Buddy D Ratner

List of Publications by Year
in descending order

231	20,614	71	138
papers	citations	h-index	g-index

10986 10734

237	237	237	19822
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biomaterials: Where We Have Been and Where We Are Going. Annual Review of Biomedical Engineering, 2004, 6, 41-75.	12.3	1,318
2	Biomedical surface science: Foundations to frontiers. Surface Science, 2002, 500, 28-60.	1.9	1,205
3	Zwitterionic hydrogels implanted in mice resist the foreign-body reaction. Nature Biotechnology, 2013, 31, 553-556.	17.5	787
4	Macrophage polarization: An opportunity for improved outcomes in biomaterials and regenerative medicine. Biomaterials, 2012, 33, 3792-3802.	11.4	728
5	Template-imprinted nanostructured surfaces for protein recognition. Nature, 1999, 398, 593-597.	27.8	657
6	Proangiogenic scaffolds as functional templates for cardiac tissue engineering. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15211-15216.	7.1	575
7	XPS O 1s binding energies for polymers containing hydroxyl, ether, ketone and ester groups. Surface and Interface Analysis, 1991, 17, 267-272.	1.8	554
8	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.	2.6	461
9	Blood compatibility of surfaces with superlow protein adsorption. Biomaterials, 2008, 29, 4285-4291.	11.4	424
10	New ideas in biomaterials scienceâ€"a path to engineered biomaterials. Journal of Biomedical Materials Research Part B, 1993, 27, 837-850.	3.1	364
11	The catastrophe revisited: Blood compatibility in the 21st Century. Biomaterials, 2007, 28, 5144-5147.	11.4	329
12	Porous Implants Modulate Healing and Induce Shifts in Local Macrophage Polarization in the Foreign Body Reaction. Annals of Biomedical Engineering, 2014, 42, 1508-1516.	2.5	325
13	Surface Characterization of Hydroxyapatite and Related Calcium Phosphates by XPS and TOF-SIMS. Analytical Chemistry, 2000, 72, 2886-2894.	6.5	300
14	Differentiating calcium carbonate polymorphs by surface analysis techniquesâ€"an XPS and TOFâ€SIMS study. Surface and Interface Analysis, 2008, 40, 1356-1361.	1.8	297
15	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, 367-390.	3.5	286
16	Endothelial Cell Growth and Protein Adsorption on Terminally Functionalized, Self-Assembled Monolayers of Alkanethiolates on Gold. Langmuir, 1997, 13, 3404-3413.	3.5	275
17	Plasma PolymerizedN-Isopropylacrylamide:Â Synthesis and Characterization of a Smart Thermally Responsive Coating. Biomacromolecules, 2001, 2, 32-36.	5.4	254
18	Glow discharge plasma deposition of tetraethylene glycol dimethyl ether for fouling-resistant biomaterial surfaces. Journal of Biomedical Materials Research Part B, 1992, 26, 415-439.	3.1	248

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19	Photo-patterning of porous hydrogels for tissue engineering. Biomaterials, 2007, 28, 2978-2986.	11.4	242
20	Synthetic Hydrogels for Biomedical Applications. ACS Symposium Series, 1976, , 1-36.	0.5	239
21	Radiation-grafted hydrogels for biomaterial applications as studied by the ESCA technique. Journal of Applied Polymer Science, 1978, 22, 643-664.	2.6	235
22	Reducing capsular thickness and enhancing angiogenesis around implant drug release systems. Journal of Controlled Release, 2002, 78, 211-218.	9.9	234
23	Engineering biomaterials to integrate and heal: The biocompatibility paradigm shifts. Biotechnology and Bioengineering, 2012, 109, 1898-1911.	3.3	217
24	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.	6.7	212
25	Glucose-sensitive membranes containing glucose oxidase: Activity, swelling, and permeability studies. Journal of Biomedical Materials Research Part B, 1985, 19, 1117-1133.	3.1	202
26	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, 75A, 1-13.	4.0	193
27	Static secondary ion mass spectrometry of adsorbed proteins. Analytical Chemistry, 1993, 65, 1431-1438.	6.5	188
28	The impact of detergents on the tissue decellularization process: A ToF-SIMS study. Acta Biomaterialia, 2017, 50, 207-219.	8.3	187
29	The blood compatibility catastrophe. Journal of Biomedical Materials Research Part B, 1993, 27, 283-287.	3.1	182
30	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, 74A, 722-738.	4.0	170
31	Surface Chemical and Mechanical Properties of Plasma-Polymerized N-Isopropylacrylamide. Langmuir, 2005, 21, 7833-7841.	3.5	170
32	The influence of surface energy on competitive protein adsorption on oxidized NiTi surfaces. Biomaterials, 2007, 28, 586-594.	11.4	159
33	Microporous nanofibrous fibrin-based scaffolds for bone tissue engineering. Biomaterials, 2008, 29, 4091-4099.	11.4	157
34	Surface characterization of extracellular matrix scaffolds. Biomaterials, 2010, 31, 428-437.	11.4	154
35	Degradable, Thermo-Sensitive Poly(<i>N</i>-isopropyl acrylamide)-Based Scaffolds with Controlled Porosity for Tissue Engineering Applications. Biomacromolecules, 2010, 11, 2583-2592.	5.4	154
36	The engineering of biomaterials exhibiting recognition and specificity. , 1996, 9, 617-625.		152

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37	Probing the Orientation of Surface-Immobilized Immunoglobulin G by Time-of-Flight Secondary Ion Mass Spectrometry. Langmuir, 2004, 20, 1877-1887.	3.5	152
38	Degradable Poly(2-hydroxyethyl methacrylate)-<i>co</i>-polycaprolactone Hydrogels for Tissue Engineering Scaffolds. Biomacromolecules, 2008, 9, 3370-3377.	5.4	152
39	Radiofrequency plasma deposition of oxygen-containing films on polystyrene and poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 1 Research Part B, 1990, 24, 1637-1659.	3.1	150
40	A fibrinogen-based precision microporous scaffold for tissue engineering. Biomaterials, 2007, 28, 5298-5306.	11.4	147
41	VEGF Induces Differentiation of Functional Endothelium From Human Embryonic Stem Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 80-89.	2.4	146
42	Observation of Surface Rearrangement of Polymers Using ESCA. Journal of Colloid and Interface Science, 1993, 159, 77-85.	9.4	132
43	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.	1.8	131
44	Nacre surface transformation to hydroxyapatite in a phosphate buffer solution. Biomaterials, 2003, 24, 4323-4331.	11.4	124
45	Surface characterization of biomaterials by electron spectroscopy for chemical analysis. Annals of Biomedical Engineering, 1983, 11, 313-336.	2.5	119
46	Blood compatibility â€" a perspective. Journal of Biomaterials Science, Polymer Edition, 2000, 11, 1107-1119.	3.5	117
47	The Biocompatibility Manifesto: Biocompatibility for the Twenty-first Century. Journal of Cardiovascular Translational Research, 2011, 4, 523-527.	2.4	113
48	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, 1181-1193.	3.1	112
49	Novel cell patterning using microheater-controlled thermoresponsive plasma films. Journal of Biomedical Materials Research - Part A, 2004, 70A, 159-168.	4.0	112
50	Solution Assembled and Microcontact Printed Monolayers of Dodecanethiol on Gold:â€‰ A Multivariate Exploration of Chemistry and Contamination. Langmuir, 2002, 18, 1518-1527.	3.5	108
51	Biomechanics of the Sensor-Tissue Interfaceâ€"Effects of Motion, Pressure, and Design on Sensor Performance and the Foreign Body Responseâ€"Part I: Theoretical Framework. Journal of Diabetes Science and Technology, 2011, 5, 632-646.	2.2	105
52	Self-assembled molecular structures as ultrasonically-responsive barrier membranes for pulsatile drug delivery. Journal of Biomedical Materials Research Part B, 2001, 57, 151-164.	3.1	102
53	Zwitterionic Hydrogels: an in Vivo Implantation Study. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1845-1859.	3.5	99
54	Endothelial cell growth on oxygen-containing films deposited by radio-frequency plasmas: the role of surface carbonyl groups. Journal of Biomaterials Science, Polymer Edition, 1992, 3, 163-183.	3.5	97

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55	Transport through crosslinked poly(2-hydroxyethyl methacrylate) hydrogel membranes. Journal of Biomedical Materials Research Part B, 1973, 7, 353-367.	3.1	93
56	An X-ray photoelectron spectroscopic investigation of the selectivity of hydroxyl derivatization reactions. Surface and Interface Analysis, 1991, 17, 567-574.	1.8	90
57	Two-Dimensional Assembly of Purines and Pyrimidines on Au(111). Langmuir, 1994, 10, 3845-3852.	3.5	90
58	Inhibition of monocyte adhesion and fibrinogen adsorption on glow discharge plasma deposited tetraethylene glycol dimethyl ether. Journal of Biomaterials Science, Polymer Edition, 2001, 12, 961-978.	3.5	90
59	Replacing and Renewing: Synthetic Materials, Biomimetics, and Tissue Engineering in Implant Dentistry. Journal of Dental Education, 2001, 65, 1340-1347.	1.2	90
60	Surface characterization of butyl methacrylate polymers by XPS and static SIMS. Surface and Interface Analysis, 1990, 15, 479-486.	1.8	88
61	Baboon Fibrinogen Adsorption and Platelet Adhesion to Polymeric Materials. Thrombosis and Haemostasis, 1991, 65, 608-617.	3.4	88
62	IR spectral changes of bovine serum albumin upon surface adsorption. Journal of Biomedical Materials Research Part B, 1989, 23, 549-569.	3.1	85
63	Static timeâ€ofâ€flight secondary ion mass spectrometry and xâ€ray photoelectron spectroscopy characterization of adsorbed albumin and fibronectin films. Surface and Interface Analysis, 2001, 31, 724-733.	1.8	85
64	In vitro study of the intrinsic toxicity of synthetic surfaces to cells. Journal of Biomedical Materials Research Part B, 1994, 28, 667-675.	3.1	83
65	The surface molecular functionality of decellularized extracellular matrices. Biomaterials, 2011, 32, 137-143.	11.4	83
66	Integrated Biâ€Layered Scaffold for Osteochondral Tissue Engineering. Advanced Healthcare Materials, 2013, 2, 872-883.	7.6	83
67	Plasma deposition of ultrathin films of poly(2-hydroxyethyl methacrylate): surface analysis and protein adsorption measurements. Macromolecules, 1993, 26, 3247-3253.	4.8	82
68	Biomaterials: Been There, Done That, and Evolving into the Future. Annual Review of Biomedical Engineering, 2019, 21, 171-191.	12.3	82
69	Interaction of urea with poly(2-hydroxyethyl methacrylate) hydrogels. Journal of Polymer Science Part A-1, Polymer Chemistry, 1972, 10, 2425-2445.	0.7	81
70	Template recognition of protein-imprinted polymer surfaces. , 2000, 49, 1-11.		78
71	Plasma-deposited tetraglyme surfaces greatly reduce total blood protein adsorption, contact activation, platelet adhesion, platelet procoagulant activity, andin vitro thrombus deposition. Journal of Biomedical Materials Research - Part A, 2007, 81A, 827-837.	4.0	78
72	A paradigm shift: biomaterials that heal. Polymer International, 2007, 56, 1183-1185.	3.1	76

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73	A pore way to heal and regenerate: 21st century thinking on biocompatibility. International Journal of Energy Production and Management, 2016, 3, 107-110.	3.7	76
74	Controlling osteopontin orientation on surfaces to modulate endothelial cell adhesion. Journal of Biomedical Materials Research - Part A, 2005, 74A, 23-31.	4.0	73
75	Drug encapsulated polymeric microspheres for intracranial tumor therapy: A review of the literature. Advanced Drug Delivery Reviews, 2015, 91, 23-37.	13.7	73
76	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.	2.6	70
77	Sustained release of antibiotic from poly(2-hydroxyethyl methacrylate) to prevent blinding infections after cataract surgery. Biomaterials, 2009, 30, 5675-5681.	11.4	69
78	Characterization of graft polymers for biomedical applications. Journal of Biomedical Materials Research Part B, 1980, 14, 665-687.	3.1	67
79	Self-Assembly of Tetraphenylporphyrin Monolayers on Gold Substrates. Langmuir, 2000, 16, 5644-5653.	3.5	67
80	Micromachining of non-fouling coatings for bio-MEMS applications. Sensors and Actuators B: Chemical, 2001, 81, 49-54.	7.8	66
81	Multitechnique Surface Characterization of Derivatization Efficiencies for Hydroxyl-Terminated Self-Assembled Monolayers. Langmuir, 1998, 14, 3545-3550.	3.5	65
82	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.	7.8	63
83	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, 627-635.	3.8	63
84	Surface Modification of Polymers with Self-Assembled Molecular Structures:Â Multitechnique Surface Characterizationâ€. Biomacromolecules, 2000, 1, 139-148.	5.4	62
85	Versatile synthesis and micropatterning of nonfouling polymer brushes on the wafer scale. Biointerphases, 2009, 4, FA50-FA57.	1.6	62
86	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, 535-555.	3.1	61
87	Design of infection-resistant antibiotic-releasing polymers: I. Fabrication and formulation. Journal of Controlled Release, 1999, 62, 289-299.	9.9	59
88	Postadsorptive transition in fibrinogen adsorbed to polyurethanes: Changes in antibody binding and sodium dodecy1 sulfate elutability. Journal of Biomedical Materials Research Part B, 1992, 26, 757-778.	3.1	58
89	Biomolecules and surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 2306-2317.	2.1	56
90	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.	4.8	56

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91	Surface characterization of a poly(styrene/pâ€hydroxystyrene) copolymer series using xâ€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.	2.1	54
92	Determination of surface coverage for tetraphenylporphyrin monolayers using ultraviolet visible absorption and x-ray photoelectron spectroscopies. Surface and Interface Analysis, 2002, 33, 506-515.	1.8	54
93	Chapter 8 Characterization of biomaterial surfaces. Cardiovascular Pathology, 1993, 2, 87-100.	1.6	52
94	Advances in the analysis of surfaces of biomedical interest. Surface and Interface Analysis, 1995, 23, 521-528.	1.8	52
95	Surface chemical composition and fibrinogen adsorption-retention of fluoropolymer films deposited from an RF glow discharge. Plasmas and Polymers, 1996, 1, 299-326.	1.5	52
96	Characterization of an in vitro model for evaluating the interface between skin and percutaneous biomaterials. Wound Repair and Regeneration, 2006, 14, 484-491.	3.0	51
97	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.	0.7	49
98	Reduced foreign body reaction to implanted biomaterials by surface treatment with oriented osteopontin. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 821-835.	3.5	48
99	Sustained Antibiotic Release from an Intraocular Lensâ€"Hydrogel Assembly for Cataract Surgery. , 2011, 52, 6109.		47
100	Developing correlations between fibrinogen adsorption and surface properties using multivariate statistics. Journal of Biomedical Materials Research Part B, 1994, 28, 1111-1126.	3.1	46
101	Glow discharge plasma deposited hexafluoropropylene films: surface chemistry and interfacial materials properties. Thin Solid Films, 1999, 352, 13-21.	1.8	46
102	A tough, precision-porous hydrogel scaffold: Ophthalmologic applications. Biomaterials, 2014, 35, 8916-8926.	11.4	46
103	Biocompatibility Evolves: Phenomenology to Toxicology to Regeneration. Advanced Healthcare Materials, 2021, 10, e2002153.	7.6	46
104	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, 79A, 788-803.	4.0	45
105	Preparation and properties of plasma-deposited films with surface energies varying over a wide range. Journal of Applied Polymer Science, 1986, 32, 4369-4381.	2.6	44
106	ToF-SIMS quantification of albumin adsorbed on plasma-deposited fluoropolymers by partial least-squares regression. Surface and Interface Analysis, 2000, 29, 837-844.	1.8	44
107	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.	2.6	43
108	Characterization of plasma-deposited styrene films by XPS and static SIMS. Surface and Interface Analysis, 1995, 23, 22-28.	1.8	43

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109	Blood compatibility assessment of polymers used in drug eluting stent coatings. Biointerphases, 2016, 11, 029806.	1.6	42
110	Quantifying the effect of pore size and surface treatment on epidermal incorporation into percutaneously implanted sphereâ€templated porous biomaterials in mice. Journal of Biomedical Materials Research - Part A, 2011, 98A, 499-508.	4.0	41
111	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.	6.5	40
112	Characterization and analysis of osteopontinâ€immobilized poly(2â€hydroxyethyl methacrylate) surfaces. Journal of Biomedical Materials Research Part B, 2003, 67A, 334-343.	3.1	39
113	Synthesis and fabrication of a degradable poly(<i>N</i>â€isopropyl acrylamide) scaffold for tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2013, 101A, 775-786.	4.0	38
114	Engineered Biomaterials Control Differentiation and Proliferation of Human-Embryonic-Stem-Cell-Derived Cardiomyocytes via Timed Notch Activation. Stem Cell Reports, 2014, 2, 271-281.	4.8	38
115	A Perspective on Titanium Biocompatibility. Engineering Materials, 2001, , 1-12.	0.6	37
116	Enhancing the biological activity of immobilized osteopontin using a type-1 collagen affinity coating. Journal of Biomedical Materials Research Part B, 2004, 70A, 10-19.	3.1	37
117	Title is missing!. Plasmas and Polymers, 2002, 7, 171-183.	1.5	36
118	Biomaterials Science: An Evolving, Multidisciplinary Endeavor. , 2013, , xxv-xxxix.		36
119	Substrate temperature effects on film chemistry in plasma depositions of organics. II. Polymerizable precursors. Journal of Polymer Science Part A, 1992, 30, 2415-2425.	2.3	35
120	Effect of polyol type on the surface structure of sulfonate-containing polyurethanes. Journal of Biomedical Materials Research Part B, 1993, 27, 735-745.	3.1	34
121	A Plasma-Deposited Surface for Cell Sheet Engineering: Advantages over Mechanical Dissociation of Cells. Plasma Processes and Polymers, 2006, 3, 516-523.	3.0	34
122	Modulating cell adhesion and spreading by control of FnIII7â€"10 orientation on charged self-assembled monolayers (SAMs) of alkanethiolates. Journal of Biomedical Materials Research - Part A, 2006, 77A, 672-678.	4.0	34
123	Variations between biomer lots. 2: The effect of differences between lots onin vitro enzymatic and oxidative degradation of a commercial polyurethane. Journal of Biomedical Materials Research Part B, 1993, 27, 327-334.	3.1	33
124	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, 183-198.	3.5	33
125	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.	5.0	33
126	Rat peritoneal macrophage adhesion to hydroxyethyl methacrylate-ethyl methacrylate copolymers and hydroxystyrene-styrene copolymers. Journal of Biomedical Materials Research Part B, 1985, 19, 1101-1115.	3.1	32

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127	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.	4.0	32
128	Protein adsorption and clotting time of pHEMA hydrogels modified with C18 ligands to adsorb albumin selectively and reversibly. Biomaterials, 2009, 30, 5541-5551.	11.4	32
129	Recognition templates for biomaterials with engineered bioreactivity. Current Opinion in Solid State and Materials Science, 1999, 4, 395-402.	11.5	30
130	Adhesion of MC3T3â€Ɛ1 cells to bone sialoprotein and bone osteopontin specifically bound to collagen I. Journal of Biomedical Materials Research - Part A, 2008, 86A, 779-787.	4.0	28
131	Healing with medical implants: The body battles back. Science Translational Medicine, 2015, 7, 272fs4.	12.4	28
132	Determining depth profiles from angle dependent xâ€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.	2.1	27
133	A REVERSIBLE THERMOSENSITIVE ADHESIVE FOR RETINAL IMPLANTS. Retina, 2008, 28, 1338-1343.	1.7	26
134	The Biocompatibility of Implant Materials. , 2015, , 37-51.		26
135	Rapidly Biodegrading PLGA-Polyurethane Fibers for Sustained Release of Physicochemically Diverse Drugs. ACS Biomaterials Science and Engineering, 2016, 2, 1595-1607.	5.2	26
136	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.	2.1	25
137	Spatial Patterning of Thick Poly(2-hydroxyethyl methacrylate) Hydrogels. Macromolecules, 2006, 39, 4395-4399.	4.8	25
138	Synthesis and ESCA surface studies of octadecyl chain-extended polyurethanes. Journal of Polymer Science Part A, 1989, 27, 2673-2683.	2.3	24
139	Analysis of polymer surfaces by SIMS: Part 15. Oxygen-functionalized aliphatic homopolymers. Surface and Interface Analysis, 1992, 18, 604-618.	1.8	24
140	Digital drug delivery: onâ€"off ultrasound controlled antibiotic release from coated matrices with negligible background leaching. Biomaterials Science, 2014, 2, 893-902.	5.4	24
141	Prostate cancer xenografts engineered from 3D precision-porous poly(2-hydroxyethyl methacrylate) hydrogels as models for tumorigenesis and dormancy escape. Biomaterials, 2014, 35, 8164-8174.	11.4	24
142	Photoreactive Carboxybetaine Copolymers Impart Biocompatibility and Inhibit Plasticizer Leaching on Polyvinyl Chloride. ACS Applied Materials & Interfaces, 2020, 12, 41026-41037.	8.0	24
143	A History of Biomaterials. , 2020, , 21-34.		24
144	Characterization of alkyl grafted polyurethane block copolymers by variable takeoff angle X-ray photoelectron spectroscopy. Journal of Biomedical Materials Research Part B, 1990, 24, 605-620.	3.1	23

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145	Surface fluorination of polylactide as a path to improve platelet associated hemocompatibility. Acta Biomaterialia, 2018, 78, 23-35.	8.3	23
146	Wearable artificial kidney: problems, progress and prospects. Nature Reviews Nephrology, 2020, 16, 558-559.	9.6	23
147	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.	2.6	21
148	BloodSurf 2017: News from the blood-biomaterial frontier. Acta Biomaterialia, 2019, 87, 55-60.	8.3	21
149	Precision-porous polyurethane elastomers engineered for application in pro-healing vascular grafts: Synthesis, fabrication and detailed biocompatibility assessment. Biomaterials, 2021, 279, 121174.	11.4	21
150	Radiation-Induced Co-Graft Polymerization of 2-Hydroxyethyl Methacrylate and Ethyl Methacrylate onto Silicone Rubber Films. ACS Symposium Series, 1976, , 283-294.	0.5	20
151	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.	2.3	19
152	Foreign Body Response Investigated With an Implanted Biosensor by <i>In Situ</i> Electrical Impedance Spectroscopy. IEEE Sensors Journal, 2008, 8, 104-112.	4.7	19
153	Cutaneous and inflammatory response to longâ€term percutaneous implants of sphereâ€templated porous/solid poly(HEMA) and silicone in mice. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1256-1268.	4.0	19
154	Thrombotic Events on Grafted Polyacrylamideâ€"Silastic Surfaces as Studied in a Baboon. Advances in Chemistry Series, 1982, , 59-80.	0.6	18
155	Surface Characterization of Materials for Blood Contact Applications. Advances in Chemistry Series, 1982, , 9-23.	0.6	18
156	The effect of octadecyl chain immobilization on the hemocompatibility of poly (2-hydroxyethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30	11.4	18
157	Facile Synthesis of Fluorine-Substituted Polylactides and Their Amphiphilic Block Copolymers. Macromolecules, 2018, 51, 1280-1289.	4.8	18
158	Glow discharge plasma deposition (GDPD) technique for the local controlled delivery of hirudin from biomaterials. Pharmaceutical Research, 1998, 15, 783-786.	3.5	17
159	Blood Compatibility of Radiation-Grafted Hydrogels. Biomaterials, Medical Devices, and Artificial Organs, 1975, 3, 115-120.	0.3	16
160	Molecular adsorption and the chemistry of plasma-deposited thin organic films: Deposition of oligomers of ethylene glycol. Plasmas and Polymers, 1996, 1, 127-151.	1.5	16
161	Rapid postadsorptive changes in fibrinogen adsorbed from plasma to segmented polyurethanes. Journal of Biomaterials Science, Polymer Edition, 1998, 9, 1071-1087.	3.5	16
162	New Substrates for Polymer Cationization with Time-of-Flight Secondary Ion Mass Spectrometry. Langmuir, 2000, 16, 6503-6509.	3.5	16

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163	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.	3.6	16
164	REVERSIBLE THERMOSENSITIVE GLUE FOR RETINAL IMPLANTS. Retina, 2007, 27, 938-942.	1.7	16
165	Surface characterization of a series of polyurethanes by X-ray photoelectron spectroscopy and contact angle methods. Journal of Biomaterials Science, Polymer Edition, 1989, 1, 191-206.	3.5	15
166	Surface characterization of tyrosine-derived polycarbonates. Journal of Applied Polymer Science, 1997, 63, 1467-1479.	2.6	15
167	Biomaterials Approaches to Combating Oral Biofilms and Dental Disease. BMC Oral Health, 2006, 6, S15.	2.3	15
168	Biomaterials Science. , 1997, , 453-464.		15
169	Introduction of Carboxyl Functional Groups onto Platinum by RF Plasma Deposition. Plasma Processes and Polymers, 2009, 6, 219-227.	3.0	14
170	Drug encapsulated aerosolized microspheres as a biodegradable, intelligent glioma therapy. Journal of Biomedical Materials Research - Part A, 2016, 104, 544-552.	4.0	14
171	Surface structure of polymers for biomedical applications. Makromolekulare Chemie Macromolecular Symposia, 1988, 19, 163-178.	0.6	13
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