

# Menachem Elimelech

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/9185498/menachem-elimelech-publications-by-year.pdf>  
**Version:** 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

|                    |                          |                 |                 |
|--------------------|--------------------------|-----------------|-----------------|
| 515<br>papers      | 87,475<br>citations      | 151<br>h-index  | 284<br>g-index  |
| 535<br>ext. papers | 98,297<br>ext. citations | 10.8<br>avg, IF | 8.84<br>L-index |

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 515 | Reply to "A resurrection of the Haber-Weiss reaction".. <i>Nature Communications</i> , <b>2022</b> , 13, 395   | 17.4 | 0         |
| 514 | Machine learning reveals key ion selectivity mechanisms in polymeric membranes with subnanometer pores.. <i>Science Advances</i> , <b>2022</b> , 8, eabl5771                 | 14.3 | 6         |
| 513 | Tutorial review of reverse osmosis and electrodialysis. <i>Journal of Membrane Science</i> , <b>2022</b> , 647, 120221   | 9.6  | 8         |
| 512 | New parametrization method for salt permeability of reverse osmosis desalination membranes <b>2022</b> , 2, 100010   |      | 3         |
| 511 | Tethered electrolyte active-layer membranes. <i>Journal of Membrane Science</i> , <b>2022</b> , 642, 120004  | 9.6  | 1         |
| 510 | Laser Interferometry for Precise Measurement of Ultralow Flow Rates from Permeable Materials. <i>Environmental Science and Technology Letters</i> , <b>2022</b> , 9, 233-238 | 11   |           |
| 509 | Designing polymeric membranes with coordination chemistry for high-precision ion separations.. <i>Science Advances</i> , <b>2022</b> , 8, eabm9436                           | 14.3 | 2         |
| 508 | Distinct impacts of natural organic matter and colloidal particles on gypsum crystallization.. <i>Water Research</i> , <b>2022</b> , 218, 118500                             | 12.5 | 2         |
| 507 | Salt and Water Transport in Reverse Osmosis Membranes: Beyond the Solution-Diffusion Model. <i>Environmental Science &amp; Technology</i> , <b>2021</b> ,                    | 10.3 | 10        |
| 506 | Joule-Heated Layered Double Hydroxide Sponge for Rapid Removal of Silica from Water. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 16130-16142           | 10.3 | 1         |
| 505 | Engineered Nanoconfinement Accelerating Spontaneous Manganese-Catalyzed Degradation of Organic Contaminants. <i>Environmental Science &amp; Technology</i> , <b>2021</b> ,   | 10.3 | 4         |
| 504 | Tailored design of nanofiltration membranes for water treatment based on synthesis-property-performance relationships.. <i>Chemical Society Reviews</i> , <b>2021</b> ,      | 58.5 | 19        |
| 503 | Module-scale analysis of low-salt-rejection reverse osmosis: Design guidelines and system performance.. <i>Water Research</i> , <b>2021</b> , 209, 117936                    | 12.5 | 1         |
| 502 | Perfect divalent cation selectivity with capacitive deionization.. <i>Water Research</i> , <b>2021</b> , 210, 117959   | 12.5 | 5         |
| 501 | Selective Fluoride Transport in Subnanometer TiO Pores. <i>ACS Nano</i> , <b>2021</b> , 15, 16828-16838  | 16.7 | 2         |
| 500 | Electrified Membranes for Water Treatment Applications. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 725-752   |      | 33        |
| 499 | Environmental Applications of Engineered Materials with Nanoconfinement. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 706-724  |      | 14        |

|     |   |      |    |
|-----|---|------|----|
| 498 | Viability of Harvesting Salinity Gradient (Blue) Energy by Nanopore-Based Osmotic Power Generation. <i>Engineering</i> , <b>2021</b> ,  | 9.7  | 5  |
| 497 | Biogas sparging to control fouling and enhance resource recovery from anaerobically digested sludge centrate by forward osmosis. <i>Journal of Membrane Science</i> , <b>2021</b> , 625, 119176   | 9.6  | 7  |
| 496 | Enhanced Photocatalytic Water Decontamination by Micro-Nano Bubbles: Measurements and Mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 7025-7033   | 10.3 | 7  |
| 495 | Membrane-Confined Iron Oxychloride Nanocatalysts for Highly Efficient Heterogeneous Fenton Water Treatment. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 9266-9275   | 10.3 | 23 |
| 494 | Selective membranes in water and wastewater treatment: Role of advanced materials. <i>Materials Today</i> , <b>2021</b> , 50, 516-516   | 21.8 | 15 |
| 493 | Selective and sensitive environmental gas sensors enabled by membrane overlayers. <i>Trends in Chemistry</i> , <b>2021</b> , 3, 547-560   | 14.8 | 2  |
| 492 | Comparison of Energy Consumption of Osmotically Assisted Reverse Osmosis and Low-Salt-Rejection Reverse Osmosis for Brine Management. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 10714-10723   | 10.3 | 5  |
| 491 | Zwitterionic coating on thin-film composite membranes to delay gypsum scaling in reverse osmosis. <i>Journal of Membrane Science</i> , <b>2021</b> , 618, 118568  | 9.6  | 27 |
| 490 | High performance polyester reverse osmosis desalination membrane with chlorine resistance. <i>Nature Sustainability</i> , <b>2021</b> , 4, 138-146  | 22.1 | 55 |
| 489 | Colloidal stability of cellulose nanocrystals in aqueous solutions containing monovalent, divalent, and trivalent inorganic salts. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 584, 456-463   | 9.3  | 11 |
| 488 | Cobalt Single Atoms on Tetrapyridomacrocyclic Support for Efficient Peroxymonosulfate Activation. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 1242-1250   | 10.3 | 47 |
| 487 | Photo-electrochemical Osmotic System Enables Simultaneous Metal Recovery and Electricity Generation from Wastewater. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 604-613  | 10.3 | 11 |
| 486 | Removal of Emerging Wastewater Organic Contaminants by Polyelectrolyte Multilayer Nanofiltration Membranes with Tailored Selectivity. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 404-414  |      | 13 |
| 485 | Comment on "Techno-economic analysis of capacitive and intercalative water deionization" by M. Metzger, M. Besli, S. Kuppan, S. Hellstrom, S. Kim, E. Sebt, C. Subban and J. Christensen, <i>Energy Environ. Sci.</i> , 2020, 13, 1544. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 2494-2498 | 35.4 | 1  |
| 484 | Graphene oxide membranes with stable porous structure for ultrafast water transport. <i>Nature Nanotechnology</i> , <b>2021</b> , 16, 337-343   | 28.7 | 95 |
| 483 | Recent advances in ion selectivity with capacitive deionization. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1095-1120  | 35.4 | 68 |
| 482 | Energy Consumption of Brackish Water Desalination: Identifying the Sweet Spots for Electrodialysis and Reverse Osmosis. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 851-864  |      | 16 |
| 481 | Fabrication of desalination membranes by interfacial polymerization: history, current efforts, and future directions. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 6290-6307   | 58.5 | 50 |

|     |  |      |     |
|-----|--|------|-----|
| 480 | Precisely Engineered Photoreactive Titanium Nanoarray Coating to Mitigate Biofouling in Ultrafiltration. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 9975-9984   | 9.5  | 3   |
| 479 | Correlation equation for evaluating energy consumption and process performance of brackish water desalination by electrodialysis. <i>Desalination</i> , <b>2021</b> , 510, 115089  | 10.3 | 2   |
| 478 | Characterization of Dehydration during Ion Transport in Polymeric Nanochannels. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 14242-14252   | 16.4 | 18  |
| 477 | Chlorine-Resistant Epoxide-Based Membranes for Sustainable Water Desalination. <i>Environmental Science and Technology Letters</i> , <b>2021</b> , 8, 818-824  | 11   | 1   |
| 476 | Membrane Materials for Selective Ion Separations at the Water-Energy Nexus. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101312   | 24   | 24  |
| 475 | The open membrane database: Synthesis-structure-performance relationships of reverse osmosis membranes. <i>Journal of Membrane Science</i> , <b>2021</b> , 119927  | 9.6  | 12  |
| 474 | True driving force and characteristics of water transport in osmotic membranes. <i>Desalination</i> , <b>2021</b> , 520, 115360  | 10.3 | 7   |
| 473 | Design principles and challenges of bench-scale high-pressure reverse osmosis up to 150 bar. <i>Desalination</i> , <b>2021</b> , 517, 115237   | 10.3 | 3   |
| 472 | Nanopore-Based Power Generation from Salinity Gradient: Why It Is Not Viable. <i>ACS Nano</i> , <b>2021</b> , 15, 4093-4107  | 16.7 | 24  |
| 471 | Nanoscale Thickness Control of Nanoporous Films Derived from Directionally Photopolymerized Mesophases. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2001977  | 4.6  | 4   |
| 470 | Thin film composite membrane compaction in high-pressure reverse osmosis. <i>Journal of Membrane Science</i> , <b>2020</b> , 610, 118268   | 9.6  | 38  |
| 469 | Electrochemical-Osmotic Process for Simultaneous Recovery of Electric Energy, Water, and Metals from Wastewater. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 8430-8442   | 10.3 | 12  |
| 468 | Towards single-species selectivity of membranes with subnanometre pores. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 426-436  | 28.7 | 138 |
| 467 | The relative insignificance of advanced materials in enhancing the energy efficiency of desalination technologies. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 1694-1710   | 35.4 | 105 |
| 466 | Relating Selectivity and Separation Performance of Lamellar Two-Dimensional Molybdenum Disulfide (MoS <sub>2</sub> ) Membranes to Nanosheet Stacking Behavior. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 9640-9651 | 10.3 | 31  |
| 465 | Energy barriers to anion transport in polyelectrolyte multilayer nanofiltration membranes: Role of intra-pore diffusion. <i>Journal of Membrane Science</i> , <b>2020</b> , 603, 117921  | 9.6  | 26  |
| 464 | Capillary-driven desalination in a synthetic mangrove. <i>Science Advances</i> , <b>2020</b> , 6, eaax5253   | 14.3 | 19  |
| 463 | Energy Efficiency of Electro-Driven Brackish Water Desalination: Electrodialysis Significantly Outperforms Membrane Capacitive Deionization. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 3663-3677                   | 10.3 | 70  |

|     |  |      |     |
|-----|--|------|-----|
| 462 | Induced Charge Anisotropy: A Hidden Variable Affecting Ion Transport through Membranes. <i>Matter</i> , <b>2020</b> , 2, 735-750   | 12.7 | 14  |
| 461 | Strong Differential Monovalent Anion Selectivity in Narrow Diameter Carbon Nanotube Porins. <i>ACS Nano</i> , <b>2020</b> , 14, 6269-6275  | 16.7 | 20  |
| 460 | In Situ Electrochemical Generation of Reactive Chlorine Species for Efficient Ultrafiltration Membrane Self-Cleaning. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 6997-7007        | 10.3 | 38  |
| 459 | Complexation between dissolved silica and alginate molecules: Implications for reverse osmosis membrane fouling. <i>Journal of Membrane Science</i> , <b>2020</b> , 605, 118109                          | 9.6  | 9   |
| 458 | Tunable Molybdenum Disulfide-Enabled Fiber Mats for High-Efficiency Removal of Mercury from Water. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 18446-18456                         | 9.5  | 27  |
| 457 | Polyamide nanofiltration membrane with highly uniform sub-nanometre pores for sub-1 ppm precision separation. <i>Nature Communications</i> , <b>2020</b> , 11, 2015                                      | 17.4 | 153 |
| 456 | Derivation of the Theoretical Minimum Energy of Separation of Desalination Processes. <i>Journal of Chemical Education</i> , <b>2020</b> , 97, 4361-4369   | 2.4  | 12  |
| 455 | Similarities and differences between potassium and ammonium ions in liquid water: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 2540-2548                     | 3.6  | 16  |
| 454 | Controlled grafting of polymer brush layers from porous cellulosic membranes. <i>Journal of Membrane Science</i> , <b>2020</b> , 596, 117719   | 9.6  | 13  |
| 453 | Ion Selectivity in Brackish Water Desalination by Reverse Osmosis: Theory, Measurements, and Implications. <i>Environmental Science and Technology Letters</i> , <b>2020</b> , 7, 42-47                  | 11   | 28  |
| 452 | Minimal and zero liquid discharge with reverse osmosis using low-salt-rejection membranes. <i>Water Research</i> , <b>2020</b> , 170, 115317   | 12.5 | 45  |
| 451 | Membrane distillation assisted by heat pump for improved desalination energy efficiency. <i>Desalination</i> , <b>2020</b> , 496, 114694   | 10.3 | 10  |
| 450 | Doing nano-enabled water treatment right: sustainability considerations from design and research through development and implementation. <i>Environmental Science: Nano</i> , <b>2020</b> , 7, 3255-3278 | 7.1  | 5   |
| 449 | Intrapore energy barriers govern ion transport and selectivity of desalination membranes. <i>Science Advances</i> , <b>2020</b> , 6,   | 14.3 | 58  |
| 448 | Ionization behavior of nanoporous polyamide membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 30191-30200                           | 11.5 | 21  |
| 447 | Janus electrocatalytic flow-through membrane enables highly selective singlet oxygen production. <i>Nature Communications</i> , <b>2020</b> , 11, 6228   | 17.4 | 38  |
| 446 | Surface functionalization of reverse osmosis membranes with sulfonic groups for simultaneous mitigation of silica scaling and organic fouling. <i>Water Research</i> , <b>2020</b> , 185, 116203         | 12.5 | 22  |
| 445 | Mechanism of Heterogeneous Fenton Reaction Kinetics Enhancement under Nanoscale Spatial Confinement. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 10868-10875                       | 10.3 | 56  |

|     |   |      |     |
|-----|---|------|-----|
| 444 | Multifunctional nanocoated membranes for high-rate electrothermal desalination of hypersaline waters. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 1025-1032  | 28.7 | 28  |
| 443 | Pathways and Challenges for Biomimetic Desalination Membranes with Sub-Nanometer Channels. <i>ACS Nano</i> , <b>2020</b> , 14, 10894-10916  | 16.7 | 30  |
| 442 | Rethinking wastewater risks and monitoring in light of the COVID-19 pandemic. <i>Nature Sustainability</i> , <b>2020</b> , 3, 981-990   | 22.1 | 111 |
| 441 | Graphene Oxide-Functionalized Membranes: The Importance of Nanosheet Surface Exposure for Biofouling Resistance. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 517-526  | 10.3 | 24  |
| 440 | Shape-Dependent Interactions of Manganese Oxide Nanomaterials with Lipid Bilayer Vesicles. <i>Langmuir</i> , <b>2019</b> , 35, 13958-13966  | 4    | 2   |
| 439 | Tuning Pb(II) Adsorption from Aqueous Solutions on Ultrathin Iron Oxychloride (FeOCl) Nanosheets. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 2075-2085   | 10.3 | 71  |
| 438 | Photografting Graphene Oxide to Inert Membrane Materials to Impart Antibacterial Activity. <i>Environmental Science and Technology Letters</i> , <b>2019</b> , 6, 141-147   | 11   | 21  |
| 437 | Comparison of energy consumption in desalination by capacitive deionization and reverse osmosis. <i>Desalination</i> , <b>2019</b> , 455, 100-114   | 10.3 | 149 |
| 436 | Single crystal texture by directed molecular self-assembly along dual axes. <i>Nature Materials</i> , <b>2019</b> , 18, 1235-1243   | 27   | 21  |
| 435 | Engineering Carbon Nanotube Forest Superstructure for Robust Thermal Desalination Membranes. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903125   | 15.6 | 31  |
| 434 | Electrospun silica nanofiber mats functionalized with ceria nanoparticles for water decontamination.. <i>RSC Advances</i> , <b>2019</b> , 9, 19408-19417  | 3.7  | 9   |
| 433 | Removal of arsenic with reduced graphene oxide-TiO <sub>2</sub> -enabled nanofibrous mats. <i>Chemical Engineering Journal</i> , <b>2019</b> , 375, 122040  | 14.7 | 29  |
| 432 | Tuning the permselectivity of polymeric desalination membranes via control of polymer crystallite size. <i>Nature Communications</i> , <b>2019</b> , 10, 2347   | 17.4 | 29  |
| 431 | Critical Knowledge Gaps in Mass Transport through Single-Digit Nanopores: A Review and Perspective. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 21309-21326   | 3.8  | 121 |
| 430 | Monte Carlo Simulations of Framework Defects in Layered Two-Dimensional Nanomaterial Desalination Membranes: Implications for Permeability and Selectivity. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 6214-6224 | 10.3 | 48  |
| 429 | Removal of calcium ions from water by selective electrosorption using target-ion specific nanocomposite electrode. <i>Water Research</i> , <b>2019</b> , 160, 445-453   | 12.5 | 39  |
| 428 | Controlling pore structure of polyelectrolyte multilayer nanofiltration membranes by tuning polyelectrolyte-salt interactions. <i>Journal of Membrane Science</i> , <b>2019</b> , 581, 413-420  | 9.6  | 40  |
| 427 | Response to comments on "Comparison of energy consumption in desalination by capacitive deionization and reverse osmosis" <i>Desalination</i> , <b>2019</b> , 462, 48-55  | 10.3 | 14  |

|     |  |      |     |
|-----|--|------|-----|
| 426 | Concentration and Recovery of Dyes from Textile Wastewater Using a Self-Standing, Support-Free Forward Osmosis Membrane. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 3078-3086   | 10.3 | 45  |
| 425 | Activation behavior for ion permeation in ion-exchange membranes: Role of ion dehydration in selective transport. <i>Journal of Membrane Science</i> , <b>2019</b> , 580, 316-326  | 9.6  | 77  |
| 424 | Precise nanofiltration in a fouling-resistant self-assembled membrane with water-continuous transport pathways. <i>Science Advances</i> , <b>2019</b> , 5, eaav9308  | 14.3 | 44  |
| 423 | One-step sonochemical synthesis of a reduced graphene oxide/ZnO nanocomposite with antibacterial and antibiofouling properties. <i>Environmental Science: Nano</i> , <b>2019</b> , 6, 3080-3090  | 7.1  | 23  |
| 422 | Sub-1 $\mu$ m Free-Standing Symmetric Membrane for Osmotic Separations. <i>Environmental Science and Technology Letters</i> , <b>2019</b> , 6, 492-498   | 11   | 12  |
| 421 | 1,4-Dioxane as an emerging water contaminant: State of the science and evaluation of research needs. <i>Science of the Total Environment</i> , <b>2019</b> , 690, 853-866  | 10.2 | 43  |
| 420 | Pathways and challenges for efficient solar-thermal desalination. <i>Science Advances</i> , <b>2019</b> , 5, eaax0763  | 14.3 | 172 |
| 419 | Silica Removal Using Magnetic Iron-Aluminum Hybrid Nanomaterials: Measurements, Adsorption Mechanisms, and Implications for Silica Scaling in Reverse Osmosis. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 13302-13311 | 10.3 | 11  |
| 418 | Economic performance of membrane distillation configurations in optimal solar thermal desalination systems. <i>Desalination</i> , <b>2019</b> , 472, 114164  | 10.3 | 27  |
| 417 | Actinia-like multifunctional nanocoagulant for single-step removal of water contaminants. <i>Nature Nanotechnology</i> , <b>2019</b> , 14, 64-71   | 28.7 | 55  |
| 416 | Asymmetric membranes for membrane distillation and thermo-osmotic energy conversion. <i>Desalination</i> , <b>2019</b> , 452, 141-148  | 10.3 | 33  |
| 415 | Environmental performance of graphene-based 3D macrostructures. <i>Nature Nanotechnology</i> , <b>2019</b> , 14, 107-119   | 28.7 | 203 |
| 414 | Potential and implemented membrane-based technologies for the treatment and reuse of flowback and produced water from shale gas and oil plays: A review. <i>Desalination</i> , <b>2019</b> , 455, 34-57                                      | 10.3 | 146 |
| 413 | Reinventing Fenton Chemistry: Iron Oxychloride Nanosheet for pH-Insensitive H <sub>2</sub> O <sub>2</sub> Activation. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 186-191   | 11   | 120 |
| 412 | Role of Ionic Charge Density in Donnan Exclusion of Monovalent Anions by Nanofiltration. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 4108-4116   | 10.3 | 113 |
| 411 | The role of nanotechnology in tackling global water challenges. <i>Nature Sustainability</i> , <b>2018</b> , 1, 166-175  | 22.1 | 241 |
| 410 | Elucidating the Role of Oxidative Debris in the Antimicrobial Properties of Graphene Oxide. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 1164-1174   | 5.6  | 25  |
| 409 | Nanofoaming of Polyamide Desalination Membranes To Tune Permeability and Selectivity. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 123-130   | 11   | 148 |



|     |   |      |     |
|-----|---|------|-----|
| 408 | Emerging electrochemical and membrane-based systems to convert low-grade heat to electricity. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 276-285   | 35.4 | 118 |
| 407 | Selective removal of divalent cations by polyelectrolyte multilayer nanofiltration membrane: Role of polyelectrolyte charge, ion size, and ionic strength. <i>Journal of Membrane Science</i> , <b>2018</b> , 559, 98-106           | 9.6  | 140 |
| 406 | A Self-Standing, Support-Free Membrane for Forward Osmosis with No Internal Concentration Polarization. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 266-271  | 11   | 36  |
| 405 | Vapor-gap membranes for highly selective osmotically driven desalination. <i>Journal of Membrane Science</i> , <b>2018</b> , 555, 407-417   | 9.6  | 21  |
| 404 | Membrane distillation at the water-energy nexus: limits, opportunities, and challenges. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1177-1196   | 35.4 | 458 |
| 403 | Studying water and solute transport through desalination membranes via neutron radiography. <i>Journal of Membrane Science</i> , <b>2018</b> , 548, 667-675   | 9.6  | 1   |
| 402 | Emerging opportunities for nanotechnology to enhance water security. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 634-641   | 28.7 | 381 |
| 401 | Combined Organic Fouling and Inorganic Scaling in Reverse Osmosis: Role of Protein-Silica Interactions. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 9145-9153   | 10.3 | 39  |
| 400 | Photocatalytic Reactive Ultrafiltration Membrane for Removal of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes from Wastewater Effluent. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 8666-8673 | 10.3 | 101 |
| 399 | Reactive, Self-Cleaning Ultrafiltration Membrane Functionalized with Iron Oxychloride Nanocatalysts. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 8674-8683  | 10.3 | 70  |
| 398 | A Path to Ultraspecificity: Support Layer Properties To Maximize Performance of Biomimetic Desalination Membranes. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 10737-10747                                    | 10.3 | 22  |
| 397 | Functionalization of ultrafiltration membrane with polyampholyte hydrogel and graphene oxide to achieve dual antifouling and antibacterial properties. <i>Journal of Membrane Science</i> , <b>2018</b> , 565, 293-302              | 9.6  | 57  |
| 396 | Fabrication of a Desalination Membrane with Enhanced Microbial Resistance through Vertical Alignment of Graphene Oxide. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 614-620                              | 11   | 24  |
| 395 | Highly efficient and sustainable non-precious-metal Fe <sup>III</sup> /Fe <sup>II</sup> electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 2527-2539                    | 13   | 167 |
| 394 | Biocatalytic and salt selective multilayer polyelectrolyte nanofiltration membrane. <i>Journal of Membrane Science</i> , <b>2018</b> , 549, 357-365   | 9.6  | 42  |
| 393 | Bacterial inactivation by a carbon nanotube/iron oxide nanocomposite: a mechanistic study using E. coli mutants. <i>Environmental Science: Nano</i> , <b>2018</b> , 5, 372-380  | 7.1  | 19  |
| 392 | Elucidating the mechanisms underlying the difference between chloride and nitrate rejection in nanofiltration. <i>Journal of Membrane Science</i> , <b>2018</b> , 548, 694-701  | 9.6  | 31  |
| 391 | Engineered Slippery Surface to Mitigate Gypsum Scaling in Membrane Distillation for Treatment of Hypersaline Industrial Wastewaters. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 14362-14370                  | 10.3 | 86  |



|     |  |      |      |
|-----|--|------|------|
| 390 | Relating Organic Fouling in Membrane Distillation to Intermolecular Adhesion Forces and Interfacial Surface Energies. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 14198-14207                          | 10.3 | 56   |
| 389 | Controlled TiO Growth on Reverse Osmosis and Nanofiltration Membranes by Atomic Layer Deposition: Mechanisms and Potential Applications. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 14311-14320       | 10.3 | 26   |
| 388 | High-Performance Capacitive Deionization via Manganese Oxide-Coated, Vertically Aligned Carbon Nanotubes. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 692-700                                     | 11   | 52   |
| 387 | High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 7279-7288                              | 10.3 | 112  |
| 386 | Permselectivity limits of biomimetic desalination membranes. <i>Science Advances</i> , <b>2018</b> , 4, eaar8266   | 14.3 | 53   |
| 385 | High-Pressure Reverse Osmosis for Energy-Efficient Hypersaline Brine Desalination: Current Status, Design Considerations, and Research Needs. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 467-475 | 11   | 114  |
| 384 | Antifouling Thin-Film Composite Membranes by Controlled Architecture of Zwitterionic Polymer Brush Layer. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 2161-2169  | 10.3 | 160  |
| 383 | Self-cleaning anti-fouling hybrid ultrafiltration membranes via side chain grafting of poly(aryl ether sulfone) and titanium dioxide. <i>Journal of Membrane Science</i> , <b>2017</b> , 529, 1-10                           | 9.6  | 81   |
| 382 | Post-fabrication modification of electrospun nanofiber mats with polymer coating for membrane distillation applications. <i>Journal of Membrane Science</i> , <b>2017</b> , 530, 158-165                                     | 9.6  | 70   |
| 381 | A facile method to quantify the carboxyl group areal density in the active layer of polyamide thin-film composite membranes. <i>Journal of Membrane Science</i> , <b>2017</b> , 534, 100-108                                 | 9.6  | 48   |
| 380 | Techno-economic assessment of a closed-loop osmotic heat engine. <i>Journal of Membrane Science</i> , <b>2017</b> , 535, 178-187   | 9.6  | 27   |
| 379 | Understanding the impact of membrane properties and transport phenomena on the energetic performance of membrane distillation desalination. <i>Journal of Membrane Science</i> , <b>2017</b> , 539, 458-474                  | 9.6  | 86   |
| 378 | Acyl-chloride quenching following interfacial polymerization to modulate the water permeability, selectivity, and surface charge of desalination membranes. <i>Journal of Membrane Science</i> , <b>2017</b> , 535, 357-364  | 9.6  | 46   |
| 377 | Maximizing the right stuff: The trade-off between membrane permeability and selectivity. <i>Science</i> , <b>2017</b> , 356,   | 33.3 | 1187 |
| 376 | Nanophotonics-enabled solar membrane distillation for off-grid water purification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 6936-6941                     | 11.5 | 227  |
| 375 | Thermal desalination membranes: Carbon nanotubes keep up the heat. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 501-503  | 28.7 | 48   |
| 374 | Recent Developments in Forward Osmosis Processes. <i>Water Intelligence Online</i> , <b>2017</b> , 16, 9781780408125   |      | 7    |
| 373 | Relating Silica Scaling in Reverse Osmosis to Membrane Surface Properties. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 4396-4406   | 10.3 | 84   |

|     |  |      |      |
|-----|--|------|------|
| 372 | Highly Selective Vertically Aligned Nanopores in Sustainably Derived Polymer Membranes by Molecular Templating. <i>ACS Nano</i> , <b>2017</b> , 11, 3911-3921  | 16.7 | 64   |
| 371 | Mitigation of Biofilm Development on Thin-Film Composite Membranes Functionalized with Zwitterionic Polymers and Silver Nanoparticles. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 182-191   | 10.3 | 137  |
| 370 | Enhanced antibacterial activity through the controlled alignment of graphene oxide nanosheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E9793-E9801                                   | 11.5 | 215  |
| 369 | Energy Efficiency and Performance Limiting Effects in Thermo-Osmotic Energy Conversion from Low-Grade Heat. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 12925-12937  | 10.3 | 58   |
| 368 | Comparison of organic fouling resistance of thin-film composite membranes modified by hydrophilic silica nanoparticles and zwitterionic polymer brushes. <i>Journal of Membrane Science</i> , <b>2017</b> , 544, 135-142                                 | 9.6  | 52   |
| 367 | Loss of Phospholipid Membrane Integrity Induced by Two-Dimensional Nanomaterials. <i>Environmental Science and Technology Letters</i> , <b>2017</b> , 4, 404-409   | 11   | 29   |
| 366 | Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 10274-10281  | 10.3 | 93   |
| 365 | Efficacy of antifouling modification of ultrafiltration membranes by grafting zwitterionic polymer brushes. <i>Separation and Purification Technology</i> , <b>2017</b> , 189, 389-398   | 8.3  | 59   |
| 364 | An Osmotic Membrane Bioreactor-Membrane Distillation System for Simultaneous Wastewater Reuse and Seawater Desalination: Performance and Implications. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 14311-14320                     | 10.3 | 47   |
| 363 | Performance and Mechanisms of Ultrafiltration Membrane Fouling Mitigation by Coupling Coagulation and Applied Electric Field in a Novel Electrocoagulation Membrane Reactor. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 8544-8551 | 10.3 | 51   |
| 362 | Influence of polyamide membrane surface chemistry on gypsum scaling behavior. <i>Journal of Membrane Science</i> , <b>2017</b> , 525, 249-256  | 9.6  | 53   |
| 361 | Osmotic versus conventional membrane bioreactors integrated with reverse osmosis for water reuse: Biological stability, membrane fouling, and contaminant removal. <i>Water Research</i> , <b>2017</b> , 109, 122-134                                    | 12.5 | 128  |
| 360 | Thin-film composite forward osmosis membranes functionalized with graphene oxide-silver nanocomposites for biofouling control. <i>Journal of Membrane Science</i> , <b>2017</b> , 525, 146-156   | 9.6  | 137  |
| 359 | Can batch or semi-batch processes save energy in reverse-osmosis desalination?. <i>Desalination</i> , <b>2017</b> , 402, 109-122   | 10.3 | 78   |
| 358 | Kinetics and energetics trade-off in reverse osmosis desalination with different configurations. <i>Desalination</i> , <b>2017</b> , 401, 42-52  | 10.3 | 47   |
| 357 | Materials for next-generation desalination and water purification membranes. <i>Nature Reviews Materials</i> , <b>2016</b> , 1,  | 73.3 | 1380 |
| 356 | Harvesting low-grade heat energy using thermo-osmotic vapour transport through nanoporous membranes. <i>Nature Energy</i> , <b>2016</b> , 1,   | 62.3 | 167  |
| 355 | Omniphobic Polyvinylidene Fluoride (PVDF) Membrane for Desalination of Shale Gas Produced Water by Membrane Distillation. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 12275-12282  | 10.3 | 232  |

|     |  |      |     |
|-----|--|------|-----|
| 354 | The Global Rise of Zero Liquid Discharge for Wastewater Management: Drivers, Technologies, and Future Directions. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 6846-55                              | 10.3 | 433 |
| 353 | Designing a biocidal reverse osmosis membrane coating: Synthesis and biofouling properties. <i>Desalination</i> , <b>2016</b> , 380, 52-59   | 10.3 | 32  |
| 352 | Thin Polymer Films with Continuous Vertically Aligned 1 nm Pores Fabricated by Soft Confinement. <i>ACS Nano</i> , <b>2016</b> , 10, 150-8   | 16.7 | 77  |
| 351 | In situ surface functionalization of reverse osmosis membranes with biocidal copper nanoparticles. <i>Desalination</i> , <b>2016</b> , 388, 1-8  | 10.3 | 106 |
| 350 | Environmental Applications of Interfacial Materials with Special Wettability. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 2132-50  | 10.3 | 197 |
| 349 | Shape-Dependent Surface Reactivity and Antimicrobial Activity of Nano-Cupric Oxide. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 3975-84  | 10.3 | 78  |
| 348 | The Critical Need for Increased Selectivity, Not Increased Water Permeability, for Desalination Membranes. <i>Environmental Science and Technology Letters</i> , <b>2016</b> , 3, 112-120                                | 11   | 392 |
| 347 | Assessing the current state of commercially available membranes and spacers for energy production with pressure retarded osmosis. <i>Desalination</i> , <b>2016</b> , 389, 108-118                                       | 10.3 | 56  |
| 346 | Pressure-retarded osmosis for power generation from salinity gradients: is it viable?. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 31-48  | 35.4 | 240 |
| 345 | Membrane-based processes for wastewater nutrient recovery: Technology, challenges, and future direction. <i>Water Research</i> , <b>2016</b> , 89, 210-21  | 12.5 | 294 |
| 344 | Engineering Surface Energy and Nanostructure of Microporous Films for Expanded Membrane Distillation Applications. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 8112-9                              | 10.3 | 151 |
| 343 | Evaluating ionic organic draw solutes in osmotic membrane bioreactors for water reuse. <i>Journal of Membrane Science</i> , <b>2016</b> , 514, 636-645   | 9.6  | 53  |
| 342 | Development of Omniphobic Desalination Membranes Using a Charged Electrospun Nanofiber Scaffold. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 11154-61   | 9.5  | 169 |
| 341 | Biofouling Mitigation in Forward Osmosis Using Graphene Oxide Functionalized Thin-Film Composite Membranes. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 5840-8                                     | 10.3 | 141 |
| 340 | Effect of Final Monomer Deposition Steps on Molecular Layer-by-Layer Polyamide Surface Properties. <i>Langmuir</i> , <b>2016</b> , 32, 10815-10823   | 4    | 12  |
| 339 | Antifouling membranes for sustainable water purification: strategies and mechanisms. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 5888-5924   | 58.5 | 676 |
| 338 | Influence of active layer and support layer surface structures on organic fouling propensity of thin-film composite forward osmosis membranes. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 1436-44 | 10.3 | 93  |
| 337 | Elements Provide a Clue: Nanoscale Characterization of Thin-Film Composite Polyamide Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 16917-22  | 9.5  | 37  |

|     |   |      |      |
|-----|---|------|------|
| 336 | Role of pressure in organic fouling in forward osmosis and reverse osmosis. <i>Journal of Membrane Science</i> , <b>2015</b> , 493, 748-754   | 9.6  | 136  |
| 335 | Engineering flat sheet microporous PVDF films for membrane distillation. <i>Journal of Membrane Science</i> , <b>2015</b> , 492, 355-363  | 9.6  | 98   |
| 334 | Antimicrobial Properties of Graphene Oxide Nanosheets: Why Size Matters. <i>ACS Nano</i> , <b>2015</b> , 9, 7226-36   | 16.7 | 620  |
| 333 | Biofouling in forward osmosis and reverse osmosis: Measurements and mechanisms. <i>Journal of Membrane Science</i> , <b>2015</b> , 493, 703-708   | 9.6  | 113  |
| 332 | Application of membrane dewatering for algal biofuel. <i>Algal Research</i> , <b>2015</b> , 11, 1-12  | 5    | 74   |
| 331 | Membrane-based osmotic heat engine with organic solvent for enhanced power generation from low-grade heat. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 5820-7   | 10.3 | 67   |
| 330 | Staged reverse osmosis operation: Configurations, energy efficiency, and application potential. <i>Desalination</i> , <b>2015</b> , 366, 9-14   | 10.3 | 88   |
| 329 | Desalination by forward osmosis: Identifying performance limiting parameters through module-scale modeling. <i>Journal of Membrane Science</i> , <b>2015</b> , 491, 159-167   | 9.6  | 96   |
| 328 | Post-fabrication modification of forward osmosis membranes with a poly(ethylene glycol) block copolymer for improved organic fouling resistance. <i>Journal of Membrane Science</i> , <b>2015</b> , 490, 209-219  | 9.6  | 70   |
| 327 | Antimicrobial Electrospun Biopolymer Nanofiber Mats Functionalized with Graphene Oxide-Silver Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 12751-9  | 9.5  | 213  |
| 326 | Environmental applications of graphene-based nanomaterials. <i>Chemical Society Reviews</i> , <b>2015</b> , 44, 5861-98   | 9.5  | 1022 |
| 325 | Interaction of Graphene Oxide with Bacterial Cell Membranes: Insights from Force Spectroscopy. <i>Environmental Science and Technology Letters</i> , <b>2015</b> , 2, 112-117   | 11   | 135  |
| 324 | Selectivity and Mass Transfer Limitations in Pressure-Retarded Osmosis at High Concentrations and Increased Operating Pressures. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 12551-9  | 10.3 | 37   |
| 323 | Controlled Architecture of Dual-Functional Block Copolymer Brushes on Thin-Film Composite Membranes for Integrated "Defending" and "Attacking" Strategies against Biofouling. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 23069-79 | 9.5  | 168  |
| 322 | Role of Reverse Divalent Cation Diffusion in Forward Osmosis Biofouling. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 13222-9  | 10.3 | 38   |
| 321 | Impaired Performance of Pressure-Retarded Osmosis due to Irreversible Biofouling. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 13050-8   | 10.3 | 64   |
| 320 | Osmotic dilution for sustainable greenwall irrigation by liquid fertilizer: Performance and implications. <i>Journal of Membrane Science</i> , <b>2015</b> , 494, 32-38   | 9.6  | 39   |
| 319 | Forward osmosis: Where are we now?. <i>Desalination</i> , <b>2015</b> , 356, 271-284  | 10.3 | 568  |

|     |  |      |     |
|-----|--|------|-----|
| 318 | The role of forward osmosis and microfiltration in an integrated osmotic-microfiltration membrane bioreactor system. <i>Chemosphere</i> , <b>2015</b> , 136, 125-32  | 8.4  | 54  |
| 317 | Performance evaluation of trimethylamine-carbon dioxide thermolytic draw solution for engineered osmosis. <i>Journal of Membrane Science</i> , <b>2015</b> , 473, 302-309  | 9.6  | 86  |
| 316 | Transparent exopolymer particles: from aquatic environments and engineered systems to membrane biofouling. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 691-707   | 10.3 | 111 |
| 315 | Molecular Design of Liquid Crystalline Brush-Like Block Copolymers for Magnetic Field Directed Self-Assembly: A Platform for Functional Materials.. <i>ACS Macro Letters</i> , <b>2014</b> , 3, 462-466                              | 6.6  | 49  |
| 314 | Thermodynamic, energy efficiency, and power density analysis of reverse electrodialysis power generation with natural salinity gradients. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 4925-36                  | 10.3 | 140 |
| 313 | Thin-Film Composite Polyamide Membranes Functionalized with Biocidal Graphene Oxide Nanosheets. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 71-76   | 11   | 396 |
| 312 | Direct contact membrane distillation with heat recovery: Thermodynamic insights from module scale modeling. <i>Journal of Membrane Science</i> , <b>2014</b> , 453, 498-515  | 9.6  | 139 |
| 311 | Scalable fabrication of polymer membranes with vertically aligned 1 nm pores by magnetic field directed self-assembly. <i>ACS Nano</i> , <b>2014</b> , 8, 11977-86   | 16.7 | 155 |
| 310 | Low flow data logger in membrane distillation: An interdisciplinary laboratory in process control <b>2014</b> ,  |      | 2   |
| 309 | Biofouling and microbial communities in membrane distillation and reverse osmosis. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 13155-64  | 10.3 | 59  |
| 308 | Thermodynamic limits of extractable energy by pressure retarded osmosis. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 2706-2714  | 35.4 | 124 |
| 307 | The road to nowhere: equilibrium partition coefficients for nanoparticles. <i>Environmental Science: Nano</i> , <b>2014</b> , 1, 317-323   | 7.1  | 116 |
| 306 | Comparison of energy efficiency and power density in pressure retarded osmosis and reverse electrodialysis. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 11002-12   | 10.3 | 133 |
| 305 | In situ formation of silver nanoparticles on thin-film composite reverse osmosis membranes for biofouling mitigation. <i>Water Research</i> , <b>2014</b> , 62, 260-70   | 12.5 | 199 |
| 304 | The importance of microscopic characterization of membrane biofilms in an unconfined environment. <i>Desalination</i> , <b>2014</b> , 348, 8-15  | 10.3 | 24  |
| 303 | Reverse Osmosis Biofilm Dispersal by Osmotic Back-Flushing: Cleaning via Substratum Perforation. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 162-166  | 11   | 33  |
| 302 | Toward Resource Recovery from Wastewater: Extraction of Phosphorus from Digested Sludge Using a Hybrid Forward Osmosis-Membrane Distillation Process. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 191-195 | 11   | 196 |
| 301 | Omniphobic Membrane for Robust Membrane Distillation. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 443-447   | 11   | 224 |



|     |  |      |     |
|-----|--|------|-----|
| 300 | Membrane scaling and flux decline during fertiliser-drawn forward osmosis desalination of brackish groundwater. <i>Water Research</i> , <b>2014</b> , 57, 172-82   | 12.5 | 91  |
| 299 | Amine enrichment and poly(ethylene glycol) (PEG) surface modification of thin-film composite forward osmosis membranes for organic fouling control. <i>Journal of Membrane Science</i> , <b>2014</b> , 450, 331-339  | 9.6  | 140 |
| 298 | Organic fouling behavior of superhydrophilic polyvinylidene fluoride (PVDF) ultrafiltration membranes functionalized with surface-tailored nanoparticles: Implications for organic fouling in membrane bioreactors. <i>Journal of Membrane Science</i> , <b>2014</b> , 463, 94-101 | 9.6  | 92  |
| 297 | Control of biofouling on reverse osmosis polyamide membranes modified with biocidal nanoparticles and antifouling polymer brushes. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 1724-1732  | 7.3  | 135 |
| 296 | Raising the Bar: Increased Hydraulic Pressure Allows Unprecedented High Power Densities in Pressure-Retarded Osmosis. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 55-59   | 11   | 145 |
| 295 | Impact of organic and colloidal fouling on trace organic contaminant rejection by forward osmosis: Role of initial permeate flux. <i>Desalination</i> , <b>2014</b> , 336, 146-152   | 10.3 | 58  |
| 294 | Relating rejection of trace organic contaminants to membrane properties in forward osmosis: measurements, modelling and implications. <i>Water Research</i> , <b>2014</b> , 49, 265-74   | 12.5 | 103 |
| 293 | Osmotic equilibrium in the forward osmosis process: Modelling, experiments and implications for process performance. <i>Journal of Membrane Science</i> , <b>2014</b> , 453, 240-252   | 9.6  | 91  |
| 292 | Effect of hydraulic pressure and membrane orientation on water flux and reverse solute flux in pressure assisted osmosis. <i>Journal of Membrane Science</i> , <b>2014</b> , 465, 159-166  | 9.6  | 71  |
| 291 | Surface functionalization of thin-film composite membranes with copper nanoparticles for antimicrobial surface properties. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 384-93  | 10.3 | 266 |
| 290 | Hybrid pressure retarded osmosis-membrane distillation system for power generation from low-grade heat: thermodynamic analysis and energy efficiency. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 5306-13  | 10.3 | 114 |
| 289 | Aligned nanostructured polymers by magnetic-field-directed self-assembly of a polymerizable lyotropic mesophase. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 19710-7  | 9.5  | 30  |
| 288 | Module-scale analysis of pressure retarded osmosis: performance limitations and implications for full-scale operation. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 12435-44  | 10.3 | 88  |
| 287 | Bidirectional diffusion of ammonium and sodium cations in forward osmosis: role of membrane active layer surface chemistry and charge. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 14369-76  | 10.3 | 85  |
| 286 | Thermally switchable aligned nanopores by magnetic-field directed self-assembly of block copolymers. <i>Advanced Materials</i> , <b>2014</b> , 26, 5148-54   | 24   | 55  |
| 285 | Designing block copolymer architectures for targeted membrane performance. <i>Polymer</i> , <b>2014</b> , 55, 347-353  | 9.3  | 89  |
| 284 | Combined organic and colloidal fouling in forward osmosis: Fouling reversibility and the role of applied pressure. <i>Journal of Membrane Science</i> , <b>2014</b> , 460, 206-212   | 9.6  | 137 |
| 283 | Mitigating biofouling on thin-film composite polyamide membranes using a controlled-release platform. <i>Journal of Membrane Science</i> , <b>2014</b> , 453, 84-91  | 9.6  | 28  |



|     |   |      |     |
|-----|---|------|-----|
| 282 | Highly hydrophilic polyvinylidene fluoride (PVDF) ultrafiltration membranes via postfabrication grafting of surface-tailored silica nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 6694-7035 | 9.5  | 235 |
| 281 | A method for the simultaneous determination of transport and structural parameters of forward osmosis membranes. <i>Journal of Membrane Science</i> , <b>2013</b> , 444, 523-538  | 9.6  | 327 |
| 280 | High Efficiency in Energy Generation from Salinity Gradients with Reverse Electrodialysis. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2013</b> , 1, 1295-1302  | 8.3  | 126 |
| 279 | Water flows, energy demand, and market analysis of the informal water sector in Kisumu, Kenya. <i>Ecological Economics</i> , <b>2013</b> , 87, 137-144  | 5.6  | 22  |
| 278 | Desalination and reuse of high-salinity shale gas produced water: drivers, technologies, and future directions. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 9569-83                                     | 10.3 | 545 |
| 277 | Effects of feed and draw solution temperature and transmembrane temperature difference on the rejection of trace organic contaminants by forward osmosis. <i>Journal of Membrane Science</i> , <b>2013</b> , 438, 57-64       | 9.6  | 127 |
| 276 | Probing the Viability of Oxo-Coupling Pathways in Iridium-Catalyzed Oxygen Evolution. <i>Organometallics</i> , <b>2013</b> , 32, 5384-5390  | 3.8  | 40  |
| 275 | A forward osmosis-membrane distillation hybrid process for direct sewer mining: system performance and limitations. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 13486-93                                | 10.3 | 202 |
| 274 | Forward osmosis desalination of brackish groundwater: Meeting water quality requirements for fertigation by integrating nanofiltration. <i>Journal of Membrane Science</i> , <b>2013</b> , 436, 1-15                          | 9.6  | 99  |
| 273 | In situ surface chemical modification of thin-film composite forward osmosis membranes for enhanced organic fouling resistance. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 12219-28                    | 10.3 | 137 |
| 272 | Aggregation rate and fractal dimension of fullerene nanoparticles via simultaneous multiangle static and dynamic light scattering measurement. <i>Journal of Colloid and Interface Science</i> , <b>2013</b> , 392, 27-33     | 9.3  | 65  |
| 271 | Toxicity of functionalized single-walled carbon nanotubes on soil microbial communities: implications for nutrient cycling in soil. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 625-33                  | 10.3 | 124 |
| 270 | Silica scaling and scaling reversibility in forward osmosis. <i>Desalination</i> , <b>2013</b> , 312, 75-81   | 10.3 | 124 |
| 269 | Standard Methodology for Evaluating Membrane Performance in Osmotically Driven Membrane Processes. <i>Desalination</i> , <b>2013</b> , 312, 31-38   | 10.3 | 304 |
| 268 | Carbon nanotube bundling: influence on layer-by-layer assembly and antimicrobial activity. <i>Soft Matter</i> , <b>2013</b> , 9, 2136   | 3.6  | 26  |
| 267 | Fouling control in a forward osmosis process integrating seawater desalination and wastewater reclamation. <i>Journal of Membrane Science</i> , <b>2013</b> , 444, 148-156  | 9.6  | 188 |
| 266 | Potential of osmotic power generation by pressure retarded osmosis using seawater as feed solution: Analysis and experiments. <i>Journal of Membrane Science</i> , <b>2013</b> , 429, 330-337                                 | 9.6  | 135 |
| 265 | Impact of humic acid fouling on membrane performance and transport of pharmaceutically active compounds in forward osmosis. <i>Water Research</i> , <b>2013</b> , 47, 4567-75   | 12.5 | 91  |

|     |   |      |     |
|-----|---|------|-----|
| 264 | Polyamide formation on a cellulose triacetate support for osmotic membranes: Effect of linking molecules on membrane performance. <i>Desalination</i> , <b>2013</b> , 312, 2-9  | 10.3 | 30  |
| 263 | Cp* Iridium Precatalysts for Selective C <sub>H</sub> Oxidation with Sodium Periodate As the Terminal Oxidant. <i>Organometallics</i> , <b>2013</b> , 32, 957-965   | 3.8  | 53  |
| 262 | More than a drop in the bucket: decentralized membrane-based drinking water refill stations in southeast Asia. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 7580-8                                     | 10.3 | 24  |
| 261 | Surface cell density effects on Escherichia coli gene expression during cell attachment. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 6223-30  | 10.3 | 6   |
| 260 | Nanofibers in thin-film composite membrane support layers: Enabling expanded application of forward and pressure retarded osmosis. <i>Desalination</i> , <b>2013</b> , 308, 73-81   | 10.3 | 125 |
| 259 | Removal of trace organic contaminants by the forward osmosis process. <i>Separation and Purification Technology</i> , <b>2013</b> , 103, 258-266  | 8.3  | 128 |
| 258 | Influence of natural organic matter fouling and osmotic backwash on pressure retarded osmosis energy production from natural salinity gradients. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 12607-16 | 10.3 | 100 |
| 257 | Modeling risk categories to predict the longitudinal prevalence of childhood diarrhea in Indonesia. <i>American Journal of Tropical Medicine and Hygiene</i> , <b>2013</b> , 89, 884-91                                     | 3.2  | 16  |
| 256 | Coupled reverse draw solute permeation and water flux in forward osmosis with neutral draw solutes. <i>Journal of Membrane Science</i> , <b>2012</b> , 392-393, 9-17  | 9.6  | 122 |
| 255 | Colloidal fouling in forward osmosis: Role of reverse salt diffusion. <i>Journal of Membrane Science</i> , <b>2012</b> , 390-391, 277-284   | 9.6  | 156 |
| 254 | Membrane-based processes for sustainable power generation using water. <i>Nature</i> , <b>2012</b> , 488, 313-9   | 50.4 | 969 |
| 253 | Particle formation during oxidation catalysis with Cp* iridium complexes. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 9785-95  | 16.4 | 141 |
| 252 | Electrochemical carbon-nanotube filter performance toward virus removal and inactivation in the presence of natural organic matter. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 1556-64               | 10.3 | 223 |
| 251 | Adverse impact of feed channel spacers on the performance of pressure retarded osmosis. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 4673-81   | 10.3 | 150 |
| 250 | Stable sequestration of single-walled carbon nanotubes in self-assembled aqueous nanopores. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 3950-3   | 16.4 | 14  |
| 249 | Thermodynamic and energy efficiency analysis of power generation from natural salinity gradients by pressure retarded osmosis. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 5230-9                     | 10.3 | 250 |
| 248 | Highly hydrophilic thin-film composite forward osmosis membranes functionalized with surface-tailored nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 5044-53                               | 9.5  | 180 |
| 247 | Impact of surface functionalization on bacterial cytotoxicity of single-walled carbon nanotubes. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 6297-305   | 10.3 | 110 |

|     |   |      |      |
|-----|---|------|------|
| 246 | Seawater desalination for agriculture by integrated forward and reverse osmosis: Improved product water quality for potentially less energy. <i>Journal of Membrane Science</i> , <b>2012</b> , 415-416, 1-8        | 9.6  | 216  |
| 245 | Boron transport in forward osmosis: Measurements, mechanisms, and comparison with reverse osmosis. <i>Journal of Membrane Science</i> , <b>2012</b> , 419-420, 42-48  | 9.6  | 74   |
| 244 | Carbon nanotube-based antimicrobial biomaterials formed via layer-by-layer assembly with polypeptides. <i>Journal of Colloid and Interface Science</i> , <b>2012</b> , 388, 268-73                                  | 9.3  | 63   |
| 243 | Superhydrophilic thin-film composite forward osmosis membranes for organic fouling control: fouling behavior and antifouling mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 11135-44 | 10.3 | 221  |
| 242 | Improved antifouling properties of polyamide nanofiltration membranes by reducing the density of surface carboxyl groups. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 13253-61                | 10.3 | 150  |
| 241 | Reverse Permeation of Weak Electrolyte Draw Solutes in Forward Osmosis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 13463-13472  | 3.9  | 21   |
| 240 | Biodegradable polymer (PLGA) coatings featuring cinnamaldehyde and carvacrol mitigate biofilm formation. <i>Langmuir</i> , <b>2012</b> , 28, 13993-9  | 4    | 61   |
| 239 | New perspectives on nanomaterial aquatic ecotoxicity: production impacts exceed direct exposure impacts for carbon nanotubes. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 2902-10             | 10.3 | 132  |
| 238 | Comparison of the removal of hydrophobic trace organic contaminants by forward osmosis and reverse osmosis. <i>Water Research</i> , <b>2012</b> , 46, 2683-92   | 12.5 | 234  |
| 237 | Direct quantification of negatively charged functional groups on membrane surfaces. <i>Journal of Membrane Science</i> , <b>2012</b> , 389, 499-508   | 9.6  | 120  |
| 236 | Relationship between use of water from community-scale water treatment refill kiosks and childhood diarrhea in Jakarta. <i>American Journal of Tropical Medicine and Hygiene</i> , <b>2012</b> , 87, 979-84         | 3.2  | 27   |
| 235 | Development of a Megasonic System for Cleaning Flat Panel Display. <i>Solid State Phenomena</i> , <b>2012</b> , 187, 181-184  | 0.4  |      |
| 234 | Thin-film composite pressure retarded osmosis membranes for sustainable power generation from salinity gradients. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 4360-9                          | 10.3 | 430  |
| 233 | Covalent binding of single-walled carbon nanotubes to polyamide membranes for antimicrobial surface properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 2869-77                            | 9.5  | 275  |
| 232 | Biocidal activity of plasma modified electrospun polysulfone mats functionalized with polyethyleneimine-capped silver nanoparticles. <i>Langmuir</i> , <b>2011</b> , 27, 13159-64                                   | 4    | 64   |
| 231 | Performance limiting effects in power generation from salinity gradients by pressure retarded osmosis. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 10273-82                                   | 10.3 | 245  |
| 230 | The future of seawater desalination: energy, technology, and the environment. <i>Science</i> , <b>2011</b> , 333, 712-733   | 33.3 | 3767 |
| 229 | Antibacterial activity of electrospun polymer mats with incorporated narrow diameter single-walled carbon nanotubes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 462-8                         | 9.5  | 102  |

|     |   |      |     |
|-----|---|------|-----|
| 228 | Relationship between distance to social gathering facilities and risk of trachoma for households in rural Tanzanian communities. <i>Social Science and Medicine</i> , <b>2011</b> , 73, 1-5                       | 5.1  | 6   |
| 227 | Chemical cleaning of RO membranes fouled by wastewater effluent: Achieving higher efficiency with dual-step cleaning. <i>Journal of Membrane Science</i> , <b>2011</b> , 382, 100-106                             | 9.6  | 99  |
| 226 | Forward with osmosis: emerging applications for greater sustainability. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 9824-30   | 10.3 | 212 |
| 225 | Relating performance of thin-film composite forward osmosis membranes to support layer formation and structure. <i>Journal of Membrane Science</i> , <b>2011</b> , 367, 340-352                                   | 9.6  | 489 |
| 224 | Biological approaches for addressing the grand challenge of providing access to clean drinking water. <i>Journal of Biological Engineering</i> , <b>2011</b> , 5, 2   | 6.3  | 25  |
| 223 | Adsorption and aggregation properties of norovirus GI and GII virus-like particles demonstrate differing responses to solution chemistry. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 520-6 | 10.3 | 72  |
| 222 | Tuning structure and properties of graded triblock terpolymer-based mesoporous and hybrid films. <i>Nano Letters</i> , <b>2011</b> , 11, 2892-900   | 11.5 | 192 |
| 221 | Bidirectional permeation of electrolytes in osmotically driven membrane processes. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 10642-51   | 10.3 | 85  |
| 220 | Antifouling ultrafiltration membranes via post-fabrication grafting of biocidal nanomaterials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 2861-8  | 9.5  | 226 |
| 219 | Electrochemical multiwalled carbon nanotube filter for viral and bacterial removal and inactivation. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 3672-9                                     | 10.3 | 278 |
| 218 | Optimal design of a microthermoelectric cooler for microelectronics. <i>Microelectronics Journal</i> , <b>2011</b> , 42, 772-777  | 1.8  | 3   |
| 217 | Membrane characterization by dynamic hysteresis: Measurements, mechanisms, and implications for membrane fouling. <i>Journal of Membrane Science</i> , <b>2011</b> , 366, 17-24                                   | 9.6  | 25  |
| 216 | Fouling and cleaning of RO membranes fouled by mixtures of organic foulants simulating wastewater effluent. <i>Journal of Membrane Science</i> , <b>2011</b> , 376, 196-206                                       | 9.6  | 190 |
| 215 | Calicivirus removal in a membrane bioreactor wastewater treatment plant. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 5170-7   | 4.8  | 70  |
| 214 | Comparing the effectiveness of shared versus private latrines in preventing trachoma in rural Tanzania. <i>American Journal of Tropical Medicine and Hygiene</i> , <b>2010</b> , 82, 693-5                        | 3.2  | 12  |
| 213 | Aggregation and deposition of engineered nanomaterials in aquatic environments: role of physicochemical interactions. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 6532-49                   | 10.3 | 880 |
| 212 | Multiwalled carbon nanotube filter: improving viral removal at low pressure. <i>Langmuir</i> , <b>2010</b> , 26, 14975-82   | 8.2  | 90  |
| 211 | Antimicrobial biomaterials based on carbon nanotubes dispersed in poly(lactic-co-glycolic acid). <i>Nanoscale</i> , <b>2010</b> , 2, 1789-94  | 7.7  | 116 |

|     |   |      |     |
|-----|---|------|-----|
| 210 | Ultrafiltration membranes incorporating amphiphilic comb copolymer additives prevent irreversible adhesion of bacteria. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 2406-11   | 10.3 | 78  |
| 209 | Gypsum scaling and cleaning in forward osmosis: measurements and mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 2022-8   | 10.3 | 275 |
| 208 | Adsorption kinetics and reversibility of linear plasmid DNA on silica surfaces: influence of alkaline earth and transition metal ions. <i>Biomacromolecules</i> , <b>2010</b> , 11, 1225-30         | 6.9  | 27  |
| 207 | Influence of biomacromolecules and humic acid on the aggregation kinetics of single-walled carbon nanotubes. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 2412-8               | 10.3 | 253 |
| 206 | High performance thin-film composite forward osmosis membrane. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 3812-8   | 10.3 | 738 |
| 205 | Impact of solution chemistry on viral removal by a single-walled carbon nanotube filter. <i>Water Research</i> , <b>2010</b> , 44, 3773-80  | 12.5 | 123 |
| 204 | SWNT-MWNT hybrid filter attains high viral removal and bacterial inactivation. <i>Langmuir</i> , <b>2010</b> , 26, 19153-8  | 11.8 | 84  |
| 203 | Toxic effects of single-walled carbon nanotubes in the development of E. coli biofilm. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 4583-9                                     | 10.3 | 154 |
| 202 | Electronic-structure-dependent bacterial cytotoxicity of single-walled carbon nanotubes. <i>ACS Nano</i> , <b>2010</b> , 4, 5471-9  | 16.7 | 392 |
| 201 | Nanocomposites of vertically aligned single-walled carbon nanotubes by magnetic alignment and polymerization of a lyotropic precursor. <i>ACS Nano</i> , <b>2010</b> , 4, 6651-8                    | 16.7 | 80  |
| 200 | Reverse draw solute permeation in forward osmosis: modeling and experiments. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 5170-6   | 10.3 | 513 |
| 199 | Comparison of fouling behavior in forward osmosis (FO) and reverse osmosis (RO). <i>Journal of Membrane Science</i> , <b>2010</b> , 365, 34-39  | 9.6  | 568 |
| 198 | Organic fouling of forward osmosis membranes: Fouling reversibility and cleaning without chemical reagents. <i>Journal of Membrane Science</i> , <b>2010</b> , 348, 337-345                         | 9.6  | 661 |
| 197 | Assessment of latrine use and quality and association with risk of trachoma in rural Tanzania. <i>Transactions of the Royal Society of Tropical Medicine and Hygiene</i> , <b>2010</b> , 104, 283-9 | 2    | 28  |
| 196 | Role of type 1 fimbriae and mannose in the development of Escherichia coli K12 biofilm: from initial cell adhesion to biofilm formation. <i>Biofouling</i> , <b>2009</b> , 25, 401-11               | 3.3  | 61  |
| 195 | Increasing Functional Sustainability of Water and Sanitation Supplies in Rural Sub-Saharan Africa. <i>Environmental Engineering Science</i> , <b>2009</b> , 26, 1017-1023                           | 2    | 85  |
| 194 | Energy-efficient water purification made possible by Yale engineers. <i>Membrane Technology</i> , <b>2009</b> , 2009, 10-11   | 1.8  | 5   |
| 193 | Performance evaluation of sucrose concentration using forward osmosis. <i>Journal of Membrane Science</i> , <b>2009</b> , 338, 61-66  | 9.6  | 169 |

|     |   |      |      |
|-----|---|------|------|
| 192 | Role of extracellular polymeric substances (EPS) in biofouling of reverse osmosis membranes. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 4393-8   | 10.3 | 290  |
| 191 | Single-walled carbon nanotubes exhibit limited transport in soil columns. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 9161-6  | 10.3 | 187  |
| 190 | Influence of shear on the production of extracellular polymeric substances in membrane bioreactors. <i>Water Research</i> , <b>2009</b> , 43, 4305-15   | 12.5 | 57   |
| 189 | Microbial cytotoxicity of carbon-based nanomaterials: implications for river water and wastewater effluent. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 2648-53   | 10.3 | 317  |
| 188 | Relating colloidal stability of fullerene (C60) nanoparticles to nanoparticle charge and electrokinetic properties. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 7270-6  | 10.3 | 158  |
| 187 | Bioinspired single bacterial cell force spectroscopy. <i>Langmuir</i> , <b>2009</b> , 25, 9656-9  | 4    | 108  |
| 186 | Science and technology for water purification in the coming decades <b>2009</b> , 337-346   |      | 78   |
| 185 | Science and technology for water purification in the coming decades. <i>Nature</i> , <b>2008</b> , 452, 301-10  | 50.4 | 5633 |
| 184 | Global challenges in energy and water supply: the promise of engineered osmosis. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 8625-9   | 10.3 | 243  |
| 183 | Physicochemical determinants of multiwalled carbon nanotube bacterial cytotoxicity. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 7528-34   | 10.3 | 289  |
| 182 | Transport of single-walled carbon nanotubes in porous media: filtration mechanisms and reversibility. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 8317-23   | 10.3 | 199  |
| 181 | Aggregation kinetics of multiwalled carbon nanotubes in aquatic systems: measurements and environmental implications. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 7963-9  | 10.3 | 362  |
| 180 | Antibacterial effects of carbon nanotubes: size does matter!. <i>Langmuir</i> , <b>2008</b> , 24, 6409-13   | 4    | 859  |
| 179 | Fatty acid fouling of reverse osmosis membranes: implications for wastewater reclamation. <i>Water Research</i> , <b>2008</b> , 42, 4393-403  | 12.5 | 58   |
| 178 | Physiology and genetic traits of reverse osmosis membrane biofilms: a case study with <i>Pseudomonas aeruginosa</i> . <i>ISME Journal</i> , <b>2008</b> , 2, 180-94   | 11.9 | 78   |
| 177 | Interaction of fullerene (C60) nanoparticles with humic acid and alginate coated silica surfaces: measurements, mechanisms, and environmental implications. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 7607-14 | 10.3 | 251  |
| 176 | Calcium and magnesium cations enhance the adhesion of motile and nonmotile <i>pseudomonas aeruginosa</i> on alginate films. <i>Langmuir</i> , <b>2008</b> , 24, 3392-9  | 4    | 88   |
| 175 | Norovirus removal and particle association in a waste stabilization pond. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 9151-7  | 10.3 | 53   |



|     |   |      |      |
|-----|---|------|------|
| 174 | Bacterial swimming motility enhances cell deposition and surface coverage. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 4371-7   | 10.3 | 56   |
| 173 | Influence of membrane support layer hydrophobicity on water flux in osmotically driven membrane processes. <i>Journal of Membrane Science</i> , <b>2008</b> , 318, 458-466  | 9.6  | 377  |
| 172 | A single-walled-carbon-nanotube filter for removal of viral and bacterial pathogens. <i>Small</i> , <b>2008</b> , 4, 481-4  | 11   | 387  |
| 171 | Novel numerical method for calculating initial flux of colloid particle adsorption through an energy barrier. <i>Journal of Colloid and Interface Science</i> , <b>2008</b> , 319, 406-15                         | 9.3  | 15   |
| 170 | Reduced aggregation and sedimentation of zero-valent iron nanoparticles in the presence of guar gum. <i>Journal of Colloid and Interface Science</i> , <b>2008</b> , 324, 71-9                                    | 9.3  | 304  |
| 169 | Influence of biofouling on boron removal by nanofiltration and reverse osmosis membranes. <i>Journal of Membrane Science</i> , <b>2008</b> , 318, 264-270   | 9.6  | 72   |
| 168 | Chemical and physical aspects of organic fouling of forward osmosis membranes. <i>Journal of Membrane Science</i> , <b>2008</b> , 320, 292-302  | 9.6  | 507  |
| 167 | Environmental applications of carbon-based nanomaterials. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 5843-59   | 10.3 | 1154 |
| 166 | Adsorption of plasmid DNA to a natural organic matter-coated silica surface: kinetics, conformation, and reversibility. <i>Langmuir</i> , <b>2007</b> , 23, 3273-9  | 4    | 77   |
| 165 | Adhesion of nonmotile <i>Pseudomonas aeruginosa</i> on "soft" polyelectrolyte layer in a radial stagnation point flow system: measurements and model predictions. <i>Langmuir</i> , <b>2007</b> , 23, 12301-8     | 4    | 42   |
| 164 | Formation of polysaccharide gel layers in the presence of Ca <sup>2+</sup> and K <sup>+</sup> ions: measurements and mechanisms. <i>Biomacromolecules</i> , <b>2007</b> , 8, 113-21                               | 6.9  | 86   |
| 163 | Single-walled carbon nanotubes exhibit strong antimicrobial activity. <i>Langmuir</i> , <b>2007</b> , 23, 8670-3  | 4    | 1014 |
| 162 | Enhanced aggregation of alginate-coated iron oxide (hematite) nanoparticles in the presence of calcium, strontium, and barium cations. <i>Langmuir</i> , <b>2007</b> , 23, 5920-8                                 | 4    | 217  |
| 161 | Modeling water flux in forward osmosis: Implications for improved membrane design. <i>AIChE Journal</i> , <b>2007</b> , 53, 1736-1744   | 3.6  | 288  |
| 160 | Direct microscopic observation of particle deposition in porous media: Role of the secondary energy minimum. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2007</b> , 294, 156-162 | 5.1  | 109  |
| 159 | Energy requirements of ammonia-carbon dioxide forward osmosis desalination. <i>Desalination</i> , <b>2007</b> , 207, 370-382  | 10.3 | 439  |
| 158 | A novel ammonia-carbon dioxide osmotic heat engine for power generation. <i>Journal of Membrane Science</i> , <b>2007</b> , 305, 13-19  | 9.6  | 202  |
| 157 | Protein antifouling mechanisms of PAN UF membranes incorporating PAN-g-PEO additive. <i>Journal of Membrane Science</i> , <b>2007</b> , 296, 42-50  | 9.6  | 180  |

|     |   |      |      |
|-----|---|------|------|
| 156 | Anti-fouling ultrafiltration membranes containing polyacrylonitrile-graft-poly(ethylene oxide) comb copolymer additives. <i>Journal of Membrane Science</i> , <b>2007</b> , 298, 136-146  | 9.6  | 362  |
| 155 | Influence of humic acid on the aggregation kinetics of fullerene (C60) nanoparticles in monovalent and divalent electrolyte solutions. <i>Journal of Colloid and Interface Science</i> , <b>2007</b> , 309, 126-34                | 9.3  | 530  |
| 154 | Isolation and assessment of phytate-hydrolysing bacteria from the DelMarVa Peninsula. <i>Environmental Microbiology</i> , <b>2007</b> , 9, 3100-7   | 5.2  | 29   |
| 153 | Yale constructs forward osmosis desalination pilot plant. <i>Membrane Technology</i> , <b>2007</b> , 2007, 7-8  | 1.8  | 37   |
| 152 | Biofouling of reverse osmosis membranes: Role of biofilm-enhanced osmotic pressure. <i>Journal of Membrane Science</i> , <b>2007</b> , 295, 11-20   | 9.6  | 473  |
| 151 | Protein (BSA) fouling of reverse osmosis membranes: Implications for wastewater reclamation. <i>Journal of Membrane Science</i> , <b>2007</b> , 296, 83-92  | 9.6  | 281  |
| 150 | Impact of alginate conditioning film on deposition kinetics of motile and nonmotile <i>Pseudomonas aeruginosa</i> strains. <i>Applied and Environmental Microbiology</i> , <b>2007</b> , 73, 5227-34                              | 4.8  | 77   |
| 149 | Evaluation of removal of noroviruses during wastewater treatment, using real-time reverse transcription-PCR: different behaviors of genogroups I and II. <i>Applied and Environmental Microbiology</i> , <b>2007</b> , 73, 7891-7 | 4.8  | 390  |
| 148 | Salt cleaning of organic-fouled reverse osmosis membranes. <i>Water Research</i> , <b>2007</b> , 41, 1134-42  | 12.5 | 121  |
| 147 | Water and sanitation in developing countries: including health in the equation. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 17-24   | 10.3 | 576  |
| 146 | Plasmid DNA adsorption on silica: kinetics and conformational changes in monovalent and divalent salts. <i>Biomacromolecules</i> , <b>2007</b> , 8, 24-32   | 6.9  | 112  |
| 145 | Desalination by ammonia-carbon dioxide forward osmosis: Influence of draw and feed solution concentrations on process performance. <i>Journal of Membrane Science</i> , <b>2006</b> , 278, 114-123                                | 9.6  | 650  |
| 144 | Forward osmosis: Principles, applications, and recent developments. <i>Journal of Membrane Science</i> , <b>2006</b> , 281, 70-87   | 9.6  | 1819 |
| 143 | Antifouling nanofiltration membranes for membrane bioreactors from self-assembling graft copolymers. <i>Journal of Membrane Science</i> , <b>2006</b> , 285, 81-89  | 9.6  | 211  |
| 142 | Influence of concentrative and dilutive internal concentration polarization on flux behavior in forward osmosis. <i>Journal of Membrane Science</i> , <b>2006</b> , 284, 237-247  | 9.6  | 962  |
| 141 | Role of electrostatic interactions in the retention of pharmaceutically active contaminants by a loose nanofiltration membrane. <i>Journal of Membrane Science</i> , <b>2006</b> , 286, 52-59                                     | 9.6  | 168  |
| 140 | A Novel, Safe, and Environmentally Friendly Technology for Water Production Through Recovery of Rejected Thermal Energy From Nuclear Power Plants <b>2006</b> , 355   |      | 1    |
| 139 | The global challenge for adequate and safe water <b>2006</b> , 55, 3-10   |      | 146  |

|     |  |      |     |
|-----|--|------|-----|
| 138 | Influence of Growth Phase on Bacterial Deposition: Interaction Mechanisms in Packed-Bed Column and Radial Stagnation Point Flow Systems. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 5586-5586       | 10.3 | 6   |
| 137 | Aggregation kinetics of alginate-coated hematite nanoparticles in monovalent and divalent electrolytes. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 1516-23  | 10.3 | 380 |
| 136 | Cryptosporidium oocyst surface macromolecules significantly hinder oocyst attachment. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 1837-42  | 10.3 | 51  |
| 135 | Structural Growth and Viscoelastic Properties of Adsorbed Alginate Layers in Monovalent and Divalent Salts. <i>Macromolecules</i> , <b>2006</b> , 39, 6558-6564  | 5.5  | 70  |
| 134 | Fouling of reverse osmosis membranes by hydrophilic organic matter: implications for water reuse. <i>Desalination</i> , <b>2006</b> , 187, 313-321   | 10.3 | 199 |
| 133 | Internal concentration polarization in forward osmosis: role of membrane orientation. <i>Desalination</i> , <b>2006</b> , 197, 1-8   | 10.3 | 498 |
| 132 | Chemical and physical aspects of cleaning of organic-fouled reverse osmosis membranes. <i>Journal of Membrane Science</i> , <b>2006</b> , 272, 198-210   | 9.6  | 274 |
| 131 | Synergistic effects in combined fouling of a loose nanofiltration membrane by colloidal materials and natural organic matter. <i>Journal of Membrane Science</i> , <b>2006</b> , 278, 72-82                                | 9.6  | 143 |
| 130 | Mechanisms of colloidal natural organic matter fouling in ultrafiltration. <i>Journal of Membrane Science</i> , <b>2006</b> , 281, 716-725   | 9.6  | 191 |
| 129 | Aggregation and deposition kinetics of fullerene (C60) nanoparticles. <i>Langmuir</i> , <b>2006</b> , 22, 10994-1001   | 4    | 574 |
| 128 | Relating organic fouling of reverse osmosis membranes to intermolecular adhesion forces. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 980-7   | 10.3 | 363 |
| 127 | Relevance of electrokinetic theory for "soft" particles to bacterial cells: implications for bacterial adhesion. <i>Langmuir</i> , <b>2005</b> , 21, 6462-72   | 4    | 120 |
| 126 | Reply to Comment on Breakdown of Colloid Filtration Theory: Role of the Secondary Energy Minimum and Surface Charge Heterogeneities. <i>Langmuir</i> , <b>2005</b> , 21, 10896-10897                                       | 4    | 9   |
| 125 | Influence of growth phase on bacterial deposition: interaction mechanisms in packed-bed column and radial stagnation point flow systems. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 6405-11         | 10.3 | 92  |
| 124 | Pharmaceutical retention mechanisms by nanofiltration membranes. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 7698-705  | 10.3 | 380 |
| 123 | Spatial distributions of Cryptosporidium oocysts in porous media: evidence for dual mode deposition. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 3620-9  | 10.3 | 109 |
| 122 | Role of surface proteins in the deposition kinetics of Cryptosporidium parvum oocysts. <i>Langmuir</i> , <b>2005</b> , 21, 710-6   | 4    | 76  |
| 121 | Effect of ferric oxyhydroxide grain coatings on the transport of bacteriophage PRD1 and Cryptosporidium parvum oocysts in saturated porous media. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 6412-9 | 10.3 | 86  |

|     |  |      |     |
|-----|--|------|-----|
| 120 | Response to Comment on "Correlation Equation for Predicting Single-Collector Efficiency in Physicochemical Filtration in Saturated Porous Media" <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 5496-5497 | 10.3 | 2   |
| 119 | Breakdown of colloid filtration theory: role of the secondary energy minimum and surface charge heterogeneities. <i>Langmuir</i> , <b>2005</b> , 21, 841-52  | 4    | 368 |
| 118 | Combined influence of natural organic matter (NOM) and colloidal particles on nanofiltration membrane fouling. <i>Journal of Membrane Science</i> , <b>2005</b> , 262, 27-41   | 9.6  | 172 |
| 117 | A novel ammonia-carbon dioxide forward (direct) osmosis desalination process. <i>Desalination</i> , <b>2005</b> , 174, 1-11  | 10.3 | 747 |
| 116 | Monte Carlo simulation of colloidal membrane filtration: Model development with application to characterization of colloid phase transition. <i>Journal of Membrane Science</i> , <b>2005</b> , 255, 291-305                 | 9.6  | 32  |
| 115 | Influence of growth phase on adhesion kinetics of Escherichia coli D21g. <i>Applied and Environmental Microbiology</i> , <b>2005</b> , 71, 3093-9  | 4.8  | 157 |
| 114 | Nanofiltration of Hormone Mimicking Trace Organic Contaminants. <i>Separation Science and Technology</i> , <b>2005</b> , 40, 2633-2649   | 2.5  | 69  |
| 113 | A Novel Method for Investigating the Influence of Feed Water Recovery on Colloidal and NOM Fouling of RO and NF Membranes. <i>Environmental Engineering Science</i> , <b>2005</b> , 22, 496-509                              | 2    | 20  |
| 112 | Natural organic matter fouling and chemical cleaning of nanofiltration membranes. <i>Water Science and Technology: Water Supply</i> , <b>2004</b> , 4, 245-251   | 1.4  | 6   |
| 111 | The role of endocrine disrupters in water recycling: risk or mania?. <i>Water Science and Technology</i> , <b>2004</b> , 50, 215-220   | 2.2  | 18  |
| 110 | Organic fouling and chemical cleaning of nanofiltration membranes: measurements and mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 4683-93  | 10.3 | 604 |
| 109 | Influence of natural organic matter and ionic composition on the kinetics and structure of hematite colloid aggregation: implications to iron depletion in estuaries. <i>Langmuir</i> , <b>2004</b> , 20, 9000-6             | 4    | 197 |
| 108 | Influence of colloidal fouling and feed water recovery on salt rejection of RO and NF membranes. <i>Desalination</i> , <b>2004</b> , 160, 1-12   | 10.3 | 126 |
| 107 | Influence of colloidal fouling on rejection of trace organic contaminants by reverse osmosis. <i>Journal of Membrane Science</i> , <b>2004</b> , 244, 215-226  | 9.6  | 181 |
| 106 | In situ monitoring techniques for concentration polarization and fouling phenomena in membrane filtration. <i>Advances in Colloid and Interface Science</i> , <b>2004</b> , 107, 83-108                                      | 14.3 | 143 |
| 105 | Bacterial adhesion and transport in porous media: role of the secondary energy minimum. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 1777-85  | 10.3 | 409 |
| 104 | Adhesion kinetics of viable <i>Cryptosporidium parvum</i> oocysts to quartz surfaces. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 6839-45  | 10.3 | 67  |
| 103 | Role of Cell Surface Lipopolysaccharides in Escherichia coli K12 adhesion and transport. <i>Langmuir</i> , <b>2004</b> , 20, 7736-46   | 4    | 268 |

|     |  |      |     |
|-----|--|------|-----|
| 102 | Deviation from the classical colloid filtration theory in the presence of repulsive DLVO interactions. <i>Langmuir</i> , <b>2004</b> , 20, 10818-28  | 4    | 313 |
| 101 | Correlation equation for predicting single-collector efficiency in physicochemical filtration in saturated porous media. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 529-36                          | 10.3 | 830 |
| 100 | Transport of <i>Cryptosporidium</i> oocysts in porous media: role of straining and physicochemical filtration. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 5932-8                                    | 10.3 | 204 |
| 99  | Removal of natural hormones by nanofiltration membranes: measurement, modeling, and mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 1888-96  | 10.3 | 432 |
| 98  | Colloid transport in a geochemically heterogeneous porous medium: aquifer tank experiment and modeling. <i>Journal of Contaminant Hydrology</i> , <b>2003</b> , 65, 161-82   | 3.9  | 42  |
| 97  | Emergence of thermodynamic restriction and its implications for full-scale reverse osmosis processes. <i>Desalination</i> , <b>2003</b> , 155, 213-228   | 10.3 | 49  |
| 96  | Effect of depletion interactions on transport of colloidal particles in porous media. <i>Journal of Colloid and Interface Science</i> , <b>2003</b> , 262, 372-83  | 9.3  | 18  |
| 95  | Performance limitation of the full-scale reverse osmosis process. <i>Journal of Membrane Science</i> , <b>2003</b> , 214, 239-244  | 9.6  | 58  |
| 94  | In situ monitoring techniques for concentration polarization and fouling phenomena in membrane filtration. <i>Advances in Colloid and Interface Science</i> , <b>2003</b> , 107, 83-83                                     | 14.3 |     |
| 93  | Particle Deposition onto Solid Surfaces with Micropatterned Charge Heterogeneity: The Hydrodynamic Bump Effect. <i>Langmuir</i> , <b>2003</b> , 19, 6594-6597  | 4    | 52  |
| 92  | Interpreting deposition patterns of microbial particles in laboratory-scale column experiments. <i>Environmental Science &amp; Technology</i> , <b>2003</b> , 37, 616-23   | 10.3 | 144 |
| 91  | Cake-enhanced concentration polarization: a new fouling mechanism for salt-rejecting membranes. <i>Environmental Science &amp; Technology</i> , <b>2003</b> , 37, 5581-8   | 10.3 | 455 |
| 90  | Effect of Membrane Surface Roughness on Colloid-Membrane DLVO Interactions. <i>Langmuir</i> , <b>2003</b> , 19, 4836-4847  | 4    | 354 |
| 89  | Virus transport in physically and geochemically heterogeneous subsurface porous media. <i>Journal of Contaminant Hydrology</i> , <b>2002</b> , 57, 161-87  | 3.9  | 75  |
| 88  | Coupling between chemical and physical interactions in natural organic matter (NOM) fouling of nanofiltration membranes: implications for fouling control. <i>Journal of Membrane Science</i> , <b>2002</b> , 203, 245-255 | 9.6  | 319 |
| 87  | Calcium sulfate (gypsum) scaling in nanofiltration of agricultural drainage water. <i>Journal of Membrane Science</i> , <b>2002</b> , 205, 279-291   | 9.6  | 116 |
| 86  | Control of Calcium Sulfate (Gypsum) Scale in Nanofiltration of Saline Agricultural Drainage Water. <i>Environmental Engineering Science</i> , <b>2002</b> , 19, 387-397  | 2    | 28  |
| 85  | Mobilization of natural colloids from an iron oxide-coated sand aquifer: effect of pH and ionic strength. <i>Environmental Science &amp; Technology</i> , <b>2002</b> , 36, 314-22   | 10.3 | 53  |

|    |  |      |     |
|----|--|------|-----|
| 84 | Micropatterning Microscopic Charge Heterogeneity on Flat Surfaces for Studying the Interaction between Colloidal Particles and Heterogeneously Charged Surfaces. <i>Nano Letters</i> , <b>2002</b> , 2, 393-396                          | 11.5 | 44  |
| 83 | The promise of bank filtration. <i>Environmental Science &amp; Technology</i> , <b>2002</b> , 36, 422A-428A  | 10.3 | 197 |
| 82 | Influence of Crossflow Membrane Filter Geometry and Shear Rate on Colloidal Fouling in Reverse Osmosis and Nanofiltration Separations. <i>Environmental Engineering Science</i> , <b>2002</b> , 19, 357-372                              | 2    | 211 |
| 81 | Membrane Separations in Aquatic Systems. <i>Environmental Engineering Science</i> , <b>2002</b> , 19, 341-341  | 2    | 16  |
| 80 | Field and laboratory investigations of inactivation of viruses (PRD1 and MS2) attached to iron oxide-coated quartz sand. <i>Environmental Science &amp; Technology</i> , <b>2002</b> , 36, 2403-13                                       | 10.3 | 128 |
| 79 | A Novel Asymmetric Clamping Cell for Measuring Streaming Potential of Flat Surfaces. <i>Langmuir</i> , <b>2002</b> , 18, 2193-2198   | 4    | 149 |
| 78 | Influence of membrane surface properties on initial rate of colloidal fouling of reverse osmosis and nanofiltration membranes. <i>Journal of Membrane Science</i> , <b>2001</b> , 188, 115-128   | 9.6  | 900 |
| 77 | Role of spatial distribution of porous medium surface charge heterogeneity in colloid transport. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2001</b> , 191, 3-15                                       | 5.1  | 86  |
| 76 | Aggregation and deposition kinetics of mobile colloidal particles in natural porous media. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2001</b> , 191, 179-188  | 5.1  | 100 |
| 75 | Coupled model of concentration polarization and pore transport in crossflow nanofiltration. <i>AIChE Journal</i> , <b>2001</b> , 47, 2733-2745   | 3.6  | 96  |
| 74 | A novel two-dimensional model for colloid transport in physically and geochemically heterogeneous porous media. <i>Journal of Contaminant Hydrology</i> , <b>2001</b> , 49, 173-99   | 3.9  | 49  |
| 73 | Role of Charge (Donnan) Exclusion in Removal of Arsenic from Water by a Negatively Charged Porous Nanofiltration Membrane. <i>Environmental Engineering Science</i> , <b>2001</b> , 18, 105-113  | 2    | 195 |
| 72 | Shear-Induced Reorganization of Deformable Molecular Assemblies: Monte Carlo Studies. <i>Langmuir</i> , <b>2001</b> , 17, 552-561  | 4    | 6   |
| 71 | Sensitivity analysis and parameter identifiability for colloid transport in geochemically heterogeneous porous media. <i>Water Resources Research</i> , <b>2001</b> , 37, 209-222  | 5.4  | 34  |
| 70 | Coupled Influence of Colloidal and Hydrodynamic Interactions on the RSA Dynamic Blocking Function for Particle Deposition onto Packed Spherical Collectors. <i>Journal of Colloid and Interface Science</i> , <b>2000</b> , 229, 554-567 | 9.3  | 47  |
| 69 | Transport of Iron Oxide Colloids in Packed Quartz Sand Media: Monolayer and Multilayer Deposition. <i>Journal of Colloid and Interface Science</i> , <b>2000</b> , 231, 32-41  | 9.3  | 103 |
| 68 | DLVO interaction energy between spheroidal particles and a flat surface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2000</b> , 165, 143-156  | 5.1  | 81  |
| 67 | The Shadow Effect in Colloid Transport and Deposition Dynamics in Granular Porous Media: Measurements and Mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2000</b> , 34, 3681-3689  | 10.3 | 140 |



|    |   |      |      |
|----|---|------|------|
| 66 | Silica-Coated Titania and Zirconia Colloids for Subsurface Transport Field Experiments. <i>Environmental Science &amp; Technology</i> , <b>2000</b> , 34, 2000-2005   | 10.3 | 46   |
| 65 | Relative Insignificance of Mineral Grain Zeta Potential to Colloid Transport in Geochemically Heterogeneous Porous Media. <i>Environmental Science &amp; Technology</i> , <b>2000</b> , 34, 2143-2148   | 10.3 | 224  |
| 64 | Relating Nanofiltration Membrane Performance to Membrane Charge (Electrokinetic) Characteristics. <i>Environmental Science &amp; Technology</i> , <b>2000</b> , 34, 3710-3716   | 10.3 | 516  |
| 63 | Particulate and THM Precursor Removal with Ferric Chloride. <i>Journal of Environmental Engineering, ASCE</i> , <b>1999</b> , 125, 1054-1061  | 2    | 11   |
| 62 | Concentration Polarization of Interacting Solute Particles in Cross-Flow Membrane Filtration. <i>Journal of Colloid and Interface Science</i> , <b>1999</b> , 212, 81-99  | 9.3  | 88   |
| 61 | Mobile Subsurface Colloids and Their Role in Contaminant Transport. <i>Advances in Agronomy</i> , <b>1999</b> , 66, 121-193   | 7.7  | 460  |
| 60 | Bacteriophage PRD1 and Silica Colloid Transport and Recovery in an Iron Oxide-Coated Sand Aquifer. <i>Environmental Science &amp; Technology</i> , <b>1999</b> , 33, 63-73  | 10.3 | 184  |
| 59 | Gravity-Induced Coagulation of Spherical Particles of Different Size and Density. <i>Journal of Colloid and Interface Science</i> , <b>1998</b> , 197, 334-47   | 9.3  | 15   |
| 58 | Effect of Interparticle Electrostatic Double Layer Interactions on Permeate Flux Decline in Crossflow Membrane Filtration of Colloidal Suspensions: An Experimental Investigation. <i>Journal of Colloid and Interface Science</i> , <b>1998</b> , 204, 77-86 | 9.3  | 135  |
| 57 | A novel approach for modeling concentration polarization in crossflow membrane filtration based on the equivalence of osmotic pressure model and filtration theory. <i>Journal of Membrane Science</i> , <b>1998</b> , 145, 223-241                           | 9.6  | 116  |
| 56 | Transport of in Situ Mobilized Colloidal Particles in Packed Soil Columns. <i>Environmental Science &amp; Technology</i> , <b>1998</b> , 32, 3562-3569  | 10.3 | 191  |
| 55 | DLVO Interaction between Rough Surfaces. <i>Langmuir</i> , <b>1998</b> , 14, 3365-3375  | 4    | 293  |
| 54 | Removing particles and THM precursors by enhanced coagulation. <i>Journal - American Water Works Association</i> , <b>1998</b> , 90, 139-150  | 0.5  | 22   |
| 53 | Arsenic removal by RO and NF membranes. <i>Journal - American Water Works Association</i> , <b>1997</b> , 89, 102-114   | 5    | 112  |
| 52 | Arsenic Removal from Drinking Water during Coagulation. <i>Journal of Environmental Engineering, ASCE</i> , <b>1997</b> , 123, 800-807  | 2    | 258  |
| 51 | Colloidal Fouling of Reverse Osmosis Membranes: Measurements and Fouling Mechanisms. <i>Environmental Science &amp; Technology</i> , <b>1997</b> , 31, 3654-3662  | 10.3 | 270  |
| 50 | Role of membrane surface morphology in colloidal fouling of cellulose acetate and composite aromatic polyamide reverse osmosis membranes. <i>Journal of Membrane Science</i> , <b>1997</b> , 127, 101-109   | 9.6  | 459  |
| 49 | Chemical and physical aspects of natural organic matter (NOM) fouling of nanofiltration membranes. <i>Journal of Membrane Science</i> , <b>1997</b> , 132, 159-181  | 9.6  | 1011 |

|    |  |      |     |
|----|--|------|-----|
| 48 | Surface Element Integration: A Novel Technique for Evaluation of DLVO Interaction between a Particle and a Flat Plate. <i>Journal of Colloid and Interface Science</i> , <b>1997</b> , 193, 273-85 | 9.3  | 271 |
| 47 | Kinetics of Permeate Flux Decline in Crossflow Membrane Filtration of Colloidal Suspensions. <i>Journal of Colloid and Interface Science</i> , <b>1997</b> , 196, 267-277                          | 9.3  | 111 |
| 46 | Colloid Transport in Geochemically Heterogeneous Porous Media: Modeling and Measurements. <i>Environmental Science &amp; Technology</i> , <b>1996</b> , 30, 3284-3293                              | 10.3 | 321 |
| 45 | Arsenic removal by ferric chloride. <i>Journal - American Water Works Association</i> , <b>1996</b> , 88, 155-167  | 0.5  | 260 |
| 44 | Colloid mobilization and transport in groundwater. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1996</b> , 107, 1-56   | 5.1  | 870 |
| 43 | Effect of solution chemistry on the surface charge of polymeric reverse osmosis and nanofiltration membranes. <i>Journal of Membrane Science</i> , <b>1996</b> , 119, 253-268                      | 9.6  | 753 |
| 42 | Modelling of particle deposition onto ideal collectors <b>1995</b> , 113-156   |      | 1   |
| 41 | Theoretical predictions compared to experimental observations in particle deposition kinetics <b>1995</b> , 310-343  |      | 1   |
| 40 | Transport of colloidal materials in ground water <b>1995</b> , 361-375   |      |     |
| 39 | Experimental techniques for aggregation studies <b>1995</b> , 263-289  |      |     |
| 38 | Electrical properties of interfaces <b>1995</b> , 9-32   |      | 4   |
| 37 | Colloid deposition dynamics in flow-through porous media: role of electrolyte concentration. <i>Environmental Science &amp; Technology</i> , <b>1995</b> , 29, 2963-73                             | 10.3 | 163 |
| 36 | Dynamics of Colloid Deposition in Porous Media: Blocking Based on Random Sequential Adsorption. <i>Langmuir</i> , <b>1995</b> , 11, 801-812  | 4    | 305 |
| 35 | Theory of concentration polarization in crossflow filtration. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1995</b> , 91, 3389  |      | 234 |
| 34 | Fouling of Reverse Osmosis Membranes by Aluminum Oxide Colloids. <i>Journal of Environmental Engineering, ASCE</i> , <b>1995</b> , 121, 884-892  | 2    | 69  |
| 33 | Electrical properties of interfaces <b>1995</b> , 9-32   |      | 2   |
| 32 | Modelling of particle deposition onto ideal collectors <b>1995</b> , 113-156   |      | 1   |
| 31 | Experimental techniques for aggregation studies <b>1995</b> , 263-289  |      |     |

|    |  |      |     |
|----|--|------|-----|
| 30 | Experimental techniques in particle deposition kinetics <b>1995</b> , 290-309  |      | 1   |
| 29 | Theoretical predictions compared to experimental observations in particle deposition kinetics <b>1995</b> , 310-343  |      |     |
| 28 | Transport of colloidal materials in ground water <b>1995</b> , 361-375   |      |     |
| 27 | Experimental techniques in particle deposition kinetics <b>1995</b> , 290-309  |      | 1   |
| 26 | Particle Deposition onto a Permeable Surface in Laminar Flow. <i>Journal of Colloid and Interface Science</i> , <b>1995</b> , 173, 165-180   | 9.3  | 104 |
| 25 | Measuring the zeta (electrokinetic) potential of reverse osmosis membranes by a streaming potential analyzer. <i>Desalination</i> , <b>1994</b> , 95, 269-286  | 10.3 | 355 |
| 24 | The search for a chlorine-resistant reverse osmosis membrane. <i>Desalination</i> , <b>1994</b> , 95, 325-345  | 10.3 | 268 |
| 23 | Effect of Particle Size on the Kinetics of Particle Deposition under Attractive Double Layer Interactions. <i>Journal of Colloid and Interface Science</i> , <b>1994</b> , 164, 190-199                                | 9.3  | 103 |
| 22 | Transient Deposition of Colloidal Particles in Heterogeneous Porous Media. <i>Journal of Colloid and Interface Science</i> , <b>1994</b> , 167, 301-313  | 9.3  | 83  |
| 21 | Kinetics of Colloid Deposition onto Heterogeneously Charged Surfaces in Porous Media. <i>Environmental Science &amp; Technology</i> , <b>1994</b> , 28, 1164-71  | 10.3 | 209 |
| 20 | Dynamics of coagulation of kaolin particles with ferric chloride. <i>Water Research</i> , <b>1994</b> , 28, 559-569  | 12.5 | 93  |
| 19 | Particle deposition on ideal collectors from dilute flowing suspensions: Mathematical formulation, numerical solution, and simulations. <i>Separation and Purification Technology</i> , <b>1994</b> , 4, 186-212       |      | 129 |
| 18 | Dynamics of Coagulation of Clay Particles with Aluminum Sulfate. <i>Journal of Environmental Engineering, ASCE</i> , <b>1994</b> , 120, 169-189  | 2    | 24  |
| 17 | The effect of particle density on collisions between sinking particles: implications for particle aggregation in the ocean. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , <b>1994</b> , 41, 469-483 | 2.5  | 39  |
| 16 | Calculation of particle deposition rate under unfavourable particle-surface interactions. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1993</b> , 89, 3443-3452                                   |      | 33  |
| 15 | Dynamics of colloid deposition in porous media: modeling the role of retained particles <b>1993</b> , 49-63  |      |     |
| 14 | Dynamics of colloid deposition in porous media: Modeling the role of retained particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1993</b> , 73, 49-63                             | 5.1  | 116 |
| 13 | Deposition of Colloids in Porous Media. <i>ACS Symposium Series</i> , <b>1992</b> , 26-39  | 0.4  | 2   |

|    |  |      |     |
|----|--|------|-----|
| 12 | Theoretical investigation of colloid separation from dilute aqueous suspensions by oppositely charged granular media. <i>Separation and Purification Technology</i> , <b>1992</b> , 2, 2-12                    |      | 30  |
| 11 | Predicting collision efficiencies of colloidal particles in porous media. <i>Water Research</i> , <b>1992</b> , 26, 1-8  | 12.5 | 119 |
| 10 | Determination of absolute coagulation rate constants by multiangle light scattering. <i>Journal of Colloid and Interface Science</i> , <b>1992</b> , 154, 1-7  | 9.3  | 71  |
| 9  | Deposition of Brownian particles in porous media: Modified boundary conditions for the sphere-in-cell model. <i>Journal of Colloid and Interface Science</i> , <b>1992</b> , 153, 294-297                      | 9.3  | 22  |
| 8  | Kinetics of capture of colloidal particles in packed beds under attractive double layer interactions. <i>Journal of Colloid and Interface Science</i> , <b>1991</b> , 146, 337-352                             | 9.3  | 129 |
| 7  | Discussion of Colloid Filtration in Fluidized Beds by George Sprouse and Bruce E. Rittmann (March/April 1990, Vol. 116, No. 2). <i>Journal of Environmental Engineering, ASCE</i> , <b>1991</b> , 117, 706-708 | 2    | 1   |
| 6  | Effect of electrolyte type on the electrophoretic mobility of polystyrene latex colloids. <i>Colloids and Surfaces</i> , <b>1990</b> , 44, 165-178   |      | 182 |
| 5  | Indirect evidence for hydration forces in the deposition of polystyrene latex colloids on glass surfaces. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1990</b> , 86, 1623                |      | 42  |
| 4  | Effect of particle size on collision efficiency in the deposition of Brownian particles with electrostatic energy barriers. <i>Langmuir</i> , <b>1990</b> , 6, 1153-1163                                       | 4    | 324 |
| 3  | Kinetics of deposition of colloidal particles in porous media. <i>Environmental Science &amp; Technology</i> , <b>1990</b> , 24, 1528-1536   | 10.3 | 430 |
| 2  | Particle Filtration for Wastewater Irrigation. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , <b>1989</b> , 115, 474-487   | 1.1  | 37  |
| 1  | Informal Small-Scale Water Services in Developing Countries: The Business of Water for Those without Formal Municipal Connections 231-240  |      | 3   |