John Forsythe

List of Publications by Year
in descending order

123 papers	5,874 citations	66250 44 h-index	97045 71 g-index
127 all docs	127 docs citations	127 times ranked	9071 citing authors

#	Article	IF	Citations
1	Extrusion 3D bioprinting of functional self-supporting neural constructs using a photoclickable gelatin bioink. Biofabrication, 2022, 14, 035014.	3.7	8
2	Design, Development, In Vitro and Preliminary In Vivo Evaluation of a Novel Photo-Angioplasty Device: Lumi-Solve. Cardiovascular Engineering and Technology, 2021, 12, 466-473.	0.7	1
3	Cell-laden injectable microgels: Current status and future prospects for cartilage regeneration. Biomaterials, 2021, 279, 121214.	5.7	30
4	Biomaterial Strategies for Restorative Therapies in Parkinsonâ€™s Disease. ACS Chemical Neuroscience, 2021, 12, 4224-4235.	1.7	7
5	In situ miRNA delivery from a hydrogel promotes osteogenesis of encapsulated mesenchymal stromal cells. Acta Biomaterialia, 2020, 101, 249-261.	4.1	43
6	Electrochemical and mechanical performance of reduced graphene oxide, conductive hydrogel, and electrodeposited Ptâ€"Ir coated electrodes: an active<i>in vitro</i>study. Journal of Neural Engineering, 2020, 17, 016015.	1.8	22
7	The use of bioactive matrices in regenerative therapies for traumatic brain injury. Acta Biomaterialia, 2020, 102, 1-12.	4.1	17
8	Interplay of Hydrogel Composition and Geometry on Human Mesenchymal Stem Cell Osteogenesis. Biomacromolecules, 2020, 21, 5323-5335.	2.6	8
9	Hyperosmotic Infusion and Oxidized Surfaces Are Essential for Biofilm Formation of Staphylococcus capitis From the Neonatal Intensive Care Unit. Frontiers in Microbiology, 2020, 11, 920.	1.5	11
10	Gelatin-Based 3D Microgels for In Vitro T Lineage Cell Generation. ACS Biomaterials Science and Engineering, 2020, 6, 2198-2208.	2.6	13
11	Microencapsulation improves chondrogenesis <i>in vitro</i> and cartilaginous matrix stability <i>in vivo</i> compared to bulk encapsulation. Biomaterials Science, 2020, 8, 1711-1725.	2.6	27
12	Migration and Differentiation of Neural Stem Cells Diverted From the Subventricular Zone by an Injectable Self-Assembling Î²-Peptide Hydrogel. Frontiers in Bioengineering and Biotechnology, 2019, 7, 315.	2.0	31
13	Self-assembling injectable peptide hydrogels for emerging treatment of ischemic stroke. Journal of Materials Chemistry B, 2019, 7, 3927-3943.	2.9	19
14	Polyethylene glycolâ€"gelatin hydrogels with tuneable stiffness prepared by horseradish peroxidase-activated tetrazineâ€"norbornene ligation. Journal of Materials Chemistry B, 2018, 6, 1394-1401.	2.9	36
15	Wavelength-Selective Coupling and Decoupling of Polymer Chains via Reversible [2 + 2] Photocycloaddition of Styrylpyrene for Construction of Cytocompatible Photodynamic Hydrogels. ACS Macro Letters, 2018, 7, 464-469.	2.3	99
16	Neural Electrodes Based on 3D Organic Electroactive Microfibers. Advanced Functional Materials, 2018, 28, 1700927.	7.8	15
17	Î²³-Tripeptides Coassemble into Fluorescent Hydrogels for Serial Monitoring in Vivo. ACS Biomaterials Science and Engineering, 2018, 4, 3843-3847.	2.6	18
18	Visible Light Activation of Nucleophilic Thiol-X Addition via Thioether Bimane Photocleavage for Polymer Cross-Linking. Biomacromolecules, 2018, 19, 4277-4285.	2.6	20

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19	Cartilage tissue formation through assembly of microgels containing mesenchymal stem cells. Acta Biomaterialia, 2018, 77, 48-62.	4.1	102
20	Increased Cardiomyocyte Alignment and Intracellular Calcium Transients Using Micropatterned and Drug-Releasing Poly(Glycerol Sebacate) Elastomers. ACS Biomaterials Science and Engineering, 2018, 4, 2494-2504.	2.6	21
21	Microfluidic Encapsulation of Human Mesenchymal Stem Cells for Articular Cartilage Tissue Regeneration. ACS Applied Materials & Interfaces, 2017, 9, 8589-8601.	4.0	119
22	Nonswelling Click-Cross-Linked Gelatin and PEG Hydrogels with Tunable Properties Using Pluronic Linkers. Biomacromolecules, 2017, 18, 757-766.	2.6	51
23	Red Light Activation of Tetrazineâ€"Norbornene Conjugation for Bioorthogonal Polymer Cross-Linking across Tissue. Chemistry of Materials, 2017, 29, 3678-3685.	3.2	42
24	A versatile and rapid coating method via a combination of plasma polymerization and surfaceâ€initiated SETâ€LRP for the fabrication of lowâ€fouling surfaces. Journal of Polymer Science Part A, 2017, 55, 2527-2536.	2.5	12
25	Versatile Bioorthogonal Hydrogel Platform by Catalyst-Free Visible Light Initiated Photodimerization of Anthracene. ACS Macro Letters, 2017, 6, 657-662.	2.3	99
26	Visible-light-mediated cleavage of polymer chains under physiological conditions via quinone photoreduction and trimethyl lock. Chemical Communications, 2017, 53, 12076-12079.	2.2	17
27	Photolabile Hydrogels Responsive to Broad Spectrum Visible Light for Selective Cell Release. ACS Applied Materials & Interfaces, 2017, 9, 32441-32445.	4.0	46
28	Electrospun scaffolds for neural tissue engineering. , 2017, , 299-320.		5
29	Antibacterial poly(ethylene glycol) hydrogels from combined epoxyâ€amine and thiolâ€ene click reaction. Journal of Polymer Science Part A, 2016, 54, 656-667.	2.5	31
30	Orthogonal strategy for the synthesis of dual-functionalised Î²³-peptide based hydrogels. Chemical Communications, 2016, 52, 5844-5847.	2.2	29
31	In situ-forming click-crosslinked gelatin based hydrogels for 3D culture of thymic epithelial cells. Biomaterials Science, 2016, 4, 1123-1131.	2.6	39
32	Implantable amyloid hydrogels for promoting stem cell differentiation to neurons. NPG Asia Materials, 2016, 8, e304-e304.	3.8	65
33	Controlling integrin-based adhesion to a degradable electrospun fibre scaffold via SI-ATRP. Journal of Materials Chemistry B, 2016, 4, 7314-7322.	2.9	12
34	Investigation of the growth mechanisms of diglyme plasma polymers on amyloid fibril networks. Applied Surface Science, 2016, 361, 162-168.	3.1	2
35	Probing the Interfacial Structure of Bilayer Plasma Polymer Films via Neutron Reflectometry. Plasma Processes and Polymers, 2016, 13, 534-543.	1.6	0
36	A self-assembling Î²-peptide hydrogel for neural tissue engineering. Soft Matter, 2016, 12, 2243-2246.	1.2	74

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37	Graphene Functionalized Scaffolds Reduce the Inflammatory Response and Supports Endogenous Neuroblast Migration when Implanted in the Adult Brain. PLoS ONE, 2016, 11, e0151589.	1.1	80
38	Nitrile Oxide-Norbornene Cycloaddition as a Bioorthogonal Crosslinking Reaction for the Preparation of Hydrogels. Macromolecular Rapid Communications, 2015, 36, 1729-1734.	2.0	28
39	Optimization of Aqueous SIâ€ATRP Grafting of Poly(Oligo(Ethylene Glycol) Methacrylate) Brushes from Benzyl Chloride Macroinitiator Surfaces. Macromolecular Bioscience, 2015, 15, 799-811.	2.1	13
40	Photodegradable Gelatin-Based Hydrogels Prepared by Bioorthogonal Click Chemistry for Cell Encapsulation and Release. Biomacromolecules, 2015, 16, 2246-2253.	2.6	85
41	Facile Oneâ€Step Micropatterning Using Photodegradable Gelatin Hydrogels for Improved Cardiomyocyte Organization and Alignment. Advanced Functional Materials, 2015, 25, 977-986.	7.8	98
42	Cell infiltration into a 3D electrospun fiber and hydrogel hybrid scaffold implanted in the brain. Biomatter, 2015, 5, e1005527.	2.6	51
43	New junction materials by the direct growth of ZnO NWs on organic semiconductors. RSC Advances, 2015, 5, 7932-7937.	1.7	1
44	Low Fouling Electrospun Scaffolds with Clicked Bioactive Peptides for Specific Cell Attachment. Biomacromolecules, 2015, 16, 2109-2118.	2.6	18
45	Light-triggered release of ciprofloxacin from an in situ forming click hydrogel for antibacterial wound dressings. Journal of Materials Chemistry B, 2015, 3, 8771-8774.	2.9	46
46	Directing the growth of ZnO nano structures on flexible substrates using low temperature aqueous synthesis. RSC Advances, 2015, 5, 90881-90887.	1.7	8
47	Fabrication, mechanical properties and cytocompatibility of elastomeric nanofibrous mats of poly(glycerol sebacate). European Polymer Journal, 2015, 64, 79-92.	2.6	37
48	Synthesis and characterization of well-defined PAAâ€"PEG multi-responsive hydrogels by ATRP and click chemistry. RSC Advances, 2014, 4, 54631-54640.	1.7	12
49	Effects of GDNFâ€Loaded Injectable Gelatinâ€Based Hydrogels on Endogenous Neural Progenitor Cell Migration. Advanced Healthcare Materials, 2014, 3, 761-774.	3.9	44
50	Neuronal Electrophysiological Function and Control of Neurite Outgrowth on Electrospun Polymer Nanofibers Are Cell Type Dependent. Tissue Engineering - Part A, 2014, 20, 1089-1095.	1.6	27
51	A study of the initial film growth of PEG-like plasma polymer films via XPS and NEXAFS. Applied Surface Science, 2014, 288, 288-294.	3.1	24
52	Nanofibrous scaffolds releasing a small molecule BDNF-mimetic for the re-direction of endogenous neuroblast migration in the brain. Biomaterials, 2014, 35, 2692-2712.	5.7	59
53	Chirality effects at each amino acid position on tripeptide self-assembly into hydrogel biomaterials. Nanoscale, 2014, 6, 5172-5180.	2.8	125
54	Specific control of cellâ€"material interactions: Targeting cell receptors using ligand-functionalized polymer substrates. Progress in Polymer Science, 2014, 39, 1312-1347.	11.8	57

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55	Surface grafted poly(Îµ-caprolactone) prepared using organocatalysed ring-opening polymerisation followed by SI-ATRP. Polymer Chemistry, 2014, 5, 2809-2815.	1.9	19
56	3D presentation of a neurotrophic factor for the regulation of neural progenitor cells. Nanomedicine, 2014, 9, 1239-1251.	1.7	14
57	3D Electrospun scaffolds promote a cytotrophic phenotype of cultured primary astrocytes. Journal of Neurochemistry, 2014, 130, 215-226.	2.1	47
58	Surface grafting of electrospun fibers using ATRP and RAFT for the control of biointerfacial interactions. Biointerphases, 2013, 8, 16.	0.6	30
59	Tripeptide Self-Assembled Hydrogels: Soft Nanomaterials for Biological Applications. BioNanoScience, 2013, 3, 21-29.	1.5	22
60	Click chemistry approach for fabricating PVA/gelatin nanofibers for the differentiation of ADSCs to keratinocytes. Journal of Materials Science: Materials in Medicine, 2013, 24, 2863-2871.	1.7	25
61	Mitochondrial DNA Haplotypes Define Gene Expression Patterns in Pluripotent and Differentiating Embryonic Stem Cells. Stem Cells, 2013, 31, 703-716.	1.4	65
62	Nanotopographic Surfaces with Defined Surface Chemistries from Amyloid Fibril Networks Can Control Cell Attachment. Biomacromolecules, 2013, 14, 2305-2316.	2.6	56
63	Self-assembly of ciprofloxacin and a tripeptide into an antimicrobial nanostructured hydrogel. Biomaterials, 2013, 34, 3678-3687.	5.7	162
64	SU-8 photolithography on reactive plasma thin-films: coated microwells for peptide display. Colloids and Surfaces B: Biointerfaces, 2013, 108, 313-321.	2.5	12
65	An X-ray and neutron reflectometry study of â€˜PEG-likeâ€™ plasma polymer films. Journal of the Royal Society Interface, 2012, 9, 1008-1019.	1.5	20
66	Unzipping the role of chirality in nanoscale self-assembly of tripeptide hydrogels. Nanoscale, 2012, 4, 6752.	2.8	108
67	Photodegradable Hydrogels Made via RAFT. Macromolecules, 2012, 45, 8387-8400.	2.2	41
68	Biofunctionalisation of polymeric scaffolds for neural tissue engineering. Journal of Biomaterials Applications, 2012, 27, 369-390.	1.2	41
69	A ToF-SIMS and XPS study of protein adsorption and cell attachment across PEG-like plasma polymer films with lateral compositional gradients. Surface Science, 2012, 606, 1798-1807.	0.8	17
70	Promoting engraftment of transplanted neural stem cells/progenitors using biofunctionalised electrospun scaffolds. Biomaterials, 2012, 33, 9188-9197.	5.7	87
71	Method to Impart Electro- and Biofunctionality to Neural Scaffolds Using Grapheneâ€“Polyelectrolyte Multilayers. ACS Applied Materials & Interfaces, 2012, 4, 4524-4531.	4.0	80
72	One step multifunctional micropatterning of surfaces using asymmetric glow discharge plasma polymerization. Chemical Communications, 2012, 48, 1907.	2.2	18

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73	Tissue Engineering of Organs: Brain Tissues. , 2011, , 457-492.		1
74	Optimizing interfacial features to regulate neural progenitor cells using polyelectrolyte multilayers and brain derived neurotrophic factor. Biointerphases, 2011, 6, 189-199.	0.6	17
75	Biological responses of human osteoblasts and osteoclasts to flame-sprayed coatings of hydroxyapatite and fluorapatite blends. Acta Biomaterialia, 2010, 6, 1575-1583.	4.1	53
76	Biosurface engineering through ink jet printing. Colloids and Surfaces B: Biointerfaces, 2010, 75, 441-447.	2.5	81
77	Implantation of Functionalized Thermally Gelling Xyloglucan Hydrogel Within the Brain: Associated Neurite Infiltration and Inflammatory Response. Tissue Engineering - Part A, 2010, 16, 2833-2842.	1.6	45
78	Biomaterials for Brain Tissue Engineering. Australian Journal of Chemistry, 2010, 63, 1143.	0.5	99
79	One-Step Method for Generating PEG-Like Plasma Polymer Gradients: Chemical Characterization and Analysis of Protein Interactions. Langmuir, 2010, 26, 13987-13994.	1.6	48
80	Three-Dimensional Nanofibrous Scaffolds Incorporating Immobilized BDNF Promote Proliferation and Differentiation of Cortical Neural Stem Cells. Stem Cells and Development, 2010, 19, 843-852.	1.1	158
81	Enhancing neurite outgrowth from primary neurones and neural stem cells using thermoresponsive hydrogel scaffolds for the repair of spinal cord injury. Journal of Biomedical Materials Research - Part A, 2009, 89A, 24-35.	2.1	49
82	Surface and bulk characterisation of electrospun membranes: Problems and improvements. Colloids and Surfaces B: Biointerfaces, 2009, 71, 1-12.	2.5	39
83	Neurite infiltration and cellular response to electrospun polycaprolactone scaffolds implanted into the brain. Biomaterials, 2009, 30, 4573-4580.	5.7	140
84	Review Paper: A Review of the Cellular Response on Electrospun Nanofibers for Tissue Engineering. Journal of Biomaterials Applications, 2009, 24, 7-29.	1.2	264
85	Molecular level and microstructural characterisation of thermally sensitive chitosan hydrogels. Soft Matter, 2009, 5, 4704.	1.2	25
86	Effects of calcination temperature on the drug delivery behaviour of Ibuprofen from hydroxyapatite powders. Journal of Materials Science: Materials in Medicine, 2008, 19, 1187-1195.	1.7	47
87	Neural tissue engineering of the CNS using hydrogels. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 87B, 251-263.	1.6	145
88	Effect of the degree of cure on the viscoelastic properties of vinyl ester resins. European Polymer Journal, 2008, 44, 3200-3212.	2.6	22
89	Characterization of neural stem cells on electrospun poly(Îµ-caprolactone) submicron scaffolds: evaluating their potential in neural tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 623-634.	1.9	106
90	Interaction of embryonic cortical neurons on nanofibrous scaffolds for neural tissue engineering. Journal of Neural Engineering, 2007, 4, 35-41.	1.8	96

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91	Production of magnetic microspheres by ultrasonic atomisation. Journal of Magnetism and Magnetic Materials, 2007, 311, 97-100.	1.0	9
92	Polylysine-functionalised thermoresponsive chitosan hydrogel for neural tissue engineering. Biomaterials, 2007, 28, 441-449.	5.7	298
93	Crystallisation kinetics of novel branched poly(ethylene terephthalate): a small-angle X-ray scattering study. Polymer International, 2006, 55, 1435-1443.	1.6	7
94	Morphology and gelation of thermosensitive xyloglucan hydrogels. Biophysical Chemistry, 2006, 121, 14-20.	1.5	67
95	The effect of surface hydrophilicity on the behavior of embryonic cortical neurons. Journal of Colloid and Interface Science, 2006, 299, 647-655.	5.0	23
96	Inflammatory response on injection of chitosan/GP to the brain. Journal of Materials Science: Materials in Medicine, 2006, 17, 633-639.	1.7	44
97	Mouse embryonic stem cell colonisation of carbonated apatite surfaces. Biomaterials, 2006, 27, 615-622.	5.7	28
98	Rheological properties of high melt strength poly(ethylene terephthalate) formed by reactive extrusion. Journal of Applied Polymer Science, 2006, 100, 3646-3652.	1.3	52
99	Morphology and gelation of thermosensitive chitosan hydrogels. Biophysical Chemistry, 2005, 117, 47-53.	1.5	87
100	Dynamic mechanical thermal analysis of thermally stable and thermally reactive network polymers. Journal of Applied Polymer Science, 2004, 93, 1348-1359.	1.3	54
101	Colonization and maintenance of murine embryonic stem cells on poly(Î±-hydroxy esters). Biomaterials, 2004, 25, 4963-4970.	5.7	52
102	Sintered hydroxyfluorapatitesâ€”IV: the effect of fluoride substitutions upon colonisation of hydroxyapatites by mouse embryonic stem cells. Biomaterials, 2004, 25, 4977-4986.	5.7	66
103	Reaction and miscibility of two diepoxides with poly(ethylene terephthalate). Journal of Applied Polymer Science, 2003, 87, 1995-2003.	1.3	18
104	Cure kinetics and thermomechanical properties of thermally stable photopolymerized dimethacrylates. Journal of Applied Polymer Science, 2003, 90, 3753-3766.	1.3	26
105	Photo-DSC cure kinetics of vinyl ester resins II: influence of diluent concentration. Polymer, 2003, 44, 671-680.	1.8	45
106	FTIR and ESR Spectroscopic Studies of the Photopolymerization of Vinyl Ester Resins. Macromolecules, 2003, 36, 6066-6074.	2.2	29
107	Phase separation, physical properties and melt rheology of a range of variously transesterified amorphous poly(ethylene terephthalate)-poly(ethylene naphthalate) blends. Journal of Applied Polymer Science, 2002, 83, 1556-1567.	1.3	18
108	Photo-DSC cure kinetics of vinyl ester resins. I. Influence of temperature. Polymer, 2002, 43, 5839-5845.	1.8	118

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109	Kinetics and network structure of thermally cured vinyl ester resins. European Polymer Journal, 2002, 38, 705-716.	2.6	88
110	The use of NMR for determination of new structures in irradiated TFE/PMVE fluoropolymers. Radiation Physics and Chemistry, 2001, 60, 609-615.	1.4	4
111	Solid state 19F NMR determination of new structure formation in FEP following radiolysis at 300 and 363K. Radiation Physics and Chemistry, 2001, 60, 439-444.	1.4	16
112	The use of crosslinking promoters in the ?-radiolysis of poly(tetrafluoroethylene-co-perfluoromethylvinyl ether). II.. Journal of Applied Polymer Science, 2000, 75, 1447-1452.	1.3	5
113	Absorption of low molecular weight penetrants by a thermoplastic polyimide. Polymer, 2000, 41, 7263-7271.	1.8	9
114	The radiation chemistry of fluoropolymers. Progress in Polymer Science, 2000, 25, 101-136.	11.8	229
115	The radiation chemistry of the copolymer of tetrafluoroethylene with 2,2-bis(trifluoromethyl)-4,5-difluoro-1,3-dioxole. Polymer Degradation and Stability, 1999, 63, 95-101.	2.7	20
116	The use of crosslinking promoters in the ?-radiolysis of poly(tetrafluoroethylene-co-perfluoromethylvinyl ether).I. Journal of Applied Polymer Science, 1999, 73, 169-175.	1.3	7
117	Radiation chemistry of poly(tetrafluoroethylene-co-perfluoromethyl vinyl ether): Effects of oxygen and crystallinity. Journal of Applied Polymer Science, 1999, 73, 807-812.	1.3	8
118	Effect of temperature and a crosslinking promoter on the Î³-radiolysis of a perfluoro-elastomer. Polymer International, 1999, 48, 1004-1009.	1.6	6
119	Thermal and mechanical properties of radiation crosslinked poly(tetrafluoroethylene-co-perfluoromethyl vinyl ether). Radiation Physics and Chemistry, 1998, 53, 657-667.	1.4	10
120	Effect of temperature on the Î³-radiolysis of poly(tetrafluoroethylene-co-perfluoromethyl vinyl ether). Radiation Physics and Chemistry, 1998, 53, 611-621.	1.4	9
121	NMR Study of the Radiation-Induced Cross-Linking of Poly(tetrafluoroethylene-co-perfluoromethyl) Tj ETQq1 1 0.784314 rgBT /Overlock	2.2	37
122	Effect of simulated low earth orbit radiation on polyimides (UV degradation study). Journal of Applied Polymer Science, 1995, 58, 1847-1856.	1.3	44
123	Surface properties of fluorinated polyimides exposed to VUV and atomic oxygen. Journal of Applied Polymer Science, 1995, 58, 1857-1864.	1.3	33