Erik R Coats

List of Publications by Year
in descending order

50 papers	1,402 citations	304368 22 h-index	344852 36 g-index
51 all docs	51 docs citations	51 times ranked	1627 citing authors

#	Article	IF	Citations
1	Polyhydroxybutyrate synthesis on biodiesel wastewater using mixed microbial consortia. Bioresource Technology, 2011, 102, 3352-3359.	4.8	105
2	Lactic acid production with undefined mixed culture fermentation of potato peel waste. Waste Management, 2014, 34, 2022-2027.	3.7	97
3	Advancing post-anoxic denitrification for biological nutrient removal. Water Research, 2011, 45, 6119-6130.	5.3	91
4	Post-anoxic denitrification driven by PHA and glycogen within enhanced biological phosphorus removal. Bioresource Technology, 2011, 102, 1019-1027.	4.8	82
5	Synthesis of Polyhydroxyalkanoates in Municipal Wastewater Treatment. Water Environment Research, 2007, 79, 2396-2403.	1.3	76
6	Polyhydroxyalkanoate synthesis by mixed microbial consortia cultured on fermented dairy manure: Effect of aeration on process rates/yields and the associated microbial ecology. Water Research, 2016, 106, 26-40.	5.3	71
7	Lactic acid production from potato peel waste by anaerobic sequencing batch fermentation using undefined mixed culture. Waste Management, 2015, 45, 51-56.	3.7	70
8	Production of Polyhydroxyalkanoate During Treatment of Tomato Cannery Wastewater. Water Environment Research, 2008, 80, 367-372.	1.3	62
9	Characterizing and contrasting the microbial ecology of laboratory and full-scale EBPR systems cultured on synthetic and real wastewaters. Water Research, 2017, 108, 124-136.	5.3	62
10	Production of natural fiber reinforced thermoplastic composites through the use of polyhydroxybutyrate-rich biomass. Bioresource Technology, 2008, 99, 2680-2686.	4.8	49
11	Comparative analysis of microbial community of novel lactic acid fermentation inoculated with different undefined mixed cultures. Bioresource Technology, 2015, 179, 268-274.	4.8	48
12	A Comparative Environmental Lifeâ€Cycle Analysis for Removing Phosphorus from Wastewater: Biological versus Physical/Chemical Processes. Water Environment Research, 2011, 83, 750-760.	1.3	37
13	Toward Nucleating the Concept of the Water Resource Recovery Facility (WRRF): Perspective from the Principal Actors. Environmental Science & Technology, 2017, 51, 4158-4164.	4.6	37
14	Influence of organic loading rate and solid retention time on polyhydroxybutyrate production from hybrid poplar hydrolysates using mixed microbial cultures. Bioresource Technology, 2015, 175, 23-33.	4.8	36
15	Characterization of poly(3â€hydroxybutyrateâ€coâ€3â€hydroxyvalerate) biosynthesized by mixed microbial consortia fed fermented dairy manure. Journal of Applied Polymer Science, 2014, 131, .	1.3	34
16	Effect of organic loading and retention time on dairy manure fermentation. Bioresource Technology, 2011, 102, 2572-2577.	4.8	30
17	Characterization of polyhydroxybutyrate biosynthesized from crude glycerol waste using mixed microbial consortia. Journal of Applied Polymer Science, 2013, 129, 1314-1321.	1.3	29
18	Effect of Anaerobic HRT on Biological Phosphorus Removal and the Enrichment of Phosphorus Accumulating Organisms. Water Environment Research, 2011, 83, 461-469.	1.3	27

#	Article	IF	Citations
19	An integrated twoâ€stage anaerobic digestion and biofuel production process to reduce life cycle <scp>GHG</scp> emissions from <scp>US</scp> dairies. Biofuels, Bioproducts and Biorefining, 2013, 7, 459-473.	1.9	27
20	Metagenomics-based analysis of viral communities in dairy lagoon wastewater. Journal of Microbiological Methods, 2013, 92, 183-188.	0.7	25
21	Dairy Wastewaters for Algae Cultivation, Polyhydroxyalkanote Reactor Effluent Versus Anaerobic Digester Effluent. Bioenergy Research, 2015, 8, 1647-1660.	2.2	25
22	Toward Polyhydroxyalkanoate Production Concurrent with Municipal Wastewater Treatment in a Sequencing Batch Reactor System. Journal of Environmental Engineering, ASCE, 2011, 137, 46-54.	0.7	24
23	Should We Build â€œObeseâ€•or â€œLeanâ€•Anaerobic Digesters?. PLoS ONE, 2014, 9, e97252.	1.1	23
24	Ultraviolet radiation pre-treatment modifies dairy wastewater, improving its utility as a medium for algal cultivation. Algal Research, 2014, 6, 98-110.	2.4	19
25	Methane production on thickened, pre-fermented manure. Bioresource Technology, 2012, 107, 205-212.	4.8	18
26	Large-scale switchable potentiostatically controlled/microbial fuel cell bioelectrochemical wastewater treatment system. Bioelectrochemistry, 2021, 138, 107724.	2.4	18
27	Community proteomics provides functional insight into polyhydroxyalkanoate production by a mixed microbial culture cultivated on fermented dairy manure. Applied Microbiology and Biotechnology, 2016, 100, 7957-7976.	1.7	17
28	EBPR Using Crude Glycerol: Assessing Process Resiliency and Exploring Metabolic Anomalies. Water Environment Research, 2015, 87, 68-79.	1.3	15
29	Algal diversity and traits predict biomass yield and grazing resistance in wastewater cultivation. Journal of Applied Phycology, 2019, 31, 2323-2334.	1.5	15
30	A natural algal polyculture outperforms an assembled polyculture in wastewater-based open pond biofuel production. Algal Research, 2019, 40, 101488.	2.4	13
31	Valorization of residual bacterial biomass waste after polyhydroxyalkanoate isolation by hydrothermal treatment. Bioresource Technology, 2015, 198, 739-745.	4.8	12
32	Assessing the Effects of RAS Fermentation on EBPR Performance and Associated Microbial Ecology. Water Environment Research, 2018, 90, 659-671.	1.3	11
33	Functional stability of a mixed microbial consortium producing PHA from waste carbon sources. Applied Biochemistry and Biotechnology, 2007, 137-140, 909-925.	1.4	10
34	Dairy manure resource recovery utilizing two-stage anaerobic digestion â€“ Implications of solids fractionation. Bioresource Technology, 2015, 198, 237-245.	4.8	10
35	Integrating dairy manure for enhanced resource recovery at a WRRF: Environmental life cycle and pilotâ€scale analyses. Water Environment Research, 2021, 93, 2034-2050.	1.3	10
36	Pilot-scale production of poly-3-hydroxybutyrate-co-3-hydroxyvalerate from fermented dairy manure: Process performance, polymer characterization, and scale-up implications. Bioresource Technology Reports, 2020, 12, 100588.	1.5	9

#	Article	IF	Citations
37	Assessing the Effects of Solids Residence Time and Volatile Fatty Acid Augmentation on Biological Phosphorus Removal Using Real Wastewater. Water Environment Research, 2010, 82, 216-226.	1.3	8
38	Toward sustainable dairy waste utilization: enhanced <scp>VFA</scp> and biogas synthesis via upcycling algal biomass cultured on waste effluent. Journal of Chemical Technology and Biotechnology, 2016, 91, 113-121.	1.6	8
39	The role of the microbial stringent response in excess intracellular accumulation of phosphorous in mixed consortia fed synthetic wastewater. Water Research, 2011, 45, 5038-5046.	5.3	6
40	Multivariate near infrared spectroscopy for predicting polyhydroxybutyrate biosynthesis by mixed microbial consortia cultured on crude glycerol. Biomass and Bioenergy, 2015, 81, 490-495.	2.9	6
41	An Eco-Friendly System for the Production of Value-Added Materials from Dairy Manure. Jom, 2018, 70, 1946-1957.	0.9	6
42	Effects of anaerobic HRT and VFA loading on the kinetics and stoichiometry of enhanced biological phosphorus removal. Water Environment Research, 2021, 93, 1608-1618.	1.3	6
43	Cofermenting Algal Biomass with Municipal Primary Solids to Enhance Carboxylate Production. Water Environment Research, 2018, 90, 1997-2007.	1.3	5
44	Green solvent extraction and properties characterization of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) biosynthesized by mixed microbial consortia fed fermented dairy manure. Bioresource Technology Reports, 2022, 18, 101065.	1.5	4
45	Reduction of GHG Emissions through the Conversion of Dairy Waste to Value-Added Materials and Products. , 2016, , 109-116.		3
46	Proteomic profiling of an undefined microbial consortium cultured in fermented dairy manure: Methods development. Electrophoresis, 2016, 37, 790-794.	1.3	2
47	Functional Stability of a Mixed Microbial Consortium Producing PHA From Waste Carbon Sources. , 2007, , 909-925.		2
48	Design Model Parameter Analysis for Nitrifying Trickling Filters. Water Environment Research, 2016, 88, 888-897.	1.3	1
49	Performance of a pilot-scale nitrifying trickling filter treating municipal aerated lagoon effluent. Water Environment Research, 2015, 87, 35-43.	1.3	1
50	Advancing a Novel Process for Post-Anoxic Denitrification. Proceedings of the Water Environment Federation, 2009, 2009, 458-459.	0.0	0