Buddy D Ratner

List of Publications by Year in Descending Order

227 papers	17,678 citations	67 h-index	129 g-index
237 ext. papers	18,930 ext. citations	6.2 avg, IF	6.91 L-index

#	Paper	IF	Citations
227	Precision-porous polyurethane elastomers engineered for application in pro-healing vascular grafts: Synthesis, fabrication and detailed biocompatibility assessment. *Biomaterials*, **2021**, 279, 121174	15.6	1
226	Biocompatibility Evolves: Phenomenology to Toxicology to Regeneration. *Advanced Healthcare Materials*, **2021**, 10, e2002153	10.1	8
225	Plasma Polymerized HMDSO Coatings For Syringes To Minimize Protein Adsorption. *Journal of Pharmaceutical Sciences*, **2021**, 110, 1710-1717	3.9	1
224	Uniform 40-μm-pore diameter precision templated scaffolds promote a pro-healing host response by extracellular vesicle immune communication. *Journal of Tissue Engineering and Regenerative Medicine*, **2021**, 15, 24-36	4.4	7
223	XPS and ToF-SIMS Characterization of New Biodegradable Poly(Peptide-Urethane-Urea) Block Copolymers. *Advanced Healthcare Materials*, **2021**, e2100894	10.1	
222	Surface-Treated Pellethanes: Comparative Quantification of Encrustation in Artificial Urine Solution. *Journal of Endourology*, **2020**, 34, 868-873	2.7	3
221	Introduction to Biomaterials Science **2020**, 3-19		3
220	Evaluation of Blood Materials Interactions **2020**, 879-898		2
219	Nonfouling Surfaces **2020**, 507-513		1
218	Wearable artificial kidney: problems, progress and prospects. *Nature Reviews Nephrology*, **2020**, 16, 558-559	19	12
217	A History of Biomaterials **2020**, 21-34		4
216	Surface Properties and Surface Characterization of Biomaterials **2020**, 53-75		0
215	Polymer Surface Analysis: The Leadership and Contributions of David Briggs. *Surface and Interface Analysis*, **2020**, 52, 1122-1127	1.5	1
214	Mesenchymal stromal cells from dermal and adipose tissues induce macrophage polarization to a pro-repair phenotype and improve skin wound healing. *Cytotherapy*, **2020**, 22, 247-260	4.8	29
213	An interview with Buddy Ratner. *Therapeutic Delivery*, **2020**, 11, 609-612	3.8	1
212	Crosslinked, biodegradable polyurethanes for precision-porous biomaterials: Synthesis and properties. *Journal of Applied Polymer Science*, **2020**, 137, 48943	2.9	5
211	The Concept and Assessment of Biocompatibility **2020**, 843-849		

210	Photoreactive Carboxybetaine Copolymers Impart Biocompatibility and Inhibit Plasticizer Leaching on Polyvinyl Chloride. *ACS Applied Materials & Interfaces*, **2020**, 12, 41026-41037	9.5	8
209	BloodSurf 2017: News from the blood-biomaterial frontier. *Acta Biomaterialia*, **2019**, 87, 55-60	10.8	13
208	Biomaterials: Been There, Done That, and Evolving into the Future. *Annual Review of Biomedical Engineering*, **2019**, 21, 171-191	12	45
207	Proteins Controlled With Precision at Organic, Polymeric, and Biopolymer Interfaces for Tissue Engineering and Regenerative Medicine **2019**, 523-534		4
206	Trifluoromethyl-functionalized poly(lactic acid): a fluoropolyester designed for blood contact applications. *Biomaterials Science*, **2019**, 7, 3764-3778	7.4	5
205	Highly-reactive haloester surface initiators for ARGET ATRP readily prepared by radio frequency glow discharge plasma. *Biointerphases*, **2019**, 14, 041006	1.8	1
204	Facile Synthesis of Fluorine-Substituted Polylactides and Their Amphiphilic Block Copolymers. *Macromolecules*, **2018**, 51, 1280-1289	5.5	14
203	Surface fluorination of polylactide as a path to improve platelet associated hemocompatibility. *Acta Biomaterialia*, **2018**, 78, 23-35	10.8	17
202	The impact of detergents on the tissue decellularization process: A ToF-SIMS study. *Acta Biomaterialia*, **2017**, 50, 207-219	10.8	104
201	Collagen affinity coating for surface binding of decorin and other biomolecules: Surface characterization. *Biointerphases*, **2017**, 12, 02C419	1.8	
200	Rapidly Biodegrading PLGA-Polyurethane Fibers for Sustained Release of Physicochemically Diverse Drugs. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1595-1607	5.5	20
199	A pore way to heal and regenerate: 21st century thinking on biocompatibility. *International Journal of Energy Production and Management*, **2016**, 3, 107-10	5.3	58
198	Drug encapsulated aerosolized microspheres as a biodegradable, intelligent glioma therapy. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 544-52	5.4	11
197	Blood compatibility assessment of polymers used in drug eluting stent coatings. *Biointerphases*, **2016**, 11, 029806	1.8	33
196	Precision-Porous PolyHEMA-Based Scaffold as an Antibiotic-Releasing Insert for a Scleral Bandage. *ACS Biomaterials Science and Engineering*, **2015**, 1, 593-600	5.5	7
195	Drug encapsulated polymeric microspheres for intracranial tumor therapy: A review of the literature. *Advanced Drug Delivery Reviews*, **2015**, 91, 23-37	18.5	64
194	Healing with medical implants: The body battles back. *Science Translational Medicine*, **2015**, 7, 272fs4	17.5	22
193	The Biocompatibility of Implant Materials **2015**, 37-51		19

192	Revealing cytokine-induced changes in the extracellular matrix with secondary ion mass spectrometry. *Acta Biomaterialia*, **2015**, 14, 70-83	10.8	7
191	Digital Drug Delivery: On-Off Ultrasound Controlled Antibiotic Release from Coated Matrices with Negligible Background Leaching. *Biomaterials Science*, **2014**, 2, 839-902	7.4	17
190	Prostate cancer xenografts engineered from 3D precision-porous poly(2-hydroxyethyl methacrylate) hydrogels as models for tumorigenesis and dormancy escape. *Biomaterials*, **2014**, 35, 8164-74	15.6	20
189	A tough, precision-porous hydrogel scaffold: ophthalmologic applications. *Biomaterials*, **2014**, 35, 8916-26	15.6	38
188	Engineered biomaterials control differentiation and proliferation of human-embryonic-stem-cell-derived cardiomyocytes via timed Notch activation. *Stem Cell Reports*, **2014**, 2, 271-81	8	31
187	Porous implants modulate healing and induce shifts in local macrophage polarization in the foreign body reaction. *Annals of Biomedical Engineering*, **2014**, 42, 1508-16	4.7	253
186	Integrated bi-layered scaffold for osteochondral tissue engineering. *Advanced Healthcare Materials*, **2013**, 2, 872-83	10.1	68
185	Non-Fouling Surfaces **2013**, 241-247		11
184	Biomaterials Science: An Evolving, Multidisciplinary Endeavor **2013**, xxv-xxxix		21
183	Going out on a limb about regrowing an arm. *Journal of Materials Science: Materials in Medicine*, **2013**, 24, 2645-9	4.5	3
182	Surface Properties and Surface Characterization of Biomaterials **2013**, 34-55		5
181	Evaluation of Blood Materials Interactions **2013**, 617-634		6
180	Zwitterionic hydrogels implanted in mice resist the foreign-body reaction. *Nature Biotechnology*, **2013**, 31, 553-6	44.5	641
179	Capillary force seeding of sphere-templated hydrogels for tissue-engineered prostate cancer xenografts. *Tissue Engineering - Part C: Methods*, **2013**, 19, 738-44	2.9	11
178	Synthesis and fabrication of a degradable poly(N-isopropyl acrylamide) scaffold for tissue engineering applications. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 775-86	5.4	32
177	Macrophage polarization: an opportunity for improved outcomes in biomaterials and regenerative medicine. *Biomaterials*, **2012**, 33, 3792-802	15.6	595
176	Identifying individual cell types in heterogeneous cultures using secondary ion mass spectrometry imaging with C60 etching and multivariate analysis. *Analytical Chemistry*, **2012**, 84, 893-900	7.8	32
175	Amphiphilic self-assembled "polymeric drugs": morphology, properties, and biological behavior of nanoparticles. *Biomacromolecules*, **2012**, 13, 624-35	6.9	12

174	The effect of octadecyl chain immobilization on the hemocompatibility of poly (2-hydroxyethyl methacrylate). *Biomaterials*, **2012**, 33, 7677-85	15.6	13
173	Cutaneous and inflammatory response to long-term percutaneous implants of sphere-templated porous/solid poly(HEMA) and silicone in mice. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 1256-68	5.4	18
172	Engineering biomaterials to integrate and heal: the biocompatibility paradigm shifts. *Biotechnology and Bioengineering*, **2012**, 109, 1898-911	4.9	185
171	Modulation of fibroblast inflammatory response by surface modification of a perfluorinated ionomer. *Biointerphases*, **2011**, 6, 43-53	1.8	7
170	Sustained antibiotic release from an intraocular lens-hydrogel assembly for cataract surgery **2011**, 52, 6109-16		41
169	The surface molecular functionality of decellularized extracellular matrices. *Biomaterials*, **2011**, 32, 137-43	15.6	73
168	The biocompatibility manifesto: biocompatibility for the twenty-first century. *Journal of Cardiovascular Translational Research*, **2011**, 4, 523-7	3.3	85
167	Quantifying the effect of pore size and surface treatment on epidermal incorporation into percutaneously implanted sphere-templated porous biomaterials in mice. *Journal of Biomedical Materials Research - Part A*, **2011**, 98, 499-508	5.4	38
166	Differential affinity of vitronectin versus collagen for synthetic biodegradable scaffolds for urethroplastic applications. *Biomaterials*, **2011**, 32, 797-807	15.6	10
165	Biomechanics of the sensor-tissue interface-effects of motion, pressure, and design on sensor performance and the foreign body response-part I: theoretical framework. *Journal of Diabetes Science and Technology*, **2011**, 5, 632-46	4.1	90
164	Degradable, thermo-sensitive poly(N-isopropyl acrylamide)-based scaffolds with controlled porosity for tissue engineering applications. *Biomacromolecules*, **2010**, 11, 2583-92	6.9	142
163	VEGF induces differentiation of functional endothelium from human embryonic stem cells: implications for tissue engineering. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2010**, 30, 80-9	9.4	133
162	Proangiogenic scaffolds as functional templates for cardiac tissue engineering. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 15211-6	11.5	498
161	Infrared light induced patterning of proteins on ppNIPAM thermoresponsive thin films: a "protein laser printer". *Lab on A Chip*, **2010**, 10, 1079-85	7.2	6
160	Surface characterization of extracellular matrix scaffolds. *Biomaterials*, **2010**, 31, 428-37	15.6	136
159	Protein adsorption and clotting time of pHEMA hydrogels modified with C18 ligands to adsorb albumin selectively and reversibly. *Biomaterials*, **2009**, 30, 5541-51	15.6	27
158	Sustained release of antibiotic from poly(2-hydroxyethyl methacrylate) to prevent blinding infections after cataract surgery. *Biomaterials*, **2009**, 30, 5675-81	15.6	59
157	Introduction of Carboxyl Functional Groups onto Platinum by RF Plasma Deposition. *Plasma Processes and Polymers*, **2009**, 6, 219-227	3.4	14

156	Versatile synthesis and micropatterning of nonfouling polymer brushes on the wafer scale. *Biointerphases*, **2009**, 4, FA50-7	1.8	57
155	Zwitterionic hydrogels: an in vivo implantation study. *Journal of Biomaterials Science, Polymer Edition*, **2009**, 20, 1845-59	3.5	92
154	Conjunctival impression cytology by using a thermosensitive adhesive: polymerized N-isopropyl acrylamide. *Cornea*, **2009**, 28, 770-3	3.1	2
153	Hydrogels for Healing **2009**, 43-51		4
152	Degradable poly(2-hydroxyethyl methacrylate)-co-polycaprolactone hydrogels for tissue engineering scaffolds. *Biomacromolecules*, **2008**, 9, 3370-7	6.9	128
151	Reduced foreign body reaction to implanted biomaterials by surface treatment with oriented osteopontin. *Journal of Biomaterials Science, Polymer Edition*, **2008**, 19, 821-35	3.5	44
150	Foreign Body Response Investigated With an Implanted Biosensor by In Situ Electrical Impedance Spectroscopy. *IEEE Sensors Journal*, **2008**, 8, 104-112	4	16
149	A reversible thermosensitive adhesive for retinal implants: in vivo experience with plasma-deposited poly(N-isopropyl acrylamide). *Retina*, **2008**, 28, 1338-43	3.6	25
148	Proteins Controlled with Precision at Organic, Polymeric, and Biopolymer Interfaces for Tissue Engineering and Regenerative Medicine **2008**, 734-742		1
147	Microporous nanofibrous fibrin-based scaffolds for bone tissue engineering. *Biomaterials*, **2008**, 29, 4091-99	7.6	139
146	Differentiation of Calcium Carbonate Polymorphs by Surface Analysis Techniques - An XPS and TOF-SIMS study. *Surface and Interface Analysis*, **2008**, 40, 1356-1361	1.5	222
145	Adhesion of MC3T3-E1 cells to bone sialoprotein and bone osteopontin specifically bound to collagen I. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 779-87	5.4	27
144	Blood compatibility of surfaces with superlow protein adsorption. *Biomaterials*, **2008**, 29, 4285-91	15.6	385
143	Stepwise Assembly of Fibrin Bilayers on Self-Assembled Monolayers of Alkanethiolates: Influence of Surface Chemistry. *Journal of Physical Chemistry C*, **2007**, 111, 8504-8508	3.8	13
142	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**, 80, 102-10	5.4	29
141	Plasma deposition of tetraglyme inside small diameter tubing: optimization and characterization. *Journal of Biomedical Materials Research - Part A*, **2007**, 81, 12-23	5.4	11
140	Plasma-deposited tetraglyme surfaces greatly reduce total blood protein adsorption, contact activation, platelet adhesion, platelet procoagulant activity, and in vitro thrombus deposition. *Journal of Biomedical Materials Research - Part A*, **2007**, 81, 827-37	5.4	71
139	The influence of surface energy on competitive protein adsorption on oxidized NiTi surfaces. *Biomaterials*, **2007**, 28, 586-94	15.6	142

138	Photo-patterning of porous hydrogels for tissue engineering. *Biomaterials*, **2007**, 28, 2978-86	15.6	215
137	The catastrophe revisited: blood compatibility in the 21st Century. *Biomaterials*, **2007**, 28, 5144-7	15.6	294
136	A fibrinogen-based precision microporous scaffold for tissue engineering. *Biomaterials*, **2007**, 28, 5298-306	15.6	136
135	A paradigm shift: biomaterials that heal. *Polymer International*, **2007**, 56, 1183-1185	3.3	57
134	Reversible thermosensitive glue for retinal implants. *Retina*, **2007**, 27, 938-42	3.6	13
133	Capillary Differentiation of Endothelial Cells on Microgrooved Surfaces. *Journal of Physical Chemistry C*, **2007**, 111, 14602-14606	3.8	5
132	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**, 77, 672-8	5.4	34
131	Glow discharge plasma treatment of polyethylene tubing with tetraglyme results in ultralow fibrinogen adsorption and greatly reduced platelet adhesion. *Journal of Biomedical Materials Research - Part A*, **2006**, 79, 788-803	5.4	43
130	Spatial Patterning of Thick Poly(2-hydroxyethyl methacrylate) Hydrogels. *Macromolecules*, **2006**, 39, 4395-4399	5.5	22
129	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, 20-6	11.4	14
128	Biomaterials approaches to combating oral biofilms and dental disease. *BMC Oral Health*, **2006**, 6 Suppl 1, S15	3.7	11
127	A Plasma-Deposited Surface for Cell Sheet Engineering: Advantages over Mechanical Dissociation of Cells. *Plasma Processes and Polymers*, **2006**, 3, 516-523	3.4	31
126	Characterization of an in vitro model for evaluating the interface between skin and percutaneous biomaterials. *Wound Repair and Regeneration*, **2006**, 14, 484-91	3.6	46
125	Surface chemical and mechanical properties of plasma-polymerized N-isopropylacrylamide. *Langmuir*, **2005**, 21, 7833-41	4	162
124	Protein adsorption on oligo(ethylene glycol)-terminated alkanethiolate self-assembled monolayers: The molecular basis for nonfouling behavior. *Journal of Physical Chemistry B*, **2005**, 109, 2934-41	3.4	421
123	Controlling osteopontin orientation on surfaces to modulate endothelial cell adhesion. *Journal of Biomedical Materials Research - Part A*, **2005**, 74, 23-31	5.4	66
122	Cell sheet detachment affects the extracellular matrix: a surface science study comparing thermal liftoff, enzymatic, and mechanical methods. *Journal of Biomedical Materials Research - Part A*, **2005**, 75, 1-13	5.4	168
121	The role of adsorbed fibrinogen in platelet adhesion to polyurethane surfaces: a comparison of surface hydrophobicity, protein adsorption, monoclonal antibody binding, and platelet adhesion. *Journal of Biomedical Materials Research - Part A*, **2005**, 74, 722-38	5.4	158

120	Poly(vinyl alcohol)-Amino Acid Hydrogels Fabricated into Tissue Engineering Scaffolds by Colloidal Gas Aphron Technology. *Macromolecular Symposia*, **2005**, 227, 115-122	0.8	8
119	Enhancing the biological activity of immobilized osteopontin using a type-1 collagen affinity coating. *Journal of Biomedical Materials Research Part B*, **2004**, 70, 10-9		29
118	Novel cell patterning using microheater-controlled thermoresponsive plasma films. *Journal of Biomedical Materials Research - Part A*, **2004**, 70, 159-68	5.4	102
117	Probing the orientation of surface-immobilized immunoglobulin G by time-of-flight secondary ion mass spectrometry. *Langmuir*, **2004**, 20, 1877-87	4	141
116	Biomaterials: where we have been and where we are going. *Annual Review of Biomedical Engineering*, **2004**, 6, 41-75	12	1188
115	Surface Analysis of Biomaterials and Biomineralization **2004**, 75-85		
114	Characterization and analysis of osteopontin-immobilized poly(2-hydroxyethyl methacrylate) surfaces. *Journal of Biomedical Materials Research Part B*, **2003**, 67, 334-43		36
113	Nacre surface transformation to hydroxyapatite in a phosphate buffer solution. *Biomaterials*, **2003**, 24, 4323-31	15.6	114
112	Compromised production of extracellular matrix in mice lacking secreted protein, acidic and rich in cysteine (SPARC) leads to a reduced foreign body reaction to implanted biomaterials. *American Journal of Pathology*, **2003**, 162, 627-35	5.8	57
111	Reducing capsular thickness and enhancing angiogenesis around implant drug release systems. *Journal of Controlled Release*, **2002**, 78, 211-8	11.7	208
110	Determination of surface coverage for tetraphenylporphyrin monolayers using ultraviolet visible absorption and x-ray photoelectron spectroscopies. *Surface and Interface Analysis*, **2002**, 33, 506-515	1.5	50
109	Micro-Scale Cell Patterning on Nonfouling Plasma Polymerized Tetraglyme Coatings by Protein Microcontact Printing. *Plasmas and Polymers*, **2002**, 7, 171-183		32
108	PEO-like plasma polymerized tetraglyme surface interactions with leukocytes and proteins: in vitro and in vivo studies. *Journal of Biomaterials Science, Polymer Edition*, **2002**, 13, 367-90	3.5	269
107	Poly(Desaminotyrosyl-tyrosine Carbonate Ethyl Ester) Studied by XPS. *Surface Science Spectra*, **2002**, 9, 6-11	1.2	4
106	Solution Assembled and Microcontact Printed Monolayers of Dodecanethiol on Gold: A Multivariate Exploration of Chemistry and Contamination. *Langmuir*, **2002**, 18, 1518-1527	4	95
105	Biomedical surface science: Foundations to frontiers. *Surface Science*, **2002**, 500, 28-60	1.8	1104
104	Recognition Templates for Biomaterials with Engineered Bioreactivity **2002**, 75-78		
103	Micromachining of non-fouling coatings for bio-MEMS applications. *Sensors and Actuators B: Chemical*, **2001**, 81, 49-54	8.5	56

102	Static time-of-flight secondary ion mass spectrometry and x-ray photoelectron spectroscopy characterization of adsorbed albumin and fibronectin films. *Surface and Interface Analysis*, **2001**, 31, 724-733	1.5	124
101	Self-assembled molecular structures as ultrasonically-responsive barrier membranes for pulsatile drug delivery. *Journal of Biomedical Materials Research Part B*, **2001**, 57, 151-64		92
100	Nanostructures, Microscale Technologies, and Plasma Deposited Films. *Plasmas and Polymers*, **2001**, 6, 189-191		2
99	A Perspective on Titanium Biocompatibility. *Engineering Materials*, **2001**, 1-12	0.4	27
98	Inhibition of monocyte adhesion and fibrinogen adsorption on glow discharge plasma deposited tetraethylene glycol dimethyl ether. *Journal of Biomaterials Science, Polymer Edition*, **2001**, 12, 961-78	3.5	85
97	Plasma polymerized N-isopropylacrylamide: synthesis and characterization of a smart thermally responsive coating. *Biomacromolecules*, **2001**, 2, 32-6	6.9	231
96	Replacing and Renewing: Synthetic Materials, Biomimetics, and Tissue Engineering in Implant Dentistry. *Journal of Dental Education*, **2001**, 65, 1340-1347	1.6	72
95	Static time-of-flight secondary ion mass spectrometry and x-ray photoelectron spectroscopy characterization of adsorbed albumin and fibronectin films **2001**, 31, 724		1
94	Template recognition of protein-imprinted polymer surfaces. *Journal of Biomedical Materials Research Part B*, **2000**, 49, 1-11		67
93	ToF-SIMS quantification of albumin adsorbed on plasma-deposited fluoropolymers by partial least-squares regression. *Surface and Interface Analysis*, **2000**, 29, 837-844	1.5	36
92	Surface modification of polymers with self-assembled molecular structures: multitechnique surface characterization. *Biomacromolecules*, **2000**, 1, 139-48	6.9	51
91	Surface characterization of hydroxyapatite and related calcium phosphates by XPS and TOF-SIMS. *Analytical Chemistry*, **2000**, 72, 2886-94	7.8	254
90	Blood compatibility--a perspective. *Journal of Biomaterials Science, Polymer Edition*, **2000**, 11, 1107-19	3.5	113
89	New Substrates for Polymer Cationization with Time-of-Flight Secondary Ion Mass Spectrometry. *Langmuir*, **2000**, 16, 6503-6509	4	14
88	Self-Assembly of Tetraphenylporphyrin Monolayers on Gold Substrates. *Langmuir*, **2000**, 16, 5644-5653	4	66
87	Glow discharge plasma deposited hexafluoropropylene films: surface chemistry and interfacial materials properties. *Thin Solid Films*, **1999**, 352, 13-21	2.2	44
86	An intrinsically protein-resistant surface plasmon resonance biosensor based upon a RF-plasma-deposited thin film. *Sensors and Actuators B: Chemical*, **1999**, 54, 125-131	8.5	55
85	Template-imprinted nanostructured surfaces for protein recognition. *Nature*, **1999**, 398, 593-7	50.4	581

84	Design of infection-resistant antibiotic-releasing polymers: I. Fabrication and formulation. *Journal of Controlled Release*, **1999**, 62, 289-99	11.7	55
83	Recognition templates for biomaterials with engineered bioreactivity. *Current Opinion in Solid State and Materials Science*, **1999**, 4, 395-402	12	30
82	Glow discharge plasma deposition (GDPD) technique for the local controlled delivery of hirudin from biomaterials. *Pharmaceutical Research*, **1998**, 15, 783-6	4.5	13
81	Multitechnique Surface Characterization of Derivatization Efficiencies for Hydroxyl-Terminated Self-Assembled Monolayers. *Langmuir*, **1998**, 14, 3545-3550	4	59
80	Rapid postadsorptive changes in fibrinogen adsorbed from plasma to segmented polyurethanes. *Journal of Biomaterials Science, Polymer Edition*, **1998**, 9, 1071-87	3.5	15
79	Molecular design strategies for biomaterials that heal. *Macromolecular Symposia*, **1998**, 130, 327-335	0.8	11
78	Recognition and Nanolithography with the Atomic Force Microscope. *ACS Symposium Series*, **1998**, 342-350	4	3
77	Endothelial Cell Growth and Protein Adsorption on Terminally Functionalized, Self-Assembled Monolayers of Alkanethiolates on Gold. *Langmuir*, **1997**, 13, 3404-3413	4	255
76	Surface characterization of tyrosine-derived polycarbonates. *Journal of Applied Polymer Science*, **1997**, 63, 1467-1479	2.9	15
75	Biomaterials Science **1997**, 453-464		15
74	Molecular adsorption and the chemistry of plasma-deposited thin organic films: Deposition of oligomers of ethylene glycol. *Plasmas and Polymers*, **1996**, 1, 127-151		15
73	Surface chemical composition and fibrinogen adsorption-retention of fluoropolymer films deposited from an RF glow discharge. *Plasmas and Polymers*, **1996**, 1, 299-326		47
72	The engineering of biomaterials exhibiting recognition and specificity. *Journal of Molecular Recognition*, **1996**, 9, 617-25	2.6	142
71	An Investigation of the Surface Chemistry of a Polyetherurethaneurea Biomaterial Using XPS. *Surface Science Spectra*, **1996**, 4, 90-95	1.2	3
70	A History of Biomaterials **1996**, 10-19		3
69	Properties of Materials **1996**, 23-65		3
68	Characterization of plasma-deposited styrene films by XPS and static SIMS. *Surface and Interface Analysis*, **1995**, 23, 22-28	1.5	35
67	Advances in the analysis of surfaces of biomedical interest. *Surface and Interface Analysis*, **1995**, 23, 521-528	1.5	49

66	New ideas in biomaterials science--a path to engineered biomaterials. *Journal of Biomedical Materials Research Part B*, **1994**, 28, 133-6		1
65	In vitro study of the intrinsic toxicity of synthetic surfaces to cells. *Journal of Biomedical Materials Research Part B*, **1994**, 28, 667-75		71
64	Developing correlations between fibrinogen adsorption and surface properties using multivariate statistics. Student Research Award in the Doctoral Degree Candidate Category, 20th annual meeting of the Society for Biomaterials, Boston, MA, April 5-9, 1994. *Journal of Biomedical Materials Research Part B*, **1994**, 28, 1111-26		43
63	Advances in X-ray photoelectron spectroscopy instrumentation and methodology: instrument evaluation and new techniques with special reference to biomedical studies. *Colloids and Surfaces B: Biointerfaces*, **1994**, 2, 333-346	6	30
62	Surface and bulk structure of segmented poly(ether urethanes) with perfluoro chain extenders. 5. Incorporation of poly(dimethylsiloxane) and polyisobutylene macroglycols. *Macromolecules*, **1994**, 27, 1548-1554	5.5	54
61	Two-Dimensional Assembly of Purines and Pyrimidines on Au(111). *Langmuir*, **1994**, 10, 3845-3852	4	83
60	Chapter 8 Characterization of biomaterial surfaces. *Cardiovascular Pathology*, **1993**, 2, 87-100	3.8	49
59	Plasma deposition of ultrathin films of poly(2-hydroxyethyl methacrylate): surface analysis and protein adsorption measurements. *Macromolecules*, **1993**, 26, 3247-3253	5.5	74
58	Allan S. Hoffman--overview and appreciation. *Journal of Biomaterials Science, Polymer Edition*, **1993**, 4, 155-64	3.5	2
57	Static secondary ion mass spectrometry of adsorbed proteins. *Analytical Chemistry*, **1993**, 65, 1431-8	7.8	176
56	Surface properties of RGD-peptide grafted polyurethane block copolymers: variable take-off angle and cold-stage ESCA studies. *Journal of Biomaterials Science, Polymer Edition*, **1993**, 4, 183-98	3.5	30
55	Observation of Surface Rearrangement of Polymers Using ESCA. *Journal of Colloid and Interface Science*, **1993**, 159, 77-85	9.3	116
54	Variations between Biomer lots. 2: The effect of differences between lots on in vitro enzymatic and oxidative degradation of a commercial polyurethane. *Journal of Biomedical Materials Research Part B*, **1993**, 27, 327-34		32
53	Effect of polyol type on the surface structure of sulfonate-containing polyurethanes. *Journal of Biomedical Materials Research Part B*, **1993**, 27, 735-45		28
52	New ideas in biomaterials science--a path to engineered biomaterials. *Journal of Biomedical Materials Research Part B*, **1993**, 27, 837-50		314
51	In vitro platelet interactions in whole human blood exposed to biomaterial surfaces: insights on blood compatibility. *Journal of Biomedical Materials Research Part B*, **1993**, 27, 1181-93		94
50	Spin Cast Poly(vinyl isobutyl ether) Film on Glass Substrate by XPS. *Surface Science Spectra*, **1992**, 1, 96-99	1.2	1
49	Spin Cast Poly(t-butyl methacrylate) Film on Glass Substrate by XPS. *Surface Science Spectra*, **1992**, 1, 104-107	1.2	

48	Spin Cast Polycarbonate Film on Glass Substrate by XPS. *Surface Science Spectra*, **1992**, 1, 108-111	1.2	4
47	Angular-Resolved ESCA Studies of Cadmium Arachidate Monolayers on Si (100): Inelastic Mean-Free Path and Depth Profile Analysis. *Materials Research Society Symposia Proceedings*, **1992**, 292, 115		
46	Analysis of polymer surfaces by SIMS: Part 15. Oxygen-functionalized aliphatic homopolymers. *Surface and Interface Analysis*, **1992**, 18, 604-618	1.5	21
45	Static secondary ion mass spectrometry of organic plasma-deposited films created from stable isotope-labeled precursors. II. Mixtures of acetone and oxygen. *Journal of Polymer Science Part A*, **1992**, 30, 1261-1278	2.5	10
44	Substrate temperature effects on film chemistry in plasma depositions of organics. II. Polymerizable precursors. *Journal of Polymer Science Part A*, **1992**, 30, 2415-2425	2.5	32
43	Substrate temperature effects on film chemistry in plasma deposition of organics. III. Analysis by static secondary ion mass spectrometry. *Journal of Polymer Science Part A*, **1992**, 30, 2427-2441	2.5	15
42	Glow discharge plasma deposition of tetraethylene glycol dimethyl ether for fouling-resistant biomaterial surfaces. *Journal of Biomedical Materials Research Part B*, **1992**, 26, 415-39		219
41	Postadsorptive transitions in fibrinogen adsorbed to polyurethanes: changes in antibody binding and sodium dodecyl sulfate elutability. *Journal of Biomedical Materials Research Part B*, **1992**, 26, 757-78		53
40	Postadsorptive transitions in fibrinogen adsorbed to biomer: changes in baboon platelet adhesion, antibody binding, and sodium dodecyl sulfate elutability. *Journal of Biomedical Materials Research Part B*, **1991**, 25, 535-55		57
39	Photoenhancement of platelet adhesion to biomaterial surfaces observed with epifluorescent video microscopy (EVM). *Journal of Biomedical Materials Research Part B*, **1991**, 25, 1317-20		11
38	XPS O 1s binding energies for polymers containing hydroxyl, ether, ketone and ester groups. *Surface and Interface Analysis*, **1991**, 17, 267-272	1.5	421
37	An X-ray photoelectron spectroscopic investigation of the selectivity of hydroxyl derivatization reactions. *Surface and Interface Analysis*, **1991**, 17, 567-574	1.5	75
36	Endothelial cell growth on oxygen-containing films deposited by radio-frequency plasmas: the role of surface carbonyl groups. *Journal of Biomaterials Science, Polymer Edition*, **1991**, 3, 163-83	3.5	87
35	Plasma-deposited polymeric films prepared from carbonyl-containing volatile precursors: XPS chemical derivatization and static SIMS surface characterization. *Chemistry of Materials*, **1991**, 3, 51-61	9.6	183
34	Baboon Fibrinogen Adsorption and Platelet Adhesion to Polymeric Materials. *Thrombosis and Haemostasis*, **1991**, 65, 608-617	7	81
33	Surface characterization of a series of polyurethanes by X-ray photoelectron spectroscopy and contact angle methods. *Journal of Biomaterials Science, Polymer Edition*, **1990**, 1, 191-206	3.5	14
32	Surface characterization of butyl methacrylate polymers by XPS and static SIMS. *Surface and Interface Analysis*, **1990**, 15, 479-486	1.5	69
31	Characterization of alkyl grafted polyurethane block copolymers by variable takeoff angle x-ray photoelectron spectroscopy. *Journal of Biomedical Materials Research Part B*, **1990**, 24, 605-20		21

30	Radiofrequency plasma deposition of oxygen-containing films on polystyrene and poly(ethylene terephthalate) substrates improves endothelial cell growth. *Journal of Biomedical Materials Research Part B*, **1990**, 24, 1637-59		132
29	Surface characterization of a poly(styrene/p-hydroxystyrene) copolymer series using x-ray photoelectron spectroscopy, static secondary ion mass spectrometry, and chemical derivatization techniques. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1990**, 8, 2274-2282	2.9	49
28	Biomolecules and surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films* , **1990**, 8, 2306-2317	2.9	46
27	Determining depth profiles from angle dependent x-ray photoelectron spectroscopy: The effects of analyzer lens aperture size and geometry. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1989**, 7, 1646-1654	2.9	26
26	IR spectral changes of bovine serum albumin upon surface adsorption. *Journal of Biomedical Materials Research Part B*, **1989**, 23, 549-69		76
25	Synthesis and ESCA surface studies of octadecyl chain-extended polyurethanes. *Journal of Polymer Science Part A*, **1989**, 27, 2673-2683	2.5	16
24	Synthesis, bulk characterization, and surface characterization of p-hydroxystyrene/styrene copolymers. *Journal of Polymer Science Part A*, **1988**, 26, 1991-2002	2.5	9
23	Role of negative ions in the RF plasma deposition of fluoropolymer films from perfluoropropane. *Journal of Polymer Science, Part B: Polymer Physics*, **1988**, 26, 1237-1249	2.6	21
22	Summary Abstract: X-ray photoelectron spectroscopy characterization of polymers for biomedical applications. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1988**, 6, 964-965	2.9	12
21	Surface structure of polymers for biomedical applications. *Makromolekulare Chemie Macromolecular Symposia*, **1988**, 19, 163-178		8
20	Radiation-grafted polymers for biomaterial applications. II. The morphology and structure of 2-hydroxyethyl methacrylate and ethyl methacrylate homopolymer grafts. *Journal of Applied Polymer Science*, **1987**, 33, 1-20	2.9	16
19	Preparation and properties of plasma-deposited films with surface energies varying over a wide range. *Journal of Applied Polymer Science*, **1986**, 32, 4369-4381	2.9	30
18	Rat peritoneal macrophage adhesion to hydroxyethyl methacrylate-ethyl methacrylate copolymers and hydroxystyrene-styrene copolymers. *Journal of Biomedical Materials Research Part B*, **1985**, 19, 1101-15		27
17	Glucose-sensitive membranes containing glucose oxidase: activity, swelling, and permeability studies. *Journal of Biomedical Materials Research Part B*, **1985**, 19, 1117-33		177
16	The Small Diameter Vascular Graft □A Challenging Biomaterials Problem. *Materials Research Society Symposia Proceedings*, **1985**, 55, 3		5
15	Radiation-grafted polymers for biomaterial applications. I. 2-hydroxyethyl methacrylate: Ethyl methacrylate grafting onto low density polyethylene films. *Journal of Applied Polymer Science*, **1984** , 29, 2645-2663	2.9	36
14	Surface characterization of biomaterials by electron spectroscopy for chemical analysis. *Annals of Biomedical Engineering*, **1983**, 11, 313-36	4.7	99
13	Thrombotic Events on Grafted Polyacrylamide□ilastic Surfaces as Studied in a Baboon. *Advances in Chemistry Series*, **1982**, 59-80		15

12	Surface Characterization of Materials for Blood Contact Applications. *Advances in Chemistry Series*, **1982**, 9-23		17
11	Characterization of graft polymers for biomedical applications. *Journal of Biomedical Materials Research Part B*, **1980**, 14, 665-87		59
10	Radiation-grafted hydrogels for biomaterial applications as studied by the ESCA technique. *Journal of Applied Polymer Science*, **1978**, 22, 643-664	2.9	190
9	The Thermodynamics of Water Sorption in Radiation-Grafted Hydrogels. *ACS Symposium Series*, **1976**, 295-304	0.4	3
8	Radiation-Induced Co-Graft Polymerization of 2-Hydroxyethyl Methacrylate and Ethyl Methacrylate onto Silicone Rubber Films. *ACS Symposium Series*, **1976**, 283-294	0.4	12
7	Synthetic Hydrogels for Biomedical Applications. *ACS Symposium Series*, **1976**, 1-36	0.4	221
6	Blood compatibility of radiation-grafted hydrogels. *Biomaterials, Medical Devices, and Artificial Organs*, **1975**, 3, 115-20		12
5	The effect of cupric ion on the radiation grafting of N-vinyl-2-pyrrolidone and other hydrophilic monomers onto silicone rubber. *Journal of Applied Polymer Science*, **1974**, 18, 3183-3204	2.9	58
4	Transport through crosslinked poly(2-hydroxyethyl methacrylate) hydrogel membranes. *Journal of Biomedical Materials Research Part B*, **1973**, 7, 353-67		81
3	Interaction of urea with poly(2-hydroxyethyl methacrylate) hydrogels. *Journal of Polymer Science Part A-1, Polymer Chemistry*, **1972**, 10, 2425-2445		59
2	Electron Spectroscopy for Chemical Analysis47-112		44
1	Dialysate Regeneration with Urea Selective Membrane Coupled to Photoelectrochemical Oxidation System. *Advanced Materials Interfaces*,2102308	4.6	0