

Ori Lahav

List of Publications by Year in descending order

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109
papers

3,715
citations

159525

30
h-index

143943

57
g-index

110
all docs

110
docs citations

110
times ranked

4061
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of pH on the kinetics of spontaneous Fe(II) oxidation by O ₂ in aqueous solution – basic principles and a simple heuristic description. <i>Chemosphere</i> , 2007, 68, 2080-2084.	4.2	460
2	Rethinking Desalinated Water Quality and Agriculture. <i>Science</i> , 2007, 318, 920-921.	6.0	196
3	Selective nitrate removal from groundwater using a hybrid nanofiltration–reverse osmosis filtration scheme. <i>Chemical Engineering Journal</i> , 2015, 279, 372-378.	6.6	192
4	Control of sulfide in sewer systems by dosage of iron salts: Comparison between theoretical and experimental results, and practical implications. <i>Science of the Total Environment</i> , 2008, 392, 145-156.	3.9	161
5	Struvite recovery from municipal-wastewater sludge centrifuge supernatant using seawater NF concentrate as a cheap Mg(II) source. <i>Separation and Purification Technology</i> , 2013, 108, 103-110.	3.9	152
6	Ammonium removal using ion exchange and biological regeneration. <i>Water Research</i> , 1998, 32, 2019-2028.	5.3	144
7	Study of urban population attitudes towards various wastewater reuse options: Israel as a case study. <i>Journal of Environmental Management</i> , 2006, 81, 360-370.	3.8	97
8	Fundamental chemistry and engineering aspects of post-treatment processes for desalinated water – A review. <i>Desalination</i> , 2011, 273, 6-22.	4.0	91
9	Revealing the mechanism of indirect ammonia electrooxidation. <i>Electrochimica Acta</i> , 2012, 63, 209-219.	2.6	89
10	Quality criteria for desalinated water following post-treatment. <i>Desalination</i> , 2007, 207, 286-303.	4.0	87
11	Rapid, Simple, and Accurate Method for Measurement of VFA and Carbonate Alkalinity in Anaerobic Reactors. <i>Environmental Science & Technology</i> , 2002, 36, 2736-2741.	4.6	84
12	Radium and Barium Removal through Blending Hydraulic Fracturing Fluids with Acid Mine Drainage. <i>Environmental Science & Technology</i> , 2014, 48, 1334-1342.	4.6	82
13	Direct measurement of the boron isotope fractionation factor: Reducing the uncertainty in reconstructing ocean paleo-pH. <i>Earth and Planetary Science Letters</i> , 2015, 414, 1-5.	1.8	66
14	Separation of divalent and monovalent ions using flow-electrode capacitive deionization with nanofiltration membranes. <i>Desalination</i> , 2018, 425, 123-129.	4.0	65
15	Sustainable removal of ammonia from anaerobic-lagoon swine waste effluents using an electrochemically-regenerated ion exchange process. <i>Chemical Engineering Journal</i> , 2013, 218, 214-222.	6.6	62
16	A new post-treatment process for attaining Ca ²⁺ , Mg ²⁺ , SO ₄ ²⁻ and alkalinity criteria in desalinated water. <i>Water Research</i> , 2007, 41, 3989-3997.	5.3	56
17	A novel approach for ammonia removal from fresh-water recirculated aquaculture systems, comprising ion exchange and electrochemical regeneration. <i>Aquacultural Engineering</i> , 2013, 52, 27-38.	1.4	52
18	Selective separation of seawater Mg ²⁺ ions for use in downstream water treatment processes. <i>Chemical Engineering Journal</i> , 2011, 175, 136-143.	6.6	50

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19	Intensive fish culture at high ammonium and low pH. <i>Aquaculture</i> , 2006, 255, 301-313.	1.7	48
20	A different approach for predicting H ₂ S(g) emission rates in gravity sewers. <i>Water Research</i> , 2006, 40, 259-266.	5.3	42
21	Ammonium removal using a novel unsaturated flow biological filter with passive aeration. <i>Water Research</i> , 2001, 35, 397-404.	5.3	39
22	Development of a single-sludge denitrification method for nitrate removal from RAS effluents: Lab-scale results vs. model prediction. <i>Aquaculture</i> , 2006, 259, 342-353.	1.7	39
23	Application of a novel plasma-based advanced oxidation process for efficient and cost-effective destruction of refractory organics in tertiary effluents and contaminated groundwater. <i>Desalination and Water Treatment</i> , 2009, 11, 236-244.	1.0	39
24	Quantification of anammox activity in a denitrification reactor for a recirculating aquaculture system. <i>Aquaculture</i> , 2009, 288, 76-82.	1.7	39
25	A conceptual, stoichiometry-based model for single-sludge denitrification in recirculating aquaculture systems. <i>Aquaculture</i> , 2006, 259, 328-341.	1.7	37
26	Optimal sensor placement for detecting organophosphate intrusions into water distribution systems. <i>Water Research</i> , 2015, 73, 193-203.	5.3	37
27	Predicting the Rejection of Major Seawater Ions by Spiral-Wound Nanofiltration Membranes. <i>Environmental Science & Technology</i> , 2015, 49, 8631-8638.	4.6	35
28	Centralised urban wastewater reuse: what is the public attitude?. <i>Water Science and Technology</i> , 2006, 54, 423-430.	1.2	34
29	Recovery of high-purity magnesium solutions from RO brines by adsorption of Mg(OH) ₂ (s) on Fe ₃ O ₄ micro-particles and magnetic solids separation. <i>Chemical Engineering Journal</i> , 2014, 235, 37-45.	6.6	32
30	Potential applications of quarry dolomite for post treatment of desalinated water. <i>Desalination and Water Treatment</i> , 2009, 1, 58-67.	1.0	31
31	Integrated hydraulic and organophosphate pesticide injection simulations for enhancing event detection in water distribution systems. <i>Water Research</i> , 2014, 63, 271-284.	5.3	31
32	Modeling Hydrogen Sulfide Emission Rates in Gravity Sewage Collection Systems. <i>Journal of Environmental Engineering, ASCE</i> , 2004, 130, 1382-1389.	0.7	30
33	Potential drawbacks associated with agricultural irrigation with treated wastewaters from desalinated water origin and possible remedies. <i>Water Science and Technology</i> , 2010, 61, 2451-2460.	1.2	30
34	Modeling pH variation in reverse osmosis. <i>Water Research</i> , 2015, 87, 328-335.	5.3	28
35	Electrooxidation for simultaneous ammonia control and disinfection in seawater recirculating aquaculture systems. <i>Aquacultural Engineering</i> , 2016, 72-73, 77-87.	1.4	28
36	Cost-effective treatment of swine wastes through recovery of energy and nutrients. <i>Waste Management</i> , 2017, 69, 508-517.	3.7	28

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37	Highly-selective separation of divalent ions from seawater and seawater RO retentate. Separation and Purification Technology, 2017, 175, 460-468.	3.9	27
38	The potential of using iron-oxide-rich soils for minimizing the detrimental effects of H ₂ S in freshwater aquaculture systems. Aquaculture, 2004, 238, 263-281.	1.7	26
39	Accurate determination of Fe(II) concentrations in the presence of a very high soluble Fe(III) background. Applied Geochemistry, 2008, 23, 2123-2129.	1.4	26
40	A New Approach for Minimizing Ammonia Emissions from Poultry Houses. Water, Air, and Soil Pollution, 2008, 191, 183-197.	1.1	25
41	A new approach to increasing the efficiency of low-pH Fe-electrocoagulation applications. Journal of Hazardous Materials, 2010, 183, 596-601.	6.5	25
42	Potential applications of indirect electrochemical ammonia oxidation within the operation of freshwater and saline-water recirculating aquaculture systems. Aquacultural Engineering, 2015, 65, 55-64.	1.4	25
43	Quality criteria for desalinated water and introduction of a novel, cost effective and advantageous post treatment process. Desalination, 2008, 221, 70-83.	4.0	24
44	A cost effective method for improving the quality of inland desalinated brackish water destined for agricultural irrigation. Desalination, 2010, 262, 152-160.	4.0	24
45	Selective separation of divalent ions from seawater using an integrated ion-exchange/nanofiltration approach. Chemical Engineering and Processing: Process Intensification, 2018, 126, 8-15.	1.8	24
46	H ₂ S(g) Removal Using a Modified, Low-pH Liquid Redox Sulfur Recovery (LRSR) Process with Electrochemical Regeneration of the Fe Catalyst Couple. Environmental Science & Technology, 2009, 43, 8315-8319.	4.6	23
47	A novel approach for SWRO desalination plants operation, comprising single pass boron removal and reuse of CO ₂ in the post treatment step. Chemical Engineering Journal, 2012, 187, 275-282.	6.6	23
48	Design aspects of calcite-dissolution reactors applied for post treatment of desalinated water. Desalination, 2013, 314, 1-9.	4.0	23
49	Desalinated brackish water with improved mineral composition using monovalent-selective nanofiltration followed by reverse osmosis. Desalination, 2021, 520, 115364.	4.0	23
50	Improved Experimental and Computational Methodology for Determining the Kinetic Equation and the Extant Kinetic Constants of Fe(II) Oxidation by Acidithiobacillus ferrooxidans. Applied and Environmental Microbiology, 2007, 73, 1742-1752.	1.4	22
51	Accurate and self-consistent procedure for determining pH in seawater desalination brines and its manifestation in reverse osmosis modeling. Water Research, 2014, 64, 187-195.	5.3	22
52	DiaNanofiltration-based method for inexpensive and selective separation of Mg ²⁺ and Ca ²⁺ ions from seawater, for improving the quality of soft and desalinated waters. Separation and Purification Technology, 2016, 166, 83-91.	3.9	21
53	Establishment of the Underlying Rationale and Description of a Cheap Nanofiltration-Based Method for Supplementing Desalinated Water with Magnesium Ions. Water (Switzerland), 2014, 6, 1172-1186.	1.2	20
54	Chemical stability of inline blends of desalinated, surface and ground waters: the need for higher alkalinity values in desalinated water. Desalination, 2009, 239, 334-345.	4.0	19

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55	Coupling mass transport and chemical equilibrium models for improving the prediction of SWRO permeate boron concentrations. <i>Desalination</i> , 2013, 310, 87-92.	4.0	19
56	Chemical stability and extent of isomorphous substitution in ferrites precipitated under ambient temperatures. <i>Journal of Hazardous Materials</i> , 2011, 193, 59-64.	6.5	18
57	Chalk as the carrier for nitrifying biofilm in a fluidized bed reactor. <i>Water Research</i> , 2001, 35, 284-290.	5.3	17
58	Reducing the specific energy consumption of 1st-pass SWRO by application of high-flux membranes fed with high-pH, decarbonated seawater. <i>Water Research</i> , 2015, 85, 185-192.	5.3	17
59	Chlorine-based disinfection for controlling horizontal transmission of VNN in a seawater recirculating aquaculture system growing European seabass. <i>Aquaculture</i> , 2019, 510, 329-336.	1.7	17
60	A membrane-based recycling process for minimizing environmental effects inflicted by ion-exchange softening applications. <i>Separation and Purification Technology</i> , 2019, 223, 24-30.	3.9	17
61	Dia-nanofiltration-electrodialysis hybrid process for selective removal of monovalent ions from Mg ²⁺ rich brines. <i>Desalination</i> , 2020, 481, 114357.	4.0	17
62	Development of an additional step to current CO ₂ -based CaCO ₃ (s) dissolution post-treatment processes for cost-effective Mg ²⁺ supply to desalinated water. <i>Chemical Engineering Journal</i> , 2010, 160, 48-56.	6.6	16
63	Favorable Operating Conditions for Obtaining High-Value Struvite Product from Sludge Dewatering Filtrate. <i>Environmental Engineering Science</i> , 2010, 27, 733-741.	0.8	16
64	Potential effects of desalinated water quality on the operation stability of wastewater treatment plants. <i>Science of the Total Environment</i> , 2009, 407, 2404-2410.	3.9	15
65	Measurement of pH, alkalinity and acidity in ultra-soft waters. <i>Water S A</i> , 2001, 27, 423.	0.2	14
66	A new algorithm for design, operation and cost assessment of struvite (MgNH ₄ PO ₄) precipitation processes. <i>Environmental Technology (United Kingdom)</i> , 2015, 36, 1892-1901.	1.2	14
67	Pilot scale evaluation of a novel post-treatment process for desalinated water. <i>Desalination and Water Treatment</i> , 2010, 13, 128-136.	1.0	13
68	Stable Incorporation of Co ²⁺ into Ferrite Structure at Ambient Temperature: Effect of Operational Parameters. <i>Water, Air, and Soil Pollution</i> , 2008, 190, 245-257.	1.1	12
69	A design study on the optimal water refreshment rate in recirculating aquaculture systems. <i>Aquacultural Engineering</i> , 2008, 38, 171-180.	1.4	12
70	A different approach for brackish-water desalination, comprising acidification of the feed-water and CO ₂ (aq) reuse for alkalinity, Ca ²⁺ and Mg ²⁺ supply in the post treatment stage. <i>Separation and Purification Technology</i> , 2012, 89, 252-260.	3.9	12
71	Effects of sub-lethal CO ₂ (aq) concentrations on the performance of intensively reared gilthead seabream (<i>Sparus aurata</i>) in brackish water: Flow-through experiments and full-scale RAS results. <i>Aquacultural Engineering</i> , 2013, 56, 18-25.	1.4	12
72	Acid-base dynamics in seawater reverse osmosis: experimental evaluation of a reactive transport algorithm. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 107-116.	1.2	12

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73	A new thermal-reduction-based approach for producing Mg from seawater. Hydrometallurgy, 2017, 169, 520-533.	1.8	12
74	Proof of concept of a new technology for prolonged high-density live shellfish transportation: Brown crab as a case study. Food Control, 2020, 114, 107239.	2.8	12
75	Replenishing Mg(II) to desalinated water by seawater nanofiltration followed by magnetic separation of Mg(OH) ₂ (s)/Fe ₃ O ₄ particles. Desalination and Water Treatment, 2016, 57, 19903-19916.	1.0	11
76	Intensification and energy minimization of seawater reverse osmosis desalination through high-pH operation: Temperature dependency and second pass implications. Chemical Engineering and Processing: Process Intensification, 2018, 131, 84-91.	1.8	11
77	A seeded ambient temperature ferrite process for treatment of AMD waters: magnetite formation in the presence and absence of calcium ions under steady state operation. Water S A, 2003, 29, 117.	0.2	10
78	Formation and minimization of bromate ions within non-thermal-plasma advanced oxidation. Desalination, 2011, 280, 273-280.	4.0	10
79	Extent and mechanism of metal ion incorporation into precipitated ferrites. Journal of Colloid and Interface Science, 2011, 358, 129-135.	5.0	10
80	Minimization of THM formation in seawater-fed recirculating aquaculture systems operated with electrochemical NH ₄ ⁺ removal. Aquaculture, 2019, 502, 162-175.	1.7	10
81	One-Step Ambient Temperature Ferrite Process for Treatment of Acid Mine Drainage Waters. Journal of Environmental Engineering, ASCE, 2003, 129, 155-161.	0.7	9
82	Treatment of Nitrate-Rich Saline Effluent by Using Citrate-Rich Waste as Carbon Source and Electron Donor in a Single-Stage Activated Sludge Reactor. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	8
83	Removal of Nitrate from Drinking Water by Ion-Exchange Followed by nZVI-Based Reduction and Electrooxidation of the Ammonia Product to N ₂ (g). ChemEngineering, 2017, 1, 2.	1.0	8
84	Implementation, Design and Cost Assessment of a Membrane-Based Process for Selectively Enriching Desalinated Water with Divalent Seawater Ions. ChemEngineering, 2018, 2, 41.	1.0	8
85	Chemical Water Stability in Optimal Operation of Water Distribution Systems with Blended Desalinated Water. Journal of Water Resources Planning and Management - ASCE, 2011, 137, 531-541.	1.3	7
86	Modelling Heavy Metal Contamination Events in Water Distribution Systems. Procedia Engineering, 2015, 119, 328-336.	1.2	7
87	A pre-treatment concept for increasing the recovery ratio of coastline BWRO plants, while providing Mg ²⁺ in the product water. Desalination, 2021, 515, 115202.	4.0	7
88	Modeling weak acids' reactive transport in reverse osmosis processes: A general framework and case studies for SWRO. Desalination, 2014, 343, 147-153.	4.0	6
89	Synthesis and characterization of zinc-hexacyanoferrate composite beads for controlling the ammonia concentration in low-temperature live seafood transports. Water Research, 2021, 203, 117551.	5.3	6
90	Decreasing Seawater Desalination Footprint by Integrating Bipolar-Membrane Electrodialysis in a Single-Pass Reverse Osmosis Scheme. ACS Sustainable Chemistry and Engineering, 2021, 9, 16232-16240.	3.2	6

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91	A new, energy-efficient approach for boron removal from SWRO plants. <i>Desalination and Water Treatment</i> , 2013, 51, 1651-1656.	1.0	5
92	Post-Treatment of Desalinated Water” <i>Chemistry, Design, Engineering, and Implementation.</i> , 2018, , 305-350.		5
93	Acidification and decarbonization in seawater: Potential pretreatment steps for biofouling control in SWRO membranes. <i>Desalination</i> , 2019, 467, 86-94.	4.0	5
94	Temperature-dependent boron permeability through reverse-osmosis membranes: implications for full-scale simulations. , 0, 68, 23-31.		5
95	Dolomite dissolution is not an attractive alternative for meeting Ca ²⁺ , Mg ²⁺ and alkalinity criteria in desalination plants” post treatment step. , 0, 115, 194-198.		5
96	A Different Approach for Predicting Reaeration Rates in Gravity Sewers and Completely Mixed Tanks. <i>Water Environment Research</i> , 2006, 78, 730-739.	1.3	4
97	Determining the kinetic constants leading to mineralization of dilute carbamazepine and estradiol-containing solutions under continuous supercritical water oxidation conditions. <i>Journal of Hazardous Materials</i> , 2022, 422, 126797.	6.5	4
98	Treatment of Presettled Municipal Wastewater Using a Passively Aerated Vertical Bed. <i>Environmental Engineering Science</i> , 2005, 22, 707-715.	0.8	3
99	Modeling the Aeration Efficiency of a Passively Aerated Vertical-Flow Biological Filter. <i>Journal of Environmental Engineering, ASCE</i> , 2007, 133, 970-978.	0.7	3
100	Accurate approach for determining fresh-water carbonate (H ₂ CO ₃) alkalinity, using a single H ₃ PO ₄ titration point. <i>Talanta</i> , 2012, 100, 12-20.	2.9	3
101	On-board zero-discharge water treatment unit for well-boats: Arctic char as a case study. <i>Journal of Applied Aquaculture</i> , 2022, 34, 953-968.	0.7	3
102	Removal of contaminants of emerging concern from secondary-effluent reverse osmosis retentates by continuous supercritical water oxidation- parametric study and conceptual design. <i>Journal of Hazardous Materials</i> , 2022, 437, 129379.	6.5	3
103	Chemical Stability Inclusion in Optimizing the Operation of Water Networks. , 2011, , .		1
104	A procedure for adjusting Grey mullet (<i>Mugil cephalus</i> Lin.) fingerlings to low-salinity, low-hardness waters for economic and environmentally friendly inland culture. <i>Aquacultural Engineering</i> , 2014, 59, 55-63.	1.4	1
105	Single SWRO Pass Boron Removal at High pH. , 2015, , 297-323.		1
106	Rehabilitation of Water Distribution Systems following a Cadmium Contamination Intrusion” A Solution Based on Water Quality and Water Distribution Systems Modeling. , 2019, , .		1
107	Closure to “Modeling Hydrogen Sulfide Emission Rates in Gravity Collection Systems” by Ori Lahav, Yue Lu, Uri Shavit, and Richard E. Loewenthal. <i>Journal of Environmental Engineering, ASCE</i> , 2005, 131, 1762-1764.	0.7	0
108	Optimal Sensors Location Using Contamination Detailed Chemistry Reactions. , 2015, , .		0

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109	Determination of low citric acid concentrations in a mixture of weak acid/bases. Water S A, 2006, 31, .	0.2	0