Oded Nir

List of Publications by Year
in descending order

40	1,197	393982	395343
papers	citations	19 h-index	33 g-index

47	47	47	1695
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rethinking wastewater risks and monitoring in light of the COVID-19 pandemic. Nature Sustainability, 2020, 3, 981-990.	11.5	195
2	Selective nitrate removal from groundwater using a hybrid nanofiltrationâ€“reverse osmosis filtration scheme. Chemical Engineering Journal, 2015, 279, 372-378.	6.6	192
3	Regressing SARS-CoV-2 Sewage Measurements Onto COVID-19 Burden in the Population: A Proof-of-Concept for Quantitative Environmental Surveillance. Frontiers in Public Health, 2021, 9, 561710.	1.3	73
4	Direct measurement of the boron isotope fractionation factor: Reducing the uncertainty in reconstructing ocean paleo-pH. Earth and Planetary Science Letters, 2015, 414, 1-5.	1.8	66
5	Closing the cycle: Phosphorus removal and recovery from diluted effluents using acid resistive membranes. Chemical Engineering Journal, 2018, 346, 640-648.	6.6	47
6	Phosphorous recovery from a novel recirculating aquaculture system followed by its sustainable reuse as a fertilizer. Science of the Total Environment, 2020, 722, 137949.	3.9	36
7	Predicting the Rejection of Major Seawater Ions by Spiral-Wound Nanofiltration Membranes. Environmental Science & Technology, 2015, 49, 8631-8638.	4.6	35
8	Recovery of high-purity magnesium solutions from RO brines by adsorption of Mg(OH)2(s) on Fe3O4 micro-particles and magnetic solids separation. Chemical Engineering Journal, 2014, 235, 37-45.	6.6	32
9	Tracking SARS-CoV-2 RNA through the Wastewater Treatment Process. ACS ES&T Water, 2021, 1, 1161-1167.	2.3	32
10	Modeling pH variation in reverse osmosis. Water Research, 2015, 87, 328-335.	5.3	28
11	Fouling minimization at membranes having a 3D surface topology with microgels as soft model colloids. Journal of Membrane Science, 2019, 569, 7-16.	4.1	28
12	Treatment of acidic wastewater via fluoride ions removal by SiO2 particles followed by phosphate ions recovery using flow-electrode capacitive deionization. Chemical Engineering Journal, 2020, 400, 125892.	6.6	27
13	The presence of ferric iron promotes calcium sulphate scaling in reverse osmosis processes. Desalination, 2016, 393, 115-119.	4.0	25
14	A novel approach for SWRO desalination plants operation, comprising single pass boron removal and reuse of CO2 in the post treatment step. Chemical Engineering Journal, 2012, 187, 275-282.	6.6	23
15	Microfiltration of deformable microgels. Soft Matter, 2016, 12, 6512-6517.	1.2	23
16	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
17	Tuning the Ion-Selectivity of Thin-Film Composite Nanofiltration Membranes by Molecular Layer Deposition of Alucone. ACS Applied Materials & Interfaces, 2020, 12, 53356-53364.	4.0	22
18	Enhancing the Sustainability of Phosphogypsum Recycling by Integrating Electrodialysis with Bipolar Membranes. ACS Sustainable Chemistry and Engineering, 2020, 8, 2490-2497.	3.2	21

#	Article	IF	Citations
19	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
20	Coupling mass transport and chemical equilibrium models for improving the prediction of SWRO permeate boron concentrations. Desalination, 2013, 310, 87-92.	4.0	19
21	Reducing the specific energy consumption of 1st-pass SWRO by application of high-flux membranes fed with high-pH, decarbonated seawater. Water Research, 2015, 85, 185-192.	5.3	17
22	Dia-nanofiltration-electrodialysis hybrid process for selective removal of monovalent ions from Mg2+ rich brines. Desalination, 2020, 481, 114357.	4.0	17
23	A new algorithm for design, operation and cost assessment of struvite (MgNH4PO4) precipitation processes. Environmental Technology (United Kingdom), 2015, 36, 1892-1901.	1.2	14
24	Effects of sub-lethal CO2(aq) concentrations on the performance of intensively reared gilthead seabream (Sparus aurata) in brackish water: Flow-through experiments and full-scale RAS results. Aquacultural Engineering, 2013, 56, 18-25.	1.4	12
25	Acidâ€“base dynamics in seawater reverse osmosis: experimental evaluation of a reactive transport algorithm. Environmental Science: Water Research and Technology, 2016, 2, 107-116.	1.2	12
26	Ion Transport in Laser-Induced Graphene Cation-Exchange Membrane Hybrids. Journal of Physical Chemistry Letters, 2020, 11, 1397-1403.	2.1	12
27	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
28	Electro-Enhanced Membrane Sorption: A New Approach for Selective Ion Separation and Its Application to Phosphate and Arsenic Removal. Industrial & Engineering Chemistry Research, 2020, 59, 10595-10605.	1.8	10
29	Low-resistance monovalent-selective cation exchange membranes prepared using molecular layer deposition for energy-efficient ion separations. RSC Advances, 2021, 11, 2427-2436.	1.7	10
30	Molecular insight into the interfacial chemical functionalities regulating heterogeneous calcium-arsenate nucleation. Journal of Colloid and Interface Science, 2020, 575, 464-471.	5.0	9
31	New compact expressions for concentration-polarization of trace-ions in pressure-driven membrane processes. , 2021, 1, 100003.		9
32	An advantage for desalination of coastal saline groundwater over seawater in view of boron removal requirements. Environmental Science: Water Research and Technology, 2021, 7, 2241-2254.	1.2	7
33	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
34	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
35	A new, energy-efficient approach for boron removal from SWRO plants. Desalination and Water Treatment, 2013, 51, 1651-1656.	1.0	5
36	Temperature-dependent boron permeability through reverse-osmosis membranes: implications for full-scale simulations. , 0, 68, 23-31.		5

#	Article	IF	Citations
37	When does commercial software fail in predicting scaling tendency in reverse osmosis and what can we do better?. , 0, 131, 34-42.		2
38	Single SWRO Pass Boron Removal at High pH. , 2015, , 297-323.		1
39	Elucidating morphological effects in membrane mineral fouling using real-time particle imaging and impedance spectroscopy. Environmental Science: Water Research and Technology, 0, , .	1.2	1
40	Instilling Monovalent Selectivity in Cation Exchange Membranes By Molecular Layer Deposition. ECS Meeting Abstracts, 2021, MA2021-01, 1173-1173.	0.0	0