Gaspare Viviani

List of Publications by Year
in descending order

83 papers	2,832 citations	101496 36 h-index	189801 50 g-index
83 all docs	83 docs citations	83 times ranked	2517 citing authors

#	Article	IF	Citations
1	Simultaneous nitritationâ€“denitritation for the treatment of high-strength nitrogen in hypersaline wastewater by aerobic granular sludge. Water Research, 2016, 88, 329-336.	5.3	119
2	Uncertainty in urban stormwater quality modelling: The effect of acceptability threshold in the GLUE methodology. Water Research, 2008, 42, 2061-2072.	5.3	107
3	Physical properties and Extracellular Polymeric Substances pattern of aerobic granular sludge treating hypersaline wastewater. Bioresource Technology, 2017, 229, 152-159.	4.8	101
4	Comparison between moving bed-membrane bioreactor (MB-MBR) and membrane bioreactor (MBR) systems: Influence of wastewater salinity variation. Bioresource Technology, 2014, 162, 60-69.	4.8	97
5	An urban drainage stormwater quality model: Model development and uncertainty quantification. Journal of Hydrology, 2010, 381, 248-265.	2.3	86
6	Performance of a hybrid activated sludge/biofilm process for wastewater treatment in a cold climate region: Influence of operating conditions. Biochemical Engineering Journal, 2013, 77, 214-219.	1.8	85
7	Urban runoff modelling uncertainty: Comparison among Bayesian and pseudo-Bayesian methods. Environmental Modelling and Software, 2009, 24, 1100-1111.	1.9	82
8	An integrated model for physical-biological wastewater organic removal in a submerged membrane bioreactor: Model development and parameter estimation. Journal of Membrane Science, 2008, 322, 1-12.	4.1	76
9	An integrated model for biological and physical process simulation in membrane bioreactors (MBRs). Journal of Membrane Science, 2011, 376, 56-69.	4.1	74
10	Performance of a MBR pilot plant treating high strength wastewater subject to salinity increase: Analysis of biomass activity and fouling behaviour. Bioresource Technology, 2013, 147, 614-618.	4.8	66
11	Comparison between hybrid moving bed biofilm reactor and activated sludge system: a pilot plant experiment. Water Science and Technology, 2010, 61, 891-902.	1.2	64
12	Membrane bioreactors for treatment of saline wastewater contaminated by hydrocarbons (diesel) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	6.6	62
13	Modelling and dynamic simulation of hybrid moving bed biofilm reactors: Model concepts and application to a pilot plant. Biochemical Engineering Journal, 2011, 56, 23-36.	1.8	60
14	Evaluation of methane emissions from Palermo municipal landfill: Comparison between field measurements and models. Waste Management, 2011, 31, 1820-1826.	3.7	59
15	A practical protocol for calibration of nutrient removal wastewater treatment models. Journal of Hydroinformatics, 2011, 13, 575-595.	1.1	58
16	Urban Storm-Water Quality Management: Centralized versus Source Control. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 268-278.	1.3	56
17	Performance of membrane bioreactor (MBR) systems for the treatment of shipboard slops: Assessment of hydrocarbon biodegradation and biomass activity under salinity variation. Journal of Hazardous Materials, 2015, 300, 765-778.	6.5	54
18	Sequential batch membrane bio-reactor for wastewater treatment: The effect of increased salinity. Bioresource Technology, 2016, 209, 205-212.	4.8	54

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19	Aerobic granular sludge treating high strength citrus wastewater: Analysis of pH and organic loading rate effect on kinetics, performance and stability. Journal of Environmental Management, 2018, 214, 23-35.	3.8	54
20	Wastewater Reuse Effects on Soil Hydraulic Conductivity. Journal of Irrigation and Drainage Engineering - ASCE, 2004, 130, 476-484.	0.6	53
21	Uncontrolled methane emissions from a MSW landfill surface: Influence of landfill features and side slopes. Waste Management, 2013, 33, 2108-2115.	3.7	52
22	Uncertainty assessment of an integrated urban drainage model. Journal of Hydrology, 2009, 373, 392-404.	2.3	51
23	Evaluation of biomass activity and wastewater characterization in a UCT-MBR pilot plant by means of respirometric techniques. Desalination, 2011, 269, 190-197.	4.0	51
24	Cultivation of granular sludge with hypersaline oily wastewater. International Biodeterioration and Biodegradation, 2015, 105, 192-202.	1.9	51
25	Quantification of kinetic parameters for heterotrophic bacteria via respirometry in a hybrid reactor. Water Science and Technology, 2010, 61, 1757-1766.	1.2	49
26	Identifiability analysis for receiving water body quality modelling. Environmental Modelling and Software, 2009, 24, 54-62.	1.9	48
27	Water quality modelling for ephemeral rivers: Model development and parameter assessment. Journal of Hydrology, 2010, 393, 186-196.	2.3	48
28	Separate and combined sewer systems: a long-term modelling approach. Water Science and Technology, 2009, 60, 555-565.	1.2	46
29	Effect of C/N shock variation on the performances of a moving bed membrane bioreactor. Bioresource Technology, 2015, 189, 250-257.	4.8	46
30	Hybrid moving bed biofilm reactors: an effective solution for upgrading a large wastewater treatment plant. Water Science and Technology, 2009, 60, 1103-1116.	1.2	45
31	Simulation of the operation of detention tanks. Water Research, 2006, 40, 83-90.	5.3	43
32	Assessment of the integrated urban water quality model complexity through identifiability analysis. Water Research, 2011, 45, 37-50.	5.3	43
33	The role of EPS concentration in MBR foaming: Analysis of a submerged pilot plant. Bioresource Technology, 2011, 102, 1628-1635.	4.8	43
34	Biological minimization of excess sludge in a membrane bioreactor: Effect of plant configuration on sludge production, nutrient removal efficiency and membrane fouling tendency. Bioresource Technology, 2018, 259, 146-155.	4.8	38
35	Assessment of data availability influence on integrated urban drainage modelling uncertainty. Environmental Modelling and Software, 2009, 24, 1171-1181.	1.9	36
36	Start-up with or without inoculum? Analysis of an SMBR pilot plant. Desalination, 2010, 260, 79-90.	4.0	36

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37	Occurrence of illicit drugs in two wastewater treatment plants in the South of Italy. Chemosphere, 2018, 198, 377-385.	4.2	33
38	Treatment of Oily Wastewater with Membrane Bioreactor Systems. Water (Switzerland), 2017, 9, 412.	1.2	32
39	Stormwater infiltration trenches: a conceptual modelling approach. Water Science and Technology, 2009, 60, 185-199.	1.2	28
40	Sensitivity and uncertainty analysis of an integrated ASM2d MBR model for wastewater treatment. Chemical Engineering Journal, 2018, 351, 579-588.	6.6	28
41	Biological nitrogen and phosphorus removal in membrane bioreactors: model development and parameter estimation. Bioprocess and Biosystems Engineering, 2013, 36, 499-514.	1.7	27
42	Shortcut nitrification-denitrification by means of autochthonous halophilic biomass in an SBR treating fish-canning wastewater. Journal of Environmental Management, 2018, 208, 142-148.	3.8	27
43	Uncertainty assessment of a membrane bioreactor model using the GLUE methodology. Biochemical Engineering Journal, 2010, 52, 263-275.	1.8	25
44	Achievement of partial nitrification under different carbon-to-nitrogen ratio and ammonia loading rate for the co-treatment of landfill leachate with municipal wastewater. Biochemical Engineering Journal, 2019, 149, 107229.	1.8	24
45	Biological Nutrient Removal and Fouling Phenomena in a University of Cape Town Membrane Bioreactor Treating High Nitrogen Loads. Journal of Environmental Engineering, ASCE, 2013, 139, 773-780.	0.7	21
46	Membrane Bioreactors for wastewater reuse: Respirometric assessment of biomass activity during a two year survey. Journal of Cleaner Production, 2018, 202, 311-320.	4.6	21
47	Modeling of perched leachate zone formation in municipal solid waste landfills. Waste Management, 2012, 32, 456-462.	3.7	19
48	A comprehensive comparison between halophilic granular and flocculent sludge in withstanding short and long-term salinity fluctuations. Journal of Water Process Engineering, 2018, 22, 265-275.	2.6	19
49	Quantification of diffuse and concentrated pollutant loads at the watershed-scale: an Italian case study. Water Science and Technology, 2009, 59, 2125-2135.	1.2	18
50	Treatment of high strength industrial wastewater with membrane bioreactors for water reuse: Effect of pre-treatment with aerobic granular sludge on system performance and fouling tendency. Journal of Water Process Engineering, 2019, 31, 100859.	2.6	18
51	A parsimonious dynamic model for river water quality assessment. Water Science and Technology, 2010, 61, 607-618.	1.2	17
52	Occurrence of Microplastics in Waste Sludge of Wastewater Treatment Plants: Comparison between Membrane Bioreactor (MBR) and Conventional Activated Sludge (CAS) Technologies. Membranes, 2022, 12, 371.	1.4	17
53	Urban water quality modelling: a parsimonious holistic approach for a complex real case study. Water Science and Technology, 2010, 61, 521-536.	1.2	16
54	Aerobic granular sludge treating shipboard slop: Analysis of total petroleum hydrocarbons loading rates on performances and stability. Process Biochemistry, 2018, 65, 164-171.	1.8	16

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55	Particle size distribution and biomass growth in a submerged membrane bioreactor. Desalination, 2006, 199, 493-495.	4.0	15
56	Uncertainty assessment of a model for biological nitrogen and phosphorus removal: Application to a large wastewater treatment plant. Physics and Chemistry of the Earth, 2012, 42-44, 61-69.	1.2	15
57	Receiving water body quality assessment: an integrated mathematical approach applied to an Italian case study. Journal of Hydroinformatics, 2012, 14, 30-47.	1.1	14
58	Effect of biomass features on oxygen transfer in conventional activated sludge and membrane bioreactor systems. Journal of Cleaner Production, 2019, 240, 118071.	4.6	14
59	Foaming Estimation Tests in Activated Sludge Systems. Clean - Soil, Air, Water, 2005, 33, 240-246.	0.8	13
60	Emission standards versus immission standards for assessing the impact of urban drainage on ephemeral receiving water bodies. Water Science and Technology, 2010, 61, 1617-1629.	1.2	13
61	Assessing Methane Emission and Economic Viability of Energy Exploitation in a Typical Sicilian Municipal Solid Waste Landfill. Waste and Biomass Valorization, 2019, 10, 3173-3184.	1.8	13
62	A hydrodynamic water quality model for propagation of pollutants in rivers. Water Science and Technology, 2010, 62, 288-299.	1.2	12
63	Uncertainty in sewer sediment deposit modelling: Detailed vs simplified modelling approaches. Physics and Chemistry of the Earth, 2012, 42-44, 11-20.	1.2	12
64	Receiving water quality assessment: comparison between simplified and detailed integrated urban modelling approaches. Water Science and Technology, 2010, 62, 2301-2312.	1.2	11
65	The influence of solid retention time on IFAS-MBR systems: analysis of system behavior. Environmental Technology (United Kingdom), 2019, 40, 1840-1852.	1.2	11
66	Assessment of landfill leachate biodegradability and treatability by means of allochthonous and autochthonous biomasses. New Biotechnology, 2020, 55, 91-97.	2.4	11
67	Micropollutants throughout an integrated urban drainage model: Sensitivity and uncertainty analysis. Journal of Hydrology, 2017, 554, 397-405.	2.3	10
68	Radionuclides in wastewater treatment plants: monitoring of Sicilian plants. Water Science and Technology, 2015, 71, 252-258.	1.2	9
69	Washing Batch Test of Contaminated Sediment: The Case of Augusta Bay (SR, Italy). Applied Sciences (Switzerland), 2020, 10, 473.	1.3	9
70	Preliminary insights about the treatment of contaminated marine sediments by means of bioslurry reactor: Process evaluation and microbiological characterization. Science of the Total Environment, 2022, 806, 150708.	3.9	9
71	Role of Modeling Uncertainty in the Estimation of Climate and Socioeconomic Impact on River Water Quality. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 479-490.	1.3	8
72	The influence of rainfall time resolution for urban water quality modelling. Water Science and Technology, 2010, 61, 2381-2390.	1.2	6

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73	Influence of the Height of Municipal Solid Waste Landfill on the Formation of Perched Leachate Zones. Journal of Environmental Engineering, ASCE, 2015, 141, .	0.7	5
74	The role of fouling mechanisms in a submerged membrane bioreactor during the start-up. Desalination, 2006, 200, 722-724.	4.0	4
75	Effect of a co-substrate supply in a MBR treating shipboard slop: Analysis of hydrocarbon removal, biomass activity and membrane fouling tendency. Biochemical Engineering Journal, 2018, 140, 178-188.	1.8	4
76	Spatial diversity of chlorine residual in a drinking water distribution system: application of an integrated fuzzy logic technique. Journal of Hydroinformatics, 2015, 17, 293-306.	1.1	3
77	Membrane bioreactors sludge: From production to disposal. , 2020, , 323-351.		3
78	Membrane Fouling Mitigation in MBR via the Feastâ€“Famine Strategy to Enhance PHA Production by Activated Sludge. Membranes, 2022, 12, 703.	1.4	3
79	Sensitivity and uncertainty analysis of an integrated membrane bioreactor model. Desalination and Water Treatment, 2016, 57, 9531-9548.	1.0	2
80	Biological Stability of Organic Fraction of Municipal Solid Wastes During Composting Processes. Environmental Engineering Science, 2018, 35, 1117-1125.	0.8	2
81	High salinity wastewater treatment by membrane bioreactors. , 2020, , 177-204.		2
82	Multiregression Analysis of the Kinetic Constants in Ephemeral Rivers: The Case Study of the Oreto River. Green Energy and Technology, 2019, , 355-360.	0.4	0
83	Enhanced Sewage Sludge Drying with a Modified Solar Greenhouse. Clean Technologies, 2022, 4, 407-419.	1.9	0