Joseph B Schlenoff

List of Publications by Year
in descending order

139 papers	12,698 citations	28242 55 h-index	23514 111 g-index
182 all docs	182 docs citations	182 times ranked	9000 citing authors

#	Article	IF	Citations
1	Factors Controlling the Growth of Polyelectrolyte Multilayers. Macromolecules, 1999, 32, 8153-8160.	2.2	878
2	Zwitteration: Coating Surfaces with Zwitterionic Functionality to Reduce Nonspecific Adsorption. Langmuir, 2014, 30, 9625-9636.	1.6	727
3	Stability and Self-Exchange in Alkanethiol Monolayers. Journal of the American Chemical Society, 1995, 117, 12528-12536.	6.6	629
4	Mechanism of Polyelectrolyte Multilayer Growth:â€‰ Charge Overcompensation and Distribution. Macromolecules, 2001, 34, 592-598.	2.2	506
5	Swelling and Smoothing of Polyelectrolyte Multilayers by Salt. Langmuir, 2001, 17, 7725-7727.	1.6	494
6	Charge and Mass Balance in Polyelectrolyte Multilayers. Journal of the American Chemical Society, 1998, 120, 7626-7634.	6.6	480
7	Sprayed Polyelectrolyte Multilayers. Langmuir, 2000, 16, 9968-9969.	1.6	410
8	The Polyelectrolyte Complex/Coacervate Continuum. Macromolecules, 2014, 47, 3108-3116.	2.2	408
9	Polyelectrolyte Multilayers Containing a Weak Polyacid:Â Construction and Deconstruction. Macromolecules, 2001, 34, 3736-3740.	2.2	376
10	Driving Forces for Oppositely Charged Polyion Association in Aqueous Solutions: Enthalpic, Entropic, but Not Electrostatic. Journal of the American Chemical Society, 2016, 138, 980-990.	6.6	337
11	Ion Transport and Equilibria in Polyelectrolyte Multilayers. Langmuir, 2001, 17, 1184-1192.	1.6	282
12	Protein Adsorption Modalities on Polyelectrolyte Multilayers. Biomacromolecules, 2004, 5, 1089-1096.	2.6	237
13	Effect of Molecular Weight on the Construction of Polyelectrolyte Multilayers:Â Stripping versus Sticking. Langmuir, 2003, 19, 2491-2495.	1.6	225
14	Ideal Mixing in Polyelectrolyte Complexes and Multilayers:Â Entropy Driven Assembly. Journal of the American Chemical Society, 2006, 128, 13690-13691.	6.6	223
15	Zwitteration As an Alternative to PEGylation. Langmuir, 2011, 27, 6794-6800.	1.6	213
16	Multiple Membranes from â€œTrueâ€•Polyelectrolyte Multilayers. Journal of the American Chemical Society, 2001, 123, 5368-5369.	6.6	208
17	Ion-Pairing Strength in Polyelectrolyte Complexes. Macromolecules, 2017, 50, 1066-1074.	2.2	205
18	Asymmetric Growth in Polyelectrolyte Multilayers. Journal of the American Chemical Society, 2013, 135, 7636-7646.	6.6	194

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19	Salt-Induced Polyelectrolyte Interdiffusion in Multilayered Films:Â A Neutron Reflectivity Study. Macromolecules, 2005, 38, 8473-8480.	2.2	189
20	Hydration Contributions to Association in Polyelectrolyte Multilayers and Complexes: Visualizing Hydrophobicity. Journal of the American Chemical Society, 2008, 130, 13589-13597.	6.6	183
21	Hydrophobic and Ultrahydrophobic Multilayer Thin Films from Perfluorinated Polyelectrolytes. Angewandte Chemie - International Edition, 2005, 44, 782-785.	7.2	178
22	Water and Ion Pairing in Polyelectrolyte Multilayers. Langmuir, 1999, 15, 6621-6623.	1.6	164
23	Doping-Controlled Ion Diffusion in Polyelectrolyte Multilayers:â€‰ Mass Transport in Reluctant Exchangers. Journal of the American Chemical Society, 2003, 125, 4627-4636.	6.6	164
24	Saloplastics: Processing Compact Polyelectrolyte Complexes. Advanced Materials, 2015, 27, 2420-2432.	11.1	154
25	Aggregation-Resistant Water-Soluble Gold Nanoparticles. Langmuir, 2007, 23, 12799-12801.	1.6	150
26	Extruded Saloplastic Polyelectrolyte Complexes. Advanced Functional Materials, 2012, 22, 1923-1931.	7.8	143
27	Vascular Smooth Muscle Cells on Polyelectrolyte Multilayers:Â Hydrophobicity-Directed Adhesion and Growth. Biomacromolecules, 2005, 6, 161-167.	2.6	140
28	Zwitterion-Stabilized Silica Nanoparticles: Toward Nonstick Nano. Langmuir, 2010, 26, 16884-16889.	1.6	140
29	Mechanical Properties of Reversibly Cross-Linked Ultrathin Polyelectrolyte Complexes. Journal of the American Chemical Society, 2006, 128, 2940-2947.	6.6	132
30	Retrospective on the Future of Polyelectrolyte Multilayers. Langmuir, 2009, 25, 14007-14010.	1.6	131
31	On the Benefits of Rubbing Salt in the Cut: Selfâ€Healing of Saloplastic PAA/PAH Compact Polyelectrolyte Complexes. Advanced Materials, 2014, 26, 2547-2551.	11.1	113
32	Phase Separations in pH-Responsive Polyelectrolyte Multilayers:â€‰ Charge Extrusion versus Charge Expulsion. Langmuir, 2004, 20, 6026-6031.	1.6	111
33	Recent developments in the properties and applications of polyelectrolyte multilayers. Current Opinion in Colloid and Interface Science, 2006, 11, 324-329.	3.4	111
34	Compact Polyelectrolyte Complexes: â€œSaloplasticâ€•Candidates for Biomaterials. Biomacromolecules, 2009, 10, 2968-2975.	2.6	111
35	Polyelectrolyte Multilayers with Reversible Thermal Responsivity. Macromolecules, 2005, 38, 1300-1306.	2.2	107
36	â€œInternal pKa'sâ€•in Polyelectrolyte Multilayers:ÂCoupling Protons and Salt. Langmuir, 2002, 18, 8263-8265.	1.6	104

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37	Mechanical Properties of Osmotically Stressed Polyelectrolyte Complexes and Multilayers: Water as a Plasticizer. Macromolecules, 2012, 45, 9364-9372.	2.2	102
38	Counterions and Water in Polyelectrolyte Multilayers:Â A Tale of Two Polycations. Langmuir, 2007, 23, 896-901.	1.6	100
39	Thermal Transformations in Extruded Saloplastic Polyelectrolyte Complexes. Macromolecules, 2012, 45, 9759-9767.	2.2	99
40	Diffusion of Sites versus Polymers in Polyelectrolyte Complexes and Multilayers. Journal of the American Chemical Society, 2017, 139, 14656-14667.	6.6	92
41	Doping and Diffusion in an Extruded Saloplastic Polyelectrolyte Complex. Macromolecules, 2013, 46, 4089-4094.	2.2	86
42	Electrochromism and Electrocatalysis in Viologen Polyelectrolyte Multilayers. Journal of the Electrochemical Society, 1997, 144, L155-L158.	1.3	81
43	Static and Dynamic Solution Behavior of a Polyzwitterion Using a Hofmeister Salt Series. Macromolecules, 2017, 50, 4454-4464.	2.2	80
44	Ion Content of Polyelectrolyte Complex Coacervates and the Donnan Equilibrium. Macromolecules, 2019, 52, 9149-9159.	2.2	78
45	Roughness and Salt Annealing in a Polyelectrolyte Multilayer. Langmuir, 2013, 29, 11742-11750.	1.6	77
46	Sulfonation of polystyrene: Toward the â€œidealâ€•polyelectrolyte. Journal of Polymer Science Part A, 2013, 51, 2416-2424.	2.5	70
47	Control of Dynamics in Polyelectrolyte Complexes by Temperature and Salt. Macromolecules, 2019, 52, 1930-1941.	2.2	70
48	Corrosion Control Using Polyelectrolyte Multilayers. Electrochemical and Solid-State Letters, 2002, 5, B13.	2.2	69
49	Spin-Coated Polyelectrolyte Coacervate Films. ACS Applied Materials & Interfaces, 2015, 7, 13980-13986.	4.0	68
50	Fibronectin and Cell Attachment to Cell and Protein Resistant Polyelectrolyte Surfaces. Biomacromolecules, 2005, 6, 3252-3258.	2.6	67
51	Polyelectrolyte Complexes with pH-Tunable Solubility. Macromolecules, 2006, 39, 8145-8152.	2.2	67
52	Highly Efficient and Stable Perovskite Solar Cells Enabled by Lowâ€Cost Industrial Organic Pigment Coating. Angewandte Chemie - International Edition, 2021, 60, 2485-2492.	7.2	66
53	Saloplastic Macroporous Polyelectrolyte Complexes: Cartilage Mimics. Macromolecules, 2010, 43, 8656-8663.	2.2	63
54	Controlling Electroosmotic Flow in Microchannels with pH-Responsive Polyelectrolyte Multilayers. Langmuir, 2003, 19, 7829-7831.	1.6	60

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55	Compact Saloplastic Poly(Acrylic Acid)/Poly(Allylamine) Complexes: Kinetic Control Over Composition, Microstructure, and Mechanical Properties. Advanced Functional Materials, 2013, 23, 673-682.	7.8	60
56	Surface passivation of perovskite thin films by phosphonium halides for efficient and stable solar cells. Journal of Materials Chemistry A, 2020, 8, 2039-2046.	5.2	58
57	Scattering Neutrons along the Polyelectrolyte Complex/Coacervate Continuum. Macromolecules, 2018, 51, 4945-4955.	2.2	56
58	Homogeneity, Modulus, and Viscoelasticity of Polyelectrolyte Multilayers by Nanoindentation: Refining the Buildup Mechanism. Langmuir, 2012, 28, 6348-6355.	1.6	55
59	Smooth Muscle Cell Phenotype Modulation and Contraction on Native and Cross-Linked Polyelectrolyte Multilayers. Biomacromolecules, 2009, 10, 3062-3068.	2.6	53
60	Swelling and Inflation in Polyelectrolyte Complexes. Macromolecules, 2019, 52, 610-619.	2.2	49
61	Correlating the Compliance and Permeability of Photo-Cross-Linked Polyelectrolyte Multilayers. Langmuir, 2011, 27, 4756-4763.	1.6	48
62	Polymerization of a Thiol-Bound Styrene Monolayer. Langmuir, 1996, 12, 1944-1946.	1.6	45
63	Equilibrium Overcompensation in Polyelectrolyte Complexes. Macromolecules, 2017, 50, 3968-3978.	2.2	45
64	Ultraviscosity in Entangled Polyelectrolyte Complexes and Coacervates. Macromolecules, 2020, 53, 4234-4246.	2.2	44
65	Supramolecular Hydrogel Induced by Electrostatic Interactions between Polycation and Phosphorylated-Fmoc-Tripeptide. Chemistry of Materials, 2020, 32, 1946-1956.	3.2	43
66	Kinetics and multilayering in the adsorption of polyelectrolytes to a charged surface. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 943-947.	0.9	42
67	Ion Diffusion Coefficients Through Polyelectrolyte Multilayers: Temperature and Charge Dependence. Langmuir, 2011, 27, 8241-8247.	1.6	42
68	Cytotoxicity of Free versus Multilayered Polyelectrolytes. Biomacromolecules, 2011, 12, 4063-4070.	2.6	42
69	Elimination of ion-exchanged precursors to poly(phenylenevinylene). Macromolecules, 1991, 24, 6653-6659.	2.2	41
70	Three-Dimensional Nanoprinting via Scanning Probe Lithography-Delivered Layer-by-Layer Deposition. ACS Nano, 2016, 10, 5656-5662.	7.3	41
71	Water and the Glass Transition Temperature in a Polyelectrolyte Complex. ACS Macro Letters, 2017, 6, 1114-1118.	2.3	41
72	Toward Ion-Free Polyelectrolyte Multilayers: Cyclic Salt Annealing. Langmuir, 2015, 31, 5787-5795.	1.6	39

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73	Precision Doping of Polyelectrolyte Complexes: Insight on the Role of Ions. Macromolecules, 2020, 53, 5465-5474.	2.2	38
74	A Small-Angle Neutron Scattering Study of the Equilibrium Conformation of Polyelectrolytes in Stoichiometric Saloplastic Polyelectrolyte Complexes. Macromolecules, 2012, 45, 1016-1024.	2.2	37
75	Singleâ€•and Multicompartment Hollow Polyelectrolyte Complex Microcapsules by Oneâ€Step Spraying. Advanced Materials, 2015, 27, 2077-2082.	11.1	36
76	Adsorption of Thiol-Containing Copolymers onto Gold. Macromolecules, 1995, 28, 4290-4295.	2.2	35
77	Cell Adhesion and Proliferation on the â€œLivingâ€•Surface of a Polyelectrolyte Multilayer. Langmuir, 2016, 32, 5412-5421.	1.6	35
78	Dynamic Viscoelasticity in Polyelectrolyte Multilayers:Â Nanodamping. Chemistry of Materials, 2006, 18, 5768-5773.	3.2	34
79	Ion distribution in dry polyelectrolyte multilayers: a neutron reflectometry study. Soft Matter, 2018, 14, 1699-1708.	1.2	32
80	Site-specific perspective on interactions in polyelectrolyte complexes: Toward quantitative understanding. Journal of Chemical Physics, 2018, 149, 163314.	1.2	29
81	Ultrathin tunable ion conducting nanomembranes for encapsulation of sulfur cathodes. Energy and Environmental Science, 2013, 6, 3286.	15.6	26
82	One-Pot, Exchange-Free, Room-Temperature Synthesis of Sub-10 nm Aqueous, Noninteracting, and Stable Zwitterated Iron Oxide Nanoparticles. Langmuir, 2013, 29, 2572-2579.	1.6	24
83	Tough strained fibers of a polyelectrolyte complex: pretensioned polymers. RSC Advances, 2014, 4, 46675-46679.	1.7	23
84	Polyelectrolyte Multilayers, an Overview. , 0, , 1-46.		22
85	Intrinsic Properties of Polyelectrolyte Multilayer Membranes: Erasing the Memory of the Interface. Langmuir, 2018, 34, 3874-3883.	1.6	22
86	Glass Transitions in Hydrated Polyelectrolyte Complexes. Macromolecules, 2021, 54, 3822-3831.	2.2	22
87	Salt Resistance as a Measure of the Strength of Polyelectrolyte Complexation. Macromolecules, 2022, 55, 978-988.	2.2	22
88	Influence of Nonstoichiometry on the Viscoelastic Properties of a Polyelectrolyte Complex. Macromolecules, 2021, 54, 7890-7899.	2.2	21
89	Extruded Superparamagnetic Saloplastic Polyelectrolyte Nanocomposites. ACS Applied Materials & Interfaces, 2015, 7, 895-901.	4.0	20
90	Collective epithelial cell sheet adhesion and migration on polyelectrolyte multilayers with uniform and gradients of compliance. Experimental Cell Research, 2016, 346, 17-29.	1.2	18

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91	Water and Ion Transport through the Glass Transition in Polyelectrolyte Complexes. Chemistry of Materials, 2020, 32, 5994-6002.	3.2	18
92	Catalytic Saloplastics: Alkaline Phosphatase Immobilized and Stabilized in Compacted Polyelectrolyte Complexes. Advanced Functional Materials, 2013, 23, 4785-4792.	7.8	14
93	Antifouling Ion-Exchange Resins. ACS Applied Materials & Interfaces, 2018, 10, 41747-41756.	4.0	14
94	Rectified Ion Currents Through Ultrathin Polyelectrolyte Complex: Toward Chemical Transistors. Electrochemical and Solid-State Letters, 2004, 7, E45.	2.2	13
95	Quasi-Spherical Cell Clusters Induced by a Polyelectrolyte Multilayer. Langmuir, 2015, 31, 6436-6446.	1.6	13
96	Cell resistant zwitterionic polyelectrolyte coating promotes bacterial attachment: an adhesion contradiction. Biomaterials Science, 2016, 4, 689-698.	2.6	13
97	Engineering Thiolated Surfaces with Polyelectrolyte Multilayers. ACS Applied Materials & Interfaces, 2019, 11, 3524-3535.	4.0	13
98	Exploring the Heteroatom Effect on Polyelectrolyte Multilayer Assembly: The Neglected Polyoniums. Langmuir, 2011, 27, 3914-3919.	1.6	11
99	Aggregation resistant zwitterated superparamagnetic nanoparticles. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	11
100	Polyelectrolyte Complex Films from Blends Versus Copolymers. Macromolecules, 2019, 52, 7812-7820.	2.2	11
101	Highly Efficient and Stable Perovskite Solar Cells Enabled by Lowâ€Cost Industrial Organic Pigment Coating. Angewandte Chemie, 2021, 133, 2515-2522.	1.6	11
102	Layer-by-Layer Assembly of Nanoparticles and Nanocolloids: Intermolecular Interactions, Structure and Materials Perspectives. , 0, , 207-243.		10
103	Human mesenchymal stem cell osteoblast differentiation, <scp>ECM</scp> deposition, and biomineralization on <scp>PAH/PAA</scp> polyelectrolyte multilayers. Journal of Biomedical Materials Research - Part A, 2015, 103, 1818-1827.	2.1	10
104	Janus Nanofilms. Langmuir, 2016, 32, 3623-3629.	1.6	10
105	Supramolecular tripeptide self-assembly initiated at the surface of coacervates by polyelectrolyte exchange. Journal of Colloid and Interface Science, 2021, 588, 580-588.	5.0	10
106	Fundamentals of Polyelectrolyte Complexes in Solution and the Bulk. , 0, , 47-86.		9
107	Smart Capsules. , 0, , 363-392.		9
108	Stressful Surfaces: Cell Metabolism on a Poorly Adhesive Substrate. Langmuir, 2018, 34, 3119-3125.	1.6	9

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109	Self-Exchange of Polyelectrolyte in Multilayers: Diffusion as a Function of Salt Concentration and Temperature. Macromolecules, 2021, 54, 9522-9531.	2.2	9
110	Valence-induced jumps in coacervate properties. Science Advances, 2022, 8, eabm4783.	4.7	9
111	Ion Environments in Mn²⁺-Doped Polyelectrolyte Complexes: Dilute Magnetic Saloplastics. Journal of Physical Chemistry B, 2016, 120, 6771-6777.	1.2	7
112	100th Anniversary of the Langmuir Isotherm: Celebrating Ongoing Discoveries at Interfaces. Langmuir, 2019, 35, 1-2.	1.6	7
113	Surface sulfonates lock serum albumin into a â€œhardâ€•corona. Biomaterials Science, 2019, 7, 3213-3225.	2.6	6
114	Dissecting Dynamics Near the Glass Transition Using Polyelectrolyte Complexes. Macromolecules, 2021, 54, 3413-3422.	2.2	6
115	Flipped Polyelectrolyte Multilayer Films: Accessing the Buried Interface. Langmuir, 2015, 31, 5078-5085.	1.6	5
116	Polyelectrolyte complex films influence the formation of polycrystalline micro-structures. Soft Matter, 2018, 14, 3164-3170.	1.2	5
117	Toward Electrically Pumped Organic Diode Lasers: Electroluminescence of Proton Transfer Polymers. Materials Research Society Symposia Proceedings, 1997, 488, 545.	0.1	3
118	Charge Balance and Transport in Polyelectrolyte Multilayers. , 0, , 99-132.		3
119	Coated Colloids: Preparation, Characterization, Assembly and Utilization. , 0, , 331-362.		3
120	Macro-counterions in a precursor to poly(phenylene vinylene): Toward defect-free luminescent films. Polymer, 2010, 51, 2993-2997.	1.8	3
121	The Thiouronium Group for Ultrastrong Pairing Interactions between Polyelectrolytes. Journal of Physical Chemistry B, 2020, 124, 10832-10840.	1.2	3
122	Hydrophobic Versus Hydrophilic Polyelectrolyte Multilayers for Emissive Europium Films. ACS Applied Polymer Materials, 2021, 3, 691-698.	2.0	3
123	pH-Controlled Fabrication of Polyelectrolyte Multilayers: Assembly and Applications. , 0, , 133-154.		2
124	Recent Progress in the Surface Solâ€“Gel Process and Protein Multilayers. , 0, , 155-175.		2
125	Chemistry Directed Deposition via Electrostatic and Secondary Interactions: A Nonlithographic Approach to Patterned Polyelectrolyte Multilayer Systems. , 0, , 271-299.		2
126	Layered Nanoarchitectures Based on Electro- and Photo-Active Building Blocks. , 0, , 301-330.		2

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127	Novel Multilayer Thin Films: Hierarchic Layer-by-Layer (Hi-LbL) Assemblies. , 2012, , 69-81.		2
128	Layer-by-Layer Assembly: From Conventional to Unconventional Methods. , 2012, , 43-67.		2
129	LbL Assemblies Using van der Waals or Affinity Interactions and Their Applications. , 2012, , 99-133.		2
130	Multilayers on Solid Planar Substrates: From Structure to Function. , 0, , 393-426.		1
131	Functional Layer-by-Layer Assemblies with Photo- and Electrochemical Response and Selective Transport of Small Molecules and Ions. , 0, , 427-460.		1
132	Controlling the Ion-Permeability of Layered Polyelectrolyte Films and Membranes. , 0, , 487-510.		1
133	Record Properties of Layer-by-Layer Assembled Composites. , 2012, , 573-593.		1
134	Coupling Chemistry and Hybridization of DNA Molecules on Layer-by-Layer Modified Colloids. , 2012, , 711-729.		1
135	Long-Range Electron Transfer through Ultrathin Polyelectrolyte Complex Films: A Hopping Model. Journal of Physical Chemistry C, 2021, 125, 22797-22808.	1.5	1
136	Polyelectrolyte Adsorption and Multilayer Formation. , 0, , 87-97.		0
137	Internally Structured Polyelectrolyte Multilayers. , 0, , 177-205.		0
138	Self-Assembly and Characterization of Electro-Optic Materials. , 0, , 461-486.		0
139	Layer-by-Layer Self-Assembled Polyelectrolytes and Nanoplatelets. , 0, , 245-269.		0