A Van Der Wal

List of Publications by Year
in descending order

24 papers	5,661 citations	304743 22 h-index	610901 24 g-index
24 all docs	24 docs citations	24 times ranked	2651 citing authors

#	Article	IF	Citations
1	Review on the science and technology of water desalination by capacitive deionization. Progress in Materials Science, 2013, 58, 1388-1442.	32.8	1,648
2	Membrane capacitive deionization. Journal of Membrane Science, 2010, 346, 256-262.	8.2	464
3	Energy consumption and constant current operation in membrane capacitive deionization. Energy and Environmental Science, 2012, 5, 9520.	30.8	439
4	Theory of membrane capacitive deionization including the effect of the electrode pore space. Journal of Colloid and Interface Science, 2011, 360, 239-248.	9.4	374
5	Water Desalination Using Capacitive Deionization with Microporous Carbon Electrodes. ACS Applied Materials & Interfaces, 2012, 4, 1194-1199.	8.0	374
6	Charge Efficiency: A Functional Tool to Probe the Double-Layer Structure Inside of Porous Electrodes and Application in the Modeling of Capacitive Deionization. Journal of Physical Chemistry Letters, 2010, 1, 205-210.	4.6	334
7	Energy consumption in membrane capacitive deionization for different water recoveries and flow rates, and comparison with reverse osmosis. Desalination, 2013, 330, 35-41.	8.2	301
8	Optimization of salt adsorption rate in membrane capacitive deionization. Water Research, 2013, 47, 1941-1952.	11.3	276
9	Time-dependent ion selectivity in capacitive charging of porous electrodes. Journal of Colloid and Interface Science, 2012, 384, 38-44.	9.4	213
10	Enhanced charge efficiency and reduced energy use in capacitive deionization by increasing the discharge voltage. Journal of Colloid and Interface Science, 2015, 446, 317-326.	9.4	184
11	Dynamic Adsorption/Desorption Process Model for Capacitive Deionization. Journal of Physical Chemistry C, 2009, 113, 5636-5640.	3.1	173
12	Theory of pH changes in water desalination by capacitive deionization. Water Research, 2017, 119, 178-186.	11.3	160
13	Effect of electrode thickness variation on operation of capacitive deionization. Electrochimica Acta, 2012, 75, 148-156.	5.2	158
14	Resistance identification and rational process design in Capacitive Deionization. Water Research, 2016, 88, 358-370.	11.3	155
15	Energy consumption in capacitive deionization â€“ Constant current versus constant voltage operation. Water Research, 2018, 143, 367-375.	11.3	93
16	Water and chemical savings in cooling towers by using membrane capacitive deionization. Desalination, 2014, 342, 148-155.	8.2	62
17	Selective adsorption of nitrate over chloride in microporous carbons. Water Research, 2019, 164, 114885.	11.3	53
18	On-line method to study dynamics of ion adsorption from mixtures of salts in capacitive deionization. Desalination, 2016, 390, 47-52.	8.2	46

#	Article	IF	Citations
19	Slowly biodegradable organic compounds impact the biostability of non-chlorinated drinking water produced from surface water. Water Research, 2018, 129, 240-251.	11.3	40
20	Heterogeneous anion exchange membranes with nitrate selectivity and low electrical resistance. Journal of Membrane Science, 2020, 607, 118000.	8.2	33
21	Capacitive deionization with wire-shaped electrodes. Electrochimica Acta, 2018, 270, 165-173.	5.2	30
22	Enhancing biological stability of disinfectant-free drinking water by reducing high molecular weight organic compounds with ultrafiltration posttreatment. Water Research, 2019, 164, 114927.	11.3	25
23	Strategies to increase ion selectivity in electrodialysis. Separation and Purification Technology, 2022, 292, 120944.	7.9	19
24	The significance of the biomass subfraction of high-MW organic carbon for the microbial growth and maintenance potential of disinfectant-free drinking water produced from surface water. Water Research, 2022, 209, 117898.	11.3	7