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	Salt Resistance as a Measure of the Strength of Polyelectrolyte Complexation. Macromolecules, 2022, 55, 978-988.	2.2	22
2	Valence-induced jumps in coacervate properties. Science Advances, 2022, 8, eabm4783.	4.7	9
3	Highly Efficient and Stable Perovskite Solar Cells Enabled by Lowâ€Cost Industrial Organic Pigment Coating. Angewandte Chemie, 2021, 133, 2515-2522.	1.6	11
4	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
5	Hydrophobic Versus Hydrophilic Polyelectrolyte Multilayers for Emissive Europium Films. ACS Applied Polymer Materials, 2021, 3, 691-698.	2.0	3
6	Dissecting Dynamics Near the Glass Transition Using Polyelectrolyte Complexes. Macromolecules, 2021, 54, 3413-3422.	2.2	6
7	Glass Transitions in Hydrated Polyelectrolyte Complexes. Macromolecules, 2021, 54, 3822-3831.	2.2	22
8	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
9	Influence of Nonstoichiometry on the Viscoelastic Properties of a Polyelectrolyte Complex. Macromolecules, 2021, 54, 7890-7899.	2.2	21
10	Long-Range Electron Transfer through Ultrathin Polyelectrolyte Complex Films: A Hopping Model. Journal of Physical Chemistry C, 2021, 125, 22797-22808.	1.5	1
11	Self-Exchange of Polyelectrolyte in Multilayers: Diffusion as a Function of Salt Concentration and Temperature. Macromolecules, 2021, 54, 9522-9531.	2.2	9
12	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
13	The Thiouronium Group for Ultrastrong Pairing Interactions between Polyelectrolytes. Journal of Physical Chemistry B, 2020, 124, 10832-10840.	1.2	3
14	Ultraviscosity in Entangled Polyelectrolyte Complexes and Coacervates. Macromolecules, 2020, 53, 4234-4246.	2.2	44
15	Precision Doping of Polyelectrolyte Complexes: Insight on the Role of Ions. Macromolecules, 2020, 53, 5465-5474.	2.2	38
16	Water and Ion Transport through the Glass Transition in Polyelectrolyte Complexes. Chemistry of Materials, 2020, 32, 5994-6002.	3.2	18
17	Supramolecular Hydrogel Induced by Electrostatic Interactions between Polycation and Phosphorylated-Fmoc-Tripeptide. Chemistry of Materials, 2020, 32, 1946-1956.	3.2	43
18	Polyelectrolyte Complex Films from Blends Versus Copolymers. Macromolecules, 2019, 52, 7812-7820.	2.2	11

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19	Surface sulfonates lock serum albumin into a â€œhardâ€•corona. Biomaterials Science, 2019, 7, 3213-3225.	2.6	6
20	Control of Dynamics in Polyelectrolyte Complexes by Temperature and Salt. Macromolecules, 2019, 52, 1930-1941.	2.2	70
21	Ion Content of Polyelectrolyte Complex Coacervates and the Donnan Equilibrium. Macromolecules, 2019, 52, 9149-9159.	2.2	78
22	100th Anniversary of the Langmuir Isotherm: Celebrating Ongoing Discoveries at Interfaces. Langmuir, 2019, 35, 1-2.	1.6	7
23	Swelling and Inflation in Polyelectrolyte Complexes. Macromolecules, 2019, 52, 610-619.	2.2	49
24	Engineering Thiolated Surfaces with Polyelectrolyte Multilayers. ACS Applied Materials & Interfaces, 2019, 11, 3524-3535.	4.0	13
25	Stressful Surfaces: Cell Metabolism on a Poorly Adhesive Substrate. Langmuir, 2018, 34, 3119-3125.	1.6	9
26	Polyelectrolyte complex films influence the formation of polycrystalline micro-structures. Soft Matter, 2018, 14, 3164-3170.	1.2	5
27	Ion distribution in dry polyelectrolyte multilayers: a neutron reflectometry study. Soft Matter, 2018, 14, 1699-1708.	1.2	32
28	Intrinsic Properties of Polyelectrolyte Multilayer Membranes: Erasing the Memory of the Interface. Langmuir, 2018, 34, 3874-3883.	1.6	22
29	Antifouling Ion-Exchange Resins. ACS Applied Materials & Interfaces, 2018, 10, 41747-41756.	4.0	14
30	Site-specific perspective on interactions in polyelectrolyte complexes: Toward quantitative understanding. Journal of Chemical Physics, 2018, 149, 163314.	1.2	29
31	Scattering Neutrons along the Polyelectrolyte Complex/Coacervate Continuum. Macromolecules, 2018, 51, 4945-4955.	2.2	56
32	Ion-Pairing Strength in Polyelectrolyte Complexes. Macromolecules, 2017, 50, 1066-1074.	2.2	205
33	Equilibrium Overcompensation in Polyelectrolyte Complexes. Macromolecules, 2017, 50, 3968-3978.	2.2	45
34	Static and Dynamic Solution Behavior of a Polyzwitterion Using a Hofmeister Salt Series. Macromolecules, 2017, 50, 4454-4464.	2.2	80
35	Diffusion of Sites versus Polymers in Polyelectrolyte Complexes and Multilayers. Journal of the American Chemical Society, 2017, 139, 14656-14667.	6.6	92
36	Water and the Glass Transition Temperature in a Polyelectrolyte Complex. ACS Macro Letters, 2017, 6, 1114-1118.	2.3	41

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37	Ion Environments in Mn²⁺-Doped Polyelectrolyte Complexes: Dilute Magnetic Saloplastics. Journal of Physical Chemistry B, 2016, 120, 6771-6777.	1.2	7
38	Cell Adhesion and Proliferation on the â€œLivingâ€•Surface of a Polyelectrolyte Multilayer. Langmuir, 2016, 32, 5412-5421.	1.6	35
39	Three-Dimensional Nanoprinting via Scanning Probe Lithography-Delivered Layer-by-Layer Deposition. ACS Nano, 2016, 10, 5656-5662.	7.3	41
40	Janus Nanofilms. Langmuir, 2016, 32, 3623-3629.	1.6	10
41	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
42	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
43	Cell resistant zwitterionic polyelectrolyte coating promotes bacterial attachment: an adhesion contradiction. Biomaterials Science, 2016, 4, 689-698.	2.6	13
44	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
45	Quasi-Spherical Cell Clusters Induced by a Polyelectrolyte Multilayer. Langmuir, 2015, 31, 6436-6446.	1.6	13
46	Saloplastics: Processing Compact Polyelectrolyte Complexes. Advanced Materials, 2015, 27, 2420-2432.	11.1	154
47	Singleâ€•and Multicompartment Hollow Polyelectrolyte Complex Microcapsules by Oneâ€Step Spraying. Advanced Materials, 2015, 27, 2077-2082.	11.1	36
48	Extruded Superparamagnetic Saloplastic Polyelectrolyte Nanocomposites. ACS Applied Materials & Interfaces, 2015, 7, 895-901.	4.0	20
49	Toward Ion-Free Polyelectrolyte Multilayers: Cyclic Salt Annealing. Langmuir, 2015, 31, 5787-5795.	1.6	39
50	Spin-Coated Polyelectrolyte Coacervate Films. ACS Applied Materials & Interfaces, 2015, 7, 13980-13986.	4.0	68
51	Flipped Polyelectrolyte Multilayer Films: Accessing the Buried Interface. Langmuir, 2015, 31, 5078-5085.	1.6	5
52	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
53	Zwitteration: Coating Surfaces with Zwitterionic Functionality to Reduce Nonspecific Adsorption. Langmuir, 2014, 30, 9625-9636.	1.6	727
54	Tough strained fibers of a polyelectrolyte complex: pretensioned polymers. RSC Advances, 2014, 4, 46675-46679.	1.7	23

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55	The Polyelectrolyte Complex/Coacervate Continuum. Macromolecules, 2014, 47, 3108-3116.	2.2	408
56	Roughness and Salt Annealing in a Polyelectrolyte Multilayer. Langmuir, 2013, 29, 11742-11750.	1.6	77
57	Ultrathin tunable ion conducting nanomembranes for encapsulation of sulfur cathodes. Energy and Environmental Science, 2013, 6, 3286.	15.6	26
58	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
59	Doping and Diffusion in an Extruded Saloplastic Polyelectrolyte Complex. Macromolecules, 2013, 46, 4089-4094.	2.2	86
60	Sulfonation of polystyrene: Toward the â€œidealâ€•polyelectrolyte. Journal of Polymer Science Part A, 2013, 51, 2416-2424.	2.5	70
61	Catalytic Saloplastics: Alkaline Phosphatase Immobilized and Stabilized in Compacted Polyelectrolyte Complexes. Advanced Functional Materials, 2013, 23, 4785-4792.	7.8	14
62	Asymmetric Growth in Polyelectrolyte Multilayers. Journal of the American Chemical Society, 2013, 135, 7636-7646.	6.6	194
63	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
64	Mechanical Properties of Osmotically Stressed Polyelectrolyte Complexes and Multilayers: Water as a Plasticizer. Macromolecules, 2012, 45, 9364-9372.	2.2	102
65	Thermal Transformations in Extruded Saloplastic Polyelectrolyte Complexes. Macromolecules, 2012, 45, 9759-9767.	2.2	99
66	Novel Multilayer Thin Films: Hierarchic Layer-by-Layer (Hi-LbL) Assemblies. , 2012, , 69-81.		2
67	Homogeneity, Modulus, and Viscoelasticity of Polyelectrolyte Multilayers by Nanoindentation: Refining the Buildup Mechanism. Langmuir, 2012, 28, 6348-6355.	1.6	55
68	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
69	Record Properties of Layer-by-Layer Assembled Composites. , 2012, , 573-593.		1
70	Coupling Chemistry and Hybridization of DNA Molecules on Layer-by-Layer Modified Colloids. , 2012, , 711-729.		1
71	Layer-by-Layer Assembly: From Conventional to Unconventional Methods. , 2012, , 43-67.		2
72	LbL Assemblies Using van der Waals or Affinity Interactions and Their Applications. , 2012, , 99-133.		2

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73	Extruded Saloplastic Polyelectrolyte Complexes. Advanced Functional Materials, 2012, 22, 1923-1931.	7.8	143
74	Aggregation resistant zwitterated superparamagnetic nanoparticles. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	11
75	Exploring the Heteroatom Effect on Polyelectrolyte Multilayer Assembly: The Neglected Polyoniums. Langmuir, 2011, 27, 3914-3919.	1.6	11
76	Zwitteration As an Alternative to PEGylation. Langmuir, 2011, 27, 6794-6800.	1.6	213
77	Correlating the Compliance and Permeability of Photo-Cross-Linked Polyelectrolyte Multilayers. Langmuir, 2011, 27, 4756-4763.	1.6	48
78	Ion Diffusion Coefficients Through Polyelectrolyte Multilayers: Temperature and Charge Dependence. Langmuir, 2011, 27, 8241-8247.	1.6	42
79	Cytotoxicity of Free versus Multilayered Polyelectrolytes. Biomacromolecules, 2011, 12, 4063-4070.	2.6	42
80	Saloplastic Macroporous Polyelectrolyte Complexes: Cartilage Mimics. Macromolecules, 2010, 43, 8656-8663.	2.2	63
81	Macro-counterions in a precursor to poly(phenylene vinylene): Toward defect-free luminescent films. Polymer, 2010, 51, 2993-2997.	1.8	3
82	Zwitterion-Stabilized Silica Nanoparticles: Toward Nonstick Nano. Langmuir, 2010, 26, 16884-16889.	1.6	140
83	Compact Polyelectrolyte Complexes: â€œSaloplasticâ€•Candidates for Biomaterials. Biomacromolecules, 2009, 10, 2968-2975.	2.6	111
84	Retrospective on the Future of Polyelectrolyte Multilayers. Langmuir, 2009, 25, 14007-14010.	1.6	131
85	Smooth Muscle Cell Phenotype Modulation and Contraction on Native and Cross-Linked Polyelectrolyte Multilayers. Biomacromolecules, 2009, 10, 3062-3068.	2.6	53
86	Hydration Contributions to Association in Polyelectrolyte Multilayers and Complexes: Visualizing Hydrophobicity. Journal of the American Chemical Society, 2008, 130, 13589-13597.	6.6	183
87	Aggregation-Resistant Water-Soluble Gold Nanoparticles. Langmuir, 2007, 23, 12799-12801.	1.6	150
88	Counterions and Water in Polyelectrolyte Multilayers:Â A Tale of Two Polycations. Langmuir, 2007, 23, 896-901.	1.6	100
89	Dynamic Viscoelasticity in Polyelectrolyte Multilayers:Â Nanodamping. Chemistry of Materials, 2006, 18, 5768-5773.	3.2	34
90	Mechanical Properties of Reversibly Cross-Linked Ultrathin Polyelectrolyte Complexes. Journal of the American Chemical Society, 2006, 128, 2940-2947.	6.6	132

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91	Polyelectrolyte Complexes with pH-Tunable Solubility. Macromolecules, 2006, 39, 8145-8152.	2.2	67
92	Ideal Mixing in Polyelectrolyte Complexes and Multilayers:Â Entropy Driven Assembly. Journal of the American Chemical Society, 2006, 128, 13690-13691.	6.6	223
93	Recent developments in the properties and applications of polyelectrolyte multilayers. Current Opinion in Colloid and Interface Science, 2006, 11, 324-329.	3.4	111
94	Hydrophobic and Ultrahydrophobic Multilayer Thin Films from Perfluorinated Polyelectrolytes. Angewandte Chemie - International Edition, 2005, 44, 782-785.	7.2	178
95	Vascular Smooth Muscle Cells on Polyelectrolyte Multilayers:Â Hydrophobicity-Directed Adhesion and Growth. Biomacromolecules, 2005, 6, 161-167.	2.6	140
96	Salt-Induced Polyelectrolyte Interdiffusion in Multilayered Films:Â A Neutron Reflectivity Study. Macromolecules, 2005, 38, 8473-8480.	2.2	189
97	Polyelectrolyte Multilayers with Reversible Thermal Responsivity. Macromolecules, 2005, 38, 1300-1306.	2.2	107
98	Fibronectin and Cell Attachment to Cell and Protein Resistant Polyelectrolyte Surfaces. Biomacromolecules, 2005, 6, 3252-3258.	2.6	67
99	Rectified Ion Currents Through Ultrathin Polyelectrolyte Complex: Toward Chemical Transistors. Electrochemical and Solid-State Letters, 2004, 7, E45.	2.2	13
100	Phase Separations in pH-Responsive Polyelectrolyte Multilayers:â€‰ Charge Extrusion versus Charge Expulsion. Langmuir, 2004, 20, 6026-6031.	1.6	111
101	Protein Adsorption Modalities on Polyelectrolyte Multilayers. Biomacromolecules, 2004, 5, 1089-1096.	2.6	237
102	Effect of Molecular Weight on the Construction of Polyelectrolyte Multilayers:Â Stripping versus Sticking. Langmuir, 2003, 19, 2491-2495.	1.6	225
103	Controlling Electroosmotic Flow in Microchannels with pH-Responsive Polyelectrolyte Multilayers. Langmuir, 2003, 19, 7829-7831.	1.6	60
104	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
105	Corrosion Control Using Polyelectrolyte Multilayers. Electrochemical and Solid-State Letters, 2002, 5, B13.	2.2	69
106	â€œInternal pKa'sâ€•in Polyelectrolyte Multilayers:ÂCoupling Protons and Salt. Langmuir, 2002, 18, 8263-8265.	1.6	104
107	Swelling and Smoothing of Polyelectrolyte Multilayers by Salt. Langmuir, 2001, 17, 7725-7727.	1.6	494
108	Polyelectrolyte Multilayers Containing a Weak Polyacid:Â Construction and Deconstruction. Macromolecules, 2001, 34, 3736-3740.	2.2	376

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109	Ion Transport and Equilibria in Polyelectrolyte Multilayers. Langmuir, 2001, 17, 1184-1192.	1.6	282
110	Multiple Membranes from â€œTrueâ€•Polyelectrolyte Multilayers. Journal of the American Chemical Society, 2001, 123, 5368-5369.	6.6	208
111	Mechanism of Polyelectrolyte Multilayer Growth:â€‰ Charge Overcompensation and Distribution. Macromolecules, 2001, 34, 592-598.	2.2	506
112	Sprayed Polyelectrolyte Multilayers. Langmuir, 2000, 16, 9968-9969.	1.6	410
113	Water and Ion Pairing in Polyelectrolyte Multilayers. Langmuir, 1999, 15, 6621-6623.	1.6	164
114	Factors Controlling the Growth of Polyelectrolyte Multilayers. Macromolecules, 1999, 32, 8153-8160.	2.2	878
115	Charge and Mass Balance in Polyelectrolyte Multilayers. Journal of the American Chemical Society, 1998, 120, 7626-7634.	6.6	480
116	Electrochromism and Electrocatalysis in Viologen Polyelectrolyte Multilayers. Journal of the Electrochemical Society, 1997, 144, L155-L158.	1.3	81
117	Toward Electrically Pumped Organic Diode Lasers: Electroluminescence of Proton Transfer Polymers. Materials Research Society Symposia Proceedings, 1997, 488, 545.	0.1	3
118	Polymerization of a Thiol-Bound Styrene Monolayer. Langmuir, 1996, 12, 1944-1946.	1.6	45
119	Kinetics and multilayering in the adsorption of polyelectrolytes to a charged surface. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 943-947.	0.9	42
120	Adsorption of Thiol-Containing Copolymers onto Gold. Macromolecules, 1995, 28, 4290-4295.	2.2	35
121	Stability and Self-Exchange in Alkanethiol Monolayers. Journal of the American Chemical Society, 1995, 117, 12528-12536.	6.6	629
122	Elimination of ion-exchanged precursors to poly(phenylenevinylene). Macromolecules, 1991, 24, 6653-6659.	2.2	41
123	Fundamentals of Polyelectrolyte Complexes in Solution and the Bulk. , 0, , 47-86.		9
124	Multilayers on Solid Planar Substrates: From Structure to Function. , 0, , 393-426.		1
125	Polyelectrolyte Adsorption and Multilayer Formation. , 0, , 87-97.		0
126	Charge Balance and Transport in Polyelectrolyte Multilayers. , 0, , 99-132.		3

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127	Polyelectrolyte Multilayers, an Overview. , 0, , 1-46.		22
128	pH-Controlled Fabrication of Polyelectrolyte Multilayers: Assembly and Applications. , 0, , 133-154.		2
129	Recent Progress in the Surface Solâ€“Gel Process and Protein Multilayers. , 0, , 155-175.		2
130	Internally Structured Polyelectrolyte Multilayers. , 0, , 177-205.		0
131	Chemistry Directed Deposition via Electrostatic and Secondary Interactions: A Nonlithographic Approach to Patterned Polyelectrolyte Multilayer Systems. , 0, , 271-299.		2
132	Layered Nanoarchitectures Based on Electro- and Photo-Active Building Blocks. , 0, , 301-330.		2
133	Coated Colloids: Preparation, Characterization, Assembly and Utilization. , 0, , 331-362.		3
134	Smart Capsules. , 0, , 363-392.		9
135	Functional Layer-by-Layer Assemblies with Photo- and Electrochemical Response and Selective Transport of Small Molecules and Ions. , 0, , 427-460.		1
136	Self-Assembly and Characterization of Electro-Optic Materials. , 0, , 461-486.		0
137	Layer-by-Layer Self-Assembled Polyelectrolytes and Nanoplatelets. , 0, , 245-269.		0
138	Layer-by-Layer Assembly of Nanoparticles and Nanocolloids: Intermolecular Interactions, Structure and Materials Perspectives. , 0, , 207-243.		10
139	Controlling the Ion-Permeability of Layered Polyelectrolyte Films and Membranes. , 0, , 487-510.		1