rate. Bioresource Technology, 2010, 101, 1190-1198.	9.6	133
12	Illicit drugs and pharmaceuticals in the environment – Forensic applications of environmental data. Part 1: Estimation of the usage of drugs in local communities. Environmental Pollution, 2009, 157, 1773-1777.	7.5	129
13	The effect of signal suppression and mobile phase composition on the simultaneous analysis of multiple classes of acidic/neutral pharmaceuticals and personal care products in surface water by solid-phase extraction and ultra performance liquid chromatography–negative electrospray tandem mass spectrometry. Talanta, 2008, 74, 1299-1312	5.5	124
14	Life cycle assessment of biogas infrastructure options on a regional scale. Bioresource Technology, 2011, 102, 7313-7323.	9.6	123
15	Instrumentation and control of anaerobic digestion processes: a review and some research challenges. Reviews in Environmental Science and Biotechnology, 2015, 14, 615-648.	8.1	118
16	Influence of substrate concentration on the stability and yield of continuous biohydrogen production. Biotechnology and Bioengineering, 2006, 93, 971-979.	3.3	110
17	Influence of catholyte pH and temperature on hydrogen production from acetate using a two chamber concentric tubular microbial electrolysis cell. International Journal of Hydrogen Energy, 2010, 35, 7716-7722.	7.1	101
18	Removal and recovery of inhibitory volatile fatty acids from mixed acid fermentations by conventional electrodialysis. Bioresource Technology, 2015, 189, 279-284.	9.6	94

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19	Hydrogen production from sewage sludge using mixed microflora inoculum: Effect of pH and enzymatic pretreatment. Bioresource Technology, 2008, 99, 6325-6331.	9.6	91
20	Illicit drugs and pharmaceuticals in the environment – Forensic applications of environmental data, Part 2: Pharmaceuticals as chemical markers of faecal water contamination. Environmental Pollution, 2009, 157, 1778-1786.	7.5	86
21	Inhibition of methane production in microbial fuel cells: Operating strategies which select elect electrogens over methanogens. Bioresource Technology, 2014, 173, 75-81.	9.6	85
22	Performance characteristics of a two-stage dark fermentative system producing hydrogen and methane continuously. Biotechnology and Bioengineering, 2007, 97, 759-770.	3.3	78
23	Monitoring methanogenic population dynamics in a full-scale anaerobic digester to facilitate operational management. Bioresource Technology, 2013, 140, 234-242.	9.6	70
24	The influence of psychrophilic and mesophilic start-up temperature on microbial fuel cell system performance. Energy and Environmental Science, 2011, 4, 1011.	30.8	68
25	The potential for hydrogen-enriched biogas production from crops: Scenarios in the UK. Biomass and Bioenergy, 2007, 31, 95-104.	5.7	66
26	Integration of biohydrogen, biomethane and bioelectrochemical systems. Renewable Energy, 2013, 49, 188-192.	8.9	64
27	Life cycle assessment of biohydrogen and biomethane production and utilisation as a vehicle fuel. Bioresource Technology, 2013, 131, 235-245.	9.6	63
28	Increased biohydrogen yields, volatile fatty acid production and substrate utilisation rates via the electrodialysis of a continually fed sucrose fermenter. Bioresource Technology, 2017, 229, 46-52.	9.6	61
29	Utilising biohydrogen to increase methane production, energy yields and process efficiency via two stage anaerobic digestion of grass. Bioresource Technology, 2015, 189, 379-383.	9.6	60
30	Fermentative production of hydrogen from a wheat flour industry co-product. Bioresource Technology, 2008, 99, 5020-5029.	9.6	59
31	Increasing power recovery and organic removal efficiency using extended longitudinal tubular microbial fuel cell (MFC) reactors. Energy and Environmental Science, 2011, 4, 459-465.	30.8	59
32	Automatic control of load increases power and efficiency in a microbial fuel cell. Journal of Power Sources, 2011, 196, 2013-2019.	7.8	57
33	Neural network and on-off control of bicarbonate alkalinity in a fluidised-bed anaerobic digester. Water Research, 1997, 31, 2019-2025.	11.3	56
34	Catalase activity measurements in suspended aerobic biomass and soil samples. Enzyme and Microbial Technology, 1999, 25, 669-676.	3.2	56
35	Controlling for peak power extraction from microbial fuel cells can increase stack voltage and avoid cell reversal. Journal of Power Sources, 2014, 269, 363-369.	7.8	56
36	Anode modification to improve the performance of a microbial fuel cell volatile fatty acid biosensor. Sensors and Actuators B: Chemical, 2014, 201, 266-273.	7.8	56

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37	Hydrogen storage and demand to increase wind power onto electricity distribution networks. International Journal of Hydrogen Energy, 2014, 39, 10195-10207.	7.1	56
38	Control of power sourced from a microbial fuel cell reduces its start-up time and increases bioelectrochemical activity. Bioresource Technology, 2013, 140, 277-285.	9.6	55
39	Novel current sensing photovoltaic maximum power point tracking based on sliding mode control strategy. Solar Energy, 2015, 118, 80-86.	6.1	54
40	Augmenting Microbial Fuel Cell power by coupling with Supported Liquid Membrane permeation for zinc recovery. Water Research, 2014, 55, 115-125.	11.3	53
41	An improved titration model reducing over estimation of total volatile fatty acids in anaerobic digestion of energy crop, animal slurry and food waste. Water Research, 2014, 61, 162-170.	11.3	53
42	ADM1 can be applied to continuous bio-hydrogen production using a variable stoichiometry approach. Water Research, 2008, 42, 4379-4385.	11.3	52
43	Increasing polyhydroxyalkanoate (PHA) yields from Cupriavidus necator by using filtered digestate liquors. Bioresource Technology, 2013, 147, 345-352.	9.6	51
44	Production of hydrogen from sewage biosolids in a continuously fed bioreactor: Effect of hydraulic retention time and sparging. International Journal of Hydrogen Energy, 2010, 35, 469-478.	7.1	49
45	Porous anodes with helical flow pathways in bioelectrochemical systems: The effects of fluid dynamics and operating regimes. Journal of Power Sources, 2012, 213, 382-390.	7.8	49
46	A neural network, based on bicarbonate monitoring, to control anaerobic digestion. Water Research, 1995, 29, 1465-1470.	11.3	47
47	Direct fermentation of fodder maize, chicory fructans and perennial ryegrass to hydrogen using mixed microflora. Bioresource Technology, 2008, 99, 8833-8839.	9.6	46
48	Mesophilic biohydrogen production from calcium hydroxide treated wheat straw. International Journal of Hydrogen Energy, 2014, 39, 16891-16901.	7.1	46
49	Use of real time gas production data for more accurate comparison of continuous single-stage and two-stage fermentation. Bioresource Technology, 2013, 129, 561-567.	9.6	44
50	Energy storage for active network management on electricity distribution networks with wind power. IET Renewable Power Generation, 2014, 8, 249-259.	3.1	44
51	Operation of a bioelectrochemical system as a polishing stage for the effluent from a two-stage biohydrogen and biomethane production process. Biochemical Engineering Journal, 2014, 85, 125-131.	3.6	44
52	Do drug users use less alcohol than non-drug users? A comparison of ethyl glucuronide concentrations in hair between the two groups in medico-legal cases. Forensic Science International, 2008, 176, 82-86.	2.2	43
53	The effect of physico-chemically immobilized methylene blue and neutral red on the anode of microbial fuel cell. Biotechnology and Bioprocess Engineering, 2012, 17, 361-370.	2.6	43
54	The use of NaCl addition for the improvement of polyhydroxyalkanoate production by Cupriavidus necator. Bioresource Technology, 2014, 163, 287-294.	9.6	41

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55	Hydrogen production in a high rate fluidised bed anaerobic digester. Water Research, 1997, 31, 1291-1298.	11.3	40
56	The effect of internal capacitance on power quality and energy efficiency in a tubular microbial fuel cell. Process Biochemistry, 2014, 49, 973-980.	3.7	40
57	A novel method for increasing biohydrogen production from food waste using electrodialysis. International Journal of Hydrogen Energy, 2019, 44, 14715-14720.	7.1	40
58	Spatiotemporal development of the bacterial community in a tubular longitudinal microbial fuel cell. Applied Microbiology and Biotechnology, 2011, 90, 1179-1191.	3.6	39
59	Enhanced biomethane potential from wheat straw by low temperature alkaline calcium hydroxide pre-treatment. Bioresource Technology, 2015, 189, 258-265.	9.6	38
60	Bifurcation and stability analysis of an anaerobic digestion model. Nonlinear Dynamics, 2007, 48, 391-408.	5.2	37
61	Active biomass in activated sludge: Comparison of respirometry with catalase activity measured using an on-line monitor. Water Research, 1998, 32, 3705-3709.	11.3	36
62	Accurate measurement of internal resistance in microbial fuel cells by improved scanning electrochemical impedance spectroscopy. Electrochimica Acta, 2021, 366, 137388.	5.2	35
63	A new instrument for on-line measurement of bicarbonate alkalinity. Water Research, 1993, 27, 167-170.	11.3	34
64	On-line monitoring of anaerobic digestion: application of a device for continuous measurement of bicarbonate alkalinity. Water Science and Technology, 1994, 30, 1-10.	2.5	32
65	Operational temperature regulates anodic biofilm growth and the development of electrogenic activity. Applied Microbiology and Biotechnology, 2011, 92, 419-430.	3.6	32
66	Control of microbial fuel cell voltage using a gain scheduling control strategy. Journal of Power Sources, 2016, 322, 106-115.	7.8	31
67	Critical analysis of methods for the measurement of volatile fatty acids. Critical Reviews in Environmental Science and Technology, 2016, 46, 209-234.	12.8	29
68	Simulation of integrated novel PSA/EHP/C process for high-pressure hydrogen recovery from Coke Oven Gas. International Journal of Hydrogen Energy, 2020, 45, 15196-15212.	7.1	29
69	Continuous recovery and enhanced yields of volatile fatty acids from a continually-fed 100ÂL food waste bioreactor by filtration and electrodialysis. Waste Management, 2021, 122, 81-88.	7.4	29
70	GC-MS-MS Determination of Gamma-Hydroxybutyrate in Blood and Urine. Journal of Analytical Toxicology, 2006, 30, 375-379.	2.8	28
71	Integration of NIRS and PCA techniques for the process monitoring of a sewage sludge anaerobic digester. Bioresource Technology, 2013, 133, 398-404.	9.6	27
72	Simultaneous determination of GHB and EtG in hair using GCMS/MS. Drug Testing and Analysis, 2011, 3, 201-205.	2.6	26

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73	Performance parameter prediction for sewage sludge digesters using reflectance FT-NIR spectroscopy. Water Research, 2011, 45, 2463-2472.	11.3	25
74	On-line low flow high-precision gas metering systems. Water Research, 1995, 29, 977-979.	11.3	24
75	Evaluation of feeding regimes to enhance PHA production using acetic and butyric acids by a pure culture of Cupriavidus necator. Biotechnology and Bioprocess Engineering, 2014, 19, 989-995.	2.6	24
76	Sampled-time control of a microbial fuel cell stack. Journal of Power Sources, 2017, 356, 338-347.	7.8	23
77	Increasing 2 -Bio- (H2 and CH4) production from food waste by combining two-stage anaerobic digestion and electrodialysis for continuous volatile fatty acids removal. Waste Management, 2021, 129, 20-25.	7.4	23
78	The influence of anodic helical design on fluid flow and bioelectrochemical performance. Bioresource Technology, 2014, 165, 13-20.	9.6	22
79	Biohythane as an energy feedstock for solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 27896-27906.	7.1	22
80	Characterization of a prototype industrial on-line analyzer for bicarbonate/carbonate monitoring. Biotechnology and Bioengineering, 1994, 44, 1325-1330.	3.3	20
81	Overcoming nutrient loss during volatile fatty acid recovery from fermentation media by addition of electrodialysis to a polytetrafluoroethylene membrane stack. Bioresource Technology, 2020, 301, 122543.	9.6	20
82	Maximising biohydrogen yields via continuous electrochemical hydrogen removal and carbon dioxide scrubbing. Bioresource Technology, 2016, 218, 512-517.	9.6	18
83	Fate of antibiotic resistant E. coli and antibiotic resistance genes during full scale conventional and advanced anaerobic digestion of sewage sludge. PLoS ONE, 2020, 15, e0237283.	2.5	18
84	Intensification of Acidogenic Fermentation for the Production of Biohydrogen and Volatile Fatty Acids—A Perspective. Fermentation, 2022, 8, 325.	3.0	17
85	A comparison of the ability of black box and neural network models of ARX structure to represent a fluidized bed anaerobic digestion process. Water Research, 1999, 33, 1027-1037.	11.3	16
86	Life cycle assessment of the electrolytic production and utilization of low carbon hydrogen vehicle fuel. International Journal of Hydrogen Energy, 2014, 39, 7190-7201.	7.1	16
87	Enrichment strategy for enhanced bioelectrochemical hydrogen production and the prevention of methanogenesis. International Journal of Hydrogen Energy, 2016, 41, 4120-4131.	7.1	16
88	Reducing the burden of food processing washdown wastewaters using microbial fuel cells. Biochemical Engineering Journal, 2017, 117, 210-217.	3.6	16
89	An automated instrument for monitoring oxygen demand in polluted waters. Water Research, 1999, 33, 3142-3148.	11.3	15
90	Addressing the challenge of optimum polyhydroxyalkanoate harvesting: Monitoring real time process kinetics and biopolymer accumulation using dielectric spectroscopy. Bioresource Technology, 2013, 134, 143-150.	9.6	15

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91	Highly efficient coproduction of electrical power and synthesis gas from biohythane using solid oxide fuel cell technology. Applied Energy, 2019, 255, 113854.	10.1	15
92	A technique for monitoring hydrogen peroxide concentration off-line and on-line. Water Research, 2000, 34, 2191-2198.	11.3	14
93	An implementation framework for wastewater treatment models requiring a minimum programming expertise. Water Science and Technology, 2009, 59, 367-380.	2.5	14
94	Bioelectrochemical treatment and recovery of copper from distillery waste effluents using power and voltage control strategies. Journal of Hazardous Materials, 2019, 371, 18-26.	12.4	14
95	Measurement of hydrogen peroxide in an advanced oxidation process using an automated biosensor. Water Research, 2007, 41, 260-268.	11.3	13
96	An evaluation of washing and extraction techniques in the analysis of ethyl glucuronide and fatty acid ethyl esters from hair samples. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2014, 953-954, 115-119.	2.3	13
97	Optimization of VPSA-EHP/C process for high-pressure hydrogen recovery from Coke Oven Gas using CO selective adsorbent. International Journal of Hydrogen Energy, 2021, 46, 709-725.	7.1	13
98	Metabolic models to investigate energy limited anaerobic ecosystems. Water Science and Technology, 2009, 60, 1669-1675.	2.5	11
99	The impact of inocula carryover and inoculum dilution on the methane yields in batch methane potential tests. Bioresource Technology, 2016, 208, 134-139.	9.6	10
100	The importance of fuel variability on the performance of solid oxide cells operating on H2/CO2 mixtures from biohydrogen processes. International Journal of Hydrogen Energy, 2018, 43, 8972-8982.	7.1	10
101	Stopping Hydrogen Migration in Its Tracks: The First Successful Synthesis of Group Ten Scorpionate Complexes Based on Azaindole Scaffolds. Inorganic Chemistry, 2019, 58, 359-367.	4.0	10
102	Design and implementation of renewable hydrogen fuel cell vehicles. Renewable Energy and Power Quality Journal, 0, , 272-277.	0.2	10
103	Analysis of the dynamic performance of a microbial fuel cell using a system identification approach. Journal of Power Sources, 2013, 238, 218-226.	7.8	9
104	Utilizing grass for the biological production of polyhydroxyalkanoates (PHAs) via green biorefining: Material and energy flows. Journal of Industrial Ecology, 2021, 25, 802-815.	5.5	9
105	Control-oriented PEM fuel cell system modeling and repetitive controller design. , 2011, , .		8
106	Factors affecting microbial fuel cell acclimation and operation in temperate climates. Water Science and Technology, 2013, 67, 2568-2575.	2.5	8
107	Co-electrolysis of simulated coke oven gas using solid oxide electrolysis technology. Energy Conversion and Management, 2020, 225, 113455.	9.2	8
108	Response to Randhir P. Deo and Rolf U. Halden's comments regarding †The removal of pharmaceuticals, personal care products, endocrine disruptors and illicit drugs during wastewater treatment and its impact on the quality of receiving waters' by Kasprzyk-Hordern et al Water Research, 2010, 44, 2688-2690.	11.3	7

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109	Transformation of a Norbornadiene Unit to Ethylenylcyclopentene Requiring Cooperation between Boron and Rhodium Centers. Organometallics, 2020, 39, 1976-1988.	2.3	7
110	Simplified Reactor Design for Mixed Culture-Based Electrofermentation toward Butyric Acid Production. Processes, 2021, 9, 417.	2.8	6
111	Applicability of a PEDOT coated electrode for amperometric quantification of short chain carboxylic acids. Sensors and Actuators B: Chemical, 2018, 255, 712-719.	7.8	5
112	Electrogenic Biofilm Development Determines Charge Accumulation and Resistance to pH Perturbation. Energies, 2020, 13, 3521.	3.1	5
113	The effects of fuel variability on the electrical performance and durability of a solid oxide fuel cell operating on biohythane. International Journal of Hydrogen Energy, 2021, 46, 2630-2645.	7.1	5
114	An overview of renewable energy technologies and hydrogen economy. Renewable Energy and Power Quality Journal, 0, , 393-397.	0.2	5
115	Renewable hydrogen hybrid electric vehicles and optimal energy recovery systems. , 2012, , .		4
116	A new sequential injection analysisâ€capillary electrophoresis system with amperometric detection. Electrophoresis, 2018, 39, 1754-1762.	2.4	4
117	Simple black box models predicting potential control parameters during disturbances to a fluidised bed anaerobic reactor. Water Science and Technology, 1997, 36, 229.	2.5	3
118	Energy management effects of integrating regenerative braking into a Renewable Hydrogen Vehicle. , 2012, , .		3
119	Challenges in scaleâ€up of electrochemical <scp>CO<sub>2</sub></scp> reduction to formate integrated with product extraction using electrodialysis. Journal of Chemical Technology and Biotechnology, 2021, 96, 2461-2471.	3.2	3
120	A Novel Method for Measuring Biomass Activity Applied to Soils Contaminated with Oil Refinery Tar. Environmental Technology (United Kingdom), 2000, 21, 1019-1027.	2.2	2
121	Design and implementation of on-board hydrogen production and storage system for hydrogen fuel cell vehicles. , 2011, , .		2
122	Integration of Wind Power and Hydrogen Hybrid Electric Vehicles into Electric Grids. Smart Innovation, Systems and Technologies, 2013, , 261-270.	0.6	2
123	Energy Storage for Active Network Management on Electricity Distribution Networks with Wind Power. Renewable Energy and Power Quality Journal, 0, , 621-626.	0.2	2
124	Fuzzy logic control for solar powered hydrogen production, storage and utilisation system. , 2012, , .		1
125	Improved Dynamic Response and Range in Microbial Fuel Cell-Based Volatile Fatty Acid Sensor by Using Poised Potential. , 2015, , 183-192.		1
126	Co-Electrolysis of Biohythane Using Solid Oxide Fuel Cell Technology. ECS Transactions, 2019, 91, 2333-2342.	0.5	0

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127	Analysis of organic and inorganic anions by a novel capillary electrophoresis-PEDOT based amperometric detection method. , 2019, , .		0
128	Clean Conversion of Aqueous Ammonia Using a Solid Oxide Cell. ECS Transactions, 2021, 103, 2173-2184.	0.5	0
129	Co-Electrolysis of Simulated Coke Oven Gas with Carbon Dioxide Using a Solid Oxide Electrolysis Cell. ECS Transactions, 2021, 103, 629-641.	0.5	Ο
130	Optimal Hydrogen Storage and Demand on Electricity Distribution Networks with Excess Wind Power. Renewable Energy and Power Quality Journal, 0, , 627-632.	0.2	0
131	Title is missing!. , 2020, 15, e0237283.		0
132	Title is missing!. , 2020, 15, e0237283.		0
133	Title is missing!. , 2020, 15, e0237283.		0
134	Title is missing!. , 2020, 15, e0237283.		0