# Jurg Keller

## List of Publications by Year in descending order



| | | | |
|---|---|---|---|
| 219 papers | 31,890 citations | 3116 95 h-index | 4853 174 g-index |
| 225 all docs | 225 docs citations | 225 times ranked | 19398 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Microbial Fuel Cells:Â Methodology and Technologyâ€. Environmental Science & Technology, 2006, 40, 5181-5192. | 4.6 | 4,962 |
| 2 | Towards practical implementation of bioelectrochemical wastewater treatment. Trends in Biotechnology, 2008, 26, 450-459. | 4.9 | 1,039 |
| 3 | Anaerobic oxidation of methane coupled to nitrate reduction in a novel archaeal lineage. Nature, 2013, 500, 567-570. | 13.7 | 1,029 |
| 4 | Advances in enhanced biological phosphorus removal: From micro to macro scale. Water Research, 2007, 41, 2271-2300. | 5.3 | 998 |
| 5 | Identification of Polyphosphate-Accumulating Organisms and Design of 16S rRNA-Directed Probes for Their Detection and Quantitation. Applied and Environmental Microbiology, 2000, 66, 1175-1182. | 1.4 | 691 |
| 6 | Global diversity and biogeography of bacterial communities in wastewater treatment plants. Nature Microbiology, 2019, 4, 1183-1195. | 5.9 | 491 |
| 7 | Microbial ecology meets electrochemistry: electricity-driven and driving communities. ISME Journal, 2007, 1, 9-18. | 4.4 | 433 |
| 8 | Microbial fuel cells for simultaneous carbon and nitrogen removal. Water Research, 2008, 42, 3013-3024. | 5.3 | 412 |
| 9 | Simultaneous nitrification, denitrification, and phosphorus removal in a lab-scale sequencing batch reactor. Biotechnology and Bioengineering, 2003, 84, 170-178. | 1.7 | 391 |
| 10 | Glycogen-accumulating organisms in laboratory-scale and full-scale wastewater treatment processes b bThe GenBank accession numbers for the sequences reported in this paper are given in Methods.. Microbiology (United Kingdom), 2002, 148, 3353-3364. | 0.7 | 377 |
| 11 | Efficient hydrogen peroxide generation from organic matter in a bioelectrochemical system. Electrochemistry Communications, 2009, 11, 1752-1755. | 2.3 | 371 |
| 12 | Simultaneous nitrification and denitrification in bench-scale sequencing batch reactors. Water Research, 1996, 30, 277-284. | 5.3 | 364 |
| 13 | Effect of temperature and free ammonia on nitrification and nitrite accumulation in landfill leachate and analysis of its nitrifying bacterial community by FISH. Bioresource Technology, 2006, 97, 459-468. | 4.8 | 358 |
| 14 | The anode potential regulates bacterial activity in microbial fuel cells. Applied Microbiology and Biotechnology, 2008, 78, 409-418. | 1.7 | 350 |
| 15 | Simultaneous nitrification, denitrification and carbon removal in microbial fuel cells. Water Research, 2010, 44, 2970-2980. | 5.3 | 341 |
| 16 | Partial nitrification to nitrite using low dissolved oxygen concentration as the main selection factor. Biodegradation, 2008, 19, 303-312. | 1.5 | 336 |
| 17 | Kinetic characterisation of an enriched Nitrospira culture with comparison to Nitrobacter. Water Research, 2007, 41, 3033-3042. | 5.3 | 331 |
| 18 | Decolorization of Azo Dyes in Bioelectrochemical Systems. Environmental Science & Technology, 2009, 43, 5137-5143. | 4.6 | 299 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Ozonation and biological activated carbon filtration of wastewater treatment plant effluents. Water Research, 2012, 46, 863-872. | 5.3 | 297 |
| 20 | Effects of Surface Charge and Hydrophobicity on Anodic Biofilm Formation, Community Composition, and Current Generation in Bioelectrochemical Systems. Environmental Science & Technology, 2013, 47, 7563-7570. | 4.6 | 294 |
| 21 | Removal of micropollutants and reduction of biological activity in a full scale reclamation plant using ozonation and activated carbon filtration. Water Research, 2010, 44, 625-637. | 5.3 | 280 |
| 22 | Cathodic oxygen reduction catalyzed by bacteria in microbial fuel cells. ISME Journal, 2008, 2, 519-527. | 4.4 | 268 |
| 23 | Methane formation in sewer systems. Water Research, 2008, 42, 1421-1430. | 5.3 | 254 |
| 24 | Metabolic model for glycogen-accumulating organisms in anaerobic/aerobic activated sludge systems. Biotechnology and Bioengineering, 2003, 81, 92-105. | 1.7 | 251 |
| 25 | Non-catalyzed cathodic oxygen reduction at graphite granules in microbial fuel cells. Electrochimica Acta, 2007, 53, 598-603. | 2.6 | 250 |
| 26 | Optimisation of poly-Î²-hydroxyalkanoate analysis using gas chromatography for enhanced biological phosphorus removal systems. Journal of Chromatography A, 2005, 1070, 131-136. | 1.8 | 244 |
| 27 | High Acetic Acid Production Rate Obtained by Microbial Electrosynthesis from Carbon Dioxide. Environmental Science & Technology, 2015, 49, 13566-13574. | 4.6 | 241 |
| 28 | Removal of organic contaminants from secondary effluent by anodic oxidation with a boron-doped diamond anode as tertiary treatment. Journal of Hazardous Materials, 2015, 283, 551-557. | 6.5 | 241 |
| 29 | Removal of Persistent Organic Contaminants by Electrochemically Activated Sulfate. Environmental Science & Technology, 2015, 49, 14326-14333. | 4.6 | 240 |
| 30 | A novel carbon nanotube modified scaffold as an efficient biocathode material for improved microbial electrosynthesis. Journal of Materials Chemistry A, 2014, 2, 13093-13102. | 5.2 | 236 |
| 31 | Comparison of acetate and propionate uptake by polyphosphate accumulating organisms and glycogen accumulating organisms. Biotechnology and Bioengineering, 2005, 91, 162-168. | 1.7 | 233 |
| 32 | Electron and Carbon Balances in Microbial Fuel Cells Reveal Temporary Bacterial Storage Behavior During Electricity Generation. Environmental Science & Technology, 2007, 41, 2915-2921. | 4.6 | 231 |
| 33 | Simultaneous nitrification, denitrification, and phosphorus removal from nutrientâ€rich industrial wastewater using granular sludge. Biotechnology and Bioengineering, 2008, 100, 529-541. | 1.7 | 215 |
| 34 | Nitrogen Removal from Wastewater by Coupling Anammox and Methane-Dependent Denitrification in a Membrane Biofilm Reactor. Environmental Science & Technology, 2013, 47, 11577-11583. | 4.6 | 214 |
| 35 | Use of Stable-Isotope Probing, Full-Cycle rRNA Analysis, and Fluorescence In Situ Hybridization-Microautoradiography To Study a Methanol-Fed Denitrifying Microbial Community. Applied and Environmental Microbiology, 2004, 70, 588-596. | 1.4 | 213 |
| 36 | Biofiltration of wastewater treatment plant effluent: Effective removal of pharmaceuticals and personal care products and reduction of toxicity. Water Research, 2011, 45, 2751-2762. | 5.3 | 210 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Obtaining highly enriched cultures of Candidatus Accumulibacter phosphates through alternating carbon sources. Water Research, 2006, 40, 3838-3848. | 5.3 | 207 |
| 38 | Effect of free ammonia on the respiration and growth processes of an enriched Nitrobacter culture. Water Research, 2007, 41, 826-834. | 5.3 | 198 |
| 39 | Enrichment of denitrifying anaerobic methane oxidizing microorganisms. Environmental Microbiology Reports, 2009, 1, 377-384. | 1.0 | 196 |
| 40 | Study of factors affecting simultaneous nitrification and denitrification (SND). Water Science and Technology, 1999, 39, 61. | 1.2 | 194 |
| 41 | Reducing sewer corrosion through integrated urban water management. Science, 2014, 345, 812-814. | 6.0 | 194 |
| 42 | Nitrobenzene Removal in Bioelectrochemical Systems. Environmental Science & Technology, 2009, 43, 8690-8695. | 4.6 | 191 |
| 43 | Microbial fuel cells operating on mixed fatty acids. Bioresource Technology, 2010, 101, 1233-1238. | 4.8 | 188 |
| 44 | Modelling of two-stage anaerobic digestion using the IWA Anaerobic Digestion Model No. 1 (ADM1). Water Research, 2005, 39, 171-183. | 5.3 | 187 |
| 45 | Effect of free ammonia and free nitrous acid concentration on the anabolic and catabolic processes of an enrichedNitrosomonas culture. Biotechnology and Bioengineering, 2006, 95, 830-839. | 1.7 | 186 |
| 46 | Syntrophic Processes Drive the Conversion of Glucose in Microbial Fuel Cell Anodes. Environmental Science & Technology, 2008, 42, 7937-7943. | 4.6 | 186 |
| 47 | The Inhibitory Effects of Free Nitrous Acid on the Energy Generation and Growth Processes of an EnrichedNitrobacterCulture. Environmental Science & Technology, 2006, 40, 4442-4448. | 4.6 | 185 |
| 48 | Sequential anodeâ€“cathode configuration improves cathodic oxygen reduction and effluent quality of microbial fuel cells. Water Research, 2008, 42, 1387-1396. | 5.3 | 181 |
| 49 | Initial development and structure of biofilms on microbial fuel cell anodes. BMC Microbiology, 2010, 10, 98. | 1.3 | 180 |
| 50 | Anaerobic metabolism of propionate by polyphosphate-accumulating organisms in enhanced biological phosphorus removal systems. Biotechnology and Bioengineering, 2005, 91, 43-53. | 1.7 | 179 |
| 51 | Demonstration of nitrogen removal via nitrite in a sequencing batch reactor treating domestic wastewater. Water Research, 2008, 42, 2166-2176. | 5.3 | 179 |
| 52 | High Current Generation Coupled to Caustic Production Using a Lamellar Bioelectrochemical System. Environmental Science & Technology, 2010, 44, 4315-4321. | 4.6 | 179 |
| 53 | Competition between polyphosphate and glycogen accumulating organisms in enhanced biological phosphorus removal systems with acetate and propionate as carbon sources. Journal of Biotechnology, 2006, 123, 22-32. | 1.9 | 174 |
| 54 | Microbial Electrosynthesis of Isobutyric, Butyric, Caproic Acids, and Corresponding Alcohols from Carbon Dioxide. ACS Sustainable Chemistry and Engineering, 2018, 6, 8485-8493. | 3.2 | 174 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | The effect of pH on the competition between polyphosphate-accumulating organisms and glycogen-accumulating organisms. Water Research, 2005, 39, 3727-3737. | 5.3 | 167 |
| 56 | Identification and comparison of aerobic and denitrifying polyphosphate-accumulating organisms. Biotechnology and Bioengineering, 2003, 83, 140-148. | 1.7 | 162 |
| 57 | Investigation of an Acetate-Fed Denitrifying Microbial Community by Stable Isotope Probing, Full-Cycle rRNA Analysis, and Fluorescent In Situ Hybridization-Microautoradiography. Applied and Environmental Microbiology, 2005, 71, 8683-8691. | 1.4 | 160 |
| 58 | Biofilm stratification during simultaneous nitrification and denitrification (SND) at a biocathode. Bioresource Technology, 2011, 102, 334-341. | 4.8 | 160 |
| 59 | Enrichment of denitrifying glycogen-accumulating organisms in anaerobic/anoxic activated sludge system. Biotechnology and Bioengineering, 2003, 81, 397-404. | 1.7 | 159 |
| 60 | Domestic wastewater treatment with purple phototrophic bacteria using a novel continuous photo anaerobic membrane bioreactor. Water Research, 2016, 100, 486-495. | 5.3 | 159 |
| 61 | Optimization of integrated chemicalâ€“biological degradation of a reactive azo dye using response surface methodology. Journal of Hazardous Materials, 2006, 138, 160-168. | 6.5 | 158 |
| 62 | Source-separated urine opens golden opportunities for microbial electrochemical technologies. Trends in Biotechnology, 2015, 33, 214-220. | 4.9 | 156 |
| 63 | Study of factors affecting simultaneous nitrification and denitrification (SND). Water Science and Technology, 1999, 39, 61-68. | 1.2 | 155 |
| 64 | The influence of substrate kinetics on the microbial community structure in granular anaerobic biomass. Water Research, 2004, 38, 1390-1404. | 5.3 | 155 |
| 65 | Sulfur transformation in rising main sewers receiving nitrate dosage. Water Research, 2009, 43, 4430-4440. | 5.3 | 155 |
| 66 | Microbiology of a Nitrite-Oxidizing Bioreactor. Applied and Environmental Microbiology, 1998, 64, 1878-1883. | 1.4 | 154 |
| 67 | Inhibition of sulfate-reducing and methanogenic activities of anaerobic sewer biofilms by ferric iron dosing. Water Research, 2009, 43, 4123-4132. | 5.3 | 153 |
| 68 | Gel-forming exopolysaccharides explain basic differences between structures of aerobic sludge granules and floccular sludges. Water Research, 2009, 43, 4469-4478. | 5.3 | 151 |
| 69 | Determining the fraction of pharmaceutical residues in wastewater originating from a hospital. Water Research, 2010, 44, 605-615. | 5.3 | 148 |
| 70 | Efficient and stable nitritation and denitritation of ammonium-rich sludge dewatering liquor using an SBR with continuous loading. Water Research, 2006, 40, 2765-2775. | 5.3 | 147 |
| 71 | Surface neutralization and H2S oxidation at early stages of sewer corrosion: Influence of temperature, relative humidity and H2S concentration. Water Research, 2012, 46, 4235-4245. | 5.3 | 141 |
| 72 | Bringing High-Rate, CO<sub>2</sub>-Based Microbial Electrosynthesis Closer to Practical Implementation through Improved Electrode Design and Operating Conditions. Environmental Science & Technology, 2016, 50, 1982-1989. | 4.6 | 141 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Electrochemical oxidation of trace organic contaminants in reverse osmosis concentrate using RuO2/IrO2-coated titanium anodes. Water Research, 2011, 45, 1579-1586. | 5.3 | 140 |
| 74 | Identifying causes for N2O accumulation in a lab-scale sequencing batch reactor performing simultaneous nitrification, denitrification and phosphorus removal. Journal of Biotechnology, 2006, 122, 62-72. | 1.9 | 139 |
| 75 | Dynamics and dynamic modelling of H2S production in sewer systems. Water Research, 2008, 42, 2527-2538. | 5.3 | 139 |
| 76 | Phototrophic bacteria for nutrient recovery from domestic wastewater. Water Research, 2014, 50, 18-26. | 5.3 | 139 |
| 77 | Evaluation of oxygen injection as a means of controlling sulfide production in a sewer system. Water Research, 2008, 42, 4549-4561. | 5.3 | 135 |
| 78 | Variation of bulk properties of anaerobic granules with wastewater type. Water Research, 2001, 35, 1723-1729. | 5.3 | 133 |
| 79 | The nanostructure of three-dimensional scaffolds enhances the current density of microbial bioelectrochemical systems. Energy and Environmental Science, 2013, 6, 1291. | 15.6 | 132 |
| 80 | Biological phosphorus removal from abattoir wastewater at very short sludge ages mediated byÂnovel PAO clade Comamonadaceae. Water Research, 2015, 69, 173-182. | 5.3 | 132 |
| 81 | Electron Fluxes in a Microbial Fuel Cell Performing Carbon and Nitrogen Removal. Environmental Science & Technology, 2009, 43, 5144-5149. | 4.6 | 126 |
| 82 | Determining the long-term effects of H2S concentration, relative humidity and air temperature on concrete sewer corrosion. Water Research, 2014, 65, 157-169. | 5.3 | 122 |
| 83 | Biologically Induced Hydrogen Production Drives High Rate/High Efficiency Microbial Electrosynthesis of Acetate from Carbon Dioxide. ChemElectroChem, 2016, 3, 581-591. | 1.7 | 122 |
| 84 | Spontaneous electrochemical removal of aqueous sulfide. Water Research, 2008, 42, 4965-4975. | 5.3 | 120 |
| 85 | Towards reducing DBP formation potential of drinking water by favouring direct ozone over hydroxyl radical reactions during ozonation. Water Research, 2015, 87, 49-58. | 5.3 | 116 |
| 86 | Consumption-based approach for assessing the contribution of hospitals towards the load of pharmaceutical residues in municipal wastewater. Environment International, 2012, 45, 99-111. | 4.8 | 111 |
| 87 | Monitoring the biological activity of micropollutants during advanced wastewater treatment with ozonation and activated carbon filtration. Water Research, 2010, 44, 477-492. | 5.3 | 109 |
| 88 | Anaerobic and aerobic metabolism of glycogen-accumulating organisms selected with propionate as the sole carbon source. Microbiology (United Kingdom), 2006, 152, 2767-2778. | 0.7 | 108 |
| 89 | Operating aerobic wastewater treatment at very short sludge ages enables treatment and energy recovery through anaerobic sludge digestion. Water Research, 2013, 47, 6546-6557. | 5.3 | 108 |
| 90 | Development of a model for assessing methane formation in rising main sewers. Water Research, 2009, 43, 2874-2884. | 5.3 | 107 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Impact of nitrate addition on biofilm properties and activities in rising main sewers. Water Research, 2009, 43, 4225-4237. | 5.3 | 106 |
| 92 | Predicting concrete corrosion of sewers using artificial neural network. Water Research, 2016, 92, 52-60. | 5.3 | 106 |
| 93 | Effect of nitrate and nitrite on the selection of microorganisms in the denitrifying anaerobic methane oxidation process. Environmental Microbiology Reports, 2011, 3, 315-319. | 1.0 | 103 |
| 94 | Understanding the properties of aerobic sludge granules as hydrogels. Biotechnology and Bioengineering, 2009, 102, 1483-1493. | 1.7 | 102 |
| 95 | Reverse osmosis integrity monitoring in water reuse: The challenge to verify virus removal â€“ A review. Water Research, 2016, 98, 384-395. | 5.3 | 98 |
| 96 | Characterisation and removal of recalcitrants in reverse osmosis concentrates from water reclamation plants. Water Research, 2011, 45, 2415-2427. | 5.3 | 96 |
| 97 | Recovering Nitrogen as a Solid without Chemical Dosing: Bio-Electroconcentration for Recovery of Nutrients from Urine. Environmental Science and Technology Letters, 2017, 4, 119-124. | 3.9 | 96 |
| 98 | Electrochemical sulfide oxidation from domestic wastewater using mixed metal-coated titanium electrodes. Water Research, 2011, 45, 5381-5388. | 5.3 | 93 |
| 99 | Impact of Iron Salt Dosage to Sewers on Downstream Anaerobic Sludge Digesters: Sulfide Control and Methane Production. Journal of Environmental Engineering, ASCE, 2013, 139, 594-601. | 0.7 | 93 |
| 100 | Removal of sulfate from high-strength wastewater by crystallisation. Water Research, 2009, 43, 762-772. | 5.3 | 92 |
| 101 | The role of iron in sulfide induced corrosion ofÂsewer concrete. Water Research, 2014, 49, 166-174. | 5.3 | 92 |
| 102 | Detection of anthropogenic gadolinium in treated wastewater in South East Queensland, Australia. Water Research, 2009, 43, 3534-3540. | 5.3 | 86 |
| 103 | Carbon and Electron Fluxes during the Electricity Driven 1,3-Propanediol Biosynthesis from Glycerol. Environmental Science & Technology, 2013, 47, 11199-11205. | 4.6 | 86 |
| 104 | Wastewater-Enhanced Microbial Corrosion of Concrete Sewers. Environmental Science & Technology, 2016, 50, 8084-8092. | 4.6 | 85 |
| 105 | Development of a novel titration and off-gas analysis (TOGA) sensor for study of biological processes in wastewater treatment systems. Biotechnology and Bioengineering, 2003, 81, 482-495. | 1.7 | 84 |
| 106 | Odor emissions from domestic wastewater: A review. Critical Reviews in Environmental Science and Technology, 2017, 47, 1581-1611. | 6.6 | 83 |
| 107 | Endogenous metabolism of Candidatus Accumulibacter phosphatis under various starvation conditions. Water Research, 2007, 41, 4646-4656. | 5.3 | 81 |
| 108 | Electrochemical sulfide removal and recovery from paper mill anaerobic treatment effluent. Water Research, 2010, 44, 2563-2571. | 5.3 | 80 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Production of targeted poly(3-hydroxyalkanoates) copolymers by glycogen accumulating organisms using acetate as sole carbon source. Journal of Biotechnology, 2007, 129, 489-497. | 1.9 | 79 |
| 110 | Reductive electrochemical remediation of emerging and regulated disinfection byproducts. Water Research, 2012, 46, 1705-1714. | 5.3 | 78 |
| 111 | Identification of controlling factors for the initiation of corrosion of fresh concrete sewers. Water Research, 2015, 80, 30-40. | 5.3 | 78 |
| 112 | Feasibility of sulfide control in sewers by reuse ofÂiron rich drinking water treatment sludge. Water Research, 2015, 71, 150-159. | 5.3 | 77 |
| 113 | Fate of N-nitrosodimethylamine, trihalomethane and haloacetic acid precursors in tertiary treatment including biofiltration. Water Research, 2011, 45, 5695-5704. | 5.3 | 76 |
| 114 | Anaerobic metabolism of Defluviicoccus vanus related glycogen accumulating organisms (GAOs) with acetate and propionate as carbon sources. Water Research, 2007, 41, 1885-1896. | 5.3 | 75 |
| 115 | Electrochemical Abatement of Hydrogen Sulfide from Waste Streams. Critical Reviews in Environmental Science and Technology, 2015, 45, 1555-1578. | 6.6 | 75 |
| 116 | Effect of pH on the ageing of reverse osmosis membranes upon exposure to hypochlorite. Desalination, 2013, 309, 97-105. | 4.0 | 73 |
| 117 | Characterisation of polyhydroxyalkanoate copolymers with controllable four-monomer composition. Journal of Biotechnology, 2008, 134, 137-145. | 1.9 | 72 |
| 118 | Optimization of intermittent, simultaneous dosage of nitrite and hydrochloric acid to control sulfide and methane productions in sewers. Water Research, 2011, 45, 6163-6172. | 5.3 | 72 |
| 119 | Determination of Growth Rate and Yield of Nitrifying Bacteria by Measuring Carbon Dioxide Uptake Rate. Water Environment Research, 2007, 79, 2437-2445. | 1.3 | 71 |
| 120 | A laboratory investigation of interactions between denitrifying anaerobic methane oxidation (DAMO) and anammox processes in anoxic environments. Scientific Reports, 2015, 5, 8706. | 1.6 | 71 |
| 121 | Autotrophic hydrogen-producing biofilm growth sustained by a cathode as the sole electron and energy source. Bioelectrochemistry, 2015, 102, 56-63. | 2.4 | 71 |
| 122 | Role of Sulfur during Acetate Oxidation in Biological Anodes. Environmental Science & Technology, 2009, 43, 3839-3845. | 4.6 | 69 |
| 123 | Proposed modifications to metabolic model for glycogen-accumulating organisms under anaerobic conditions. Biotechnology and Bioengineering, 2002, 80, 277-279. | 1.7 | 67 |
| 124 | Electrochemical sulfide removal from synthetic and real domestic wastewater at high current densities. Water Research, 2011, 45, 2281-2289. | 5.3 | 66 |
| 125 | Modern scientific methods and their potential in wastewater science and technology. Water Research, 2002, 36, 370-393. | 5.3 | 64 |
| 126 | Understanding the operational parameters affecting NDMA formation at Advanced Water Treatment Plants. Journal of Hazardous Materials, 2011, 185, 1575-1581. | 6.5 | 64 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | High-Throughput Amplicon Sequencing Reveals Distinct Communities within a Corroding Concrete Sewer System. Applied and Environmental Microbiology, 2012, 78, 7160-7162. | 1.4 | 64 |
| 128 | Stoichiometric and kinetic characterisation ofNitrobacter in mixed culture by decoupling the growth and energy generation processes. Biotechnology and Bioengineering, 2006, 94, 1176-1188. | 1.7 | 62 |
| 129 | A novel bioelectrochemical system for chemical-free permanent treatment of acid mine drainage. Water Research, 2017, 126, 411-420. | 5.3 | 60 |
| 130 | Microbial electrosynthesis system with dual biocathode arrangement for simultaneous acetogenesis, solventogenesis and carbon chain elongation. Chemical Communications, 2019, 55, 4351-4354. | 2.2 | 60 |
| 131 | Modeling aerobic carbon oxidation and storage by integrating respirometric, titrimetric, and off-gas CO2 measurements. Biotechnology and Bioengineering, 2004, 88, 135-147. | 1.7 | 59 |
| 132 | Electrochemical regeneration of sulfur loaded electrodes. Electrochemistry Communications, 2009, 11, 1437-1440. | 2.3 | 58 |
| 133 | Assessment of the impact of chloride on the formation of chlorinated by-products in the presence and absence of electrochemically activated sulfate. Chemical Engineering Journal, 2017, 330, 1265-1271. | 6.6 | 58 |
| 134 | Kinetics and mechanisms of nitrate and ammonium formation during ozonation of dissolved organic nitrogen. Water Research, 2017, 108, 451-461. | 5.3 | 58 |
| 135 | Bioelectrochemical systems: Microbial versus enzymatic catalysis. Electrochimica Acta, 2012, 82, 165-174. | 2.6 | 57 |
| 136 | Nutrient removal and energy recovery from high-rate activated sludge processes â€“ Impact of sludge age. Bioresource Technology, 2017, 245, 1155-1161. | 4.8 | 56 |
| 137 | A comprehensive laboratory assessment of the effects of sewer-dosed iron salts on wastewater treatment processes. Water Research, 2018, 146, 109-117. | 5.3 | 56 |
| 138 | Effectiveness of an alternating aerobic, anoxic/anaerobic strategy for maintaining biomass activity of BNR sludge during long-term starvation. Water Research, 2007, 41, 2590-2598. | 5.3 | 54 |
| 139 | Model-based analysis of anaerobic acetate uptake by a mixed culture of polyphosphate-accumulating and glycogen-accumulating organisms. Biotechnology and Bioengineering, 2003, 83, 293-302. | 1.7 | 53 |
| 140 | A novel and simple treatment for control of sulfide induced sewer concrete corrosion using free nitrous acid. Water Research, 2015, 70, 279-287. | 5.3 | 51 |
| 141 | Biodegradability of DBP precursors after drinking water ozonation. Water Research, 2016, 106, 550-561. | 5.3 | 51 |
| 142 | Mathematical modelling of prefermentersâ€"I. Model development and verification. Water Research, 1999, 33, 2757-2768. | 5.3 | 50 |
| 143 | Oxidised stainless steel: a very effective electrode material for microbial fuel cell bioanodes but at high risk of corrosion. Electrochimica Acta, 2015, 158, 356-360. | 2.6 | 47 |
| 144 | Evaluation of data-driven models for predicting the service life of concrete sewer pipes subjected to corrosion. Journal of Environmental Management, 2019, 234, 431-439. | 3.8 | 47 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Removal of the X-ray Contrast Media Diatrizoate by Electrochemical Reduction and Oxidation. Environmental Science & Technology, 2013, 47, 13686-13694. | 4.6 | 45 |
| 146 | Anaerobic phosphate release from activated sludge with enhanced biological phosphorus removal. A possible mechanism of intracellular pH control. , 1999, 63, 507-515. | | 44 |
| 147 | Dehalogenation of Iodinated X-ray Contrast Media in a Bioelectrochemical System. Environmental Science & Technology, 2011, 45, 782-788. | 4.6 | 43 |
| 148 | Impact of oxygen mass transfer on nitrification reactions in suspended carrier reactor biofilms. Process Biochemistry, 2009, 44, 43-53. | 1.8 | 40 |
| 149 | Effects of in-sewer dosing of iron-rich drinking water sludge on wastewater collection and treatment systems. Water Research, 2020, 171, 115396. | 5.3 | 40 |
| 150 | Microscale structure and function of anaerobicÃ¢Â€Â“aerobic granules containing glycogen accumulating organisms. FEMS Microbiology Ecology, 2003, 45, 253-261. | 1.3 | 39 |
| 151 | A sequencing batch reactor system for high-level biological nitrogen and phosphorus removal from abattoir wastewater. Biodegradation, 2009, 20, 339-350. | 1.5 | 39 |
| 152 | A comparative study of methanol as a supplementary carbon source for enhancing denitrification in primary and secondary anoxic zones. Biodegradation, 2009, 20, 221-234. | 1.5 | 38 |
| 153 | Stoichiometric and kinetic characterisation of Nitrosomonas sp. in mixed culture by decoupling the growth and energy generation processes. Journal of Biotechnology, 2006, 126, 342-356. | 1.9 | 35 |
| 154 | Differential distribution of ammonia- and nitrite-oxidising bacteria in flocs and granules from a nitrifying/denitrifying sequencing batch reactor. Enzyme and Microbial Technology, 2006, 39, 1392-1398. | 1.6 | 35 |
| 155 | Plasma treatment of electrodes significantly enhances the development of anodic electrochemically active biofilms. Electrochimica Acta, 2013, 108, 566-574. | 2.6 | 35 |
| 156 | Enhancing Toxic Metal Removal from Acidified Sludge with Nitrite Addition. Environmental Science & Technology, 2015, 49, 6257-6263. | 4.6 | 35 |
| 157 | Methanobacterium enables high rate electricity-driven autotrophic sulfate reduction. RSC Advances, 2015, 5, 89368-89374. | 1.7 | 35 |
| 158 | Recovery of in-sewer dosed iron from digested sludge at downstream treatment plants and its reuse potential. Water Research, 2020, 174, 115627. | 5.3 | 35 |
| 159 | Development of bioelectrocatalytic activity stimulates mixedâ€culture reduction of glycerol in a bioelectrochemical system. Microbial Biotechnology, 2015, 8, 483-489. | 2.0 | 34 |
| 160 | Prediction of concrete corrosion in sewers with hybrid Gaussian processes regression model. RSC Advances, 2017, 7, 30894-30903. | 1.7 | 34 |
| 161 | A rapid, non-destructive methodology to monitor activity of sulfide-induced corrosion of concrete based on H2S uptake rate. Water Research, 2014, 59, 229-238. | 5.3 | 32 |
| 162 | A decision support system for selecting sanitation systems in developing countries. Socio-Economic Planning Sciences, 2002, 36, 267-290. | 2.5 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Variation in Biofilm Structure and Activity Along the Length of a Rising Main Sewer. Water Environment Research, 2009, 81, 800-808. | 1.3 | 30 |
| 164 | Effects of surface washing on the mitigation of concrete corrosion under sewer conditions. Cement and Concrete Composites, 2016, 68, 88-95. | 4.6 | 30 |
| 165 | Analysis of biological wastewater treatment processes using multicomponent gas phase mass balancing. Biotechnology and Bioengineering, 2001, 76, 361-375. | 1.7 | 29 |
| 166 | Sludge population optimisation in biological nutrient removal wastewater treatment systems through on-line process control: a re/view. Reviews in Environmental Science and Biotechnology, 2008, 7, 243-254. | 3.9 | 29 |
| 167 | Impact of fluctuations in gaseous H 2 S concentrations on sulfide uptake by sewer concrete: The effect of high H 2 S loads. Water Research, 2015, 81, 84-91. | 5.3 | 28 |
| 168 | Electrochemical oxidation processes for PFAS removal from contaminated water and wastewater: fundamentals, gaps and opportunities towards practical implementation. Journal of Hazardous Materials, 2022, 434, 128886. | 6.5 | 28 |
| 169 | Determination of external and internal mass transfer limitation in nitrifying microbial aggregates. Biotechnology and Bioengineering, 2004, 86, 445-457. | 1.7 | 27 |
| 170 | Elucidation of metabolic pathways in glycogenâ€accumulating organisms with in vivo<sup>13</sup>C nuclear magnetic resonance. Environmental Microbiology, 2007, 9, 2694-2706. | 1.8 | 27 |
| 171 | Cathodic biofilm activates electrode surface and achieves efficient autotrophic sulfate reduction. Electrochimica Acta, 2016, 213, 66-74. | 2.6 | 27 |
| 172 | Removal of Pharmaceuticals and Illicit Drugs from Wastewater Due to Ferric Dosing in Sewers. Environmental Science & Technology, 2019, 53, 6245-6254. | 4.6 | 27 |
| 173 | Modeling the Aerobic Metabolism of Polyphosphateâ€Accumulating Organisms Enriched with Propionate as a Carbon Source. Water Environment Research, 2007, 79, 2477-2486. | 1.3 | 24 |
| 174 | Removal of magnetic resonance imaging contrast agents through advanced water treatment plants. Water Science and Technology, 2010, 61, 685-692. | 1.2 | 24 |
| 175 | Long-term field test of an electrochemical method for sulfide removal from sewage. Water Research, 2012, 46, 3085-3093. | 5.3 | 24 |
| 176 | Comparison of microbial communities across sections of a corroding sewer pipe and the effects of wastewater flooding. Biofouling, 2017, 33, 780-792. | 0.8 | 24 |
| 177 | Online titrimetric and off-gas analysis for examining nitrification processes in wastewater treatment. Water Research, 2003, 37, 2678-2690. | 5.3 | 23 |
| 178 | Selective cathodic microbial biofilm retention allows a high current-to-sulfide efficiency in sulfate-reducing microbial electrolysis cells. Bioelectrochemistry, 2017, 118, 62-69. | 2.4 | 22 |
| 179 | Ferrous Salt Demand for Sulfide Control in Rising Main Sewers: Tests on a Laboratory-Scale Sewer System. Journal of Environmental Engineering, ASCE, 2010, 136, 1180-1187. | 0.7 | 20 |
| 180 | Microstructure of copolymers of polyhydroxyalkanoates produced by glycogen accumulating organisms with acetate as the sole carbon source. Process Biochemistry, 2008, 43, 968-977. | 1.8 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Characterisation of enhanced biological phosphorus removal activated sludges with dissimilar phosphorus removal performances. Water Science and Technology, 1998, 37, 567-571. | 1.2 | 19 |
| 182 | Engineered ecosystem for sustainable on-site wastewater treatment. Water Research, 2007, 41, 1823-1831. | 5.3 | 18 |
| 183 | SCORe-CT: a new method for testing effectiveness of sulfide-control chemicals used in sewer systems. Water Science and Technology, 2011, 64, 2381-2388. | 1.2 | 18 |
| 184 | Oxygen Suppresses Light-Driven Anodic Current Generation by a Mixed Phototrophic Culture. Environmental Science & Technology, 2014, 48, 14000-14006. | 4.6 | 17 |
| 185 | Opportunities for reducing coagulants usage in urban water management: The Oxley Creek Sewage Collection and Treatment System as an example. Water Research, 2019, 165, 114996. | 5.3 | 17 |
| 186 | Effective removal of MIB and geosmin using MBBR for drinking water treatment. Water Research, 2019, 149, 440-447. | 5.3 | 16 |
| 187 | The impact of primary sedimentation on the use of iron-rich drinking water sludge on the urban wastewater system. Journal of Hazardous Materials, 2021, 402, 124051. | 6.5 | 16 |
| 188 | Integrating process engineering and microbiology tools to advance activated sludge wastewater treatment research and development. Reviews in Environmental Science and Biotechnology, 2002, 1, 83-97. | 3.9 | 15 |
| 189 | Reducing natural organic matter and disinfection by-product precursors by alternating oxic and anoxic conditions during engineered short residence time riverbank filtration: A laboratory-scale column study. Science of the Total Environment, 2016, 565, 616-625. | 3.9 | 15 |
| 190 | Enhancing zero valent iron based natural organic matter removal by mixing with dispersed carbon cathodes. Science of the Total Environment, 2016, 550, 95-102. | 3.9 | 15 |
| 191 | Marine phototrophic consortia transfer electrons to electrodes in response to reductive stress. Photosynthesis Research, 2016, 127, 347-354. | 1.6 | 15 |
| 192 | Effects of aging of ferric-based drinking water sludge on its reactivity for sulfide and phosphate removal. Water Research, 2020, 184, 116179. | 5.3 | 15 |
| 193 | Improved understanding of the interactions and complexities of biological nitrogen and phosphorus removal processes. Reviews in Environmental Science and Biotechnology, 2004, 3, 265-272. | 3.9 | 14 |
| 194 | Oxidative capacitance of sulfate-based boron-doped diamond electrochemical system. Electrochemistry Communications, 2018, 89, 14-18. | 2.3 | 14 |
| 195 | Dynamic Response of Sulfate-Reducing and Methanogenic Activities of Anaerobic Sewer Biofilms to Ferric Dosing. Journal of Environmental Engineering, ASCE, 2012, 138, 510-517. | 0.7 | 12 |
| 196 | Fully reversible current driven by a dual marine photosynthetic microbial community. Bioresource Technology, 2015, 195, 248-253. | 4.8 | 12 |
| 197 | Periodic deprivation of gaseous hydrogen sulfide affects the activity of the concrete corrosion layer in sewers. Water Research, 2019, 157, 463-471. | 5.3 | 12 |
| 198 | Model development and full scale validation for anaerobic treatment of protein and fat based wastewater. Water Science and Technology, 1997, 36, 423-431. | 1.2 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Analysis of Free Ammonia Inhibition of Nitrite Oxidizing Bacteria Using a Dissolved Oxygen Respirometer. Environmental Engineering Research, 2008, 13, 125-130. | 1.5 | 12 |
| 200 | Using Anoxygenic Photosynthetic Bacteria for the Removal of Sulfide from Wastewater. Advances in Photosynthesis and Respiration, 2008, , 437-460. | 1.0 | 11 |
| 201 | Enhancing anaerobic digestion using free nitrous acid: Identifying the optimal pre-treatment condition in continuous operation. Water Research, 2021, 205, 117694. | 5.3 | 10 |
| 202 | Evaluation of continuous and intermittent trickling strategies for the removal of hydrogen sulfide in a biotrickling filter. Chemosphere, 2022, 291, 132723. | 4.2 | 10 |
| 203 | Performance of a substratum-irradiated photosynthetic biofilm reactor for the removal of sulfide from wastewater. Biotechnology and Bioengineering, 2004, 87, 14-23. | 1.7 | 9 |
| 204 | Anodic Reactivity of Ferrous Sulfide Precipitates Changing over Time due to Particulate Speciation. Environmental Science & Technology, 2013, 47, 12366-12373. | 4.6 | 9 |
| 205 | Scaling-Free Electrochemical Production of Caustic and Oxygen for Sulfide Control in Sewers. Environmental Science & Technology, 2015, 49, 11395-11402. | 4.6 | 9 |
| 206 | Optimization and Control of Nitrogen Removal Activated Sludge Processes: A Review of Recent Developments. Focus on Biotechnology, 2003, , 187-227. | 0.4 | 9 |
| 207 | Characterisation of the bacterial consortium involved in nitrite oxidation in activated sludge. Water Science and Technology, 1999, 39, 45-52. | 1.2 | 9 |
| 208 | Selective Extraction of Medium-Chain Carboxylic Acids by Electrodialysis and Phase Separation. ACS Omega, 2021, 6, 7841-7850. | 1.6 | 8 |
| 209 | Long-term performance of enhanced-zero valent iron for drinking water treatment: A lab-scale study. Chemical Engineering Journal, 2017, 315, 124-131. | 6.6 | 7 |
| 210 | Electrochemical Quartz Crystal Microbalance to Monitor Biofilm Growth and Properties during BioElectrochemical System Inoculation and Load Conditions. ECS Transactions, 2010, 28, 11-22. | 0.3 | 5 |
| 211 | Evaluation of anaerobic digestion processes for short sludge-age waste activated sludge combined with anammox treatment of digestate liquor. Water Science and Technology, 2016, 73, 1052-1060. | 1.2 | 5 |
| 212 | Nitrite addition to acidified sludge significantly improves digestibility, toxic metal removal, dewaterability and pathogen reduction. Scientific Reports, 2016, 6, 39795. | 1.6 | 5 |
| 213 | Greenhouse gas production in wastewater treatment: process selection is the major factor. Water Science and Technology, 2003, 47, 43-8. | 1.2 | 5 |
| 214 | Evaluating a strategy for maintaining nitrifier activity during long-term starvation in a moving bed biofilm reactor (MBBR) treating reverse osmosis concentrate. Water Science and Technology, 2012, 66, 837-842. | 1.2 | 4 |
| 215 | Wastewater Treatment (Microbial Bioelectrochemical) and Production of Value-Added By-Products. , 2014, , 2111-2117. | | 1 |
| 216 | Electrochemical Treatment of Reverse Osmosis Concentrates. , 2014, , 644-651. | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | METABOLIC MODEL OF THE AEROBIC METABOLISM OF POLYPHOSPHATE ACCUMULATING ORGANISMS WITH A PROPIONATE CARBON SOURCE. Proceedings of the Water Environment Federation, 2007, 2007, 1243-1255. | 0.0 | 0 |
| 218 | Anodic Reactivity of Ferrous Sulfide Particles Generated in Wastewater Treatment. ECS Meeting Abstracts, 2012, , . | 0.0 | 0 |
| 219 | CFD MODELLING OF PARTICLE TRANSPORT AND BIOLOGICAL REACTIONS IN A MIXED WASTEWATER TREATMENT VESSEL. , 2002, , . | | 0 |