List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2329096/publications.pdf Version: 2024-02-01



SHAOVILIANC

#	Article	IF	CITATIONS
1	High-Performance Chain Scissionable Resists for Extreme Ultraviolet Lithography: Discovery of the Photoacid Generator Structure and Mechanism. Chemistry of Materials, 2022, 34, 6170-6181.	3.2	11
2	High-strength and fibrous capsule–resistant zwitterionic elastomers. Science Advances, 2021, 7, .	4.7	82
3	Combination of polycarboxybetaine coating and factor XII inhibitor reduces clot formation while preserving normal tissue coagulation during extracorporeal life support. Biomaterials, 2021, 272, 120778.	5.7	28
4	High‣trength and Nonfouling Zwitterionic Tripleâ€Network Hydrogel in Saline Environments. Advanced Materials, 2021, 33, e2102479.	11.1	58
5	Strong Surface Hydration and Salt Resistant Mechanism of a New Nonfouling Zwitterionic Polymer Based on Protein Stabilizer TMAO. Journal of the American Chemical Society, 2021, 143, 16786-16795.	6.6	78
6	Elucidating Molecular Design Principles for Charge-Alternating Peptides. Biomacromolecules, 2020, 21, 435-443.	2.6	14
7	Surface hydration for antifouling and bio-adhesion. Chemical Science, 2020, 11, 10367-10377.	3.7	91
8	Zwitterionic Peptide Cloak Mimics Protein Surfaces for Protein Protection. Angewandte Chemie - International Edition, 2020, 59, 22378-22381.	7.2	38
9	Zwitterionic Peptide Cloak Mimics Protein Surfaces for Protein Protection. Angewandte Chemie, 2020, 132, 22564-22567.	1.6	2
10	Photoreactive Carboxybetaine Copolymers Impart Biocompatibility and Inhibit Plasticizer Leaching on Polyvinyl Chloride. ACS Applied Materials & Interfaces, 2020, 12, 41026-41037.	4.0	24
11	Zwitterionic Nanoconjugate Enables Safe and Efficient Lymphatic Drug Delivery. Nano Letters, 2020, 20, 4693-4699.	4.5	22
12	De novo design of functional zwitterionic biomimetic material for immunomodulation. Science Advances, 2020, 6, eaba0754.	4.7	54
13	Zwitterionic Polymer Conjugated Glucagon-like Peptide-1 for Prolonged Glycemic Control. Bioconjugate Chemistry, 2020, 31, 1812-1819.	1.8	13
14	Enhanced pulmonary systemic delivery of protein drugs via zwitterionic polymer conjugation. Journal of Controlled Release, 2020, 322, 170-176.	4.8	28
15	Nonfouling Surfaces. , 2020, , 507-513.		8
16	Strong Hydration at the Poly(ethylene glycol) Brush/Albumin Solution Interface. Langmuir, 2020, 36, 2030-2036.	1.6	23
17	Zwitterionic carboxybetaine polymers extend the shelf-life of human platelets. Acta Biomaterialia, 2020, 109, 51-60.	4.1	25
18	Protecting Enzymatic Activity via Zwitterionic Nanocapsulation for the Removal of Phenol Compound from Wastewater. Langmuir, 2019, 35, 1858-1863.	1.6	28

#	Article	IF	CITATIONS
19	Zwitterionic Hydrogels Based on a Degradable Disulfide Carboxybetaine Cross-Linker. Langmuir, 2019, 35, 1864-1871.	1.6	31
20	In situ real-time tracing of hierarchical targeting nanostructures in drug resistant tumors using diffuse fluorescence tomography. Chemical Science, 2019, 10, 7878-7886.	3.7	17
21	Trimethylamine <i>N</i> -oxide–derived zwitterionic polymers: A new class of ultralow fouling bioinspired materials. Science Advances, 2019, 5, eaaw9562.	4.7	149
22	Zwitterionic poly-carboxybetaine coating reduces artificial lung thrombosis in sheep and rabbits. Acta Biomaterialia, 2019, 92, 71-81.	4.1	47
23	Expansion of primitive human hematopoietic stem cells by culture in a zwitterionic hydrogel. Nature Medicine, 2019, 25, 1566-1575.	15.2	162
24	Zwitterionic Interfaces: Concepts and Emerging Applications Special Issue. Langmuir, 2019, 35, 1055-1055.	1.6	4
25	Nanoscavenger provides long-term prophylactic protection against nerve agents in rodents. Science Translational Medicine, 2019, 11, .	5.8	56
26	Proactively Reducing Antiâ€Drug Antibodies via Immunomodulatory Bioconjugation. Angewandte Chemie, 2019, 131, 2455-2458.	1.6	0
27	Proactively Reducing Antiâ€Drug Antibodies via Immunomodulatory Bioconjugation. Angewandte Chemie - International Edition, 2019, 58, 2433-2436.	7.2	10
28	Absolute Orientations of Water Molecules at Zwitterionic Polymer Interfaces and Interfacial Dynamics after Salt Exposure. Langmuir, 2019, 35, 1327-1334.	1.6	52
29	Evaluating the Effect of Shear Stress on Graft-To Zwitterionic Polycarboxybetaine Coating Stability Using a Flow Cell. Langmuir, 2019, 35, 1984-1988.	1.6	15
30	Ultralow Fouling and Functionalizable Surface Chemistry Based on Zwitterionic Carboxybetaine Random Copolymers. Langmuir, 2019, 35, 1544-1551.	1.6	60
31	Protein Encapsulation: Zwitterionic Nanocages Overcome the Efficacy Loss of Biologic Drugs (Adv.) Tj ETQq1 1 (0.784314 r 11.1	rgBJT /Overloc
32	Zwitterionic Nanocages Overcome the Efficacy Loss of Biologic Drugs. Advanced Materials, 2018, 30, e1705728.	11.1	59
33	Mitigation of Inflammatory Immune Responses with Hydrophilic Nanoparticles. Angewandte Chemie, 2018, 130, 4617-4621.	1.6	10
34	Mitigation of Inflammatory Immune Responses with Hydrophilic Nanoparticles. Angewandte Chemie - International Edition, 2018, 57, 4527-4531.	7.2	66
35	Polypeptides with High Zwitterion Density for Safe and Effective Therapeutics. Angewandte Chemie - International Edition, 2018, 57, 7743-7747.	7.2	64
36	Polypeptides with High Zwitterion Density for Safe and Effective Therapeutics. Angewandte Chemie, 2018, 130, 7869-7873.	1.6	12

#	Article	IF	CITATIONS
37	A Chromatin-Mimetic Nanomedicine for Therapeutic Tolerance Induction. ACS Nano, 2018, 12, 12004-12014.	7.3	11
38	Self-Healing Zwitterionic Microgel Constructs: Self-Healing Zwitterionic Microgels as a Versatile Platform for Malleable Cell Constructs and Injectable Therapies (Adv. Mater. 39/2018). Advanced Materials, 2018, 30, 1870291.	11.1	5
39	Expressing a Monomeric Organophosphate Hydrolase as an EK Fusion Protein. Bioconjugate Chemistry, 2018, 29, 3686-3690.	1.8	9
40	Zwitterlation mitigates protein bioactivity loss <i>in vitro</i> over PEGylation. Chemical Science, 2018, 9, 8561-8566.	3.7	36
41	Revealing the Immunogenic Risk of Polymers. Angewandte Chemie, 2018, 130, 14069-14072.	1.6	6
42	Selfâ€Healing Zwitterionic Microgels as a Versatile Platform for Malleable Cell Constructs and Injectable Therapies. Advanced Materials, 2018, 30, e1803087.	11.1	94
43	Effect of Surface Hydration on Antifouling Properties of Mixed Charged Polymers. Langmuir, 2018, 34, 6538-6545.	1.6	53
44	Classifying antimicrobial and multifunctional peptides with Bayesian network models. Peptide Science, 2018, 110, e24079.	1.0	15
45	Revealing the Immunogenic Risk of Polymers. Angewandte Chemie - International Edition, 2018, 57, 13873-13876.	7.2	84
46	Achieving Ultralow Fouling under Ambient Conditions via Surface-Initiated ARGET ATRP of Carboxybetaine. ACS Applied Materials & amp; Interfaces, 2017, 9, 9255-9259.	4.0	79
47	Sterilization, hydration-dehydration and tube fabrication of zwitterionic hydrogels. Biointerphases, 2017, 12, 02C411.	0.6	11
48	A Coatingâ€Free Nonfouling Polymeric Elastomer. Advanced Materials, 2017, 29, 1700617.	11.1	59
49	Preface to the Tribute to Keith E. Gubbins, Pioneer in the Theory of Liquids Special Issue. Langmuir, 2017, 33, 11095-11101.	1.6	3
50	Poly(ectoine) Hydrogels Resist Nonspecific Protein Adsorption. Langmuir, 2017, 33, 11264-11269.	1.6	19
51	Paper Sensor Coated with a Poly(carboxybetaine)-Multiple DOPA Conjugate via Dip-Coating for Biosensing in Complex Media. Analytical Chemistry, 2017, 89, 10999-11004.	3.2	49
52	Redefining the Protein–Protein Interface: Coarse Graining and Combinatorics for an Improved Understanding of Amino Acid Contributions to the Protein–Protein Binding Affinity. Langmuir, 2017, 33, 11511-11517.	1.6	3
53	Sensitive and Quantitative Detection of Anti-Poly(ethylene glycol) (PEG) Antibodies by Methoxy-PEG-Coated Surface Plasmon Resonance Sensors. Analytical Chemistry, 2017, 89, 8217-8222.	3.2	20
54	Stable and Functionalizable Quantum Dots with a Thin Zwitterionic Carboxybetaine Layer. Langmuir, 2017, 33, 8784-8789.	1.6	11

#	Article	IF	CITATIONS
55	Anti-PEG antibodies in the clinic: Current issues and beyond PEGylation. Journal of Controlled Release, 2016, 244, 184-193.	4.8	465
56	Multimodal, Biomaterialâ€Focused Anticoagulation via Superlow Fouling Zwitterionic Functional Groups Coupled with Antiâ€Platelet Nitric Oxide Release. Advanced Materials Interfaces, 2016, 3, 1500646.	1.9	32
57	Directed neural stem cell differentiation on polyaniline-coated high strength hydrogels. Materials Today Chemistry, 2016, 1-2, 15-22.	1.7	42
58	Ultra-low fouling and high antibody loading zwitterionic hydrogel coatings for sensing and detection in complex media. Acta Biomaterialia, 2016, 40, 31-37.	4.1	77
59	Achieving low-fouling surfaces with oppositely charged polysaccharides via LBL assembly. Acta Biomaterialia, 2016, 40, 16-22.	4.1	20
60	Butyrylcholinesterase nanocapsule as a long circulating bioscavenger with reduced immune response. Journal of Controlled Release, 2016, 230, 73-78.	4.8	36
61	Hierarchical design of a polymeric nanovehicle for efficient tumor regression and imaging. Nanoscale, 2016, 8, 9318-9327.	2.8	13
62	Superhydrophilicity and spontaneous spreading on zwitterionic surfaces: carboxybetaine and sulfobetaine. RSC Advances, 2016, 6, 24827-24834.	1.7	40
63	Low-fouling electrospun PLLA films modified with zwitterionic poly(sulfobetaine) Tj ETQq1 1 0.784314 rgBT /Ov	verlock 10 4.1	Tf 50 422 Td
64	Hierarchical zwitterionic modification of a SERS substrate enables real-time drug monitoring in blood plasma. Nature Communications, 2016, 7, 13437.	5.8	156
65	Development of antithrombotic nanoconjugate blocking integrin α2β1-collagen interactions. Scientific Reports, 2016, 6, 26292.	1.6	6
66	Zwitterionic polymer-protein conjugates reduce polymer-specific antibody response. Nano Today, 2016, 11, 285-291.	6.2	89
67	Molecular level studies on interfacial hydration of zwitterionic and other antifouling polymers in situ. Acta Biomaterialia, 2016, 40, 6-15.	4.1	155
68	Harnessing isomerization-mediated manipulation of nonspecific cell/matrix interactions to reversibly trigger and suspend stem cell differentiation. Chemical Science, 2016, 7, 333-338.	3.7	32
69	Brazilin inhibits amyloid β-protein fibrillogenesis, remodels amyloid fibrils and reduces amyloid cytotoxicity. Scientific Reports, 2015, 5, 7992.	1.6	134
70	Stealth Surface Modification of Surface-Enhanced Raman Scattering Substrates for Sensitive and Accurate Detection in Protein Solutions. ACS Nano, 2015, 9, 2668-2676.	7.3	89
71	Functionalized plasmonic nanostructure arrays for direct and accurate mapping extracellular pH of living cells in complex media using SERS. Biosensors and Bioelectronics, 2015, 73, 202-207.	5.3	44
72	Probing the Surface Hydration of Nonfouling Zwitterionic and PEG Materials in Contact with Proteins. ACS Applied Materials & amp; Interfaces, 2015, 7, 16881-16888.	4.0	223

#	Article	IF	CITATIONS
73	Probing the Surface Hydration of Nonfouling Zwitterionic and Poly(ethylene glycol) Materials with Isotopic Dilution Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 8775-8780.	1.5	69
74	EKylation: Addition of an Alternating-Charge Peptide Stabilizes Proteins. Biomacromolecules, 2015, 16, 3357-3361.	2.6	51
75	Zwitterionic gel encapsulation promotes protein stability, enhances pharmacokinetics, and reduces immunogenicity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12046-12051.	3.3	236
76	Thermoresponsive self-assembled NiPAm-zwitterion copolymers. Polymer Chemistry, 2015, 6, 1066-1077.	1.9	43
77	Molecular Understanding and Design of Zwitterionic Materials. Advanced Materials, 2015, 27, 15-26.	11.1	682
78	Restraint of the Differentiation of Mesenchymal Stem Cells by a Nonfouling Zwitterionic Hydrogel. Angewandte Chemie, 2014, 126, 12943-12948.	1.6	17
79	Restraint of the Differentiation of Mesenchymal Stem Cells by a Nonfouling Zwitterionic Hydrogel. Angewandte Chemie - International Edition, 2014, 53, 12729-12734.	7.2	64
80	Fluorescent porous silicon biological probes with high quantum efficiency and stability. Optics Express, 2014, 22, 29996.	1.7	6
81	Difference of Carboxybetaine and Oligo(ethylene glycol) Moieties in Altering Hydrophobic Interactions: A Molecular Simulation Study. Journal of Physical Chemistry B, 2014, 118, 189-194.	1.2	32
82	Chemical insights into dodecylamine spore lethal germination. Chemical Science, 2014, 5, 3320-3324.	3.7	5
83	Reversibly switchable polymer with cationic/zwitterionic/anionic behavior through synergistic protonation and deprotonation. Chemical Science, 2014, 5, 200-205.	3.7	82
84	Influence of Charged Groups on the Properties of Zwitterionic Moieties: A Molecular Simulation Study. Journal of Physical Chemistry B, 2014, 118, 7630-7637.	1.2	99
85	Differences in Cationic and Anionic Charge Densities Dictate Zwitterionic Associations and Stimuli Responses. Journal of Physical Chemistry B, 2014, 118, 6956-6962.	1.2	121
86	A Green Chemistry-Oriented Sporicidal Cocktail. ACS Sustainable Chemistry and Engineering, 2014, 2, 1734-1738.	3.2	0
87	One-Step Dip Coating of Zwitterionic Sulfobetaine Polymers on Hydrophobic and Hydrophilic Surfaces. ACS Applied Materials & Interfaces, 2014, 6, 6664-6671.	4.0	123
88	Integrated Antimicrobial and Nonfouling Zwitterionic Polymers. Angewandte Chemie - International Edition, 2014, 53, 1746-1754.	7.2	516
89	A Robust Graft-to Strategy To Form Multifunctional and Stealth Zwitterionic Polymer-Coated Mesoporous Silica Nanoparticles. Biomacromolecules, 2014, 15, 1845-1851.	2.6	59
90	Cross-Linked Carboxybetaine SAMs Enable Nanoparticles with Remarkable Stability in Complex Media. Langmuir, 2014, 30, 2522-2529.	1.6	17

#	Article	IF	CITATIONS
91	Zwitterionic fusion in hydrogels and spontaneous and time-independent self-healing under physiological conditions. Biomaterials, 2014, 35, 3926-3933.	5.7	119
92	Achieving One‣tep Surface Coating of Highly Hydrophilic Poly(Carboxybetaine Methacrylate) Polymers on Hydrophobic and Hydrophilic Surfaces. Advanced Materials Interfaces, 2014, 1, 1400071.	1.9	80
93	In Situ Probing of the Surface Hydration of Zwitterionic Polymer Brushes: Structural and Environmental Effects. Journal of Physical Chemistry C, 2014, 118, 15840-15845.	1.5	117
94	Poly(carboxybetaine) nanomaterials enable long circulation and prevent polymer-specific antibody production. Nano Today, 2014, 9, 10-16.	6.2	151
95	Biologically Inspired Stealth Peptide-Capped Gold Nanoparticles. Langmuir, 2014, 30, 1864-1870.	1.6	73
96	Cellulose Paper Sensors Modified with Zwitterionic Poly(carboxybetaine) for Sensing and Detection in Complex Media. Analytical Chemistry, 2014, 86, 2871-2875.	3.2	71
97	Engineering Buffering and Hydrolytic or Photolabile Charge Shifting in a Polycarboxybetaine Ester Gene Delivery Platform. Biomacromolecules, 2013, 14, 1587-1593.	2.6	43
98	Surface initiated atom transfer radical polymerization grafting of sodium styrene sulfonate from titanium and silicon substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 06F103.	0.9	8
99	In situ controlled growth of well-dispersed Au nanoparticles inside the channels of SBA-15 using a simple, bio-inspired method for surface-enhanced Raman spectroscopy. RSC Advances, 2013, 3, 10154.	1.7	12
100	Effect of Carbon Spacer Length on Zwitterionic Carboxybetaines. Journal of Physical Chemistry B, 2013, 117, 1357-1366.	1.2	101
101	Zwitterionic polymer-modified silicon microring resonators for label-free biosensing in undiluted humanplasma. Biosensors and Bioelectronics, 2013, 42, 100-105.	5.3	44
102	Directly Functionalizable Surface Platform for Protein Arrays in Undiluted Human Blood Plasma. Analytical Chemistry, 2013, 85, 1447-1453.	3.2	41
103	Hydrolytic Cationic Ester Microparticles for Highly Efficient DNA Vaccine Delivery. Small, 2013, 9, 3439-3444.	5.2	36
104	Zwitterionic hydrogels implanted in mice resist the foreign-body reaction. Nature Biotechnology, 2013, 31, 553-556.	9.4	787
105	Screening nonspecific interactions of peptides without background interference. Biomaterials, 2013, 34, 1871-1877.	5.7	38
106	Bloodâ€Inert Surfaces via Ionâ€Pair Anchoring of Zwitterionic Copolymer Brushes in Human Whole Blood. Advanced Functional Materials, 2013, 23, 1100-1110.	7.8	143
107	Functional Optical Imaging-based Biosensors Characterize Zwitterionic Coatings on SiO2 for Cancer Biomarker Detection. , 2012, , 20-42.		0
108	Two-Layer Architecture Using Atom Transfer Radical Polymerization for Enhanced Sensing and Detection in Complex Media. Biomacromolecules, 2012, 13, 4049-4056.	2.6	21

#	Article	IF	CITATIONS
109	Sequence, Structure, and Function of Peptide Self-Assembled Monolayers. Journal of the American Chemical Society, 2012, 134, 6000-6005.	6.6	254
110	Dry Film Refractive Index as an Important Parameter for Ultra-Low Fouling Surface Coatings. Biomacromolecules, 2012, 13, 589-593.	2.6	37
111	Superhydrophilic Zwitterionic Polymers Stabilize Liposomes. Langmuir, 2012, 28, 11625-11632.	1.6	96
112	Improved Mechanical Properties of Zwitterionic Hydrogels with Hydroxyl Groups. Journal of Physical Chemistry B, 2012, 116, 5766-5770.	1.2	36
113	Suppressing Surface Reconstruction of Superhydrophobic PDMS Using a Superhydrophilic Zwitterionic Polymer. Biomacromolecules, 2012, 13, 1683-1687.	2.6	93
114	Decoding nonspecific interactions from nature. Chemical Science, 2012, 3, 3488.	3.7	96
115	The effect of lightly crosslinked poly(carboxybetaine) hydrogel coating on the performance of sensors in whole blood. Biomaterials, 2012, 33, 7945-7951.	5.7	71
116	Synchronizing nonfouling and antimicrobial properties in a zwitterionic hydrogel. Biomaterials, 2012, 33, 8928-8933.	5.7	116
117	Super-hydrophilic zwitterionic poly(carboxybetaine) and amphiphilic non-ionic poly(ethylene glycol) for stealth nanoparticles. Nano Today, 2012, 7, 404-413.	6.2	270
118	Poly(zwitterionic)protein conjugates offer increased stability without sacrificing binding affinity or bioactivity. Nature Chemistry, 2012, 4, 59-63.	6.6	494
119	Role of Nonspecific Interactions in Molecular Chaperones through Model-Based Bioinformatics. Biophysical Journal, 2012, 103, 2484-2491.	0.2	11
120	Simple and Robust Approach for Passivating and Functionalizing Surfaces for Use in Complex Media. Langmuir, 2012, 28, 9707-9713.	1.6	31
121	Zwitterionic Polymer-Based Platform with Two-Layer Architecture for Ultra Low Fouling and High Protein Loading. Analytical Chemistry, 2012, 84, 3440-3445.	3.2	88
122	High Viability of Cells Encapsulated in Degradable Poly(carboxybetaine) Hydrogels. Langmuir, 2012, 28, 17778-17784.	1.6	30
123	Softer Zwitterionic Nanogels for Longer Circulation and Lower Splenic Accumulation. ACS Nano, 2012, 6, 6681-6686.	7.3	211
124	Internal Architecture of Zwitterionic Polymer Brushes Regulates Nonfouling Properties. Macromolecular Rapid Communications, 2012, 33, 1003-1007.	2.0	38
125	Reversibly Switching the Function of a Surface between Attacking and Defending against Bacteria. Angewandte Chemie - International Edition, 2012, 51, 2602-2605.	7.2	237
126	Divalent cation-mediated polysaccharide interactions with zwitterionic surfaces. Biomaterials, 2012, 33, 2001-2006.	5.7	51

#	Article	IF	CITATIONS
127	Interactions of alginate-producing and -deficient Pseudomonas aeruginosa with zwitterionic polymers. Biomaterials, 2012, 33, 3626-3631.	5.7	28
128	Direct cell encapsulation in biodegradable and functionalizable carboxybetaine hydrogels. Biomaterials, 2012, 33, 5706-5712.	5.7	86
129	Controlled Hierarchical Architecture in Surfaceâ€initiated Zwitterionic Polymer Brushes with Structurally Regulated Functionalities. Advanced Materials, 2012, 24, 1834-1837.	11.1	103
130	Molecular Dynamics Simulation Study of Ion Interactions with Zwitterions. Journal of Physical Chemistry B, 2011, 115, 8358-8363.	1.2	78
131	Carboxybetaine Methacrylate Polymers Offer Robust, Long-Term Protection against Cell Adhesion. Langmuir, 2011, 27, 10800-10804.	1.6	20
132	Water Mobility: A Bridge between the Hofmeister Series of Ions and the Friction of Zwitterionic Surfaces in Aqueous Environments. Journal of Physical Chemistry C, 2011, 115, 15525-15531.	1.5	21
133	Understanding Three Hydration-Dependent Transitions of Zwitterionic Carboxybetaine Hydrogel by Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2011, 115, 11575-11580.	1.2	23
134	Local and Bulk Hydration of Zwitterionic Glycine and its Analogues through Molecular Simulations. Journal of Physical Chemistry B, 2011, 115, 660-667.	1.2	63
135	Photoiniferter-Mediated Polymerization of Zwitterionic Carboxybetaine Monomers for Low-Fouling and Functionalizable Surface Coatings. Macromolecules, 2011, 44, 9213-9220.	2.2	87
136	Thermodynamics of Water Stabilization of Carboxybetaine Hydrogels from Molecular Dynamics Simulations. Journal of Physical Chemistry Letters, 2011, 2, 1757-1760.	2.1	18
137	Surface Plasmon Resonance Biosensor for Determination of Tetrodotoxin: Prevalidation Study. Journal of AOAC INTERNATIONAL, 2011, 94, 596-604.	0.7	12
138	Tetrodotoxin Detection by a Surface Plasmon Resonance Sensor in Pufferfish Matrices and Urine. Journal of Sensors, 2011, 2011, 1-10.	0.6	24
139	Uniform zwitterionic polymer hydrogels with a nonfouling and functionalizable crosslinker using photopolymerization. Biomaterials, 2011, 32, 6893-6899.	5.7	109
140	Single nonfouling hydrogels with mechanical and chemical functionality gradients. Biomaterials, 2011, 32, 8456-8461.	5.7	29
141	A Thermoresponsive Antimicrobial Wound Dressing Hydrogel Based on a Cationic Betaine Ester. Advanced Functional Materials, 2011, 21, 4028-4034.	7.8	106
142	Manipulating Sticky and Non‣ticky Properties in a Single Material. Angewandte Chemie - International Edition, 2011, 50, 6102-6104.	7.2	57
143	Zwitterionic poly(carboxybetaine) hydrogels for glucose biosensors in complex media. Biosensors and Bioelectronics, 2011, 26, 2454-2459.	5.3	130
144	Multifunctional and degradable zwitterionic nanogels for targeted delivery, enhanced MR imaging, reduction-sensitive drug release, and renal clearance. Biomaterials, 2011, 32, 4604-4608.	5.7	116

#	Article	IF	CITATIONS
145	Functionalizable and nonfouling zwitterionic carboxybetaine hydrogels with a carboxybetaine dimethacrylate crosslinker. Biomaterials, 2011, 32, 961-968.	5.7	143
146	Chaotrope vs. kosmotrope: Which one has lower friction?. Journal of Chemical Physics, 2011, 135, 154702.	1.2	4
147	Ultralowâ€Fouling, Functionalizable, and Hydrolyzable Zwitterionic Materials and Their Derivatives for Biological Applications. Advanced Materials, 2010, 22, 920-932.	11.1	1,697
148	Nanoparticles for Drug Delivery Prepared from Amphiphilic PLGA Zwitterionic Block Copolymers with Sharp Contrast in Polarity between Two Blocks. Angewandte Chemie - International Edition, 2010, 49, 3771-3776.	7.2	175
149	pH responsive properties of non-fouling mixed-charge polymer brushes based on quaternary amine and carboxylic acid monomers. Biomaterials, 2010, 31, 2919-2925.	5.7	159
150	Functionalizable and ultra-low fouling zwitterionic surfaces via adhesive mussel mimetic linkages. Biomaterials, 2010, 31, 1486-1492.	5.7	174
151	Mediating high levels of gene transfer without cytotoxicity via hydrolytic cationic ester polymers. Biomaterials, 2010, 31, 4186-4193.	5.7	35
152	Imaging and cell targeting characteristics of magnetic nanoparticles modified by a functionalizable zwitterionic polymer with adhesive 3,4-dihydroxyphenyl-l-alanine linkages. Biomaterials, 2010, 31, 6582-6588.	5.7	117
153	Ultra-low fouling and functionalizable zwitterionic coatings grafted onto SiO2 via a biomimetic adhesive group for sensing and detection in complex media. Biosensors and Bioelectronics, 2010, 25, 2276-2282.	5.3	95
154	Modulation of barnacle (<i>Balanus amphitrite</i> Darwin) cyprid settlement behavior by sulfobetaine and carboxybetaine methacrylate polymer coatings. Biofouling, 2010, 26, 673-683.	0.8	98
155	Functionalizable and Ultrastable Zwitterionic Nanogels. Langmuir, 2010, 26, 6883-6886.	1.6	73
156	Integrated Antimicrobial and Nonfouling Hydrogels to Inhibit the Growth of Planktonic Bacterial Cells and Keep the Surface Clean. Langmuir, 2010, 26, 10425-10428.	1.6	110
157	Label-Free Biomarker Sensing in Undiluted Serum with Suspended Microchannel Resonators. Analytical Chemistry, 2010, 82, 1905-1910.	3.2	100
158	Difference in Hydration between Carboxybetaine and Sulfobetaine. Journal of Physical Chemistry B, 2010, 114, 16625-16631.	1.2	198
159	Nonfouling Polyampholytes from an Ion-Pair Comonomer with Biomimetic Adhesive Groups. Macromolecules, 2010, 43, 14-16.	2.2	70
160	Engineering the Polymer Backbone To Strengthen Nonfouling Sulfobetaine Hydrogels. Langmuir, 2010, 26, 14793-14798.	1.6	112
161	Zwitterionic carboxybetaine polymer surfaces and their resistance to long-term biofilm formation. Biomaterials, 2009, 30, 5234-5240.	5.7	465
162	Functionalizable and ultra stable nanoparticles coated with zwitterionic poly(carboxybetaine) in undiluted blood serum. Biomaterials, 2009, 30, 5617-5621.	5.7	216

#	Article	IF	CITATIONS
163	Ultra-low fouling peptide surfaces derived from natural amino acids. Biomaterials, 2009, 30, 5892-5896.	5.7	265
164	Label-free detection of cancer biomarker candidates using surface plasmon resonance imaging. Analytical and Bioanalytical Chemistry, 2009, 393, 1157-1163.	1.9	104
165	Direct detection of carcinoembryonic antigen autoantibodies in clinical human serum samples using a surface plasmon resonance sensor. Colloids and Surfaces B: Biointerfaces, 2009, 70, 1-6.	2.5	66
166	Functionalizable surface platform with reduced nonspecific protein adsorption from full blood plasma—Material selection and protein immobilization optimization. Biosensors and Bioelectronics, 2009, 24, 1924-1930.	5.3	170
167	Comparative study of SPR and ELISA methods based on analysis of CD166/ALCAM levels in cancer and control human sera. Biosensors and Bioelectronics, 2009, 24, 2143-2148.	5.3	81
168	Novel Zwitterionic-Polymer-Coated Silica Nanoparticles. Langmuir, 2009, 25, 3196-3199.	1.6	84
169	Polysulfobetaine-Grafted Surfaces as Environmentally Benign Ultralow Fouling Marine Coatings. Langmuir, 2009, 25, 13516-13521.	1.6	235
170	Pursuing "Zero―Protein Adsorption of Poly(carboxybetaine) from Undiluted Blood Serum and Plasma. Langmuir, 2009, 25, 11911-11916.	1.6	289
171	Hydration of "Nonfouling―Functional Groups. Journal of Physical Chemistry B, 2009, 113, 197-201.	1.2	91
172	Zwitterionic Hydrogels: an in Vivo Implantation Study. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1845-1859.	1.9	99
173	Ultra low fouling zwitterionic polymers with a biomimetic adhesive group. Biomaterials, 2008, 29, 4592-4597.	5.7	231
174	Adhesion of MC3T3‣1 cells to bone sialoprotein and bone osteopontin specifically bound to collagen I. Journal of Biomedical Materials Research - Part A, 2008, 86A, 779-787.	2.1	28
175	pHâ€induced conformation changes of adsorbed vitronectin maximize its bovine aortic endothelial cell binding ability. Journal of Biomedical Materials Research - Part A, 2008, 87A, 505-514.	2.1	16
176	A Switchable Biocompatible Polymer Surface with Selfâ€ s terilizing and Nonfouling Capabilities. Angewandte Chemie - International Edition, 2008, 47, 8831-8834.	7.2	325
177	An New Avenue to Nonfouling Materials. Advanced Materials, 2008, 20, 335-338.	11.1	369
178	The hydrolysis of cationic polycarboxybetaine esters to zwitterionic polycarboxybetaines with controlled properties. Biomaterials, 2008, 29, 4719-4725.	5.7	83
179	MC3T3-E1 cell adhesion to hydroxyapatite with adsorbed bone sialoprotein, bone osteopontin, and bovine serum albumin. Colloids and Surfaces B: Biointerfaces, 2008, 64, 236-247.	2.5	69
180	Blood compatibility of surfaces with superlow protein adsorption. Biomaterials, 2008, 29, 4285-4291.	5.7	424

#	Article	IF	CITATIONS
181	Nonfouling Polymer Brushes via Surface-Initiated, Two-Component Atom Transfer Radical Polymerization. Macromolecules, 2008, 41, 4216-4219.	2.2	170
182	Ultralow Fouling Zwitterionic Polymers Grafted from Surfaces Covered with an Initiator via an Adhesive Mussel Mimetic Linkage. Journal of Physical Chemistry B, 2008, 112, 15269-15274.	1.2	89
183	Molecular simulation study of temperature effect on ionic hydration in carbon nanotubes. Physical Chemistry Chemical Physics, 2008, 10, 1896.	1.3	76
184	Film Thickness Dependence of Protein Adsorption from Blood Serum and Plasma onto Poly(sulfobetaine)-Grafted Surfaces. Langmuir, 2008, 24, 9211-9214.	1.6	220
185	Hybrid Surface Platform for the Simultaneous Detection of Proteins and DNAs Using a Surface Plasmon Resonance Imaging Sensor. Analytical Chemistry, 2008, 80, 4231-4236.	3.2	47
186	Surface Plasmon Resonance (SPR) Sensors for the Detection of Bacterial Pathogens. , 2008, , 83-108.		20
187	Origin of repulsive force and structure/dynamics of interfacial water in OEG–protein interactions: a molecular simulation study. Physical Chemistry Chemical Physics, 2008, 10, 5539.	1.3	112
188	Nonfouling Behavior of Polycarboxybetaine-Grafted Surfaces: Structural and Environmental Effects. Biomacromolecules, 2008, 9, 2686-2692.	2.6	244
189	Ultralow Fouling and Functionalizable Surface Chemistry Based on a Zwitterionic Polymer Enabling Sensitive and Specific Protein Detection in Undiluted Blood Plasma. Analytical Chemistry, 2008, 80, 7894-7901.	3.2	381
190	Physical, Chemical, and Chemicalâ^'Physical Double Network of Zwitterionic Hydrogels. Journal of Physical Chemistry B, 2008, 112, 5327-5332.	1.2	99
191	Molecular Simulation Studies of Protein Interactions with Zwitterionic Phosphorylcholine Self-Assembled Monolayers in the Presence of Water. Langmuir, 2008, 24, 10358-10364.	1.6	319
192	Zwitterionic Polymers Exhibiting High Resistance to Nonspecific Protein Adsorption from Human Serum and Plasma. Biomacromolecules, 2008, 9, 1357-1361.	2.6	712
193	Reduced foreign body reaction to implanted biomaterials by surface treatment with oriented osteopontin. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 821-835.	1.9	48
194	A molecular simulation study of methylated and hydroxyl sugar-based self-assembled monolayers: Surface hydration and resistance to protein adsorption. Journal of Chemical Physics, 2008, 129, 215101.	1.2	31
195	Molecular simulation studies of nanoscale friction between phosphorylcholine self-assembled monolayer surfaces: Correlation between surface hydration and friction. Journal of Chemical Physics, 2007, 127, 084708.	1.2	13
196	Capillary Differentiation of Endothelial Cells on Microgrooved Surfaces. Journal of Physical Chemistry C, 2007, 111, 14602-14606.	1.5	5
197	Development of Biocompatible Interpenetrating Polymer Networks Containing a Sulfobetaine-Based Polymer and a Segmented Polyurethane for Protein Resistance. Biomacromolecules, 2007, 8, 122-127.	2.6	132
198	Protein interactions with oligo(ethylene glycol) (OEG) self-assembled monolayers: OEG stability, surface packing density and protein adsorption. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 1415-1427.	1.9	170

#	Article	IF	CITATIONS
199	Stepwise Assembly of Fibrin Bilayers on Self-Assembled Monolayers of Alkanethiolates:  Influence of Surface Chemistry. Journal of Physical Chemistry C, 2007, 111, 8504-8508.	1.5	13
200	Endothelial Cell Migration on Surface-Density Gradients of Fibronectin, VEGF, or Both Proteins. Langmuir, 2007, 23, 11168-11173.	1.6	132
201	Controlling the orientation of bone osteopontin via its specific binding with collagen I to modulate osteoblast adhesion. Journal of Biomedical Materials Research - Part A, 2007, 80A, 102-110.	2.1	32
202	Inhibition of bacterial adhesion and biofilm formation on zwitterionic surfaces. Biomaterials, 2007, 28, 4192-4199.	5.7	640
203	Stop band shift based chemical sensing with three-dimensional opal and inverse opal structures. Sensors and Actuators B: Chemical, 2007, 124, 452-458.	4.0	46
204	Superlow Fouling Sulfobetaine and Carboxybetaine Polymers on Glass Slides. Langmuir, 2006, 22, 10072-10077.	1.6	601
205	Strong Resistance of a Thin Crystalline Layer of Balanced Charged Groups to Protein Adsorption. Langmuir, 2006, 22, 8186-8191.	1.6	211
206	Dual-Functional Biomimetic Materials:Â Nonfouling Poly(carboxybetaine) with Active Functional Groups for Protein Immobilization. Biomacromolecules, 2006, 7, 3311-3315.	2.6	430
207	Highly Protein-Resistant Coatings from Well-Defined Diblock Copolymers Containing Sulfobetaines. Langmuir, 2006, 22, 2222-2226.	1.6	284
208	SPR Biosensors for Detection of Biological and Chemical Analytes. Springer Series on Chemical Sensors and Biosensors, 2006, , 177-190.	0.5	9
209	Understanding the nonfouling mechanism of surfaces through molecular simulations of sugar-based self-assembled monolayers. Journal of Chemical Physics, 2006, 125, 214704.	1.2	76
210	Strong Resistance of Oligo(phosphorylcholine) Self-Assembled Monolayers to Protein Adsorption. Langmuir, 2006, 22, 2418-2421.	1.6	92
211	Controlling DNA Orientation on Mixed ssDNA/OEG SAMs. Langmuir, 2006, 22, 4694-4698.	1.6	89
212	Secreted protein acidic and rich in cysteine (SPARC/osteonectin/BM-40) binds to fibrinogen fragments D and E, but not to native fibrinogen. Matrix Biology, 2006, 25, 20-26.	1.5	16
213	Quantitative and simultaneous detection of four foodborne bacterial pathogens with a multi-channel SPR sensor. Biosensors and Bioelectronics, 2006, 22, 752-758.	5.3	274
214	Studies of αB crystallin subunit dynamics by surface plasmon resonance. Analytical Biochemistry, 2006, 350, 186-195.	1.1	25
215	Surface Grafted Sulfobetaine Polymers via Atom Transfer Radical Polymerization as Superlow Fouling Coatings. Journal of Physical Chemistry B, 2006, 110, 10799-10804.	1.2	497
216	Modulating cell adhesion and spreading by control of FnIII7–10 orientation on charged self-assembled monolayers (SAMs) of alkanethiolates. Journal of Biomedical Materials Research - Part A, 2006, 77A, 672-678.	2.1	34

#	Article	IF	CITATIONS
217	Molecular simulation studies of the structure of phosphorylcholine self-assembled monolayers. Journal of Chemical Physics, 2006, 125, 174714.	1.2	41
218	Detection of low-molecular-weight domoic acid using surface plasmon resonance sensor. Sensors and Actuators B: Chemical, 2005, 107, 193-201.	4.0	111
219	Comparison of E. coli O157:H7 preparation methods used for detection with surface plasmon resonance sensor. Sensors and Actuators B: Chemical, 2005, 107, 202-208.	4.0	111
220	Strong Resistance of Phosphorylcholine Self-Assembled Monolayers to Protein Adsorption:Â Insights into Nonfouling Properties of Zwitterionic Materials. Journal of the American Chemical Society, 2005, 127, 14473-14478.	6.6	918
221	Controlling osteopontin orientation on surfaces to modulate endothelial cell adhesion. Journal of Biomedical Materials Research - Part A, 2005, 74A, 23-31.	2.1	73
222	Improved Method for the Preparation of Carboxylic Acid and Amine Terminated Self-Assembled Monolayers of Alkanethiolates. Langmuir, 2005, 21, 2633-2636.	1.6	230
223	Intramolecular Janus Segregation of a Heteroarm Star Copolymer. Macromolecules, 2005, 38, 6201-6209.	2.2	41
224	Identifying the SPARC Binding Sites on Collagen I and Procollagen I by Atomic Force Microscopy. Analytical Chemistry, 2005, 77, 6765-6771.	3.2	35
225	Protein Adsorption on Oligo(ethylene glycol)-Terminated Alkanethiolate Self-Assembled Monolayers:Â The Molecular Basis for Nonfouling Behavior. Journal of Physical Chemistry B, 2005, 109, 2934-2941.	1.2	461
226	Strong Repulsive Forces between Protein and Oligo (Ethylene Glycol) Self-Assembled Monolayers: A Molecular Simulation Study. Biophysical Journal, 2005, 89, 158-166.	0.2	310
227	DNA-Directed Protein Immobilization on Mixed Self-Assembled Monolayers via a Streptavidin Bridge. Langmuir, 2004, 20, 8090-8095.	1.6	130
228	Probing the Orientation of Surface-Immobilized Immunoglobulin G by Time-of-Flight Secondary Ion Mass Spectrometry. Langmuir, 2004, 20, 1877-1887.	1.6	152
229	Molecular Simulation Studies of the Orientation and Conformation of Cytochrome c Adsorbed on Self-Assembled Monolayers. Journal of Physical Chemistry B, 2004, 108, 17418-17424.	1.2	145
230	DNA Directed Protein Immobilization on Mixed ssDNA/Oligo(ethylene glycol) Self-Assembled Monolayers for Sensitive Biosensors. Analytical Chemistry, 2004, 76, 6967-6972.	3.2	148
231	Molecular Simulation Study of Water Interactions with Oligo (Ethylene Glycol)-Terminated Alkanethiol Self-Assembled Monolayers. Langmuir, 2004, 20, 8931-8938.	1.6	270
232	Controlling Antibody Orientation on Charged Self-Assembled Monolayers. Langmuir, 2003, 19, 2859-2864.	1.6	232
233	Surface functionalization for self-referencing surface plasmon resonance (SPR) biosensors by multi-step self-assembly. Sensors and Actuators B: Chemical, 2003, 90, 22-30.	4.0	116
234	Tip-Based Hybrid Simulation Study of Frictional Properties of Self-Assembled Monolayers:  Effects of Chain Length, Terminal Group, Scan Direction, and Scan Velocity. Langmuir, 2003, 19, 9742-9747.	1.6	37

#	Article	IF	CITATIONS
235	Protein Adsorption on Alkanethiolate Self-Assembled Monolayers:Â Nanoscale Surface Structural and Chemical Effects. Langmuir, 2003, 19, 2974-2982.	1.6	78
236	Nanoscale Frictional Properties of Mixed Alkanethiol Self-Assembled Monolayers on Au(111) by Scanning Force Microscopy:Â Humidity Effect. Langmuir, 2003, 19, 666-671.	1.6	25
237	Orientation of Adsorbed Antibodies on Charged Surfaces by Computer Simulation Based on a United-Residue Model. Langmuir, 2003, 19, 3472-3478.	1.6	129
238	Molecular-Scale Mixed Alkanethiol Monolayers of Different Terminal Groups on Au(111) by Low-Current Scanning Tunneling Microscopy. Langmuir, 2003, 19, 3266-3271.	1.6	58
239	Molecular simulation study of nanoscale friction between alkyl monolayers on Si(111) immersed in solvents. Journal of Chemical Physics, 2003, 119, 765-770.	1.2	17
240	Cell multipole method for molecular simulations in bulk and confined systems. Journal of Chemical Physics, 2003, 118, 5347-5355.	1.2	12
241	Orientation of a Y-shaped biomolecule adsorbed on a charged surface. Physical Review E, 2002, 66, 011911.	0.8	14
242	Molecular simulation study of nanoscale friction for alkyl monolayers on Si(111). Journal of Chemical Physics, 2002, 117, 1804-1811.	1.2	57
243	Measurements of Friction and Adhesion for Alkyl Monolayers on Si(111) by Scanning Force Microscopy. Langmuir, 2002, 18, 5448-5456.	1.6	51
244	Radial Size of a Starburst Dendrimer in Solvents of Varying Quality. Macromolecules, 2002, 35, 7865-7868.	2.2	65
245	Molecular simulation study of the c(4×2) superlattice structure of alkanethiol self-assembled monolayers on Au(111). Journal of Chemical Physics, 2002, 117, 7342-7349.	1.2	106
246	Molecular simulation studies of self-assembled monolayers of alkanethiols on Au(111). Molecular Physics, 2002, 100, 2261-2275.	0.8	42
247	Transport diffusion of liquid water and methanol through membranes. Journal of Chemical Physics, 2002, 117, 808-818.	1.2	44
248	Spectral surface plasmon resonance biosensor for detection of staphylococcal enterotoxin B in milk. International Journal of Food Microbiology, 2002, 75, 61-69.	2.1	301
249	In Situ Single-Molecule Detection of Antibodyâ^'Antigen Binding by Tapping-Mode Atomic Force Microscopy. Analytical Chemistry, 2002, 74, 6017-6022.	3.2	52
250	Nonequilibrium molecular dynamics simulations of confined fluids in contact with the bulk. Journal of Chemical Physics, 2001, 114, 6869-6877.	1.2	41
251	Controlled Chemical and Structural Properties of Mixed Self-Assembled Monolayers by Coadsorption of Symmetric and Asymmetric Disulfides on Au(111). Journal of Physical Chemistry B, 2001, 105, 2975-2980.	1.2	69
252	Molecular Simulation Study of Alkyl Monolayers on Si(111). Langmuir, 2001, 17, 6275-6281.	1.6	66

#	Article	IF	CITATIONS
253	Spanning Time Scales in Dynamic Simulations of Atomic-Scale Friction. Tribology Letters, 2001, 11, 111-115.	1.2	6
254	Atomic indentation and friction of self-assembled monolayers by hybrid molecular simulations. Journal of Chemical Physics, 2000, 113, 8800-8806.	1.2	60
255	Nanoscale Frictional Properties of Pure and Mixed Alkanethiols on Au(111) by Scanning Force Microscopy. ACS Symposium Series, 2000, , 168-177.	0.5	0
256	Controlled Chemical and Structural Properties of Mixed Self-Assembled Monolayers of Alkanethiols on Au(111). Langmuir, 2000, 16, 9287-9293.	1.6	133
257	Vapour-liquid equilibria in two-dimensional Lennard-Jones fluids: unperturbed and substrate-mediated films. Molecular Physics, 1995, 86, 599-612.	0.8	45
258	Adsorption, isosteric heat and commensurate-incommensurate transition of methane on graphite. Molecular Physics, 1993, 80, 103-116.	0.8	56
259	Layering, freezing transitions, capillary condensation and diffusion of methane in slit carbon pores. Molecular Physics, 1993, 79, 373-391.	0.8	89
260	Computer Simulation Study of Adsorption, Isosteric Heat and Phase Transitions of Methane on Graphite. Materials Research Society Symposia Proceedings, 1992, 290, 191.	0.1	2