

Merlin Bruening

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Thioaromatic monolayers on gold: a new family of self-assembling monolayers. <i>Langmuir</i> , 1993, 9, 2974-2981.	1.6	436
2	Catalytic Membranes Prepared Using Layer-by-Layer Adsorption of Polyelectrolyte/Metal Nanoparticle Films in Porous Supports. <i>Nano Letters</i> , 2006, 6, 2268-2272.	4.5	365
3	Catalytic Nanoparticles Formed by Reduction of Metal Ions in Multilayered Polyelectrolyte Films. <i>Nano Letters</i> , 2002, 2, 497-501.	4.5	342
4	Synthesis of Passivating, Nylon-Like Coatings through Cross-Linking of Ultrathin Polyelectrolyte Films. <i>Journal of the American Chemical Society</i> , 1999, 121, 1978-1979.	6.6	308
5	Electrochemical and in Situ Ellipsometric Investigation of the Permeability and Stability of Layered Polyelectrolyte Films. <i>Langmuir</i> , 2000, 16, 2006-2013.	1.6	297
6	Selective Hydrogenation by Pd Nanoparticles Embedded in Polyelectrolyte Multilayers. <i>Journal of the American Chemical Society</i> , 2004, 126, 2658-2659.	6.6	286
7	Functionalization of Surfaces by Water-Accelerated Atom-Transfer Radical Polymerization of Hydroxyethyl Methacrylate and Subsequent Derivatization. <i>Macromolecules</i> , 2002, 35, 1175-1179.	2.2	281
8	Surface-Initiated Atom Transfer Radical Polymerization on Gold at Ambient Temperature. <i>Journal of the American Chemical Society</i> , 2000, 122, 7616-7617.	6.6	277
9	Multilayer polyelectrolyte films as nanofiltration membranes for separating monovalent and divalent cations. <i>Journal of Membrane Science</i> , 2008, 310, 76-84.	4.1	267
10	Effect of filler incorporation route on the properties of polysulfone-silver nanocomposite membranes of different porosities. <i>Journal of Membrane Science</i> , 2008, 325, 58-68.	4.1	262
11	Ultrathin, Multilayered Polyelectrolyte Films as Nanofiltration Membranes. <i>Langmuir</i> , 2003, 19, 7038-7042.	1.6	246
12	Creation of Functional Membranes Using Polyelectrolyte Multilayers and Polymer Brushes. <i>Langmuir</i> , 2008, 24, 7663-7673.	1.6	229
13	Layered Polyelectrolyte Films as Selective, Ultrathin Barriers for Anion Transport. <i>Chemistry of Materials</i> , 2000, 12, 1941-1946.	3.2	194
14	High-Flux Nanofiltration Membranes Prepared by Adsorption of Multilayer Polyelectrolyte Membranes on Polymeric Supports. <i>Langmuir</i> , 2005, 21, 10587-10592.	1.6	188
15	Techniques for phosphopeptide enrichment prior to analysis by mass spectrometry. <i>Mass Spectrometry Reviews</i> , 2010, 29, 29-54.	2.8	168
16	Correlation of the Swelling and Permeability of Polyelectrolyte Multilayer Films. <i>Chemistry of Materials</i> , 2005, 17, 5375-5381.	3.2	167
17	Multilayered Polyelectrolyte Films Containing Palladium Nanoparticles: Synthesis, Characterization, and Application in Selective Hydrogenation. <i>Chemistry of Materials</i> , 2005, 17, 301-307.	3.2	166
18	Size-Selective Transport of Uncharged Solutes through Multilayer Polyelectrolyte Membranes. <i>Chemistry of Materials</i> , 2004, 16, 351-357.	3.2	163

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19	High-Capacity Binding of Proteins by Poly(Acrylic Acid) Brushes and Their Derivatives. <i>Langmuir</i> , 2006, 22, 4274-4281.	1.6	154
20	Coating of Nafion Membranes with Polyelectrolyte Multilayers to Achieve High Monovalent/Divalent Cation Electrodialysis Selectivities. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 6620-6628.	4.0	154
21	Nanoparticle-Containing Membranes for the Catalytic Reduction of Nitroaromatic Compounds. <i>Langmuir</i> , 2009, 25, 1865-1871.	1.6	142
22	Preparation of Hyperbranched Polymer Films Grafted on Self-Assembled Monolayers. <i>Journal of the American Chemical Society</i> , 1996, 118, 3773-3774.	6.6	140
23	Synthesis and Characterization of Surface-Grafted, Hyperbranched Polymer Films Containing Fluorescent, Hydrophobic, Ion-Binding, Biocompatible, and Electroactive Groups. <i>Langmuir</i> , 1997, 13, 770-778.	1.6	138
24	Controlling the Permeability of Multilayered Polyelectrolyte Films through Derivatization, Cross-Linking, and Hydrolysis. <i>Langmuir</i> , 2001, 17, 931-937.	1.6	131
25	Kinetics of surface-initiated atom transfer radical polymerization. <i>Journal of Polymer Science Part A</i> , 2003, 41, 386-394.	2.5	131
26	High-Capacity, Protein-Binding Membranes Based on Polymer Brushes Grown in Porous Substrates. <i>Chemistry of Materials</i> , 2006, 18, 4033-4039.	3.2	123
27	Use of Porous Membranes Modified with Polyelectrolyte Multilayers as Substrates for Protein Arrays with Low Nonspecific Adsorption. <i>Analytical Chemistry</i> , 2006, 78, 135-140.	3.2	117
28	Controlling the Nanofiltration Properties of Multilayer Polyelectrolyte Membranes through Variation of Film Composition. <i>Langmuir</i> , 2004, 20, 11545-11551.	1.6	116
29	Polymer Brush-Modified Magnetic Nanoparticles for His-Tagged Protein Purification. <i>Langmuir</i> , 2011, 27, 3106-3112.	1.6	113
30	High-Capacity Purification of His-tagged Proteins by Affinity Membranes Containing Functionalized Polymer Brushes. <i>Biomacromolecules</i> , 2007, 8, 3102-3107.	2.6	108
31	Enhancement of the Ion-Transport Selectivity of Layered Polyelectrolyte Membranes through Cross-Linking and Hybridization. <i>Chemistry of Materials</i> , 2001, 13, 2641-2648.	3.2	102
32	Enhancing the Anion-Transport Selectivity of Multilayer Polyelectrolyte Membranes by Templating with Cu ²⁺ . <i>Macromolecules</i> , 2002, 35, 3171-3178.	2.2	101
33	Separation of Fluoride from Other Monovalent Anions Using Multilayer Polyelectrolyte Nanofiltration Membranes. <i>Langmuir</i> , 2007, 23, 1716-1722.	1.6	99
34	Polar Ligand Adsorption Controls Semiconductor Surface Potentials. <i>Journal of the American Chemical Society</i> , 1994, 116, 2972-2977.	6.6	98
35	Synthesis of Triblock Copolymer Brushes by Surface-Initiated Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2002, 35, 5410-5416.	2.2	97
36	Applications of Polymer Brushes in Protein Analysis and Purification. <i>Annual Review of Analytical Chemistry</i> , 2009, 2, 387-408.	2.8	96

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37	Fundamentals of Selective Ion Transport through Multilayer Polyelectrolyte Membranes. <i>Langmuir</i> , 2013, 29, 1885-1892.	1.6	96
38	Non-specific, on-probe cleanup methods for MALDI-MS samples. <i>Mass Spectrometry Reviews</i> , 2003, 22, 429-440.	2.8	94
39	Multilayer Dendrimer-Polyanhydride Composite Films on Glass, Silicon, and Gold Wafers. <i>Angewandte Chemie International Edition in English</i> , 1997, 36, 2114-2116.	4.4	93
40	Optimization of flux and selectivity in Cl ⁻ /SO ₄ ²⁻ separations with multilayer polyelectrolyte membranes. <i>Journal of Membrane Science</i> , 2006, 283, 366-372.	4.1	92
41	Separation of amino acid mixtures using multilayer polyelectrolyte nanofiltration membranes. <i>Journal of Membrane Science</i> , 2006, 280, 1-5.	4.1	91
42	Recovery of phosphate using multilayer polyelectrolyte nanofiltration membranes. <i>Journal of Membrane Science</i> , 2009, 327, 2-5.	4.1	90
43	Simultaneous Control of Surface Potential and Wetting of Solids with Chemisorbed Multifunctional Ligands. <i>Journal of the American Chemical Society</i> , 1997, 119, 5720-5728.	6.6	89
44	Controlled Synthesis of Cross-Linked Ultrathin Polymer Films by Using Surface-Initiated Atom Transfer Radical Polymerization. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 1510-1512.	7.2	88
45	Ultrathin, Gas-Selective Polyimide Membranes Prepared from Multilayer Polyelectrolyte Films. <i>Chemistry of Materials</i> , 2003, 15, 281-287.	3.2	87
46	Facile Trypsin Immobilization in Polymeric Membranes for Rapid, Efficient Protein Digestion. <i>Analytical Chemistry</i> , 2010, 82, 10045-10051.	3.2	82
47	Preparation of composite membranes by atom transfer radical polymerization initiated from a porous support. <i>Journal of Membrane Science</i> , 2003, 227, 1-14.	4.1	81
48	Control of the Density of Polymer Brushes Prepared by Surface-Initiated Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2006, 39, 5251-5258.	2.2	81
49	Modelling nanofiltration of electrolyte solutions. <i>Advances in Colloid and Interface Science</i> , 2019, 268, 39-63.	7.0	78
50	Catalytic hollow fiber membranes prepared using layer-by-layer adsorption of polyelectrolytes and metal nanoparticles. <i>Catalysis Today</i> , 2010, 156, 100-106.	2.2	77
51	Selectivity as a Function of Nanoparticle Size in the Catalytic Hydrogenation of Unsaturated Alcohols. <i>Journal of the American Chemical Society</i> , 2009, 131, 3601-3610.	6.6	75
52	Polyelectrolyte multilayer films as backflushable nanofiltration membranes with tunable hydrophilicity and surface charge. <i>Journal of Membrane Science</i> , 2010, 349, 268-278.	4.1	75
53	Solution-Diffusion-Electro-Migration model and its uses for analysis of nanofiltration, pressure-retarded osmosis and forward osmosis in multi-ionic solutions. <i>Journal of Membrane Science</i> , 2013, 447, 463-476.	4.1	75
54	Detection of Phosphopeptides Using Fe(III)-Nitrilotriacetate Complexes Immobilized on a MALDI Plate. <i>Analytical Chemistry</i> , 2006, 78, 1574-1580.	3.2	74

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55	Patterned Monolayer/Polymer Films for Analysis of Dilute or Salt-Contaminated Protein Samples by MALDI-MS. <i>Analytical Chemistry</i> , 2003, 75, 185-190.	3.2	73
56	Variation of Ion-Exchange Capacity, ζ Potential, and Ion-Transport Selectivities with the Number of Layers in a Multilayer Polyelectrolyte Film. <i>Langmuir</i> , 2009, 25, 7478-7485.	1.6	70
57	Removal and separation of metal ions from aqueous solutions using a silica-gel-bonded macrocycle system. <i>Analytical Chemistry</i> , 1988, 60, 1825-1826.	3.2	69
58	Highly selective separations of multivalent and monovalent cations in electrodialysis through Nafion membranes coated with polyelectrolyte multilayers. <i>Polymer</i> , 2016, 103, 478-485.	1.8	69
59	Ultrathin, Ion-Selective Polyimide Membranes Prepared from Layered Polyelectrolytes. <i>Journal of the American Chemical Society</i> , 2001, 123, 11805-11806.	6.6	67
60	Surface-Initiated Thermal Radical Polymerization on Gold. <i>Langmuir</i> , 2001, 17, 1731-1736.	1.6	63
61	Phosphopeptide Enrichment Using MALDI Plates Modified with High-Capacity Polymer Brushes. <i>Analytical Chemistry</i> , 2008, 80, 5727-5735.	3.2	63
62	Inhibition of Electrochemical Reactions at Gold Surfaces by Grafted, Highly Fluorinated, Hyperbranched Polymer Films. <i>Langmuir</i> , 1997, 13, 1388-1391.	1.6	62
63	Removal of Dyes, Sugars, and Amino Acids from NaCl Solutions Using Multilayer Polyelectrolyte Nanofiltration Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 6284-6288.	1.8	62
64	Polymer Brush Membranes for Pervaporation of Organic Solvents from Water. <i>Macromolecules</i> , 2005, 38, 2307-2314.	2.2	61
65	Rapid Growth of Polymer Brushes from Immobilized Initiators. <i>Journal of the American Chemical Society</i> , 2006, 128, 9056-9060.	6.6	59
66	Effect of organic solvent and anion type on cation binding constants with silica gel bound macrocycles and their use in designing selective concentrator columns. <i>Analytical Chemistry</i> , 1991, 63, 21-24.	3.2	57
67	Ultrathin, Hyperbranched Poly(acrylic acid) Membranes on Porous Alumina Supports. <i>Journal of the American Chemical Society</i> , 2000, 122, 11670-11678.	6.6	57
68	Protein Purification with Polymeric Affinity Membranes Containing Functionalized Poly(acid) Brushes. <i>Biomacromolecules</i> , 2010, 11, 1019-1026.	2.6	56
69	Spontaneous Generation of Multilamellar Vesicles from Ethylene Oxide/Butylene Oxide Diblock Copolymers. <i>Langmuir</i> , 2002, 18, 5337-5342.	1.6	55
70	Selective Hydrogenation of Monosubstituted Alkenes by Pd Nanoparticles Embedded in Polyelectrolyte Films. <i>Langmuir</i> , 2008, 24, 2916-2920.	1.6	55
71	Ultrathin, Layered Polyamide and Polyimide Coatings on Aluminum. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 3528-3535.	1.8	54
72	Crystallization of Polymer Brushes with Poly(ethylene oxide) Side Chains. <i>Macromolecules</i> , 2007, 40, 8212-8219.	2.2	54

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73	Polymer-brush stationary phases for open-tubular capillary electrochromatography. Journal of Chromatography A, 2004, 1044, 323-330.	1.8	53
74	Just spray it. Nature Materials, 2009, 8, 449-450.	13.3	53
75	Controlling Ion Transport through Multilayer Polyelectrolyte Membranes by Derivatization with Photolabile Functional Groups. Macromolecules, 2002, 35, 3164-3170.	2.2	52
76	pH-Dependent Growth and Morphology of Multilayer Dendrimer/Poly(acrylic acid) Films. Langmuir, 2003, 19, 94-99.	1.6	52
77	Ion-exchange membranes prepared using layer-by-layer polyelectrolyte deposition. Journal of Membrane Science, 2010, 354, 198-205.	4.1	52
78	Layer-by-layer modification of aliphatic polyamide anion-exchange membranes to increase Cl ⁻ /SO ₄ ²⁻ selectivity. Journal of Membrane Science, 2019, 578, 209-219.	4.1	52
79	Ion separations with membranes. Journal of Polymer Science, 2020, 58, 2831-2856.	2.0	52
80	Modeling diffusion-limited, neutral-macrocycle-mediated cation transport in supported liquid membranes. Analytical Chemistry, 1989, 61, 1140-1148.	3.2	51
81	Solid phase extraction of ions using molecular recognition technology. Pure and Applied Chemistry, 1995, 67, 1069-1074.	0.9	51
82	Synthesis of Hyperbranched, Hydrophilic Fluorinated Surface Grafts. Langmuir, 1996, 12, 5519-5521.	1.6	49
83	Completely Aqueous Procedure for the Growth of Polymer Brushes on Polymeric Substrates. Langmuir, 2007, 23, 11360-11365.	1.6	49
84	Enhancing the Ion-Transport Selectivity of Multilayer Polyelectrolyte Membranes. Chemistry - A European Journal, 2002, 8, 3832-3837.	1.7	48
85	Rapid Synthesis of Functional Polymer Brushes by Surface-Initiated Atom Transfer Radical Polymerization of an Acidic Monomer. Macromolecules, 2008, 41, 8413-8417.	2.2	47
86	Formation of High-Capacity Protein-Adsorbing Membranes through Simple Adsorption of Poly(acrylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	47
87	Cation separations in electrodialysis through membranes coated with polyelectrolyte multilayers. Polymer, 2014, 55, 1397-1403.	1.8	46
88	Adsorption of polyelectrolyte multilayers imparts high monovalent/divalent cation selectivity to aliphatic polyamide cation-exchange membranes. Journal of Membrane Science, 2017, 537, 177-185.	4.1	45
89	Aqueous Solvation and Functionalization of Weak-Acid Polyelectrolyte Thin Films. Langmuir, 1998, 14, 4232-4237.	1.6	43
90	Separation of Ions Using Polyelectrolyte-Modified Nanoporous Track-Etched Membranes. Langmuir, 2013, 29, 10287-10296.	1.6	41

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91	Phosphopeptide Enrichment with TiO ₂ -Modified Membranes and Investigation of Tau Protein Phosphorylation. <i>Analytical Chemistry</i> , 2013, 85, 5699-5706.	3.2	39
92	Quantitation of cation binding by silica gel bound thiamacrocycles and the design of highly selective concentration and purification columns for palladium(II), gold(III), silver(I), and mercury(II). <i>Analytical Chemistry</i> , 1991, 63, 1014-1017.	3.2	38
93	High Selectivities among Monovalent Cations in Dialysis through Cation-Exchange Membranes Coated with Polyelectrolyte Multilayers. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 44134-44143.	4.0	37
94	Increased Protein Sorption in Poly(acrylic acid)-Containing Films through Incorporation of Comb-Like Polymers and Film Adsorption at Low pH and High Ionic Strength. <i>Langmuir</i> , 2013, 29, 2946-2954.	1.6	36
95	An analytical solution of the solution-diffusion-electromigration equations reproduces trends in ion rejections during nanofiltration of mixed electrolytes. <i>Journal of Membrane Science</i> , 2017, 523, 361-372.	4.1	35
96	Macrocycle-metal cation interactions involving polyaza macrocycles bonded to silica gel via a nitrogen donor atom. <i>Pure and Applied Chemistry</i> , 1990, 62, 1115-1118.	0.9	33
97	An all-aqueous route to polymer brush-modified membranes with remarkable permeabilities and protein capture rates. <i>Journal of Membrane Science</i> , 2012, 389, 117-125.	4.1	33
98	Use of Polymer-Modified MALDI-MS Probes To Improve Analyses of Protein Digests and DNA. <i>Analytical Chemistry</i> , 2004, 76, 3106-3111.	3.2	32
99	Phosphopeptide enrichment on functionalized polymer microspots for MALDI-MS analysis. <i>Analyst</i> , 2009, 134, 512-518.	1.7	31
100	Facilitated ion transport through polyelectrolyte multilayer films containing metal-binding ligands. <i>Journal of Membrane Science</i> , 2014, 459, 169-176.	4.1	30
101	Wet air oxidation with tubular ceramic membranes modified with polyelectrolyte/Pt nanoparticle films. <i>Applied Catalysis B: Environmental</i> , 2009, 91, 180-188.	10.8	29
102	Sacrificial polyelectrolyte multilayer coatings as an approach to membrane fouling control: Disassembly and regeneration mechanisms. <i>Journal of Membrane Science</i> , 2015, 491, 149-158.	4.1	29
103	Pepsin-Containing Membranes for Controlled Monoclonal Antibody Digestion Prior to Mass Spectrometry Analysis. <i>Analytical Chemistry</i> , 2015, 87, 10942-10949.	3.2	29
104	Formation of Ultrathin, Defect-Free Membranes by Grafting of Poly(acrylic acid) onto Layered Polyelectrolyte Films. <i>Langmuir</i> , 2001, 17, 8236-8241.	1.6	28
105	Layer-by-Layer Assembly of Thick, Cu ²⁺ -Chelating Films. <i>Langmuir</i> , 2013, 29, 12720-12729.	1.6	28
106	Limited Proteolysis via Millisecond Digestions in Protease-Modified Membranes. <i>Analytical Chemistry</i> , 2012, 84, 8357-8363.	3.2	27
107	Facile Synthesis of Thick Films of Poly(methyl methacrylate), Poly(styrene), and Poly(vinyl pyridine) from Au Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 3042-3048.	4.0	26
108	Flow through negatively charged, nanoporous membranes separates Li ⁺ and K ⁺ due to induced electromigration. <i>Chemical Communications</i> , 2020, 56, 10954-10957.	2.2	26

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109	Preparation of amphiphilic triblock copolymer brushes for surface patterning. <i>Nanotechnology</i> , 2003, 14, 1075-1080.	1.3	25
110	Immobilization of Carboxymethylated Polyethylenimine-Metal-Ion Complexes in Porous Membranes to Selectively Capture His-Tagged Protein. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 2575-2584.	4.0	25
111	Moderate pH changes alter the fluxes, selectivities and limiting currents in ion transport through polyelectrolyte multilayers deposited on membranes. <i>Journal of Membrane Science</i> , 2020, 616, 118570.	4.1	25
112	Electrodialysis through nafion membranes coated with polyelectrolyte multilayers yields >99% pure monovalent ions at high recoveries. <i>Journal of Membrane Science</i> , 2022, 647, 120294.	4.1	25
113	Dynamic crossflow filtration with a rotating tubular membrane: Using centripetal force to decrease fouling by buoyant particles. <i>Chemical Engineering Research and Design</i> , 2016, 106, 101-114.	2.7	24
114	Electron transfer in hybrid molecular solid-state devices. <i>Synthetic Metals</i> , 1996, 76, 245-248.	2.1	21
115	Esterification and Ether Formation at a Hydroxyl-Terminated Self-Assembled Monolayer Surface Using Low-Energy Collisions of Polyatomic Cations. <i>Langmuir</i> , 2002, 18, 4799-4808.	1.6	21
116	Adsorption of Anionic or Cationic Surfactants in Polyanionic Brushes and Its Effect on Brush Swelling and Fouling Resistance during Emulsion Filtration. <i>Langmuir</i> , 2015, 31, 11790-11799.	1.6	21
117	Detection of Protamine and Heparin Using Electrodes Modified with Poly(acrylic acid) and Its Amine Derivative. <i>Electroanalysis</i> , 2001, 13, 1447-1453.	1.5	20
118	Effects of Monomer Composition on CO ₂ -Selective Polymer Brush Membranes. <i>Chemistry of Materials</i> , 2010, 22, 4026-4033.	3.2	20
119	Polyelectrolyte multilayers as anti-adhesive membrane coatings for virus concentration and recovery. <i>Journal of Membrane Science</i> , 2014, 469, 140-150.	4.1	20
120	Layer-by-Layer Deposition with Polymers Containing Nitrotriacetate, A Convenient Route to Fabricate Metal- and Protein-Binding Films. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10164-10173.	4.0	20
121	Elution Is a Critical Step for Recovering Human Adenovirus 40 from Tap Water and Surface Water by Cross-Flow Ultrafiltration. <i>Applied and Environmental Microbiology</i> , 2016, 82, 4982-4993.	1.4	20
122	Aqueous Swelling of Zwitterionic Poly(sulfobetaine methacrylate) Brushes in the Presence of Ionic Surfactants. <i>Macromolecules</i> , 2018, 51, 1161-1171.	2.2	20
123	Limited proteolysis in porous membrane reactors containing immobilized trypsin. <i>Analyst, The</i> , 2017, 142, 2578-2586.	1.7	19
124	Identification of p65-Associated Phosphoproteins by Mass Spectrometry after On-Plate Phosphopeptide Enrichment Using Polymer-oxotitanium Films. <i>Journal of Proteome Research</i> , 2010, 9, 3005-3015.	1.8	18
125	Bifunctional polymer brushes for low-bias enrichment of mono- and multi-phosphorylated peptides prior to mass spectrometry analysis. <i>Analyst, The</i> , 2011, 136, 3595.	1.7	17
126	Rapid Protein Digestion and Purification with Membranes Attached to Pipet Tips. <i>Analytical Chemistry</i> , 2015, 87, 11984-11989.	3.2	17

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127	Monoclonal Antibody Capture and Analysis Using Porous Membranes Containing Immobilized Peptide Mimotopes. <i>Analytical Chemistry</i> , 2018, 90, 12161-12167.	3.2	16
128	Deviations from Electroneutrality in Membrane Barrier Layers: A Possible Mechanism Underlying High Salt Rejections. <i>Langmuir</i> , 2016, 32, 2644-2658.	1.6	15
129	Oil droplet behavior on model nanofiltration membrane surfaces under conditions of hydrodynamic shear and salinity. <i>Journal of Colloid and Interface Science</i> , 2020, 560, 247-259.	5.0	14
130	Highly selective ion separations based on counter-flow electromigration in nanoporous membranes. <i>Journal of Membrane Science</i> , 2021, 638, 119684.	4.1	13
131	Crystallization kinetics of polymer brushes with poly(ethylene oxide) side chains. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010, 48, 1955-1959.	2.4	11
132	Functionalizing Microporous Membranes for Protein Purification and Protein Digestion. <i>Annual Review of Analytical Chemistry</i> , 2015, 8, 81-100.	2.8	11
133	Porous star-star polyelectrolyte multilayers for protein binding. <i>Polymer</i> , 2018, 138, 267-274.	1.8	11
134	Highly Rectifying Fluidic Diodes Based on Asymmetric Layer-by-Layer Nanofilms on Nanochannel Membranes. <i>Analytical Chemistry</i> , 2021, 93, 4291-4298.	3.2	11
135	Determination of the Serum Concentrations of the Monoclonal Antibodies Bevacizumab, Rituximab, and Panitumumab Using Porous Membranes Containing Immobilized Peptide Mimotopes. <i>Analytical Chemistry</i> , 2021, 93, 7562-7570.	3.2	11
136	Control of Teflon AF 2400 Permeability in a Liquid-Core Waveguide by an Ultra-Thin Crosslinked Polyamide Coating. <i>Applied Spectroscopy</i> , 2002, 56, 574-578.	1.2	9
137	Rapid screening and scale-up of ultracentrifugation-free, membrane-based procedures for purification of His-tagged membrane proteins. <i>Biotechnology Progress</i> , 2019, 35, e2859.	1.3	9
138	Quantitation of Trastuzumab and an Antibody to SARS-CoV-2 in Minutes Using Affinity Membranes in 96-Well Plates. <i>Analytical Chemistry</i> , 2022, 94, 884-891.	3.2	9
139	Membrane-Based Affinity Purification to Identify Target Proteins of a Small-Molecule Drug. <i>Analytical Chemistry</i> , 2020, 92, 11912-11920.	3.2	8
140	Enzyme-containing spin membranes for rapid digestion and characterization of single proteins. <i>Analyst</i> , 2018, 143, 3907-3917.	1.7	6
141	Wet Air Oxidation of Formic Acid Using Nanoparticle-Modified Polysulfone Hollow Fibers as Gas-Liquid Contactors. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 1440-1448.	4.0	5
142	Ion Separations Based on Spontaneously Arising Streaming Potentials in Rotating Isoporous Membranes. <i>Membranes</i> , 2022, 12, 631.	1.4	5
143	A Limiting Case of Constant Counterion Electrochemical Potentials in the Membrane for Examining Ion Transfer at Ion-Exchange Membranes and Patches. <i>Langmuir</i> , 2019, 35, 13243-13256.	1.6	4
144	Highly Selective Current-Induced Accumulation of Trace Ions at Micro/NanoPorous Interfaces. <i>Advanced Theory and Simulations</i> , 2019, 2, 1900009.	1.3	4

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145	Electro-osmo-dialysis through nanoporous layers physically conjugated to micro-perforated ion-exchange membranes: Highly selective accumulation of trace coions. <i>Journal of Membrane Science</i> , 2021, 622, 119022.	4.1	4
146	Molecular Approach to Surface Control of Chalcogenide Semiconductors. <i>Japanese Journal of Applied Physics</i> , 1993, 32, 730.	0.8	4
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153	Formation of Composite Membranes with Ultrathin Skins Using New Methods of Organic Film Formation: Gas-Selective Membranes. <i>ACS Symposium Series</i> , 2004, , 269-280.	0.5	1
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