

Benjamin J Tcharke

List of Publications by Year in descending order

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Version: 2024-02-01

65
papers

4,154
citations

172457

29
h-index

123424

61
g-index

65
all docs

65
docs citations

65
times ranked

4191
citing authors

#	ARTICLE	IF	CITATIONS
1	First confirmed detection of SARS-CoV-2 in untreated wastewater in Australia: A proof of concept for the wastewater surveillance of COVID-19 in the community. <i>Science of the Total Environment</i> , 2020, 728, 138764.	8.0	1,393
2	Wastewater-based epidemiology biomarkers: Past, present and future. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 105, 453-469.	11.4	327
3	SARS-CoV-2 RNA monitoring in wastewater as a potential early warning system for COVID-19 transmission in the community: A temporal case study. <i>Science of the Total Environment</i> , 2021, 761, 144216.	8.0	218
4	Spatio-temporal assessment of illicit drug use at large scale: evidence from 7 years of international wastewater monitoring. <i>Addiction</i> , 2020, 115, 109-120.	3.3	154
5	Identification and quantification of selected plastics in biosolids by pressurized liquid extraction combined with double-shot pyrolysis gas chromatography-mass spectrometry. <i>Science of the Total Environment</i> , 2020, 715, 136924.	8.0	145
6	Towards finding a population biomarker for wastewater epidemiology studies. <i>Science of the Total Environment</i> , 2014, 487, 621-628.	8.0	141
7	Temporal trends in drug use in Adelaide, South Australia by wastewater analysis. <i>Science of the Total Environment</i> , 2016, 565, 384-391.	8.0	115
8	Wastewater treatment plants as a source of plastics in the environment: a review of occurrence, methods for identification, quantification and fate. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1908-1931.	2.4	112
9	Social, demographic, and economic correlates of food and chemical consumption measured by wastewater-based epidemiology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 21864-21873.	7.1	104
10	Plastics in biosolids from 1950 to 2016: A function of global plastic production and consumption. <i>Water Research</i> , 2021, 201, 117367.	11.3	77
11	Harnessing the Power of the Census: Characterizing Wastewater Treatment Plant Catchment Populations for Wastewater-Based Epidemiology. <i>Environmental Science & Technology</i> , 2019, 53, 10303-10311.	10.0	69
12	Measuring spatial and temporal trends of nicotine and alcohol consumption in Australia using wastewater-based epidemiology. <i>Addiction</i> , 2018, 113, 1127-1136.	3.3	62
13	Release of Plastics to Australian Land from Biosolids End-Use. <i>Environmental Science & Technology</i> , 2020, 54, 15132-15141.	10.0	62
14	A National Wastewater Monitoring Program for a better understanding of public health: A case study using the Australian Census. <i>Environment International</i> , 2019, 122, 400-411.	10.0	59
15	LC-HRMS suspect screening to show spatial patterns of New Psychoactive Substances use in Australia. <i>Science of the Total Environment</i> , 2019, 650, 2181-2187.	8.0	58
16	Plastic particles in soil: state of the knowledge on sources, occurrence and distribution, analytical methods and ecological impacts. <i>Environmental Sciences: Processes and Impacts</i> , 2021, 23, 240-274.	3.5	44
17	Urinary Concentrations of Bisphenols in the Australian Population and Their Association with the Per Capita Mass Loads in Wastewater. <i>Environmental Science & Technology</i> , 2020, 54, 10141-10148.	10.0	43
18	Assessment of drugs of abuse in a wastewater treatment plant with parallel secondary wastewater treatment train. <i>Science of the Total Environment</i> , 2019, 658, 947-957.	8.0	41

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19	Trends in nicotine consumption between 2010 and 2017 in an Australian city using the wastewater-based epidemiology approach. <i>Environment International</i> , 2019, 125, 184-190.	10.0	39
20	Towards an efficient method for the extraction and analysis of cannabinoids in wastewater. <i>Talanta</i> , 2020, 217, 121034.	5.5	37
21	Enantiomeric profiling of amphetamine and methamphetamine in wastewater: A 7-year study in regional and urban Queensland, Australia. <i>Science of the Total Environment</i> , 2018, 643, 827-834.	8.0	36
22	Per capita loads of organic UV filters in Australian wastewater influent. <i>Science of the Total Environment</i> , 2019, 662, 134-140.	8.0	36
23	Trends in stimulant use in Australia: A comparison of wastewater analysis and population surveys. <i>Science of the Total Environment</i> , 2015, 536, 331-337.	8.0	35
24	Estimates of tobacco use by wastewater analysis of anabasine and anatabine. <i>Drug Testing and Analysis</i> , 2016, 8, 702-707.	2.6	35
25	Evaluating the stability of three oxidative stress biomarkers under sewer conditions and potential impact for use in wastewater-based epidemiology. <i>Water Research</i> , 2019, 166, 115068.	11.3	35
26	Simultaneous determination of 24 opioids, stimulants and new psychoactive substances in wastewater. <i>MethodsX</i> , 2019, 6, 953-960.	1.6	34
27	New approach for the measurement of long-term alcohol consumption trends: Application of wastewater-based epidemiology in an Australian regional city. <i>Drug and Alcohol Dependence</i> , 2020, 207, 107795.	3.2	34
28	Determining changes in new psychoactive substance use in Australia by wastewater analysis. <i>Science of the Total Environment</i> , 2020, 731, 139209.	8.0	33
29	Wastewater treatment efficacy evaluated with inÂvitro bioassays. <i>Water Research X</i> , 2020, 9, 100072.	6.1	31
30	Trends in artificial sweetener consumption: A 7-year wastewater-based epidemiology study in Queensland, Australia. <i>Science of the Total Environment</i> , 2021, 754, 142438.	8.0	29
31	Systematic Evaluation of the In-Sample Stability of Selected Pharmaceuticals, Illicit Drugs, and Their Metabolites in Wastewater. <i>Environmental Science & Technology</i> , 2021, 55, 7418-7429.	10.0	29
32	Concentrations of phthalate metabolites in Australian urine samples and their contribution to the per capita loads in wastewater. <i>Environment International</i> , 2020, 137, 105534.	10.0	29
33	Uncertainties in estimating alcohol and tobacco consumption by wastewater-based epidemiology. <i>Current Opinion in Environmental Science and Health</i> , 2019, 9, 13-18.	4.1	27
34	Pharmaceuticals, personal care products, food additive and pesticides in surface waters from three Australian east coast estuaries (Sydney, Yarra and Brisbane). <i>Marine Pollution Bulletin</i> , 2020, 153, 111014.	5.0	27
35	Monitoring of SARS-CoV-2 in sewersheds with low COVID-19 cases using a passive sampling technique. <i>Water Research</i> , 2022, 218, 118481.	11.3	26
36	Calibration and validation of a microporous polyethylene passive sampler for quantitative estimation of illicit drug and pharmaceutical and personal care product (PPCP) concentrations in wastewater influent. <i>Science of the Total Environment</i> , 2020, 704, 135891.	8.0	25

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37	National wastewater reconnaissance of artificial sweetener consumption and emission in Australia. <i>Environment International</i> , 2020, 143, 105963.	10.0	25
38	Population Socioeconomics Predicted Using Wastewater. <i>Environmental Science and Technology Letters</i> , 2020, 7, 567-572.	8.7	23
39	Impact of COVID-19 Controls on the Use of Illicit Drugs and Alcohol in Australia. <i>Environmental Science and Technology Letters</i> , 2021, 8, 799-804.	8.7	22
40	Analyzing Wastewater Samples Collected during Census To Determine the Correction Factors of Drugs for Wastewater-Based Epidemiology: The Case of Codeine and Methadone. <i>Environmental Science and Technology Letters</i> , 2019, 6, 265-269.	8.7	19
41	Using Prescription and Wastewater Data to Estimate the Correction Factors of Atenolol, Carbamazepine, and Naproxen for Wastewater-Based Epidemiology Applications. <i>Environmental Science & Technology</i> , 2021, 55, 7551-7560.	10.0	19
42	Long-term trends in tobacco use assessed by wastewater-based epidemiology and its relationship with consumption of nicotine containing products. <i>Environment International</i> , 2020, 145, 106088.	10.0	18
43	Estimating Alcohol Consumption by Wastewater-Based Epidemiology: An Assessment of the Correction Factor for Ethyl Sulfate Using Large-Scale National Monitoring Data. <i>Environmental Science and Technology Letters</i> , 2021, 8, 333-338.	8.7	18
44	A pilot wastewater-based epidemiology assessment of anabolic steroid use in Queensland, Australia. <i>Drug Testing and Analysis</i> , 2019, 11, 937-949.	2.6	17
45	Determination of anabasine, anatabine, and nicotine biomarkers in wastewater by enhanced direct injection LC-MS/MS and evaluation of their in-sewer stability. <i>Science of the Total Environment</i> , 2020, 743, 140551.	8.0	17
46	A sensitive analytical method for the measurement of neurotransmitter metabolites as potential population biomarkers in wastewater. <i>Journal of Chromatography A</i> , 2020, 1612, 460623.	3.7	16
47	Investigating the correlation between wastewater analysis and roadside drug testing in South Australia. <i>Drug and Alcohol Dependence</i> , 2018, 187, 123-126.	3.2	14
48	A wastewater-based assessment of the impact of a minimum unit price (MUP) on population alcohol consumption in the Northern Territory, Australia. <i>Addiction</i> , 2022, 117, 243-249.	3.3	14
49	A comparison of trends in wastewater-based data and traditional epidemiological indicators of stimulant consumption in three locations. <i>Addiction</i> , 2020, 115, 462-472.	3.3	13
50	Performance- and image-enhancing drug use in the community: use prevalence, user demographics and the potential role of wastewater-based epidemiology. <i>Journal of Hazardous Materials</i> , 2021, 419, 126340.	12.4	13
51	Background release and potential point sources of per- and polyfluoroalkyl substances to municipal wastewater treatment plants across Australia. <i>Chemosphere</i> , 2022, 293, 133657.	8.2	12
52	Anabasine-based measurement of cigarette consumption using wastewater analysis. <i>Drug Testing and Analysis</i> , 2020, 12, 1393-1398.	2.6	11
53	Application of catecholamine metabolites as endogenous population biomarkers for wastewater-based epidemiology. <i>Science of the Total Environment</i> , 2021, 763, 142992.	8.0	11
54	Does size matter? Quantification of plastics associated with size fractionated biosolids. <i>Science of the Total Environment</i> , 2022, 811, 152382.	8.0	11

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55	In-Sewer Stability Assessment of Anabolic Steroids and Selective Androgen Receptor Modulators. Environmental Science & Technology, 2022, 56, 1627-1638.	10.0	10
56	A nationwide wastewater-based assessment of metformin consumption across Australia. Environment International, 2022, 165, 107282.	10.0	10
57	In-sewer stability of selected analgesics and their metabolites. Water Research, 2021, 204, 117647.	11.3	9
58	Time-Integrative Passive Sampling of Very Hydrophilic Chemicals in Wastewater Influent. Environmental Science and Technology Letters, 2020, 7, 848-853.	8.7	8
59	Quantifying nicotine and alcohol consumption in New Zealand using wastewater-based epidemiology timed to coincide with census. Drug and Alcohol Review, 2021, 40, 1178-1185.	2.1	8
60	Artificial sweeteners in end-use biosolids in Australia. Water Research, 2021, 200, 117237.	11.3	8
61	The impact of COVID-19 on antidepressant sales and prescription dispensing in Australia. Australian and New Zealand Journal of Psychiatry, 2022, 56, 871-872.	2.3	3
62	Wastewater analysis shows a large decrease in oxycodone use in Adelaide. Medical Journal of Australia, 2017, 207, 88-88.	1.7	2
63	Multisite Calibration of a Microporous Polyethylene Tube Passive Sampler for Quantifying Drugs in Wastewater. Environmental Science & Technology, 2021, 55, 12922-12929.	10.0	1
64	A simple liquid extraction for simultaneous determination of 12 opioid ligands in plasma by LC-MS/MS. Analytical Methods, 2022, , .	2.7	1
65	Spatial, temporal and socioeconomic patterns of illicit drug use in New Zealand assessed using wastewater-based epidemiology timed to coincide with the census. New Zealand Medical Journal, 2021, 134, 11-26.	0.5	0