

# Sonia Heaven

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1340276/publications.pdf>

Version: 2024-02-01

92  
papers

4,310  
citations

117453

34  
h-index

110170

64  
g-index

93  
all docs

93  
docs citations

93  
times ranked

4667  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of the harvesting of micro-algae for biofuel production. <i>Reviews in Environmental Science and Biotechnology</i> , 2013, 12, 165-178.	3.9	520
2	Anaerobic digestion of source-segregated domestic food waste: Performance assessment by mass and energy balance. <i>Bioresource Technology</i> , 2011, 102, 612-620.	4.8	308
3	Trace element requirements for stable food waste digestion at elevated ammonia concentrations. <i>Bioresource Technology</i> , 2012, 104, 127-135.	4.8	307
4	Ammonia inhibition and toxicity in anaerobic digestion: A critical review. <i>Journal of Water Process Engineering</i> , 2019, 32, 100899.	2.6	222
5	Potential errors in the quantitative evaluation of biogas production in anaerobic digestion processes. <i>Bioresource Technology</i> , 2009, 100, 6339-6346.	4.8	214
6	Biogas production from undiluted chicken manure and maize silage: A study of ammonia inhibition in high solids anaerobic digestion. <i>Bioresource Technology</i> , 2016, 218, 1215-1223.	4.8	140
7	Fluid-dynamic characterization of real-scale raceway reactors for microalgae production. <i>Biomass and Bioenergy</i> , 2013, 54, 267-275.	2.9	132
8	Anaerobic digestion of autoclaved and untreated food waste. <i>Waste Management</i> , 2014, 34, 370-377.	3.7	123
9	Strategies for stable anaerobic digestion of vegetable waste. <i>Renewable Energy</i> , 2012, 44, 206-214.	4.3	110
10	Co-digestion of source segregated domestic food waste to improve process stability. <i>Bioresource Technology</i> , 2012, 114, 168-178.	4.8	103
11	Anaerobic digestion of two biodegradable municipal waste streams. <i>Journal of Environmental Management</i> , 2012, 104, 166-174.	3.8	102
12	Comments on "Anaerobic digestion of microalgae as a necessary step to make microalgal biodiesel sustainable". <i>Biotechnology Advances</i> , 2011, 29, 164-167.	6.0	94
13	The effect of pH control and "hydraulic flush" on hydrolysis and Volatile Fatty Acids (VFA) production and profile in anaerobic leach bed reactors digesting a high solids content substrate. <i>Bioresource Technology</i> , 2012, 123, 263-271.	4.8	79
14	Degradation of some EN13432 compliant plastics in simulated mesophilic anaerobic digestion of food waste. <i>Polymer Degradation and Stability</i> , 2018, 147, 76-88.	2.7	79
15	Comparison of mesophilic and thermophilic anaerobic digestion of sugar beet pulp: Performance, dewaterability and foam control. <i>Bioresource Technology</i> , 2014, 152, 202-211.	4.8	74
16	Slow pyrolysis of organic fraction of municipal solid waste (OFMSW): Characterisation of products and screening of the aqueous liquid product for anaerobic digestion. <i>Applied Energy</i> , 2018, 213, 158-168.	5.1	72
17	A review on fermentative hydrogen production from dairy industry wastewater. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 1627-1636.	1.6	68
18	Preliminary trials of in situ ammonia stripping from source segregated domestic food waste digestate using biogas: Effect of temperature and flow rate. <i>Bioresource Technology</i> , 2010, 101, 9486-9492.	4.8	67

#	ARTICLE	IF	CITATIONS
19	Modeling the Water Scrubbing Process and Energy Requirements for CO <sub>2</sub> Capture to Upgrade Biogas to Biomethane. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 12783-12792.	1.8	65
20	Energetic and environmental benefits of co-digestion of food waste and cattle slurry: A preliminary assessment. <i>Resources, Conservation and Recycling</i> , 2011, 56, 71-79.	5.3	61
21	Methods of energy extraction from microalgal biomass: a review. <i>Reviews in Environmental Science and Biotechnology</i> , 2014, 13, 301-320.	3.9	61
22	Biohydrogen production from food waste in batch and semi-continuous conditions: Evaluation of a two-phase approach with digestate recirculation for pH control. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 4351-4360.	3.8	57
23	Quantifying the percentage of methane formation via acetoclastic and syntrophic acetate oxidation pathways in anaerobic digesters. <i>Waste Management</i> , 2018, 71, 749-756.	3.7	55
24	Anaerobic Digestion of Whole-Crop Winter Wheat Silage for Renewable Energy Production. <i>Energy &amp; Fuels</i> , 2012, 26, 2357-2364.	2.5	53
25	Energy potential from the anaerobic digestion of food waste in municipal solid waste stream of urban areas in Vietnam. <i>International Journal of Energy and Environmental Engineering</i> , 2014, 5, 365-374.	1.3	51
26	Effect of a Trace Element Addition Strategy on Volatile Fatty Acid Accumulation in Thermophilic Anaerobic Digestion of Food Waste. <i>Waste and Biomass Valorization</i> , 2015, 6, 1-12.	1.8	48
27	Biochemical methane potential of winter wheat ( <i>Triticum aestivum</i> L.): Influence of growth stage and storage practice. <i>Bioresource Technology</i> , 2010, 101, 8179-8184.	4.8	47
28	Mercury in the River Nura and its floodplain, Central Kazakhstan: I. River sediments and water. <i>Science of the Total Environment</i> , 2000, 260, 35-44.	3.9	44
29	Reducing the environmental impact of methane emissions from dairy farms by anaerobic digestion of cattle waste. <i>Waste Management</i> , 2011, 31, 1745-1751.	3.7	43
30	Management of household bulky waste in England. <i>Resources, Conservation and Recycling</i> , 2007, 51, 78-92.	5.3	42
31	Mass transfer and gas-liquid interface properties of single CO <sub>2</sub> bubbles rising in tap water. <i>Chemical Engineering Science</i> , 2016, 140, 171-178.	1.9	40
32	Analysis of energy footprints associated with recycling of glass and plastic—case studies for industrial ecology. <i>Ecological Modelling</i> , 2004, 174, 175-189.	1.2	39
33	Influence of ammonia in the anaerobic digestion of food waste. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 5131-5142.	3.3	39
34	Continuous operation of thermophilic food waste digestion with side-stream ammonia stripping. <i>Bioresource Technology</i> , 2017, 244, 611-620.	4.8	36
35	Improving the performance of enzymes in hydrolysis of high solids paper pulp derived from MSW. <i>Biotechnology for Biofuels</i> , 2013, 6, 107.	6.2	34
36	The role of phase separation and feed cycle length in leach beds coupled to methanogenic reactors for digestion of a solid substrate (Part 1): Optimisation of reactors™ performance. <i>Bioresource Technology</i> , 2012, 103, 56-63.	4.8	32

#	ARTICLE	IF	CITATIONS
37	Anaerobic granular reactors for the treatment of dairy wastewater: A review. <i>International Journal of Dairy Technology</i> , 2015, 68, 459-470.	1.3	30
38	The potential for facilitating spring discharge from continental climate waste stabilisation ponds by carry-over of treated wastewater: concepts and experimental findings. <i>Water Science and Technology</i> , 2007, 55, 219-227.	1.2	29
39	Investigation of the impact of trace elements on anaerobic volatile fatty acid degradation using a fractional factorial experimental design. <i>Water Research</i> , 2017, 125, 458-465.	5.3	28
40	Mercury in the River Nura and its floodplain, Central Kazakhstan: II. Floodplain soils and riverbank silt deposits. <i>Science of the Total Environment</i> , 2000, 260, 45-55.	3.9	27
41	Biphasic production of hydrogen and methane from waste lactose in cyclic-batch reactors. <i>Journal of Cleaner Production</i> , 2010, 18, S95-S104.	4.6	27
42	Cultivation and anaerobic digestion of <i>Scenedesmus</i> spp. grown in a pilot-scale open raceway. <i>Algal Research</i> , 2014, 5, 95-102.	2.4	27
43	Comparative testing of energy yields from micro-algal biomass cultures processed via anaerobic digestion. <i>Renewable Energy</i> , 2016, 87, 744-753.	4.3	27
44	Energy Balance of Biogas Production from Microalgae: Effect of Harvesting Method, Multiple Raceways, Scale of Plant and Combined Heat and Power Generation. <i>Journal of Marine Science and Engineering</i> , 2017, 5, 9.	1.2	25
45	Anaerobic digestion of maize in coupled leach-bed and anaerobic filter reactors. <i>Water Science and Technology</i> , 2008, 58, 1505-1511.	1.2	24
46	Development of a coarse membrane bioreactor for two-stage anaerobic digestion of biodegradable municipal solid waste. <i>Water Science and Technology</i> , 2009, 59, 729-735.	1.2	24
47	<i>In situ</i> biogas stripping of ammonia from a digester using a gas mixing system. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 3216-3224.	1.2	24
48	Antifoam, dilution and trace element addition as foaming control strategies in mesophilic anaerobic digestion of sugar beet pulp. <i>International Biodeterioration and Biodegradation</i> , 2019, 145, 104812.	1.9	24
49	Estimating the Generation of Garden Waste in England and the Differences between Rural and Urban Areas. <i>Resources</i> , 2020, 9, 8.	1.6	23
50	The role of phase separation and feed cycle length in leach beds coupled to methanogenic reactors for digestion of a solid substrate (Part 2): Hydrolysis, acidification and methanogenesis in a two-phase system. <i>Bioresource Technology</i> , 2011, 102, 7393-7400.	4.8	22
51	Simultaneous biomethanisation of endogenous and imported CO <sub>2</sub> in organically loaded anaerobic digesters. <i>Applied Energy</i> , 2019, 247, 670-681.	5.1	21
52	Disc Stack Centrifugation Separation and Cell Disruption of Microalgae: A Technical Note. <i>Environment and Natural Resources Research</i> , 2011, 1, .	0.1	20
53	Wastewater reuse in central Asia: implications for the design of pond systems. <i>Water Science and Technology</i> , 2007, 55, 85-93.	1.2	17
54	Quantification of methane losses from the acclimatisation of anaerobic digestion to marine salt concentrations. <i>Renewable Energy</i> , 2016, 86, 497-506.	4.3	17

#	ARTICLE	IF	CITATIONS
55	Optimisation of biogas yields from anaerobic digestion by feedstock type. , 2013, , 131-165.		15
56	Assessment of the potential for biogas production from wheat straw leachate in upflow anaerobic sludge blanket digesters. Water Science and Technology, 2012, 66, 2737-2744.	1.2	13
57	Thermophilic Digestion of Food Waste by Dilution: Ammonia Limit Values and Energy Considerations. Energy & Fuels, 2017, 31, 10890-10900.	2.5	13
58	Energy Balance of Biogas Production from Microalgae: Development of an Energy and Mass Balance Model. Current Biotechnology, 2016, 4, 554-567.	0.2	13
59	Predicting pH rise as a control measure for integration of CO <sub>2</sub> biomethanisation with anaerobic digestion. Applied Energy, 2020, 277, 115535.	5.1	11
60	Worsening of the Aral Basin Crisis: Can There Be a Solution?. Journal of Water Resources Planning and Management - ASCE, 1999, 125, 363-368.	1.3	10
61	Data related to anaerobic digestion of bioplastics: Images and properties of digested bioplastics and digestate, synthetic food waste recipe and packaging information. Data in Brief, 2019, 25, 103990.	0.5	10
62	Semi-continuous anaerobic digestion of the marine micro-algal species <i>I. galbana</i> and <i>D. salina</i> grown under low and high sulphate conditions. Algal Research, 2019, 41, 101564.	2.4	10
63	Integration of on-farm biodiesel production with anaerobic digestion to maximise energy yield and greenhouse gas savings from process and farm residues. Bioresource Technology, 2011, 102, 7784-7793.	4.8	8
64	Evaluation of microporous hollow fibre membranes for mass transfer of H <sub>2</sub> into anaerobic digesters for biomethanization. Journal of Chemical Technology and Biotechnology, 2019, 94, 2693-2701.	1.6	8
65	Particle Size Distribution in Municipal Solid Waste Pre-Treated for Bioprocessing. Resources, 2019, 8, 166.	1.6	8
66	Estimating the Methane Potential of Energy Crops: An Overview on Types of Data Sources and Their Limitations. Processes, 2021, 9, 1565.	1.3	8
67	Biocycle anaerobic digester: performance and benefits. Proceedings of Institution of Civil Engineers: Waste and Resource Management, 2011, 164, 141-150.	0.9	7
68	Effect of increasing the organic loading rate on the co-digestion and mono-digestion of cattle slurry and maize. Water Science and Technology, 2012, 66, 2336-2342.	1.2	7
69	Effect of mean cell residence time on transmembrane flux, mixed-liquor characteristics and overall performance of a submerged anaerobic membrane bioreactor. Environmental Technology (United Kingdom), 2014, 35, 1141-1150.	1.4	7
70	Algal wastewater treatment systems for seasonal climates: Application of a simple modelling approach to generate local and regional design guidelines. Water Research, 2012, 46, 2307-2323.	5.3	6
71	Potential for Biomethanisation of CO <sub>2</sub> from Anaerobic Digestion of Organic Wastes in the United Kingdom. Processes, 2022, 10, 1202.	1.3	6
72	Calibration of a simple model for waste stabilisation pond performance in seasonal climates. Water Science and Technology, 2011, 64, 1488-1496.	1.2	5

#	ARTICLE	IF	CITATIONS
73	Effect of Pasteurisation on Methane Yield from Food Waste and Other Substrates in Anaerobic Digestion. <i>Processes</i> , 2020, 8, 1351.	1.3	5
74	A Rapid, Sensitive, Low-Cost Assay for Detecting Hydrogenotrophic Methanogens in Anaerobic Digesters Using Loop-Mediated Isothermal Amplification. <i>Microorganisms</i> , 2020, 8, 740.	1.6	5
75	Development and testing of a fully gravitational submerged anaerobic membrane bioreactor for wastewater treatment. <i>Environmental Technology (United Kingdom)</i> , 2015, 36, 2328-2339.	1.2	4
76	Impact of low loading on digestion of the mechanically-separated organic fraction of municipal solid waste. <i>Waste Management</i> , 2020, 107, 101-112.	3.7	4
77	Mass and energy balance for a rotating-drum composting plant. <i>Proceedings of Institution of Civil Engineers: Waste and Resource Management</i> , 2011, 164, 151-159.	0.9	3
78	Effectiveness of pressurised carbon dioxide for inactivation of <i>Escherichia coli</i> isolated from sewage sludge. <i>Water Science and Technology</i> , 2012, 65, 1759-1764.	1.2	3
79	Seasonally loaded waste stabilisation ponds: a novel application for intermittent discharge. <i>Water Science and Technology</i> , 2012, 66, 1893-1899.	1.2	3
80	Seasonal Yield and Fuel Consumed for Domestic, Organic Waste Collections in Currently Operational Door-to-Door and Bring-Type Collection Systems. <i>Waste and Biomass Valorization</i> , 2013, 4, 683-693.	1.8	3
81	Dynamic changes in anaerobic digester metabolic pathways and microbial populations during acclimatisation to increasing ammonium concentrations. <i>Waste Management</i> , 2021, 135, 409-419.	3.7	3
82	Light attenuation parameters for waste stabilisation ponds. <i>Water Science and Technology</i> , 2005, 51, 143-52.	1.2	3
83	Influence of annual climate variability on design and operation of waste stabilisation ponds for continental climates. <i>Water Science and Technology</i> , 2007, 55, 37-46.	1.2	2
84	Operation and recovery of a seasonally-loaded UK waste stabilisation pond system. <i>Water Science and Technology</i> , 2013, 67, 1105-1112.	1.2	2
85	Anaerobic digestion of spring and winter wheat: Comparison of net energy yields. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2016, 51, 1084-1089.	0.9	2
86	Operation of Submerged Anaerobic Membrane Bioreactors at 20 Å°C: Effect of Solids Retention Time on Flux, Mixed Liquor Characteristics and Performance. <i>Processes</i> , 2021, 9, 1525.	1.3	2
87	Effect of solid and liquid retention times on hydrolysis of maize. <i>Water Science and Technology</i> , 2008, 58, 1371-1378.	1.2	1
88	Treatment of seasonal wastewater flows in a two-pond system. <i>Biosystems Engineering</i> , 2013, 115, 408-414.	1.9	1
89	Investigating the hydrodynamic performance of carbonation sumps in High Rate Algal Pond (HRAP)raceways using computational fluid dynamics (CFD). <i>Biofuels</i> , 2014, 5, 723-739.	1.4	1
90	Modelling fuel consumption in kerbside source segregated food waste collection: separate collection and co-collection. <i>Environmental Technology (United Kingdom)</i> , 2015, 36, 3013-3021.	1.2	1

#	ARTICLE	IF	CITATIONS
91	Use of a Hydraulic Flush Reactor in a Two-Stage Anaerobic Digestion Process for Biodegradable Municipal Waste. <i>Environmental Engineering Science</i> , 2009, 26, 1599-1606.	0.8	0
92	Evaluation of pressurised carbon dioxide pre-treatment aimed at improving the sanitisation and anaerobic digestibility of co-settled sewage sludge. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2019, 54, 261-268.	0.9	0