Andrew J Schuler

List of Publications by Year
in descending order

56 papers	1,502 citations	304368 22 h-index	301761 39 g-index
56 all docs	56 docs citations	56 times ranked	1675 citing authors

#	Article	IF	Citations
1	Enhanced Biological Phosphorus Removal from Wastewater by Biomass with Different Phosphorus Contents, Part I: Experimental Results and Comparison with Metabolic Models. Water Environment Research, 2003, 75, 485-498.	1.3	136
2	Parameters characterization and optimization of activated carbon (AC) cathodes for microbial fuel cell application. Bioresource Technology, 2014, 163, 54-63.	4.8	102
3	Effects of integrated fixed film activated sludge media on activated sludge settling in biological nutrient removal systems. Water Research, 2010, 44, 1553-1561.	5.3	94
4	Surface Modification of Microbial Fuel Cells Anodes: Approaches to Practical Design. Electrochimica Acta, 2014, 134, 116-126.	2.6	89
5	Influence of anode surface chemistry on microbial fuel cell operation. Bioelectrochemistry, 2015, 106, 141-149.	2.4	88
6	Low Acetate Concentrations Favor Polyphosphate-Accumulating Organisms over Glycogen-Accumulating Organisms in Enhanced Biological Phosphorus Removal from Wastewater. Environmental Science & Technology, 2013, 47, 3816-3824.	4.6	84
7	High catalytic activity and pollutants resistivity using Fe-AAPyr cathode catalyst for microbial fuel cell application. Scientific Reports, 2015, 5, 16596.	1.6	82
8	Doubleâ€Chamber Microbial Fuel Cell with a Nonâ€Platinumâ€Group Metal Feâ€“Nâ€“C Cathode Catalyst. ChemSusChem, 2015, 8, 828-834.	3.6	75
9	Surface Modification for Enhanced Biofilm Formation and Electron Transport in Shewanella Anodes. Journal of the Electrochemical Society, 2015, 162, H597-H603.	1.3	57
10	Experimental and Theoretical Examination of Surface Energy and Adhesion of Nitrifying and Heterotrophic Bacteria Using Self-Assembled Monolayers. Environmental Science & Technology, 2011, 45, 1055-1060.	4.6	54
11	Attachment surface energy effects on nitrification and estrogen removal rates by biofilms for improved wastewater treatment. Water Research, 2013, 47, 2190-2198.	5.3	45
12	Development and validation of a flux-based stoichiometric model for enhanced biological phosphorus removal metabolism. Water Research, 1999, 33, 462-476.	5.3	44
13	Comparison of Conventional and Integrated Fixedâ€Film Activated Sludge Systems: Attachedâ€and Suspendedâ€Growth Functions and Quantitative Polymerase Chain Reaction Measurements. Water Environment Research, 2011, 83, 627-635.	1.3	43
14	Relationship between surface chemistry, biofilm structure, and electron transfer in Shewanella anodes. Biointerphases, 2015, 10, 019013.	0.6	42
15	Filament content threshold for activated sludge bulking: Artifact or reality?. Water Research, 2007, 41, 4349-4356.	5.3	39
16	Causes of Variable Biomass Density and Its Effects on Settleability in Full-Scale Biological Wastewater Treatment Systems. Environmental Science & Technology, 2007, 41, 1675-1681.	4.6	39
17	Seasonal variability of biomass density and activated sludge settleability in full-scale wastewater treatment systems. Chemical Engineering Journal, 2010, 164, 16-22.	6.6	38
18	Diversity matters: Dynamic simulation of distributed bacterial states in suspended growth biological wastewater treatment systems. Biotechnology and Bioengineering, 2005, 91, 62-74.	1.7	35

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19	Density effects on activated sludge zone settling velocities. Water Research, 2007, 41, 1814-1822.	5.3	35
20	Enhanced Biological Phosphorus Removal from Wastewater by Biomass with Different Phosphorus Contents, Part III: Anaerobic Sources of Reducing Equivalents. Water Environment Research, 2003, 75, 512-522.	1.3	31
21	The effects of wastewater types on power generation and phosphorus removal of microbial fuel cells (MFCs) with activated carbon (AC) cathodes. International Journal of Hydrogen Energy, 2014, 39, 21796-21802.	3.8	28
22	Enhanced Biological Phosphorus Removal from Wastewater by Biomass with Different Phosphorus Contents, Part II: Anaerobic Adenosine Triphosphate Utilization and Acetate Uptake Rates. Water Environment Research, 2003, 75, 499-511.	1.3	25
23	Conjugated gold nanoparticles as a tool for probing the bacterial cell envelope: The case of Shewanella oneidensis MR-1. Biointerphases, 2016, 11, 011003.	0.6	23
24	Effects of salinity and nitrogen source on growth and lipid production for a wild algal polyculture in produced water media. Algal Research, 2019, 38, 101406.	2.4	22
25	Microsphere addition for the study of biomass properties and density effects on settleability in biological wastewater treatment systems. Water Research, 2007, 41, 2163-2170.	5.3	18
26	Methods for increasing the rate of anammox attachment in a sidestream deammonification MBBR. Water Science and Technology, 2016, 74, 110-117.	1.2	17
27	Ultraviolet treatment and biodegradation of dibenzothiophene: Identification and toxicity of products. Environmental Toxicology and Chemistry, 2010, 29, 2409-2416.	2.2	16
28	Biomass and lipid productivity of Dunaliella tertiolecta in a produced water-based medium over a range of salinities. Journal of Applied Phycology, 2019, 31, 3349-3358.	1.5	14
29	Applied Electrode Potential Leads toShewanella oneidensisMR-1 Biofilms Engaged in Direct Electron Transfer. Journal of the Electrochemical Society, 2013, 160, H866-H871.	1.3	13
30	Performance and diversity responses of nitrifying biofilms developed on varied materials and topographies to stepwise increases of aeration. Bioresource Technology, 2019, 281, 429-439.	4.8	12
31	The Case for Variable Density: A New Perspective on Activated Sludge Settling. Water Environment Research, 2007, 79, 2298-2303.	1.3	11
32	Is the whole the sumof its parts? Agent-basedmodelling of wastewater treatment systems. Water Science and Technology, 2011, 63, 1590-1598.	1.2	10
33	Process hydraulics, distributed bacterial states, and biological phosphorus removal from wastewater. Biotechnology and Bioengineering, 2006, 94, 909-920.	1.7	9
34	Distributed state simulation of endogenous processes in biological wastewater treatment. Biotechnology and Bioengineering, 2007, 97, 1087-1097.	1.7	8
35	Effects of surface skewness on local shear stresses, biofilm activity, and microbial communities for wastewater treatment. Bioresource Technology, 2021, 320, 124251.	4.8	7
36	Role of Changing Biomass Density in Process Disruptions Affecting Biomass Settling at a Full-Scale Domestic Wastewater Treatment Plant. Journal of Environmental Engineering, ASCE, 2012, 138, 67-73.	0.7	6

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37	Predicted Distributed State Effects on Enhanced Biological Phosphorus Removal in a 5â€Stage Bardenpho Wastewater Treatment Configuration. Water Environment Research, 2008, 80, 454-463.	1.3	4
38	Trace Organic Chemical Profiles in Nutrient Removal Systems With and Without Integrated Fixed Film Activated Sludge. Proceedings of the Water Environment Federation, 2009, 2009, 704-711.	0.0	3
39	Effects of Methyl, Ester, and Amine Surface Groups on Microbial Activity and Communities in Nitrifying Biofilms. ACS Applied Bio Materials, 2022, , .	2.3	2
40	A Net Water Production Model for Ultrafiltration Including Flow Direction Reversal and Chemically Assisted Backwashing. Water Environment Research, 2007, 79, 877-886.	1.3	1
41	Shelter From The Storm: Integrated Fixed Film Activated Sludge Protects Nitrifiers From Toxic Upsets. Proceedings of the Water Environment Federation, 2010, 2010, 679-685.	0.0	1
42	A STEP CLOSER TO REALITY: NEW DEVELOPMENTS IN PREDICTING DISTRIBUTED PAO STATES FOR ENHANCED BIOLOGICAL PHOSPHORUS REMOVAL. Proceedings of the Water Environment Federation, 2005, 2005, 3887-3888.	0.0	0
43	What are Distributed States and when are they Important? New Strategies to Improve EBPR Performance. Proceedings of the Water Environment Federation, 2006, 2006, 4873-4883.	0.0	0
44	The Case for Variable Density: A New Perspective on Activated Sludge Settling. Proceedings of the Water Environment Federation, 2006, 2006, 49-61.	0.0	0
45	A New View of the Relationship Between Filament Content and Activated Sludge Settleability. Proceedings of the Water Environment Federation, 2007, 2007, 1474-1475.	0.0	0
46	IMPROVING PREDICTIONS OF COMPLEX EBPR CONFIGURATION PERFORMANCE USING THE DISTRIBUTED STATE APPROACH. Proceedings of the Water Environment Federation, 2007, 2007, 1256-1269.	0.0	0
47	Pipeline to the Future: Critical Success Factors in Attracting, Developing, and Retaining Your Future Water Quality Leaders. Water Environment Research, 2007, 79, 2251-2252.	1.3	0
48	It's Getting Clearer: A New View of Seasonal Changes in Secondary Sedimentation Linked to Variable Biomass Density. Proceedings of the Water Environment Federation, 2009, 2009, 4057-4064.	0.0	0
49	How Does IFAS Affect Distributions of AOB and NOB Communities? Population Measurements and Modeling of Pilot Scale Systems. Proceedings of the Water Environment Federation, 2009, 2009, 2349-2358.	0.0	0
50	Acetate Concentration Effects on EBPR: Is GAO Competition Over-Stated Because of Lab Conditions?. Proceedings of the Water Environment Federation, 2011, 2011, 78-83.	0.0	0
51	Metabolisms of Acetate Transport in EBPR and Biokinetics for PAOs and Gaos. Proceedings of the Water Environment Federation, 2013, 2013, 758-770.	0.0	0
52	A Simplified Ammonia Mass Transfer Model for MBBRs. Proceedings of the Water Environment Federation, 2015, 2015, 3679-3692.	0.0	0
53	Mass Transfer and Mixing in Wastewater Treatment Biofilms. Proceedings of the Water Environment Federation, 2017, 2017, 541-545.	0.0	0
54	Application of Increased Shear Force on Mature Steady State Nitrifying Biofilms Grown on Modified 3-D Printed Surfaces. Proceedings of the Water Environment Federation, 2017, 2017, 554-570.	0.0	0

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55	Community and Performance Responses of Nitrifying Biofilms Grown on Surfaces with Varying Characteristics to Changes in Shear. Proceedings of the Water Environment Federation, 2018, 2018, 2272-2281.	0.0	0
56	Pipeline to the future: critical success factors in attracting, developing, and retaining your future water quality leaders. Water Environment Research, 2007, 79, 2251-2.	1.3	0