Joon Ha Kim

List of Publications by Year
in descending order

109 papers	3,611 citations	101384 36 h-index	143772 57 g-index
110 all docs	110 docs citations	110 times ranked	3585 citing authors

#	Article	IF	Citations
1	Prediction of effluent concentration in a wastewater treatment plant using machine learning models. Journal of Environmental Sciences, 2015, 32, 90-101.	3.2	180
2	Development of early-warning protocol for predicting chlorophyll-a concentration using machine learning models in freshwater and estuarine reservoirs, Korea. Science of the Total Environment, 2015, 502, 31-41.	3.9	176
3	Overview of systems engineering approaches for a large-scale seawater desalination plant with a reverse osmosis network. Desalination, 2009, 238, 312-332.	4.0	155
4	Linking land-use type and stream water quality using spatial data of fecal indicator bacteria and heavy metals in the Yeongsan river basin. Water Research, 2010, 44, 4143-4157.	5.3	143
5	Toward a combined system of forward osmosis and reverse osmosis for seawater desalination. Desalination, 2009, 247, 239-246.	4.0	125
6	Prediction of contamination potential of groundwater arsenic in Cambodia, Laos, and Thailand using artificial neural network. Water Research, 2011, 45, 5535-5544.	5.3	115
7	Reverse osmosis (RO) and pressure retarded osmosis (PRO) hybrid processes: Model-based scenario study. Desalination, 2013, 322, 121-130.	4.0	113
8	The relative importance of water temperature and residence time in predicting cyanobacteria abundance in regulated rivers. Water Research, 2017, 124, 11-19.	5.3	100
9	Release of Escherichia coli from the bottom sediment in a first-order creek: Experiment and reach-specific modeling. Journal of Hydrology, 2010, 391, 322-332.	2.3	99
10	Simulation of forward osmosis membrane process: Effect of membrane orientation and flow direction of feed and draw solutions. Desalination, 2011, 277, 83-91.	4.0	91
11	Molecular dynamics simulations in membrane-based water treatment processes: A systematic overview. Journal of Membrane Science, 2013, 438, 112-125.	4.1	89
12	Smart water grid: the future water management platform. Desalination and Water Treatment, 2015, 55, 339-346.	1.0	86
13	Thin-film nanocomposite membrane with CNT positioning in support layer for energy harvesting from saline water. Chemical Engineering Journal, 2016, 284, 68-77.	6.6	85
14	Meteorological effects on the levels of fecal indicator bacteria in an urban stream: A modeling approach. Water Research, 2010, 44, 2189-2202.	5.3	83
15	The modified SWAT model for predicting fecal coliforms in the Wachusett Reservoir Watershed, USA. Water Research, 2012, 46, 4750-4760.	5.3	76
16	Numerical analysis of spacer impacts on forward osmosis membrane process using concentration polarization index. Journal of Membrane Science, 2013, 427, 10-20.	4.1	72
17	Artificial neural network model for optimizing operation of a seawater reverse osmosis desalination plant. Desalination, 2009, 247, 180-189.	4.0	68
18	Determination of a constant membrane structure parameter in forward osmosis processes. Journal of Membrane Science, 2011, 375, 241-248.	4.1	67

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19	Recent Advances in Osmotic Energy Generation via Pressure-Retarded Osmosis (PRO): A Review. Energies, 2015, 8, 11821-11845.	1.6	63
20	Public Mis-Notification of Coastal Water Quality:Â A Probabilistic Evaluation of Posting Errors at Huntington Beach, California. Environmental Science & Technology, 2004, 38, 2497-2504.	4.6	62
21	Locating Sources of Surf Zone Pollution:Â A Mass Budget Analysis of Fecal Indicator Bacteria at Huntington Beach, California. Environmental Science & Technology, 2004, 38, 2626-2636.	4.6	60
22	Scale formation in reverse osmosis desalination: model development. Desalination, 2009, 238, 333-346.	4.0	57
23	Spacer optimization strategy for direct contact membrane distillation: Shapes, configurations, diameters, and numbers of spacer filaments. Desalination, 2017, 417, 9-18.	4.0	49
24	An optimization strategy for a forward osmosis-reverse osmosis hybrid process for wastewater reuse and seawater desalination: A modeling study. Desalination, 2019, 463, 40-49.	4.0	49
25	Developing a flow control strategy to reduce nutrient load in a reclaimed multi-reservoir system using a 2D hydrodynamic and water quality model. Science of the Total Environment, 2014, 466-467, 871-880.	3.9	48
26	Modeling seasonal variability of fecal coliform in natural surface waters using the modified SWAT. Journal of Hydrology, 2016, 535, 377-385.	2.3	48
27	Absence of $Escherichia coli$ Phylogenetic Group B2 Strains in Humans and Domesticated Animals from Jeonnam Province, Republic of Korea. Applied and Environmental Microbiology, 2009, 75, 5659-5666.	1.4	46
28	Overview of pressure-retarded osmosis (PRO) process and hybrid application to sea water reverse osmosis process. Desalination and Water Treatment, 2012, 43, 193-200.	1.0	44
29	Modeling of colloidal fouling in forward osmosis membrane: Effects of reverse draw solution permeation. Desalination, 2013, 314, 115-123.	4.0	43
30	Temperature Prediction Using the Missing Data Refinement Model Based on a Long Short-Term Memory Neural Network. Atmosphere, 2019, 10, 718.	1.0	43
31	A comprehensive review of the feasibility of pressure retarded osmosis: Recent technological advances and industrial efforts towards commercialization. Desalination, 2020, 491, 114501.	4.0	43
32	Determination of the optimal parameters in regression models for the prediction of chlorophyll-a: A case study of the Yeongsan Reservoir, Korea. Science of the Total Environment, 2009, 407, 2536-2545.	3.9	42
33	Characteristics of wet and dry weather heavy metal discharges in the Yeongsan Watershed, Korea. Science of the Total Environment, 2009, 407, 3482-3493.	3.9	41
34	Prediction of membrane fouling in the pilot-scale microfiltration system using genetic programming. Desalination, 2009, 247, 285-294.	4.0	41
35	New methodology of evaluation of best management practices performances for an agricultural watershed according to the climate change scenarios: A hybrid use of deterministic and decision support models. Ecological Engineering, 2018, 119, 73-83.	1.6	38
36	Advancing assessment and design of stormwater monitoring programs using a self-organizing map: Characterization of trace metal concentration profiles in stormwater runoff. Water Research, 2011, 45, 4183-4197.	5.3	37

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37	Assessment on Hydrologic Response by Climate Change in the Chao Phraya River Basin, Thailand. Water (Switzerland), 2015, 7, 6892-6909.	1.2	36
38	SEAHERO R&D program and key strategies for the scale-up of a seawater reverse osmosis (SWRO) system. Desalination, 2009, 238, 1-9.	4.0	35
39	Arsenic levels in human hair, Kandal Province, Cambodia: The influences of groundwater arsenic, consumption period, age and gender. Applied Geochemistry, 2010, 25, 81-90.	1.4	35
40	Performance analysis of reverse osmosis, membrane distillation, and pressure-retarded osmosis hybrid processes. Desalination, 2016, 380, 85-92.	4.0	35
41	Influence of colloidal fouling on pressure retarded osmosis. Desalination, 2016, 389, 207-214.	4.0	32
42	Decadal and seasonal scale changes of an artificial lake environment after blocking tidal flows in the Yeongsan Estuary region, Korea. Science of the Total Environment, 2009, 407, 6063-6072.	3.9	31
43	A systematic optimization of Internally Staged Design (ISD) for a full-scale reverse osmosis process. Journal of Membrane Science, 2017, 540, 285-296.	4.1	31
44	Stressorâ€"response modeling using the 2D water quality model and regression trees to predict chlorophyll-a in a reservoir system. Journal of Hydrology, 2015, 529, 805-815.	2.3	27
45	Evaluation of the relationship between two different methods for enumeration fecal indicator bacteria: Colony-forming unit and most probable number. Journal of Environmental Sciences, 2010, 22, 846-850.	3.2	26
46	Development of enhanced groundwater arsenic prediction model using machine learning approaches in Southeast Asian countries. Desalination and Water Treatment, 2016, 57, 12227-12236.	1.0	26
47	Factors dominating stratification cycle and seasonal water quality variation in a Korean estuarine reservoir. Journal of Environmental Monitoring, 2010, 12, 1072.	2.1	25
48	A fouling model for simulating long-term performance of SWRO desalination process. Journal of Membrane Science, 2012, 401-402, 282-291.	4.1	23
49	High diversity and abundance of antibiotic-resistant Escherichia coli isolated from humans and farm animal hosts in Jeonnam Province, South Korea. Science of the Total Environment, 2010, 408, 3499-3506.	3.9	22
50	Site-specific raw seawater quality impact study on SWRO process for optimizing operation of the pressurized step. Desalination, 2009, 238, 140-157.	4.0	20
51	Modeling and Simulation Studies Analyzing the Pressure-Retarded Osmosis (PRO) and PRO-Hybridized Processes. Energies, 2019, 12, 243.	1.6	20
52	Theoretical investigation of hybrid desalination system combining reverse osmosis and forward osmosis. Desalination and Water Treatment, 2010, 15, 114-120.	1.0	19
53	An ambitious step to the future desalination technology: SEAHERO R&D program (2007â€"2012). Applied Water Science, 2011, 1, 11-17.	2.8	19
54	A simulation study with a new performance index for pressure-retarded osmosis processes hybridized with seawater reverse osmosis and membrane distillation. Desalination, 2018, 444, 118-128.	4.0	19

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55	Energy saving methodology for the SWRO desalination process: control of operating temperature and pressure. Desalination, 2009, 247, 260-270.	4.0	17
56	A control methodology for the feed water temperature to optimize SWRO desalination process using genetic programming. Desalination, 2009, 247, 190-199.	4.0	17
57	Review of seawater natural organic matter fouling and reverse osmosis transport modeling for seawater reverse osmosis desalination. Desalination and Water Treatment, 2010, 15, 92-107.	1.0	17
58	Interpretation of seasonal water quality variation in the Yeongsan Reservoir, Korea using multivariate statistical analyses. Water Science and Technology, 2009, 59, 2219-2226.	1.2	16
59	Spatial and temporal variability of fecal indicator bacteria in an urban stream under different meteorological regimes. Water Science and Technology, 2010, 61, 3102-3108.	1.2	15
60	Prevalence of season€specific <i>Escherichia coli</i> strains in the Yeongsan River Basin of South Korea. Environmental Microbiology, 2011, 13, 3103-3113.	1.8	15
61	Molecular dynamics simulation of seawater reverse osmosis desalination using carbon nanotube membranes. Desalination and Water Treatment, 2016, 57, 20169-20176.	1.0	15
62	Modeling spatiotemporal bacterial variability with meteorological and watershed land-use characteristics. Water Research, 2016, 100, 306-315.	5.3	14
63	Development of a package model for process simulation and cost estimation of seawater reverse osmosis desalination plant. Desalination, 2009, 247, 326-335.	4.0	13
64	Impacts of flow channel geometry, hydrodynamic and membrane properties on osmotic backwash of RO membranes€"CFD modeling and simulation. Desalination, 2020, 476, 114229.	4.0	13
65	Analysis of the relation between pollutant loading and water depth flowrate changes in a constructed wetland for agricultural nonpoint source pollution management. Ecological Engineering, 2020, 152, 105841.	1.6	13
66	Solar and Tidal Modulations of Fecal Indicator Bacteria in Coastal Waters at Huntington Beach, California. Environmental Management, 2007, 39, 867-875.	1.2	12
67	Prediction of reverse osmosis membrane fouling due to scale formation in the presence of dissolved organic matters using genetic programming. Desalination and Water Treatment, 2010, 15, 121-128.	1.0	12
68	Effect of environmental flow management on river water quality: a case study at Yeongsan River, Korea. Water Science and Technology, 2009, 59, 2437-2446.	1.2	11
69	Evaluation of pollutants removal efficiency to achieve successful urban river restoration. Water Science and Technology, 2009, 59, 2101-2109.	1.2	11
70	Factors affecting metal exchange between sediment and water in an estuarine reservoir: A spatial and seasonal observation. Journal of Environmental Monitoring, 2009, 11, 2058.	2.1	9
71	Optimal strategies of fill and aeration in a sequencing batch reactor for biological nitrogen and carbon removal. Korean Journal of Chemical Engineering, 2010, 27, 925-929.	1.2	9
72	Time-series image analysis for investigating SWRO fouling mechanism. Desalination and Water Treatment, 2012, 43, 212-220.	1.0	9

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73	Pressure Retarded Osmosis Process: Current Status and Future. Daehan Hwan'gyeong Gonghag Hoeji, 2014, 36, 791-802.	0.4	9
74	Water quality changes according to the midstream weir construction in the Yeongsan River, Korea. Desalination and Water Treatment, 2015, 53, 3066-3071.	1.0	8
75	Mass Load-Based Pollution Management of the Han River and Its Tributaries, Korea. Environmental Management, 2008, 41, 12-19.	1.2	6
76	SeaHERO core technology and its research scope for a seawater reverse osmosis desalination system. Desalination and Water Treatment, 2010, 15, 1-4.	1.0	6
77	Diffuse pollutant unit loads of various transportation landuses. Desalination and Water Treatment, 2012, 38, 222-229.	1.0	6
78	Online estimation of fouling development for SWRO system using real data. Desalination, 2009, 247, 200-209.	4.0	5
79	Application of hybrid systems techniques for cleaning and replacement of a RO membrane. Desalination, 2009, 247, 25-32.	4.0	5
80	A rapid performance diagnosis of seawater reverse osmosis membranes: simulation approach. Desalination and Water Treatment, 2010, 15, 11-19.	1.0	5
81	Modeling of solute transport in multi-component solution for reverse osmosis membranes. Desalination and Water Treatment, 2010, 15, 20-28.	1.0	5
82	New ecological health assessment approaches of an urban stream using molecular and physiological level biomarkers and bioindicators. Animal Cells and Systems, 2012, 16, 329-336.	0.8	5
83	Impact of hydraulic pressure and pH on organic fouling in pressure retarded osmosis (PRO) process. Desalination and Water Treatment, 2016, 57, 10121-10128.	1.0	5
84	Investigation of stormwater runoff strength in an agricultural area, Korea. Desalination and Water Treatment, 2012, 38, 360-365.	1.0	4
85	Fluorescence imaging for biofoulants detection and monitoring of biofouled strength in reverse osmosis membrane. Analytical Methods, 2014, 6, 993-1000.	1.3	4
86	Smart water grid: desalination water management platform. Desalination and Water Treatment, 2016, 57, 2845-2854.	1.0	4
87	Modeling seawater reverse osmosis system under degradation conditions of membrane performance: assessment of isobaric energy recovery devices and feed pressure control benefits. Desalination and Water Treatment, 2016, 57, 20210-20218.	1.0	4
88	Integration of PRO into Desalination Processes. , 2017, , 129-151.		4
89	Feasibility study on tri-hybrid desalination system. Desalination and Water Treatment, 2010, 15, 35-42.	1.0	3
90	Particle removal properties of stormwater runoff with a lab-scale vortex separator. Desalination and Water Treatment, 2012, 38, 301-305.	1.0	3

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91	Application of coagulation process for the treatment of combined sewer overflows (CSOs). Desalination and Water Treatment, 2013, 51, 4063-4071.	1.0	3
92	Developing alternative regression models for describing water quality using a self-organizing map. Desalination and Water Treatment, 2016, 57, 20146-20158.	1.0	3
93	Theoretical Analysis of a Mathematical Relation between Driving Pressures in Membrane-Based Desalting Processes. Membranes, 2021, 11, 220.	1.4	3
94	A new methodology for determining dispersion coefficient using ordinary and partial differential transport equations. Water Science and Technology, 2009, 59, 2197-2203.	1.2	2
95	Potassium Recovery from Potassium Solution and Seawater Using Different Adsorbents. Applied Sciences (Switzerland), 2021, 11, 8660.	1.3	2
96	Occurrence of Antibiotic Resistant E. coli in Surface Water: A Study in a Typical Urban Watershed, Korea. Water Practice and Technology, 2010, 5, .	1.0	1
97	Understanding boron rejection by reverse osmosis membranes. Desalination and Water Treatment, 2010, 15, 129-133.	1.0	1
98	Application of World Ocean Atlas data for estimating the relative performance of a new construction of SWRO desalination plant. Desalination and Water Treatment, 2010, 15, 5-10.	1.0	1
99	Membrane-based SWRO pretreatment: Knowledge discovery in databases using principal component analysis regression. Desalination and Water Treatment, 2010, 15, 160-166.	1.0	1
100	Total annual profits estimation for new construction of an SWRO desalination plant in Korea. Desalination and Water Treatment, 2010, 15, 108-113.	1.0	1
101	Ripening of granular media filters for pretreatment of seawater in membrane desalination. Desalination and Water Treatment, 2010, 15, 29-34.	1.0	1
102	Comparison of numerical schemes for improved prediction model of fecal indicator bacteria in a riverine system. Desalination and Water Treatment, 2012, 38, 373-381.	1.0	1
103	Techno-economical approach of GAC and microfiltration as a coagulant-free pre-treatment of seawater desalination. Desalination and Water Treatment, 2012, 42, 87-93.	1.0	1
104	Characterizing particle size distribution of nonpoint source pollutants in an agricultural area. Desalination and Water Treatment, 2013, 51, 4138-4145.	1.0	1
105	Influence of spatial resolution of radar images on the parameterization and performance of SWAT model. Desalination and Water Treatment, 2016, , 1-9.	1.0	1
106	Advanced total phosphorus removal approach: system design and combined sewer overflows (CSOs) sludge application. Desalination and Water Treatment, 2013, 51, 4072-4080.	1.0	0
107	Impacts of Spacers on Forward Osmosis Processes. , 2015, , 49-71.		0
108	Developing statistical models for estimating $chlorophyll$-a and total suspended solid levels at an estuarine reservoir with nutrient inputs from satellite observations. Desalination and Water Treatment, 0, , 1-14.	1.0	0

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109	Finding sources and sinks of fluorescent dissolved organic matter in a riverine system using parallel factor model. Desalination and Water Treatment, 2016, 57, 20199-20209.	1.0	0