

CITATION REPORT

List of articles citing

Effect of Membrane Surface Roughness on ColloidMembrane DLVO Interactions

DOI: 10.1021/la027083c
Langmuir, 2003, 19, 4836-4847.

Source: <https://exaly.com/paper-pdf/35590896/citation-report.pdf>

Version: 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. 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.

#	Paper	IF	Citations
387	Colloidal adhesion to hydrophilic membrane surfaces. <i>Journal of Membrane Science</i> , 2004 , 241, 235-248	9.6	113
386	Interaction between Charged Surfaces on the Poisson-Boltzmann Level: The Constant Regulation Approximation. 2004 , 108, 19467-19475		86
385	Electrostatic interactions between double layers: influence of surface roughness, regulation, and chemical heterogeneities. <i>Langmuir</i> , 2004 , 20, 5052-65	4	45
384	Direct observation of microbial adhesion to membranes. <i>Environmental Science & Technology</i> , 2005 , 39, 6461-9	10.3	99
383	Free energy of mixing of cross-linked polymer blends. <i>Langmuir</i> , 2005 , 21, 240-50	4	6
382	Direct force measurements between cellulose surfaces and colloidal silica particles. 2005 , 6, 3057-66		48
381	Examining the electrochemical properties of a nanofiltration membrane with atomic force microscopy. <i>Journal of Membrane Science</i> , 2006 , 276, 286-294	9.6	28
380	. 2006 ,		479
379	Electromagnetophoretic Measurements of Adsorption Forces of Polystyrene Microparticles on Silica Surfaces in Surfactant Solutions. 2006 , 79, 47-52		11
378	Effect of surface roughness on fouling of RO and NF membranes during filtration of a high organic surficial groundwater. 2006 , 55, 559-570		82
377	Characterization of commercial nanofiltration membranes and comparison with self-made polyethersulfone membranes. 2006 , 191, 245-253		125
376	Force spectroscopy of bonds that form between a Staphylococcus bacterium and silica or polystyrene substrates. 2006 , 150, 228-234		21
375	A comparison of vertical scanning interferometry (VSI) and atomic force microscopy (AFM) for characterizing membrane surface topography. <i>Journal of Membrane Science</i> , 2006 , 278, 410-417	9.6	51
374	Characterization of polymeric nanofiltration membranes for systematic analysis of membrane performance. <i>Journal of Membrane Science</i> , 2006 , 278, 418-427	9.6	136
373	Extended DLVO interactions between spherical particles and rough surfaces. <i>Journal of Colloid and Interface Science</i> , 2006 , 298, 50-8	9.3	395
372	Enhanced roughness of lipid membranes caused by external electric fields. 2007 , 41, 202-207		2
371	Assembly and characterization of colloid-based antireflective coatings on multicrystalline silicon solar cells. 2007 , 17, 791-799		137

370	Kinetic adhesion of bacterial cells to sand: cell surface properties and adhesion rate. <i>Colloids and Surfaces B: Biointerfaces</i> , 2007 , 59, 35-45	6	72
369	Interfacial polymerization of thin film nanocomposites: A new concept for reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2007 , 294, 1-7	9.6	924
368	A review of visualization techniques of biocolloid transport processes at the pore scale under saturated and unsaturated conditions. 2007 , 30, 1392-1407		95
367	Influence of membrane and colloid characteristics on fouling of nanofiltration membranes. <i>Journal of Membrane Science</i> , 2007 , 289, 220-230	9.6	111
366	Impacts of reaction and curing conditions on polyamide composite reverse osmosis membrane properties. <i>Journal of Membrane Science</i> , 2008 , 311, 34-45	9.6	605
365	Characterization of CO ₂ plasma treated polymeric membranes and quantification of flux enhancement. <i>Journal of Membrane Science</i> , 2008 , 323, 1-10	9.6	27
364	Evaluation of surface roughness of a plasma treated polymeric membrane by wavelet analysis and quantification of its enhanced performance. 2008 , 255, 2504-2511		40
363	Drawbacks of applying nanofiltration and how to avoid them: A review. <i>Separation and Purification Technology</i> , 2008 , 63, 251-263	8.3	639
362	Initial Deposition of Colloidal Particles on a Rough Nanofiltration Membrane. 2008 , 85, 570-579		9
361	Produced water treatment by nanofiltration and reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2008 , 322, 162-170	9.6	311
360	DLVO interaction energy between a sphere and a nano-patterned plate. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008 , 318, 45-52	5.1	80
359	Novel approach combining physico-chemical characterizations and mass transfer modelling of nanofiltration and low pressure reverse osmosis membranes for brackish water desalination intensification. 2008 , 221, 174-191		98
358	Nanofluidics: Systems and Applications. 2008 , 8, 441-450		78
357	Fouling in Membrane Processes. 121-138		4
356	Correlation between sub-micron surface roughness of iron oxide encrustations and trace element concentrations. 2009 , 407, 4703-10		11
355	Use of atomic force microscopy and fractal geometry to characterize the roughness of nano-, micro-, and ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2009 , 340, 117-132	9.6	58
354	Novel approach for the analysis of bench-scale, low pressure membrane fouling in water treatment. <i>Journal of Membrane Science</i> , 2009 , 334, 1-8	9.6	54
353	Direct observation of bacterial deposition onto clean and organic-fouled polyamide membranes. <i>Journal of Colloid and Interface Science</i> , 2009 , 336, 13-20	9.3	78

352	Influence of DOC on fouling of a PVDF ultrafiltration membrane modified by nano-sized alumina. 2009 , 239, 29-37		20
351	Effects of feed water temperature on separation performance and organic fouling of brackish water RO membranes. 2009 , 239, 346-359		119
350	Effect of solution chemistry on the surface property of reverse osmosis membranes under seawater conditions. 2009 , 247, 148-161		28
349	Deposition of <i>Cryptosporidium parvum</i> oocysts on natural organic matter surfaces: microscopic evidence for secondary minimum deposition in a radial stagnation point flow cell. <i>Langmuir</i> , 2009 , 25, 1594-605	4	56
348	Reply to comment by William P. Johnson et al. on "Transport and fate of bacteria in porous media: Coupled effects of chemical conditions and pore space geometry" 2009 , 45,		8
347	A new approach to the characterization of reverse osmosis membrane by dynamic hysteresis. 2010 , 18, 257-263		12
346	Surface modifications for antifouling membranes. 2010 , 110, 2448-71		1578
345	Using polyelectrolyte coatings to improve fouling resistance of a positively charged nanofiltration membrane. <i>Journal of Membrane Science</i> , 2010 , 347, 250-259	9.6	128
344	Evaluation of surface properties of reverse osmosis membranes on the initial biofouling stages under no filtration condition. <i>Journal of Membrane Science</i> , 2010 , 351, 112-122	9.6	97
343	Preparation and characterization of a neutrally charged antifouling nanofiltration membrane by coating a layer of sulfonated poly(ether ether ketone) on a positively charged nanofiltration membrane. <i>Journal of Membrane Science</i> , 2010 , 362, 192-201	9.6	67
342	Effect of colloids on salt transport in crossflow nanofiltration. <i>Journal of Membrane Science</i> , 2010 , 346, 240-249	9.6	13
341	Organic fouling of forward osmosis membranes: Fouling reversibility and cleaning without chemical reagents. <i>Journal of Membrane Science</i> , 2010 , 348, 337-345	9.6	661
340	The role of nano-scale heterogeneous electrostatic interactions in initial bacterial adhesion from flow: a case study with <i>Staphylococcus aureus</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2010 , 76, 489-95	6	25
339	Inorganic fouling of pressure-driven membrane processes [A critical review]. 2010 , 250, 236-248		307
338	Biofilm formation, cleaning, re-formation on polyamide composite membranes. 2010 , 257, 73-79		56
337	Sulfonated poly(arylene ether sulfone) RO membranes for high water flux and chlorine resistance. 2010 , 15, 205-213		3
336	Pilot-Scale Evaluation of Chemical Cleaning Protocols for Organic and Biologically Fouled Microfiltration Membranes. 2010 , 136, 542-553		10
335	Colloidal Interactions for Nanopatterned Surfaces Based on Surface Element Integration (SEI) Approach. 2010 ,		1

334	MWNTs/Polyester Thin Film Nanocomposite Membrane: An Approach To Overcome the Trade-Off Effect between Permeability and Selectivity. 2010 , 114, 16395-16400		98
333	Strategies for controlling biofouling in membrane filtration systems: challenges and opportunities. 2010 , 20, 4567		411
332	Retention of latex colloids on calcite as a function of surface roughness and topography. <i>Langmuir</i> , 2010 , 26, 4743-52	4	41
331	Initial colloid deposition on bare and zeolite-coated stainless steel and aluminum: influence of surface roughness. <i>Langmuir</i> , 2010 , 26, 12605-13	4	34
330	Is surface roughness a "scapegoat" or a primary factor when defining particle-substrate interactions?. <i>Langmuir</i> , 2010 , 26, 2528-37	4	84
329	Coupled factors influencing the transport and retention of <i>Cryptosporidium parvum</i> oocysts in saturated porous media. <i>Water Research</i> , 2010 , 44, 1213-23	12.5	45
328	Self-assembled block copolymer thin films as water filtration membranes. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 847-53	9.5	317
327	Numerical study on the deposition rate of hematite particle on polypropylene walls: role of surface roughness. <i>Langmuir</i> , 2011 , 27, 4603-12	4	43
326	Actinide-Nanoparticle Interaction: Generation, Stability and Mobility. 2011 , 1-30		4
325	Preparation and Characterization of Membranes Formed by Nonsolvent Induced Phase Separation: A Review. 2011 , 50, 3798-3817		839
324	Surface Roughness Effect on Deposition of Nano- and Micro-Sized Colloids in Saturated Columns at Different Solution Ionic Strengths. <i>Vadose Zone Journal</i> , 2011 , 10, 1071-1081	2.7	84
323	Fabrication and characterization of macroporous flyash ceramic pellets. 2011 , 62, 817-824		16
322	Impacts of silica on the sustainable productivity of reverse osmosis membranes treating low-salinity brackish groundwater. 2011 , 279, 210-218		41
321	Colloidal interactions and fouling of NF and RO membranes: a review. 2011 , 164, 126-43		445
320	Interaction force measurement between <i>E. coli</i> cells and nanoparticles immobilized surfaces by using AFM. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011 , 82, 316-24	6	56
319	Development of antifouling properties and performance of nanofiltration membranes modified by interfacial polymerisation. 2011 , 273, 36-47		59
318	Membrane characterization by dynamic hysteresis: Measurements, mechanisms, and implications for membrane fouling. <i>Journal of Membrane Science</i> , 2011 , 366, 17-24	9.6	25
317	pH-responsive nanofiltration membranes by surface modification. <i>Journal of Membrane Science</i> , 2011 , 366, 373-381	9.6	47

316	QCM study of mineral surface crystallization on aromatic polyamide membrane surfaces. <i>Journal of Membrane Science</i> , 2011 , 379, 426-433	9.6	23
315	DLVO interaction of colloidal particles with topographically and chemically heterogeneous surfaces. <i>Journal of Colloid and Interface Science</i> , 2011 , 353, 87-97	9.3	102
314	Stochasticity of bacterial attachment and its predictability by the extended derjaguin-landau-verwey-overbeek theory. 2011 , 77, 3757-64		30
313	Interaction of a Spherical Colloid and a Porous Membrane in a Bulk Electrolyte. 2011 , 28, 058201		1
312	Novel thin-film composite membrane for seawater desalination with sulfonated poly(arylene ether sulfone) containing amino groups. 2012 , 43, 230-237		11
311	Improvement of Adhesive Strength of Polyacetal by Irradiation of Vacuum Ultra-Violet Light and Deposition of Nanometer-Sized Particles Simultaneously using Laser Ablation. 2012 , 1424, 37		
310	Towards a description of particulate fouling: from single particle deposition to clogging. 2012 , 185-186, 34-76		111
309	Site-specific retention of colloids at rough rock surfaces. <i>Environmental Science & Technology</i> , 2012 , 46, 9378-87	10.3	35
308	Deposition of latex colloids at rough mineral surfaces: an analogue study using nanopatterned surfaces. <i>Langmuir</i> , 2012 , 28, 6606-17	4	34
307	Application of DLVO energy map to evaluate interactions between spherical colloids and rough surfaces. <i>Langmuir</i> , 2012 , 28, 14681-92	4	57
306	Nanoparticles and their influence on radionuclide mobility in deep geological formations. <i>Applied Geochemistry</i> , 2012 , 27, 390-403	3.5	55
305	Theoretical and experimental investigation of detachment of colloids from rough collector surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012 , 410, 98-110	5.1	41
304	Humic acid facilitates the transport of ARS-labeled hydroxyapatite nanoparticles in iron oxyhydroxide-coated sand. <i>Environmental Science & Technology</i> , 2012 , 46, 2738-45	10.3	144
303	Mechanically and structurally robust sulfonated block copolymer membranes for water purification applications. 2012 , 23, 245703		16
302	Colloid adhesive parameters for chemically heterogeneous porous media. <i>Langmuir</i> , 2012 , 28, 13643-51	4	63
301	Role of Surface Roughness in Chemical Detachment of Colloids Deposited at Primary Energy Minima. <i>Vadose Zone Journal</i> , 2012 , 11,	2.7	49
300	Microstructure and anti-adhesion properties of PES/TAP/Ag hybrid ultrafiltration membrane. 2012 , 287, 71-77		35
299	Thin-film composite membrane formed by interfacial polymerization of polyvinylamine (PVAm) and trimesoyl chloride (TMC) for nanofiltration. 2012 , 288, 98-107		67

298	Nanoscale characterization of synthetic polymeric porous membranes: Scrutinizing their stiffness, roughness, and chemical composition. <i>Journal of Membrane Science</i> , 2012 , 407-408, 128-135	9.6	23
297	Coupled factors influencing detachment of nano- and micro-sized particles from primary minima. 2012 , 134-135, 1-11		28
296	Functionalized nanoparticle interactions with polymeric membranes. 2012 , 211-212, 288-95		51
295	Anti-biofouling property of vanillin on <i>Aeromonas hydrophila</i> initial biofilm on various membrane surfaces. 2013 , 29, 1695-703		45
294	Effects of Flow Velocity and Nonionic Surfactant on Colloid Straining in Saturated Porous Media Under Unfavorable Conditions. 2013 , 98, 193-208		22
293	Effect of surface pattern formation on membrane fouling and its control in phase inversion process. <i>Journal of Membrane Science</i> , 2013 , 446, 326-331	9.6	65
292	Microfiltration (MF) membrane fouling potential evaluation of protein with different ion strengths and divalent cations based on extended DLVO theory. 2013 , 331, 62-68		29
291	Membrane Characterization. 2013 , 1		7
290	Dynamic filtration Ultrasonic cleaning in a continuous operated filtration process under submerged conditions. <i>Separation and Purification Technology</i> , 2013 , 119, 72-81	8.3	14
289	Use of nanoimprinted surface patterns to mitigate colloidal deposition on ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2013 , 428, 598-607	9.6	87
288	Understanding the structure and performance of self-assembled triblock terpolymer membranes. <i>Journal of Membrane Science</i> , 2013 , 444, 461-468	9.6	50
287	Impact of Na ⁺ on Biological Wastewater Treatment and the Potential of Anaerobic Membrane Bioreactors: A Review. 2013 , 43, 2722-2746		31
286	Fouling potential evaluation of soluble microbial products (SMP) with different membrane surfaces in a hybrid membrane bioreactor using worm reactor for sludge reduction. 2013 , 140, 111-9		17
285	Numerical simulation of retention and release of colloids in porous media at the pore scale. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 427, 33-40	5.1	34
284	Interaction energy evaluation of the role of solution chemistry and organic foulant composition on polysaccharide fouling of microfiltration membrane bioreactors. <i>Chemical Engineering Science</i> , 2013 , 104, 1028-1035	4.4	19
283	Fouling mitigation of a dead-end microfiltration by mixing-enhanced preoxidation for Fe and Mn removal from groundwater. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 419, 87-93	5.1	21
282	Roles of ionic strength and biofilm roughness on adhesion kinetics of <i>Escherichia coli</i> onto groundwater biofilm grown on PVC surfaces. <i>Water Research</i> , 2013 , 47, 2531-42	12.5	70
281	Flagella-mediated differences in deposition dynamics for <i>Azotobacter vinelandii</i> in porous media. <i>Environmental Science & Technology</i> , 2013 , 47, 5162-70	10.3	12

280	Attachment of silver nanoparticles (AgNPs) onto thin-film composite (TFC) membranes through covalent bonding to reduce membrane biofouling. <i>Journal of Membrane Science</i> , 2013 , 441, 73-82	9.6	255
279	Transport through composite membranes, part 2: Impacts of roughness on permeability and fouling. <i>Journal of Membrane Science</i> , 2013 , 425-426, 141-148	9.6	65
278	DLVO interactions of carbon nanotubes with isotropic planar surfaces. <i>Langmuir</i> , 2013 , 29, 3976-88	4	34
277	Colloid interaction energies for physically and chemically heterogeneous porous media. <i>Langmuir</i> , 2013 , 29, 3668-76	4	102
276	Microanalysis of Reverse Osmosis and Nanofiltration Membranes. 2013 , 1		
275	Nanoscale roughness and morphology affect the IsoElectric Point of titania surfaces. <i>PLoS ONE</i> , 2013 , 8, e68655	3.7	40
274	Performance of polyamide and polyethersulfone membranes in the nanofiltration of reactive dye-salt mixtures on pilot scale. 2014 , 52, 7026-7036		1
273	Energy and Environmental Applications. 2014 , 241-269		4
272	Propagation-of-uncertainty from contact angle and streaming potential measurements to XDLVO model assessments of membrane-colloid interactions. <i>Journal of Colloid and Interface Science</i> , 2014 , 428, 191-8	9.3	16
271	Heteroaggregation of microparticles with nanoparticles changes the chemical reversibility of the microparticles' attachment to planar surfaces. <i>Journal of Colloid and Interface Science</i> , 2014 , 421, 103-13 ^{9.3}		27
270	Variability of crystal surface reactivity: What do we know?. <i>Applied Geochemistry</i> , 2014 , 43, 132-157	3.5	108
269	Fouling of nanofiltration membranes used for separation of fermented glycerol solutions. 2014 , 68,		15
268	Characterization and performance of nanofiltration membranes. 2014 , 12, 241-255		44
267	Conductive CNT-PVDF membrane for capacitive organic fouling reduction. <i>Journal of Membrane Science</i> , 2014 , 459, 143-156	9.6	117
266	Relating fouling behavior and cake layer formation of alginic acid to the physiochemical properties of thin film composite and nanocomposite seawater RO membranes. 2014 , 338, 1-9		18
265	Nanoparticle aggregation: principles and modeling. 2014 , 811, 19-43		85
264	Surface-modified reverse osmosis membranes applying a copolymer film to reduce adhesion of bacteria as a strategy for biofouling control. <i>Separation and Purification Technology</i> , 2014 , 124, 117-123 ^{8.3}		49
263	Modeling of permeate flux and mass transfer resistances in the reclamation of molasses wastewater by a novel gas-sparged nanofiltration. <i>Korean Journal of Chemical Engineering</i> , 2014 , 31, 1865-1876	2.8	4

262	Antifouling behaviours of PVDF/nano-TiO ₂ composite membranes revealed by surface energetics and quartz crystal microbalance monitoring. <i>RSC Advances</i> , 2014 , 4, 43590-43598	3.7	38
261	Modulating particle adhesion with micro-patterned surfaces. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 8199-207	9.5	11
260	Progress in particle resuspension from rough surfaces by turbulent flows. 2014 , 45, 1-53		107
259	Thin-film composite membranes formed by interfacial polymerization with natural material sericin and trimesoyl chloride for nanofiltration. <i>Journal of Membrane Science</i> , 2014 , 471, 381-391	9.6	118
258	A novel approach for quantitative evaluation of the physicochemical interactions between rough membrane surface and sludge foulants in a submerged membrane bioreactor. 2014 , 171, 247-52		31
257	Room-temperature development of thin film composite reverse osmosis membranes from cellulose acetate with antibacterial properties. <i>Journal of Membrane Science</i> , 2014 , 453, 212-220	9.6	55
256	Deposition of toxic metal particles on rough nanofiltration membranes. <i>Korean Journal of Chemical Engineering</i> , 2014 , 31, 1413-1424	2.8	7
255	Multi-scale strategy to eradicate <i>Pseudomonas aeruginosa</i> on surfaces using solid lipid nanoparticles loaded with free fatty acids. 2014 , 6, 825-32		23
254	Facilitated attachment of nanoparticles at primary minima by nanoscale roughness is susceptible to hydrodynamic drag under unfavorable chemical conditions. 2014 , 466-467, 1094-102		23
253	Hydrophobic nano-asperities in control of energy barrier during particle-surface interactions. 2015 , 3, 164-171		13
252	Bacterial attachment and biofilm formation on surfaces are reduced by small-diameter nanoscale pores: how small is small enough?. 2015 , 1, 15022		136
251	Pore-Scale Study of Flow Rate on Colloid Attachment and Remobilization in a Saturated Micromodel. 2015 , 44, 1376-83		20
250	Studies of polypropylene membrane fouling during microfiltration of broth with <i>Citrobacter freundii</i> bacteria. 2015 , 17, 56-64		3
249	Forward osmosis desalination of oil and gas wastewater: Impacts of membrane selection and operating conditions on process performance. <i>Journal of Membrane Science</i> , 2015 , 488, 40-55	9.6	101
248	Membrane Fouling in Forward Osmosis Processes. 2015 , 217-240		1
247	Microfiltration of post-fermentation broth with backflushing membrane cleaning. 2015 , 69,		9
246	Quantitative assessment of interfacial interactions with rough membrane surface and its implications for membrane selection and fabrication in a MBR. 2015 , 179, 367-372		14
245	Effect of Rough Nanoparticle Orientation on DLVO Energy Interaction. 2015 , 36, 755-764		8

244	Modification of membrane surfaces via microswelling for fouling control in drinking water treatment. <i>Journal of Membrane Science</i> , 2015 , 475, 488-495	9.6	40
243	Transparent exopolymer particles: from aquatic environments and engineered systems to membrane biofouling. <i>Environmental Science & Technology</i> , 2015 , 49, 691-707	10.3	111
242	Correlating ultrafiltration membrane fouling with membrane properties, water quality, and permeate flux. 2015 , 56, 1746-1757		3
241	Influence of membrane surface roughness on interfacial interactions with sludge flocs in a submerged membrane bioreactor. <i>Journal of Colloid and Interface Science</i> , 2015 , 446, 84-90	9.3	33
240	Influence of active layer and support layer surface structures on organic fouling propensity of thin-film composite forward osmosis membranes. <i>Environmental Science & Technology</i> , 2015 , 49, 1436-44	10.3	93
239	Reduction of microbial contamination from drinking water using an iron oxide nanoparticle-impregnated ultrafiltration mixed matrix membrane: preparation, characterization and antimicrobial properties. 2015 , 1, 204-217		29
238	Magnetic nanoparticles augmented composite membranes in removal of organic foulant through magnetic actuation. <i>Journal of Membrane Science</i> , 2015 , 493, 134-146	9.6	27
237	Flotation of methylated roughened glass particles and analysis of particle-bubble energy barrier. 2015 , 79, 125-132		44
236	Hydraulic irreversibility of ultrafiltration membrane fouling by humic acid: Effects of membrane properties and backwash water composition. <i>Journal of Membrane Science</i> , 2015 , 493, 723-733	9.6	78
235	Surface Roughness Impacts on Granular Media Filtration at Favorable Deposition Conditions: Experiments and Modeling. <i>Environmental Science & Technology</i> , 2015 , 49, 7879-88	10.3	27
234	Effect of Interparticle Interaction on Particle Deposition in a Crossflow Microfilter. 2015 , 137,		0
233	Analysis of membrane fouling with porous membrane filters by microbial suspensions for autotrophic nitrogen transformations. <i>Separation and Purification Technology</i> , 2015 , 146, 284-293	8.3	37
232	Cotransport of bismethiazol and montmorillonite colloids in saturated porous media. 2015 , 177-178, 18-29		17
231	Nanofiltration and reverse osmosis surface topographical heterogeneities: Do they matter for initial bacterial adhesion?. <i>Journal of Membrane Science</i> , 2015 , 486, 10-20	9.6	14
230	Hydrophilic, bactericidal nanoheater-enabled reverse osmosis membranes to improve fouling resistance. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 11117-26	9.5	54
229	Regulating the aqueous phase monomer balance for flux improvement in polyamide thin film composite membranes. <i>Journal of Membrane Science</i> , 2015 , 487, 74-82	9.6	46
228	Poly(amidoamine) dendrimer (PAMAM) grafted on thin film composite (TFC) nanofiltration (NF) hollow fiber membranes for heavy metal removal. <i>Journal of Membrane Science</i> , 2015 , 487, 117-126	9.6	190
227	Determining Parameters and Mechanisms of Colloid Retention and Release in Porous Media. <i>Langmuir</i> , 2015 , 31, 12096-105	4	70

226	Influence of surface roughness on the initial formation of biofilm. 2015 , 284, 410-416		64
225	Hydrophobized particles can accelerate nucleation of clathrate hydrates. 2015 , 140, 440-445		39
224	Fouling mechanisms in the early stage of an enhanced coagulation-ultrafiltration process. 2015 , 9, 73-83		4
223	. 2016 ,		23
222	Sustainable Process for the Preparation of High-Performance Thin-Film Composite Membranes using Ionic Liquids as the Reaction Medium. 2016 , 9, 1101-11		37
221	Dual-Functional Coating of Forward Osmosis Membranes for Hydrophilization and Antimicrobial Resistance. 2016 , 3, 1500599		13
220	Single Layer Deposition of Polystyrene Particles onto Planar Polydimethylsiloxane Substrates. <i>Langmuir</i> , 2016 , 32, 88-101	4	18
219	Concurrent Modeling of Hydrodynamics and Interaction Forces Improves Particle Deposition Predictions. <i>Environmental Science & Technology</i> , 2016 , 50, 4401-12	10.3	15
218	Improving the water permeability and antifouling property of thin-film composite polyamide nanofiltration membrane by modifying the active layer with triethanolamine. <i>Journal of Membrane Science</i> , 2016 , 513, 108-116	9.6	110
217	Characterization of Ceramic Membranes. 2016 , 149-216		
216	A new approach to construct three-dimensional surface morphology of sludge flocs in a membrane bioreactor. 2016 , 219, 521-526		19
215	Organic fouling behaviour of structurally and chemically different forward osmosis membranes [A study of cellulose triacetate and thin film composite membranes. <i>Journal of Membrane Science</i> , 2016 , 520, 247-261	9.6	66
214	Modeling three-dimensional surface morphology of biocake layer in a membrane bioreactor based on fractal geometry. 2016 , 222, 478-484		20
213	Non-linear, non-monotonic effect of nano-scale roughness on particle deposition in absence of an energy barrier: Experiments and modeling. <i>Scientific Reports</i> , 2015 , 5, 17747	4.9	17
212	Membrane Fouling, Modelling and Recent Developments for Mitigation. 2016 , 433-462		5
211	Membrane fouling in a membrane bioreactor: A novel method for membrane surface morphology construction and its application in interaction energy assessment. <i>Journal of Membrane Science</i> , 2016 , 516, 135-143	9.6	41
210	Improvement of vertically aligned carbon nanotube membranes: desalination potential, flux enhancement and scale-up. 2016 , 57, 28133-28140		12
209	Fractal reconstruction of rough membrane surface related with membrane fouling in a membrane bioreactor. 2016 , 216, 817-23		30

208	Tailoring surface charge and wetting property for robust oil-fouling mitigation in membrane distillation. <i>Journal of Membrane Science</i> , 2016 , 516, 113-122	9.6	98
207	Microscopic surface topography of a wrought superalloy processed by laser shock peening. 2016 , 130, 25-33		8
206	Subnanometric Roughness Affects the Deposition and Mobile Adhesion of Escherichia coli on Silanized Glass Surfaces. <i>Langmuir</i> , 2016 , 32, 5422-33	4	30
205	Performance characteristics of surfactant treated commercial polyamide membrane in the nanofiltration of model solution of reactive yellow 160. <i>Journal of Water Process Engineering</i> , 2016 , 9, e27-e37	6.7	6
204	Use of aerobic spores as a surrogate for cryptosporidium oocysts in drinking water supplies. <i>Water Research</i> , 2016 , 90, 185-202	12.5	17
203	A comprehensive physico-chemical characterization of superhydrophilic loose nanofiltration membranes. <i>Journal of Membrane Science</i> , 2016 , 501, 1-14	9.6	64
202	Thermodynamic analysis of effects of contact angle on interfacial interactions and its implications for membrane fouling control. 2016 , 201, 245-52		22
201	Impact of liquid-filled voids within the active layer on transport through thin-film composite membranes. <i>Journal of Membrane Science</i> , 2016 , 500, 124-135	9.6	52
200	The DLVO Energy Interaction of Nanorough Surfaces by Spherical Coordinates. 2016 , 37, 884-893		3
199	Impact of the surface energy of particulate foulants on membrane fouling. <i>Journal of Membrane Science</i> , 2016 , 510, 101-111	9.6	52
198	Influence of Chemical Heterogeneity and Nanoscale Roughness on the DLVO Energy Interaction by Spherical Coordinates. 2016 , 37, 806-815		2
197	Membrane fouling in osmotically driven membrane processes: A review. <i>Journal of Membrane Science</i> , 2016 , 499, 201-233	9.6	488
196	A new method for modeling rough membrane surface and calculation of interfacial interactions. 2016 , 200, 451-7		55
195	Surface patterning of polymeric membranes and its effect on antifouling characteristics. 2017 , 52, 240-257		36
194	Quantification of interfacial interactions between a rough sludge floc and membrane surface in a membrane bioreactor. <i>Journal of Colloid and Interface Science</i> , 2017 , 490, 710-718	9.3	57
193	Adsorption of silica colloids onto like-charged silica surfaces of different roughness. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017 , 520, 85-96	5.1	11
192	Thermodynamic assessment of adsorptive fouling with the membranes modified via layer-by-layer self-assembly technique. <i>Journal of Colloid and Interface Science</i> , 2017 , 494, 194-203	9.3	18
191	Quantitative evaluation of the interfacial interactions between a randomly rough sludge floc and membrane surface in a membrane bioreactor based on fractal geometry. 2017 , 234, 198-207		14

190	Effects of flow interruption on transport and retention of iron oxide colloids in quartz sand. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017 , 520, 532-543	5.1	20
189	Contribution of Nano- to Microscale Roughness to Heterogeneity: Closing the Gap between Unfavorable and Favorable Colloid Attachment Conditions. <i>Environmental Science & Technology</i> , 2017 , 51, 2151-2160	10.3	58
188	The effects of salt concentration and foulant surface charge on hydrocarbon fouling of a poly(vinylidene fluoride) microfiltration membrane. <i>Water Research</i> , 2017 , 117, 230-241	12.5	27
187	Study of Nanoparticle Adsorption and Release in Porous Media Based on the DLVO Theory. 2017 ,		13
186	Osmotic membrane bioreactors for wastewater reuse: Performance comparison between cellulose triacetate and polyamide thin film composite membranes. <i>Journal of Membrane Science</i> , 2017 , 539, 383-391	9.6	35
185	Filtration of Glycoprotein-Modified Carboxylated Polystyrene Microspheres as Cryptosporidium Oocysts Surrogates: Effects of Flow Rate, Alum, and Humic Acid. 2017 , 143, 04017032		3
184	Transport of bacteria in porous media and its enhancement by surfactants for bioaugmentation: A review. 2017 , 35, 490-504		45
183	Rolling Spheres on Bioinspired Microstructured Surfaces. <i>Langmuir</i> , 2017 , 33, 164-175	4	5
182	Effect of low-concentration rhamnolipid biosurfactant on transport in natural porous media. 2017 , 53, 361-375		13
181	Temperature dependency of virus and nanoparticle transport and retention in saturated porous media. 2017 , 196, 10-20		29
180	Realization of quantifying interfacial interactions between a randomly rough membrane surface and a foulant particle. 2017 , 226, 220-228		67
179	Pathogen transport in groundwater systems: contrasts with traditional solute transport. 2017 , 25, 921-930		26
178	An energy map model for colloid transport. <i>Chemical Engineering Science</i> , 2017 , 158, 208-215	4.4	7
177	Comparison of antifouling behaviours of modified PVDF membranes by TiO ₂ sols with different nanoparticle size: Implications of casting solution stability. <i>Journal of Membrane Science</i> , 2017 , 525, 378-386	9.6	25
176	New polymeric membrane nanofiltration for succinate recovery: a comparative study. 2017 , 24, 1		9
175	Analyzing adhesion in microstructured systems through a robust computational approach. 2017 , 49, 1165-1170		3
174	Contributions of Nanoscale Roughness to Anomalous Colloid Retention and Stability Behavior. <i>Langmuir</i> , 2017 , 33, 10094-10105	4	71
173	Membrane fouling in a submerged membrane bioreactor: An unified approach to construct topography and to evaluate interaction energy between two randomly rough surfaces. 2017 , 243, 1121-1132		7

172	Effects of fractal roughness of membrane surfaces on interfacial interactions associated with membrane fouling in a membrane bioreactor. 2017 , 244, 560-568		19
171	Colloidal nanoparticle sorting and ordering on anodic alumina patterned surfaces using templated capillary force assembly. 2017 , 326, 264-269		7
170	Mechanistic study of nanoparticles deposition and release in porous media. 2017 , 157, 816-832		14
169	Quantitative assessment of interfacial forces between two rough surfaces and its implications for anti-adhesion membrane fabrication. <i>Separation and Purification Technology</i> , 2017 , 189, 238-245	8.3	16
168	Biofouling of membrane distillation, forward osmosis and pressure retarded osmosis: Principles, impacts and future directions. <i>Journal of Membrane Science</i> , 2017 , 542, 378-398	9.6	96
167	Physicochemical correlations between membrane surface hydrophilicity and adhesive fouling in membrane bioreactors. <i>Journal of Colloid and Interface Science</i> , 2017 , 505, 900-909	9.3	42
166	Critical Conditions for Massive Fines Detachment Induced by Single-Phase Flow in Coalbed Methane Reservoirs: Modeling and Experiments. 2017 , 31, 6782-6793		32
165	Surface Forces and Their Application to Particle Deposition and Resuspension. 2017 , 209-261		
164	Enhanced both perm-selectivity and fouling resistance of poly(piperazine-amide) nanofiltration membrane by incorporating sericin as a co-reactant of aqueous phase. <i>Journal of Membrane Science</i> , 2017 , 523, 282-290	9.6	57
163	Self-adaptive cycle-to-cycle control of in-line coagulant dosing in ultrafiltration for pre-treatment of reverse osmosis feed water. 2017 , 401, 22-31		19
162	Particles in Wall-Bounded Turbulent Flows: Deposition, Re-Suspension and Agglomeration. 2017 ,		5
161	High efficient removal of dyes from aqueous solution through nanofiltration using diethanolamine-modified polyamide thin-film composite membrane. <i>Separation and Purification Technology</i> , 2017 , 173, 135-143	8.3	159
160	Development of Multilayered Chlorogenate-Peptide Based Biocomposite Scaffolds for Potential Applications in Ligament Tissue Engineering - An In Vitro Study. 2017 , 34, 37-56		1
159	Introduction to Saline Water Pretreatment. 2017 , 1-10		2
158	Guanidinium-functionalized nanofiltration membranes integrating anti-fouling and antimicrobial effects. 2018 , 6, 6442-6454		68
157	Optimization of the ionic liquid-based interfacial polymerization system for the preparation of high-performance, low-fouling RO membranes. <i>Journal of Membrane Science</i> , 2018 , 556, 342-351	9.6	19
156	Prediction of the filtrate particle size distribution from the pore size distribution in membrane filtration: Numerical correlations from computer simulations. 2018 , 8, 035308		5
155	Functional graphene oxide membrane preparation for organics/inorganic salts mixture separation aiming at advanced treatment of refractory wastewater. 2018 , 628-629, 261-270		18

154	A novel integrated method for quantification of interfacial interactions between two rough bioparticles. <i>Journal of Colloid and Interface Science</i> , 2018 , 516, 295-303	9.3	18
153	Gypsum scale formation on graphene oxide modified reverse osmosis membrane. <i>Journal of Membrane Science</i> , 2018 , 552, 132-143	9.6	37
152	Polyethylenimine Linked Glycidol Surface Antifouling Reverse Osmosis Membrane. 2018 , 57, 2322-2328		12
151	Nanostructured titanium surfaces exhibit recalcitrance towards <i>Staphylococcus epidermidis</i> biofilm formation. <i>Scientific Reports</i> , 2018 , 8, 1071	4.9	66
150	Mass transport modeling of natural organic matter (NOM) and salt during Nanofiltration of inorganic colloid-NOM mixtures. 2018 , 429, 60-69		5
149	Mitigation of membrane scaling in electro dialysis by electroconvection enhancement, pH adjustment and pulsed electric field application. <i>Journal of Membrane Science</i> , 2018 , 549, 129-140	9.6	37
148	Fouling mitigation and cleanability of TiO photocatalyst-modified PVDF membranes during ultrafiltration of model oily wastewater with different salt contents. 2018 , 25, 34912-34921		11
147	Modeling Dynamics of Colloidal Fouling of RO/NF Membranes with A Novel Collision-Attachment Approach. <i>Environmental Science & Technology</i> , 2018 , 52, 1471-1478	10.3	23
146	Membrane fouling in vacuum membrane distillation for ionic liquid recycling: Interaction energy analysis with the XDLVO approach. <i>Journal of Membrane Science</i> , 2018 , 550, 436-447	9.6	36
145	Tris(hydroxymethyl)aminomethane polyamide thin-film-composite antifouling reverse osmosis membrane. 2018 , 135, 45891		7
144	A facile method for simulating randomly rough membrane surface associated with interface behaviors. 2018 , 427, 915-921		43
143	Antifouling, fouling release and antimicrobial materials for surface modification of reverse osmosis and nanofiltration membranes. 2018 , 6, 313-333		189
142	Bacterial Adhesion to Ultrafiltration Membranes: Role of Hydrophilicity, Natural Organic Matter, and Cell-Surface Macromolecules. <i>Environmental Science & Technology</i> , 2018 , 52, 162-172	10.3	34
141	Simulation of foulant bioparticle topography based on Gaussian process and its implications for interface behavior research. 2018 , 434, 975-981		12
140	Roll-to-roll nanoimprint lithography of ultrafiltration membrane. 2018 , 135, 45993		17
139	New Developments in Membrane Technologies Used in the Treatment of Produced Water: A Review. 2018 , 43, 2093-2118		40
138	Does casting method matter in filtration membranes? A comparison in performance between doctor blade and slot-die extruded polymeric membranes. 2018 , 135, 45563		8
137	Quantitative Analysis of Membrane Fouling Mechanisms Involved in Microfiltration of Humic AcidProtein Mixtures at Different Solution Conditions. 2018 , 10, 1306		11

136	New Image Texture Analysis, and Application to Polymer Membrane Surface Morphologies and Roughness. 2018 , 24, 471-477		
135	Multifunctional amines enable the formation of polyamide nanofilm composite ultrafiltration and nanofiltration membranes with modulated charge and performance. 2018 , 6, 20242-20253		33
134	Thermodynamic insights into membrane fouling in a membrane bioreactor: Evaluating thermodynamic interactions with Gaussian membrane surface. <i>Journal of Colloid and Interface Science</i> , 2018 , 527, 280-288	9.3	4
133	Performance of a seawater-driven forward osmosis process for pre-concentrating digested sludge centrate: organic enrichment and membrane fouling. 2018 , 4, 1047-1056		14
132	Microfluidic Mimic for Colloid Membrane Filtration: A Review. 2018 , 98, 137-157		7
131	Aggregation Behavior of Multiwalled Carbon Nanotube-Titanium Dioxide Nanohybrids: Probing the Part-Whole Question. <i>Environmental Science & Technology</i> , 2018 , 52, 8233-8241	10.3	14
130	Electrostatic Double-Layer Interaction at the Surface of Rough Cluster-Assembled Films: The Case of Nanostructured Zirconia. <i>Langmuir</i> , 2018 , 34, 10230-10242	4	10
129	Comparison of Types and Amounts of Nanoscale Heterogeneity on Bacteria Retention. 2018 , 6,		16
128	Impacts of morphology on fouling propensity in a membrane bioreactor based on thermodynamic analyses. <i>Journal of Colloid and Interface Science</i> , 2018 , 531, 282-290	9.3	7
127	Towards nanoscale electrical measurements in liquid by advanced KPFM techniques: a review. 2018 , 81, 086101		45
126	Nanoscale Functionalized Particles with Rotation-Controlled Capture in Shear Flow. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 29058-29068	9.5	15
125	Thermodynamic prediction and experimental investigation of short-term dynamic membrane formation in dynamic membrane bioreactors: Effects of sludge properties. 2019 , 77, 85-96		10
124	Sulfaguanidine nanofiltration active layer towards anti-adhesive and antimicrobial attributes for desalination and dye removal.. <i>RSC Advances</i> , 2019 , 9, 20715-20727	3.7	9
123	Next-Generation Asymmetric Membranes Using Thin-Film Liftoff. 2019 , 19, 5036-5043		16
122	Identification of scaling during clean-in-place (CIP) in membrane water treatment process. <i>Chemosphere</i> , 2019 , 237, 124398	8.4	12
121	Effect of oscillating temperature and crystallization on graphene oxide composite pervaporation membrane for inland brine desalination. <i>Journal of Membrane Science</i> , 2019 , 588, 117210	9.6	26
120	Determination of Surface Energy Parameters of Hydrophilic Porous Membranes via a Corrected Contact Angle Approach. <i>Langmuir</i> , 2019 , 35, 15009-15016	4	8
119	Effects of surface morphology on alginate adhesion: Molecular insights into membrane fouling based on XDLVO and DFT analysis. <i>Chemosphere</i> , 2019 , 233, 373-380	8.4	58

118	Influence of Surface Micro-Patterning and Hydrogel Coating on Colloidal Silica Fouling of Polyamide Thin-Film Composite Membranes. <i>Membranes</i> , 2019 , 9,	3.8	10
117	Controllable ion transport by surface-charged graphene oxide membrane. 2019 , 10, 1253		184
116	Micro- and Nanotopography Sensitive Bacterial Attachment Mechanisms: A Review. 2019 , 10, 191		115
115	Electric charge of nanopatterned silica surfaces. 2019 , 21, 7576-7587		16
114	Deposition of titanium dioxide nanoparticles onto engineered rough surfaces with controlled heights and properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019 , 571, 125-133	5.3	5
113	Mineral scaling in membrane desalination: Mechanisms, mitigation strategies, and feasibility of scaling-resistant membranes. <i>Journal of Membrane Science</i> , 2019 , 579, 52-69	9.6	93
112	Biofouling-resistant nanocellulose layer in hierarchical polymeric membranes: Synthesis, characterization and performance. <i>Journal of Membrane Science</i> , 2019 , 579, 162-171	9.6	27
111	Hydrodynamic versus Surface Interaction Impacts of Roughness in Closing the Gap between Favorable and Unfavorable Colloid Transport Conditions. <i>Environmental Science & Technology</i> , 2019 , 53, 2450-2459	10.3	33
110	Development of self-assembled polygalacturonic acid-peptide composites and their interactions with mesenchymal stem cells for potential applications in tendon tissue engineering. 2019 , 8, 64		
109	Colloid Transport in Environmental Granular Porous Media. 2019 , 1-14		
108	Interactions between nanoparticles and fractal surfaces. <i>Water Research</i> , 2019 , 151, 296-309	12.5	12
107	Transport and deposition of colloidal particles on a patterned membrane surface: Effect of cross-flow velocity and the size ratio of particle to surface pattern. <i>Journal of Membrane Science</i> , 2019 , 572, 309-319	9.6	18
106	Carbon Nanotube-Based Membranes for Water Purification. 2019 , 309-331		8
105	In situ modification of polyamide reverse osmosis membrane module for improved fouling resistance. <i>Chemical Engineering Research and Design</i> , 2019 , 141, 402-412	5.5	4
104	Selection of pretreatment technologies for seawater reverse osmosis plants: A review. 2019 , 449, 78-91		87
103	Polymer membranes [Fractal characteristics and determination of roughness scaling exponents. <i>Journal of Membrane Science</i> , 2019 , 570-571, 9-22	9.6	7
102	Study of polyamide thin film characteristics impact on permeability/selectivity performance and fouling behavior of forward osmosis membrane. 2019 , 26, 1181-1191		15
101	Investigation of succinic acid recovery from aqueous solution and fermentation broth using polyimide nanofiltration membrane. 2020 , 8, 101895		10

100	Role and importance of surface heterogeneities in transport of particles in saturated porous media. 2020 , 50, 244-329		28
99	The fate of silver nanoparticles in riverbank filtration systems - The role of biological components and flow velocity. 2020 , 699, 134387		5
98	Fabrication of high performance polyamide reverse osmosis membrane from monomer 4-morpholino-m-phenylenediamine and tailoring with zwitterions. 2020 , 473, 114169		33
97	The roles of particles in enhancing membrane filtration: A review. <i>Journal of Membrane Science</i> , 2020 , 595, 117570	9.6	28
96	Control of organic and surfactant fouling using dynamic membranes in the separation of oil-in-water emulsions. <i>Journal of Colloid and Interface Science</i> , 2020 , 560, 787-794	9.3	12
95	Gradient crystallinity and its influence on the poly(vinylidene fluoride)/poly(methyl methacrylate) membrane-derived by immersion precipitation method. 2020 , 137, 48677		5
94	Evidence for the critical role of nanoscale surface roughness on the retention and release of silver nanoparticles in porous media. 2020 , 258, 113803		13
93	Predicting the fouling tendency of thin film composite membranes using fractal analysis and membrane autopsy. 2020 , 59, 4397-4407		2
92	Prolonging the antibacterial activity of nanosilver-coated membranes through partial sulfidation. 2020 , 7, 2607-2617		2
91	Quantifying Surface Wetting Properties Using Droplet Probe Atomic Force Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 42386-42392	9.5	4
90	Stochastic Collision-Attachment-Based Monte Carlo Simulation of Colloidal Fouling: Transition from Foulant-Clean-Membrane Interaction to Foulant-Fouled-Membrane Interaction. <i>Environmental Science & Technology</i> , 2020 , 54, 12703-12712	10.3	8
89	Nanoscale polyelectrolyte/metal ion hydrogel modified RO membrane with dual anti-fouling mechanism and superhigh transport property. 2020 , 488, 114510		15
88	Outlining the Roles of Membrane-Foulant and Foulant-Foulant Interactions in Organic Fouling During Microfiltration and Ultrafiltration: A Mini-Review. 2020 , 8, 417		25
87	Impact of scaling on aeration performance of fine-pore membrane diffusers based on a pilot-scale study. <i>Scientific Reports</i> , 2020 , 10, 4902	4.9	1
86	Effect of particle surface corrugation on colloidal interactions. <i>Journal of Colloid and Interface Science</i> , 2020 , 579, 794-804	9.3	4
85	What are the microscopic events during membrane backwashing?. <i>Journal of Membrane Science</i> , 2020 , 602, 117886	9.6	13
84	An environmentally sustainable approach for online chemical cleaning of MBR with activated peroxymonosulfate. <i>Journal of Membrane Science</i> , 2020 , 600, 117872	9.6	11
83	An l-cystine/l-cysteine impregnated nanofiltration membrane with the superior performance of an anchoring heavy metal in wastewater.. <i>RSC Advances</i> , 2020 , 10, 3438-3449	3.7	7

82	Influence of graphene oxide nanoparticles on the transport and cotransport of biocolloids in saturated porous media. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 189, 110841	6	21
81	Surface Interactions between Water-in-Oil Emulsions with Asphaltenes and Electroless Nickel-Phosphorus Coating. <i>Langmuir</i> , 2020 , 36, 897-905	4	9
80	Understanding the Roughness-Fouling Relationship in Reverse Osmosis: Mechanism and Implications. <i>Environmental Science & Technology</i> , 2020 , 54, 5288-5296	10.3	27
79	Ozone compatibility with polymer nanofiltration membranes. <i>Journal of Membrane Science</i> , 2021 , 618, 118656	9.6	5
78	Zwitterionic coating on thin-film composite membranes to delay gypsum scaling in reverse osmosis. <i>Journal of Membrane Science</i> , 2021 , 618, 118568	9.6	27
77	Effects of graphene derivatives on polyvinylidene fluoride membrane modification evaluated with XDLVO theory and quartz crystal microbalance with dissipation. <i>Water Environment Research</i> , 2021 , 93, 360-369	2.8	1
76	Environmental Biotechnology Vol. 3. <i>Environmental Chemistry for A Sustainable World</i> , 2021 ,	0.8	
75	Evaluation of the fouling potential of sludge in a membrane bioreactor integrated with microbial fuel cell. <i>Chemosphere</i> , 2021 , 262, 128405	8.4	11
74	High recovery, point-of-collection plasma separation from blood using electrospun polyacrylonitrile membranes. <i>AIChE Journal</i> , 2021 , 67, e17088	3.6	0
73	Insights into the roles of membrane pore size and feed foulant concentration in ultrafiltration membrane fouling based on collision-attachment theory. <i>Water Environment Research</i> , 2021 , 93, 516-523	2.8	2
72	Anti-fouling piezoelectric PVDF membrane: Effect of morphology on dielectric and piezoelectric properties. <i>Journal of Membrane Science</i> , 2021 , 620, 118818	9.6	9
71	How microbes read the map: Effects of implant topography on bacterial adhesion and biofilm formation. <i>Biomaterials</i> , 2021 , 268, 120595	15.6	23
70	Constructing superhydrophobic surface of PES/PES-SiO ₂ mixed matrix membrane contactors for efficient SO ₂ capture. <i>Separation and Purification Technology</i> , 2021 , 259, 118222	8.3	5
69	Template-etched sodium alginate hydrogel as the sublayer to improve the FO performance with double barriers for high metal ion rejection. <i>Chemical Engineering Journal</i> , 2021 , 413, 127425	14.7	2
68	Optimal synthesis of high fouling-resistant PVC-based ultrafiltration membranes with tunable surface pore size distribution and ultralow water contact angle for the treatment of oily wastewater. <i>Separation and Purification Technology</i> , 2021 , 257, 117829	8.3	14
67	Colloid Interaction Energies for Surfaces with Steric Effects and Incompressible and/or Compressible Roughness. <i>Langmuir</i> , 2021 , 37, 1501-1510	4	5
66	Impact of phosphate adsorption on the mobility of PANI-supported nano zero-valent iron. <i>Vadose Zone Journal</i> , 2021 , 20, e20091	2.7	4
65	Nanoparticles for enhanced oil recovery. 2021 , 125-174		2

64	Development of Polymeric Membranes for Oil/Water Separation. <i>Membranes</i> , 2021 , 11,	3.8	10
63	Zwitterionic and hydrophilic polyelectrolyte/metal ion anti-fouling layers via covalent and coordination bonds for reverse osmosis membranes. <i>Materials Chemistry Frontiers</i> ,	7.8	1
62	How physicochemical properties of filtration membranes impact peptide migration and selectivity during electrodialysis with filtration membranes: Development of predictive statistical models and understanding of mechanisms involved. <i>Journal of Membrane Science</i> , 2021 , 619, 118175	9.6	4
61	Derjaguin-Landau-Verwey-Overbeek energy landscape of a Janus particle with a nonuniform cap. <i>Physical Review E</i> , 2021 , 103, 032610	2.4	1
60	Enhanced permeability and antifouling performance of polyether sulfone (PES) membrane via elevating magnetic Ni@MXene nanoparticles to upper layer in phase inversion process. <i>Journal of Membrane Science</i> , 2021 , 623, 119080	9.6	58
59	Migration of ions near charged surface. <i>PLoS ONE</i> , 2021 , 16, e0250343	3.7	0
58	Silica Fouling in Reverse Osmosis Systems- Small-Angle Neutron Scattering Studies. <i>Membranes</i> , 2021 , 11,	3.8	2
57	In situ amphiphilic modification of thin film composite membrane for application in aqueous and organic solvents. <i>Journal of Membrane Science</i> , 2021 , 626, 119155	9.6	8
56	Colloidal metal transport in soils developing on historic coal mine spoil. <i>Applied Geochemistry</i> , 2021 , 128, 104933	3.5	0
55	The influence of RO membrane surface properties on surfactant fouling in radioactive wastewater treatment. <i>Chemical Engineering Research and Design</i> , 2021 , 149, 858-865	5.5	1
54	Application and mechanisms of microalgae harvesting by magnetic nanoparticles (MNPs). <i>Separation and Purification Technology</i> , 2021 , 265, 118519	8.3	8
53	Sustainable Desalination and Water Reuse. 2021 , 2, 1-204		1
52	Recent Progress of Zwitterionic Materials as Antifouling Membranes for Ultrafiltration, Nanofiltration, and Reverse Osmosis. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 4390-4412	4.3	10
51	Modelling the combined effect of surface roughness and topography on bacterial attachment. <i>Journal of Materials Science and Technology</i> , 2021 , 81, 151-161	9.1	4
50	Polyamide membranes enabled by covalent organic framework nanofibers for efficient reverse osmosis. <i>Journal of Polymer Science</i> ,	2.4	0
49	Constructing a selective blocked-nanolayer on nanofiltration membrane via surface-charge inversion for promoting Li ⁺ permselectivity over Mg ²⁺ . <i>Journal of Membrane Science</i> , 2021 , 635, 119504	9.6	6
48	Colloidal interactions between model foulants and engineered surfaces: Interplay between roughness and surface energy. <i>Chemical Engineering Journal Advances</i> , 2021 , 8, 100138	3.6	2
47	Polyamide desalination membranes: Formation, structure, and properties. <i>Progress in Polymer Science</i> , 2021 , 122, 101451	29.6	16

46	Facile synthesis of 2D TiO ₂ @MXene composite membrane with enhanced separation and antifouling performance. <i>Journal of Membrane Science</i> , 2021 , 640, 119854	9.6	49
45	Mobility of solid and porous hollow SiO nanoparticles in saturated porous media: Impacts of surface and particle structure. <i>Journal of Colloid and Interface Science</i> , 2022 , 606, 480-490	9.3	4
44	Effects of pH and Ionic Strength on Colloidal Fouling of Charged Nanofiltration Membranes. <i>Journal of Chemical Engineering of Japan</i> , 2011 , 44, 476-485	0.8	7
43	Spontaneous Detachment of Colloids from Primary Energy Minima by Brownian Diffusion. <i>PLoS ONE</i> , 2016 , 11, e0147368	3.7	12
42	Understanding the Role of Pattern Geometry on Nanofiltration Threshold Flux. <i>Membranes</i> , 2020 , 10,	3.8	3
41	Implementation of NF as a robust barrier for organic contaminants during water reuse applications. 2010 , 151-168		
40	DLVO Interactions between Particles and Rough Surfaces: An Extended Surface Element Integration Method. <i>Langmuir</i> , 2021 , 37, 13208-13217	4	1
39	Fouling and Wetting: A Major Challenge for Membrane Distillation. <i>Environmental Chemistry for A Sustainable World</i> , 2021 , 161-192	0.8	2
38	Nanofiltration for drinking water treatment: a review. <i>Frontiers of Chemical Science and Engineering</i> , 2021 , 1-18	4.5	8
37	Membrane Fouling: Microscopic Insights into the Effects of Surface Chemistry and Roughness. <i>Advanced Theory and Simulations</i> , 2100395	3.5	1
36	Living Filtration Membranes Demonstrate Antibiofouling Properties. <i>ACS ES&T Water</i> ,		0
35	A novel loose nanofiltration membrane with superior anti-biofouling performance prepared from zwitterion-grafted chitosan. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2022 , 104191	5.3	0
34	Influence of Reverse Osmosis Process in Different Operating Conditions on Phenolic Profile and Antioxidant Activity of Conventional and Ecological Cabernet Sauvignon Red Wine.. <i>Membranes</i> , 2022 , 12,	3.8	1
33	Integrating advanced Keggin-structure polyoxometalate into polymeric membrane to enhance photocatalytic self-cleaning and antifouling functionalities. <i>Korean Journal of Chemical Engineering</i> , 1	2.8	1
32	Interfacial interactions of rough spherical surfaces with random topographies. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022 , 642, 128570	5.1	1
31	Enhanced Antifouling Properties of Mos ₂ -Ag Incorporated Thin-Film Nanocomposite Membranes. <i>SSRN Electronic Journal</i> ,	1	
30	Ultrafiltration Membrane Fouling in Side-Stream Aerobic Granular Sludge Membrane Bioreactor. <i>SSRN Electronic Journal</i> ,	1	
29	Important Role of Concave Surfaces in Deposition of Colloids under Favorable Conditions as Revealed by Microscale Visualization.. <i>Environmental Science & Technology</i> , 2022 ,	10.3	0

28	Influence of Draw Ratio and Take-Up Velocity on Properties of Ultrafiltration Hollow Fiber Membranes from Polyethersulfone. <i>Fibers</i> , 2022 , 10, 29	3.7	1
27	Data_Sheet_1.docx. 2018 ,		
26	Mechanisms of Hierarchical Topographies Tuning Bacteria and Cell Biological Responses to the Surfaces of Pure Titanium and Cu-Bearing Titanium Alloy.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	2
25	Ultrafiltration of aerobic granular sludge bioreactor effluent: Fouling potentials and properties. <i>Journal of Water Process Engineering</i> , 2022 , 47, 102805	6.7	0
24	?????????????????????. <i>Chinese Science Bulletin</i> , 2022 ,	2.9	
23	Micro- and nanoplastics retention in porous media exhibits different dependence on grain surface roughness and clay coating with particle size. <i>Water Research</i> , 2022 , 221, 118717	12.5	0
22	Potential of MXene-based membranes in water treatment and desalination: A critical review. <i>Chemosphere</i> , 2022 , 303, 135234	8.4	1
21	Cosolvent-Assisted Interfacial Polymerization toward Regulating the Morphology and Performance of Polyamide Reverse Osmosis Membranes: Increased m-Phenylenediamine Solubility or Enhanced Interfacial Vaporization?. <i>Environmental Science & Technology</i> , 2022 , 56, 10308-10316	10.3	1
20	Development of Composite Thin-Film Nanofiltration Membranes Based on Polyethersulfone for Water Purification. <i>Journal of Polymers and the Environment</i> ,	4.5	0
19	Interaction of rough ellipsoidal particles with random surface asperities in colloidal systems. <i>Chemical Engineering Science</i> , 2022 , 117869	4.4	
18	Alkali carbonate reaction (ACR): Investigations on mechanism of dedolomitization of dolomite in dolostones. 2022 , 351, 128942		1
17	Dissecting the role of membrane defects with low-energy barrier on fouling development through A collision Attachment-Monte Carlo approach. 2022 , 120981		1
16	Dissecting the Role of Membrane Defects on Fouling Development and Characteristics with a Collision Attachment-Monte Carlo Approach.		0
15	Ceramic membranes with in situ doped iron oxide nanoparticles for enhancement of antifouling characteristics and organic removal.		0
14	Membrane-organic solute interactions in asymmetric flow field flow fractionation: Interplay of hydrodynamic and electrostatic forces. 2023 , 855, 158891		0
13	Reverse osmosis membrane biofouling: causes, consequences and countermeasures. 2022 , 5,		2
12	Nanofiltration Membranes with Crumpled Polyamide Films: A Critical Review on Mechanisms, Performances, and Environmental Applications. 2022 , 56, 12811-12827		3
11	Zwitterionic Biomaterials.		6

- 10 Tuneable ion transport by electrically responsive membranes under electrical assistance. **2022**, 663, 121046 ○
- 9 Interaction of deformable solid and hollow particles with rough surface morphology in colloidal systems. **2023**, 630, 497-510 ○
- 8 Polyamidoamine and carboxylated cellulose nanocrystal grafted antifouling forward osmosis membranes for efficient leachate treatment via integrated forward osmosis and membrane distillation process. **2023**, 668, 121241 1
- 7 Does Surface Roughness Necessarily Increase the Fouling Propensity of Polyamide Reverse Osmosis Membranes by Humic Acid?. ○
- 6 Insights on the development of enhanced antifouling reverse osmosis membranes: Industrial applications and challenges. **2023**, 553, 116460 2
- 5 What in particle morphology determines the DLVO interaction energy between hematite particles in electrolyte solutions?. **2023**, 664, 131144 ○
- 4 A computer simulation study of extended DLVO interactions between calcite nanoparticles and real rough surfaces. **2023**, 457, 129308 ○
- 3 Colloidal interactions for a polystyrene particle and a smooth silicon surface: atomic force microscopy, XDLVO theory, and surface element integration.. **2023**, 131315 ○
- 2 Fouling-resistant surface modification of forward osmosis membranes using MoS₂-Ag nanofillers. **2023**, 38, 102844 ○
- 1 Aliquots of MIL-140 and Graphene in Smart PNIPAM Mixed Hydrogels: A Nanoenvironment for a More Eco-Friendly Treatment of NaCl and Humic Acid Mixtures by Membrane Distillation. **2023**, 13, 437 ○