

Barbara Kasprzyk-Hordern

List of Publications by Year in descending order

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Version: 2024-02-01

112
papers

15,709
citations

25034

57
h-index

23533

111
g-index

124
all docs

124
docs citations

124
times ranked

12613
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on emerging contaminants in wastewaters and the environment: Current knowledge, understudied areas and recommendations for future monitoring. <i>Water Research</i> , 2015, 72, 3-27.	11.3	1,942
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. <i>Water Research</i> , 2009, 43, 363-380.	11.3	1,343
3	Catalytic ozonation and methods of enhancing molecular ozone reactions in water treatment. <i>Applied Catalysis B: Environmental</i> , 2003, 46, 639-669.	20.2	1,203
4	The occurrence of pharmaceuticals, personal care products, endocrine disruptors and illicit drugs in surface water in South Wales, UK. <i>Water Research</i> , 2008, 42, 3498-3518.	11.3	921
5	The efficiency and mechanisms of catalytic ozonation. <i>Applied Catalysis B: Environmental</i> , 2010, 99, 27-42.	20.2	811
6	Chemistry of alumina, reactions in aqueous solution and its application in water treatment. <i>Advances in Colloid and Interface Science</i> , 2004, 110, 19-48.	14.7	420
7	Comparing illicit drug use in 19 European cities through sewage analysis. <i>Science of the Total Environment</i> , 2012, 432, 432-439.	8.0	416
8	Future perspectives of wastewater-based epidemiology: Monitoring infectious disease spread and resistance to the community level. <i>Environment International</i> , 2020, 139, 105689.	10.0	408
9	Multi-residue method for the determination of basic/neutral pharmaceuticals and illicit drugs in surface water by solid-phase extraction and ultra performance liquid chromatographyâ€“positive electrospray ionisation tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2007, 1161, 132-145.	3.7	343
10	Pharmacologically active compounds in the environment and their chirality. <i>Chemical Society Reviews</i> , 2010, 39, 4466.	38.1	342
11	Wastewater-Based Epidemiology: Global Collaborative to Maximize Contributions in the Fight Against COVID-19. <i>Environmental Science & Technology</i> , 2020, 54, 7754-7757.	10.0	337
12	Spatial differences and temporal changes in illicit drug use in Europe quantified by wastewater analysis. <i>Addiction</i> , 2014, 109, 1338-1352.	3.3	319
13	Spatial and temporal occurrence of pharmaceuticals and illicit drugs in the aqueous environment and during wastewater treatment: New developments. <i>Science of the Total Environment</i> , 2013, 454-455, 442-456.	8.0	289
14	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 chromatographyâ€“electrospray tandem mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 391, 1293-1308.	3.7	277
15	Multi-residue analysis of drugs of abuse in wastewater and surface water by solid-phase extraction and liquid chromatographyâ€“positive electrospray ionisation tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2011, 1218, 1620-1631.	3.7	235
16	Critical evaluation of methodology commonly used in sample collection, storage and preparation for the analysis of pharmaceuticals and illicit drugs in surface water and wastewater by solid phase extraction and liquid chromatographyâ€“mass spectrometry. <i>Journal of Chromatography A</i> , 2011, 1218, 8036-8059.	3.7	221
17	Multi-residue analysis of 90 emerging contaminants in liquid and solid environmental matrices by ultra-high-performance liquid chromatography tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2016, 1431, 64-78.	3.7	211
18	Measuring biomarkers in wastewater as a new source of epidemiological information: Current state and future perspectives. <i>Environment International</i> , 2017, 99, 131-150.	10.0	209

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19	Mechanisms of catalytic ozonation: An investigation into superoxide ion radical and hydrogen peroxide formation during catalytic ozonation on alumina and zeolites in water. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 437-449.	20.2	172
20	N-nitrosodimethylamine (NDMA) formation during ozonation of dimethylamine-containing waters. <i>Water Research</i> , 2008, 42, 863-870.	11.3	167
21	Illicit and pharmaceutical drug consumption estimated via wastewater analysis. Part A: Chemical analysis and drug use estimates. <i>Science of the Total Environment</i> , 2014, 487, 629-641.	8.0	164
22	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
23	Mechanisms of catalytic ozonation on alumina and zeolites in water: Formation of hydroxyl radicals. <i>Applied Catalysis B: Environmental</i> , 2012, 123-124, 94-106.	20.2	151
24	Testing wastewater to detect illicit drugs: State of the art, potential and research needs. <i>Science of the Total Environment</i> , 2014, 487, 613-620.	8.0	149
25	Comparison of pharmaceutical, illicit drug, alcohol, nicotine and caffeine levels in wastewater with sale, seizure and consumption data for 8 European cities. <i>BMC Public Health</i> , 2016, 16, 1035.	2.9	139
26	Catalytic ozonation of natural organic matter on alumina. <i>Applied Catalysis B: Environmental</i> , 2006, 62, 345-358.	20.2	135
27	Enantiomeric analysis of drugs of abuse in wastewater by chiral liquid chromatography coupled with tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2010, 1217, 4575-4586.	3.7	130
28	Enantiomeric Profiling of Chiral Drugs in Wastewater and Receiving Waters. <i>Environmental Science & Technology</i> , 2012, 46, 1681-1691.	10.0	130
29	Illicit drugs and pharmaceuticals in the environment – Forensic applications of environmental data. Part 1: Estimation of the usage of drugs in local communities. <i>Environmental Pollution</i> , 2009, 157, 1773-1777.	7.5	129
30	Multi-residue determination of the sorption of illicit drugs and pharmaceuticals to wastewater suspended particulate matter using pressurised liquid extraction, solid phase extraction and liquid chromatography coupled with tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2011, 1218, 7901-7913.	3.7	128
31	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. <i>Talanta</i> , 2008, 74, 1299-1312.	5.5	124
32	Catalytic ozonation for the removal of organic contaminants in water on alumina. <i>Applied Catalysis B: Environmental</i> , 2015, 165, 408-418.	20.2	119
33	Drugs of abuse in wastewater and suspended particulate matter – Further developments in sewage epidemiology. <i>Environment International</i> , 2012, 48, 28-38.	10.0	118
34	Determination of chiral pharmaceuticals and illicit drugs in wastewater and sludge using microwave assisted extraction, solid-phase extraction and chiral liquid chromatography coupled with tandem mass spectrometry. <i>Analytica Chimica Acta</i> , 2015, 882, 112-126.	5.4	113
35	Wastewater-based epidemiology to assess pan-European pesticide exposure. <i>Water Research</i> , 2017, 121, 270-279.	11.3	110
36	The hazard of N-nitrosodimethylamine (NDMA) formation during water disinfection with strong oxidants. <i>Desalination</i> , 2005, 176, 37-45.	8.2	95

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37	Mass spectrometric strategies for the investigation of biomarkers of illicit drug use in wastewater. <i>Mass Spectrometry Reviews</i> , 2018, 37, 258-280.	5.4	95
38	Catalytic ozonation for the removal of organic contaminants in water on ZSM-5 zeolites. <i>Applied Catalysis B: Environmental</i> , 2014, 154-155, 110-122.	20.2	90
39	Estimation of caffeine intake from analysis of caffeine metabolites in wastewater. <i>Science of the Total Environment</i> , 2017, 609, 1582-1588.	8.0	87
40	Illicit drugs and pharmaceuticals in the environment – Forensic applications of environmental data, Part 2: Pharmaceuticals as chemical markers of faecal water contamination. <i>Environmental Pollution</i> , 2009, 157, 1778-1786.	7.5	86
41	Multi-year inter-laboratory exercises for the analysis of illicit drugs and metabolites in wastewater: Development of a quality control system. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 103, 34-43.	11.4	85
42	Wastewater-Based Epidemiology To Monitor Synthetic Cathinones Use in Different European Countries. <i>Environmental Science & Technology</i> , 2016, 50, 10089-10096.	10.0	83
43	Enantiomeric profiling of chiral illicit drugs in a pan-European study. <i>Water Research</i> , 2018, 130, 151-160.	11.3	83
44	Liquid chromatography-tandem mass spectrometry determination of synthetic cathinones and phenethylamines in influent wastewater of eight European cities. <i>Chemosphere</i> , 2017, 168, 1032-1041.	8.2	82
45	Catalytic ozonation of chlorinated VOCs on ZSM-5 zeolites and alumina: Formation of chlorides. <i>Applied Catalysis B: Environmental</i> , 2017, 200, 274-282.	20.2	82
46	Wastewater-based epidemiology and enantiomeric profiling for drugs of abuse in South African wastewaters. <i>Science of the Total Environment</i> , 2018, 625, 792-800.	8.0	82
47	Using chiral liquid chromatography quadrupole time-of-flight mass spectrometry for the analysis of pharmaceuticals and illicit drugs in surface and wastewater at the enantiomeric level. <i>Journal of Chromatography A</i> , 2012, 1249, 115-129.	3.7	81
48	Enantiomer profiling of high loads of amphetamine and MDMA in communal sewage: A Dutch perspective. <i>Science of the Total Environment</i> , 2014, 487, 666-672.	8.0	77
49	Multi-residue enantiomeric analysis of pharmaceuticals and their active metabolites in the Guadalquivir River basin (South Spain) by chiral liquid chromatography coupled with tandem mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 5859-5873.	3.7	76
50	Enantiomeric profiling of chiral drug biomarkers in wastewater with the usage of chiral liquid chromatography coupled with tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2016, 1438, 84-99.	3.7	75
51	Estimation of community-wide drugs use via stereoselective profiling of sewage. <i>Science of the Total Environment</i> , 2012, 423, 142-150.	8.0	71
52	Assessment of bisphenol-A in the urban water cycle. <i>Science of the Total Environment</i> , 2019, 650, 900-907.	8.0	68
53	Stereoselective biodegradation of amphetamine and methamphetamine in river microcosms. <i>Water Research</i> , 2013, 47, 5708-5718.	11.3	67
54	Occurrence of pharmaceutical residues, personal care products, lifestyle chemicals, illicit drugs and metabolites in wastewater and receiving surface waters of Krakow agglomeration in South Poland. <i>Science of the Total Environment</i> , 2021, 768, 144360.	8.0	64

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55	Biotic phase micropollutant distribution in horizontal sub-surface flow constructed wetlands. <i>Science of the Total Environment</i> , 2018, 630, 648-657.	8.0	61
56	A novel immobilization strategy for electrochemical detection of cancer biomarkers: DNA-directed immobilization of aptamer sensors for sensitive detection of prostate specific antigens. <i>Analyst</i> , The, 2015, 140, 2628-2633.	3.5	59
57	Increased levels of the oxidative stress biomarker 8-iso-prostaglandin F ₂ ± in wastewater associated with tobacco use. <i>Scientific Reports</i> , 2016, 6, 39055.	3.3	59
58	Enantiomeric profiling of a chemically diverse mixture of chiral pharmaceuticals in urban water. <i>Environmental Pollution</i> , 2017, 230, 368-377.	7.5	58
59	Community Sewage Sensors for Monitoring Public Health. <i>Environmental Science & Technology</i> , 2015, 49, 5845-5846.	10.0	56
60	Estimation of community-wide exposure to bisphenol A via water fingerprinting. <i>Environment International</i> , 2019, 125, 1-8.	10.0	54
61	Monitoring Genetic Population Biomarkers for Wastewater-Based Epidemiology. <i>Analytical Chemistry</i> , 2017, 89, 9941-9945.	6.5	53
62	MTBE, DIPE, ETBE and TAME degradation in water using perfluorinated phases as catalysts for ozonation process. <i>Applied Catalysis B: Environmental</i> , 2004, 51, 51-66.	20.2	50
63	Multi-residue enantiomeric analysis of human and veterinary pharmaceuticals and their metabolites in environmental samples by chiral liquid chromatography coupled with tandem mass spectrometry detection. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 9085-9104.	3.7	50
64	Spatiotemporal profiling of antibiotics and resistance genes in a river catchment: Human population as the main driver of antibiotic and antibiotic resistance gene presence in the environment. <i>Water Research</i> , 2021, 203, 117533.	11.3	49
65	Illicit and pharmaceutical drug consumption estimated via wastewater analysis. Part B: Placing back-calculations in a formal statistical framework. <i>Science of the Total Environment</i> , 2014, 487, 642-650.	8.0	48
66	Making Waves: Collaboration in the time of SARS-CoV-2 - rapid development of an international co-operation and wastewater surveillance database to support public health decision-making. <i>Water Research</i> , 2021, 199, 117167.	11.3	48
67	Changes in drug use in European cities during early COVID-19 lockdowns – A snapshot from wastewater analysis. <i>Environment International</i> , 2021, 153, 106540.	10.0	47
68	Wastewater-based epidemiology combined with local prescription analysis as a tool for temporal monitoring of drugs trends - A UK perspective. <i>Science of the Total Environment</i> , 2020, 735, 139433.	8.0	46
69	A Novel DNA Biosensor Using a Ferrocenyl Intercalator Applied to the Potential Detection of Human Population Biomarkers in Wastewater. <i>Environmental Science & Technology</i> , 2015, 49, 5609-5617.	10.0	44
70	New Framework To Diagnose the Direct Disposal of Prescribed Drugs in Wastewater – A Case Study of the Antidepressant Fluoxetine. <i>Environmental Science & Technology</i> , 2016, 50, 3781-3789.	10.0	44
71	Enantioselective degradation of amphetamine-like environmental micropollutants (amphetamine,) <i>Tj ETQq1 1 0.784314 rgBT /Overlook</i>	7.5	40
72	Enantioselective simultaneous analysis of selected pharmaceuticals in environmental samples by ultrahigh performance supercritical fluid based chromatography tandem mass spectrometry. <i>Analytica Chimica Acta</i> , 2016, 934, 239-251.	5.4	40

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73	Critical evaluation of monitoring strategy for the multi-residue determination of 90 chiral and achiral micropollutants in effluent wastewater. <i>Science of the Total Environment</i> , 2017, 579, 569-578.	8.0	40
74	In Situ Calibration of a New Chemcatcher Configuration for the Determination of Polar Organic Micropollutants in Wastewater Effluent. <i>Environmental Science & Technology</i> , 2016, 50, 9469-9478.	10.0	39
75	Applications of chiral chromatography coupled with mass spectrometry in the analysis of chiral pharmaceuticals in the environment. <i>Trends in Environmental Analytical Chemistry</i> , 2014, 1, e34-e51.	10.3	38
76	Stereoisomeric profiling of drugs of abuse and pharmaceuticals in wastewaters of Valencia (Spain). <i>Science of the Total Environment</i> , 2014, 494-495, 49-57.	8.0	36
77	Community Sewage Sensors towards Evaluation of Drug Use Trends: Detection of Cocaine in Wastewater with DNA-Directed Immobilization Aptamer Sensors. <i>Scientific Reports</i> , 2016, 6, 21024.	3.3	35
78	Enantioselective fractionation of fluoroquinolones in the aqueous environment using chiral liquid chromatography coupled with tandem mass spectrometry. <i>Chemosphere</i> , 2018, 206, 376-386.	8.2	31
79	Simultaneous enantiomeric analysis of pharmacologically active compounds in environmental samples by chiral LC-MS/MS with a macrocyclic antibiotic stationary phase. <i>Journal of Mass Spectrometry</i> , 2017, 52, 94-108.	1.6	30
80	Verifying community-wide exposure to endocrine disruptors in personal care products – In quest for metabolic biomarkers of exposure via in vitro studies and wastewater-based epidemiology. <i>Water Research</i> , 2018, 143, 117-126.	11.3	29
81	Stereoisomeric profiling of chiral pharmaceutically active compounds in wastewaters and the receiving environment – A catchment-scale and a laboratory study. <i>Environment International</i> , 2019, 127, 558-572.	10.0	27
82	Multi-residue determination of micropollutants in <i>Phragmites australis</i> from constructed wetlands using microwave assisted extraction and ultra-high-performance liquid chromatography tandem mass spectrometry. <i>Analytica Chimica Acta</i> , 2017, 959, 91-101.	5.4	26
83	Comparison of phosphodiesterase type V inhibitors use in eight European cities through analysis of urban wastewater. <i>Environment International</i> , 2018, 115, 279-284.	10.0	26
84	Stereochemistry of ephedrine and its environmental significance: Exposure and effects directed approach. <i>Journal of Hazardous Materials</i> , 2018, 348, 39-46.	12.4	23
85	A new paradigm in public health assessment: Water fingerprinting for protein markers of public health using mass spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 119, 115621.	11.4	23
86	The application of the perfluorinated bonded alumina phase for natural organic matter catalytic ozonation. <i>Journal of Environmental Engineering and Science</i> , 2004, 3, 41-50.	0.8	22
87	Enantiomeric Profiling of Chiral Pharmacologically Active Compounds in the Environment with the Usage of Chiral Liquid Chromatography Coupled with Tandem Mass Spectrometry. <i>Current Analytical Chemistry</i> , 2016, 12, 303-314.	1.2	20
88	The Feasibility of Using a Perfluorinated Bonded Alumina Phase in the Ozonation Process. <i>Ozone: Science and Engineering</i> , 2003, 25, 185-197.	2.5	19
89	Simultaneous ozonation of 90 organic micropollutants including illicit drugs and their metabolites in different water matrices. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 2465-2478.	2.4	19
90	Catalytic Ozonation of Gasoline Compounds in Model and Natural Water in the Presence of Perfluorinated Alumina Bonded Phases. <i>Ozone: Science and Engineering</i> , 2005, 27, 301-310.	2.5	17

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91	Diagnosing Down-the-Drain Disposal of Unused Pharmaceuticals at a River Catchment Level: Unrecognized Sources of Environmental Contamination That Require Nontechnological Solutions. <i>Environmental Science & Technology</i> , 2021, 55, 11657-11666.	10.0	17
92	New Analytical Framework for Verification of Biomarkers of Exposure to Chemicals Combining Human Biomonitoring and Water Fingerprinting. <i>Analytical Chemistry</i> , 2017, 89, 7232-7239.	6.5	16
93	Multiresidue antibiotic-metabolite quantification method using ultra-performance liquid chromatography coupled with tandem mass spectrometry for environmental and public exposure estimation. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 5901-5920.	3.7	16
94	Ozonation Enhancement with Nonpolar Bonded Alumina Phases. <i>Ozone: Science and Engineering</i> , 2004, 26, 367-380.	2.5	14
95	Challenges in realising the potential of wastewater-based epidemiology to quantitatively monitor and predict the spread of disease. <i>Journal of Water and Health</i> , 2022, 20, 1038-1050.	2.6	12
96	Gold-gold junction electrodes: the disconnection method. <i>Chemical Record</i> , 2012, 12, 143-148.	5.8	11
97	Oil Water Interfacial Phosphate Transfer Facilitated by Boronic Acid: Observation of Unusually Fast Oil Water Lateral Charge Transport. <i>ChemElectroChem</i> , 2014, 1, 1640-1646.	3.4	11
98	A high prevalence of bla OXA-48 in <i>Klebsiella (Raoultella) ornithinolytica</i> and related species in hospital wastewater in South West England. <i>Microbial Genomics</i> , 2021, 7, .	2.0	10
99	Sewage-based Epidemiology Requires a Truly Transdisciplinary Approach. <i>Gaia</i> , 2014, 23, 266-268.	0.7	9
100	Cavity transport effects in generator-collector electrochemical analysis of nitrobenzene. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 18966-18973.	2.8	9
101	COMBI, continuous ozonation merged with biofiltration to study oxidative and microbial transformation of trace organic contaminants. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 552-563.	2.4	9
102	Micellar chromatographic determination of partition coefficients and associated thermodynamic data for pharmaceutical compounds. <i>Journal of Thermal Analysis and Calorimetry</i> , 2010, 102, 343-347.	3.6	8
103	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.. <i>Water Research</i> , 2010, 44, 2688-2690.	11.3	7
104	Editorial Perspectives: could water fingerprinting help with community-wide health assessment?. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1033-1035.	2.4	6
105	Square Wave Electroanalysis at Generator-collector Gold-gold Double Hemisphere Junctions. <i>Electroanalysis</i> , 2012, 24, 1726-1731.	2.9	5
106	Multi-residue determination of micropollutants in Nigerian fish from Lagos lagoon using ultrasound assisted extraction, solid phase extraction and ultra-high-performance liquid chromatography tandem mass spectrometry. <i>Analytical Methods</i> , 2020, 12, 2114-2122.	2.7	4
107	Feedback-amplified electrochemical dual-plate boron-doped diamond microtrench detector for flow injection analysis. <i>Electrophoresis</i> , 2015, 36, 1866-1871.	2.4	3
108	A multi-residue chiral liquid chromatography coupled with tandem mass spectrometry method for analysis of antifungal agents and their metabolites in aqueous environmental matrices. <i>Analytical Methods</i> , 2021, 13, 2466-2477.	2.7	3

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109	Stereoselective metabolism of chloramphenicol by bacteria isolated from wastewater, and the importance of stereochemistry in environmental risk assessments for antibiotics. <i>Water Research</i> , 2022, 217, 118415.	11.3	3
110	Comments on "Solid Phase Catalytic Ozonation Process for the Destruction of a Model Pollutant" by D.S. Pines and D.A. Reckhow (<i>Ozone Sci. Eng.</i> 25 (2003), 25). <i>Ozone: Science and Engineering</i> , 2003, 25, 535-538.	2.5	2
111	Special Issue. Testing the waters: A selection of papers from the first international multidisciplinary conference on detecting illicit drugs in wastewater. <i>Science of the Total Environment</i> , 2014, 487, 611-612.	8.0	0
112	MTBE, DIPE, ETBE and TAME degradation in water using perfluorinated phases as catalysts for ozonation process. <i>Applied Catalysis B: Environmental</i> , 2004, 51, 51-66.	20.2	0