

Axel T Neffe

List of Publications by Year in descending order

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115
papers

3,127
citations

196777

29
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182931

54
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125
all docs

125
docs citations

125
times ranked

5272
citing authors

#	ARTICLE	IF	CITATIONS
1	In Vivo Performance of a Cell and Factor Free Multifunctional Fiber Mesh Modulating Postinfarct Myocardial Remodeling. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	3
2	Microparticles from glycidylmethacrylated gelatin as cell carriers prepared in an aqueous two-phase system. <i>European Polymer Journal</i> , 2021, 142, 110148.	2.6	5
3	Immunocompatibility and non-thrombogenicity of gelatin-based hydrogels. <i>Clinical Hemorheology and Microcirculation</i> , 2021, 77, 335-350.	0.9	13
4	Response of Endothelial Cells to Gelatin-Based Hydrogels. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 527-540.	2.6	26
5	Formulation of drug-loaded oligodepsipeptide particles with submicron size. <i>Clinical Hemorheology and Microcirculation</i> , 2021, 77, 201-219.	0.9	0
6	Thermally-Induced Shape-Memory Behavior of Degradable Gelatin-Based Networks. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5892.	1.8	10
7	Soft, Formstable (Co)Polyester Blend Elastomers. <i>Nanomaterials</i> , 2021, 11, 1472.	1.9	3
8	Functionalizable coaxial PLLA/PDLA nanofibers with stereocomplexes at the internal interface. <i>Journal of Materials Research</i> , 2021, 36, 2995-3009.	1.2	3
9	Establishment of an in vitro thrombogenicity test system with cyclic olefin copolymer substrate for endothelial layer formation. <i>MRS Communications</i> , 2021, 11, 1-9.	0.8	2
10	Hydrogel networks by aliphatic dithiol Michael addition to glycidylmethacrylated gelatin. <i>MRS Advances</i> , 2021, 6, 796-800.	0.5	2
11	Polyester urethane functionalizable through maleimide side-chains and cross-linkable by polylactide stereocomplexes. <i>European Polymer Journal</i> , 2020, 137, 109916.	2.6	6
12	Alkynyl-functionalized chain-extended PCL for coupling to biological molecules. <i>European Polymer Journal</i> , 2020, 136, 109908.	2.6	4
13	Supramolecular Gelatin Networks Based on Inclusion Complexes. <i>Macromolecular Bioscience</i> , 2020, 20, e2000221.	2.1	6
14	Salt-Induced Shape-Memory Effect in Gelatin-Based Hydrogels. <i>Biomacromolecules</i> , 2020, 21, 2024-2031.	2.6	18
15	Perfluorophenyl azide functionalization of electrospun poly(para - ϵ -dioxanone). <i>Polymers for Advanced Technologies</i> , 2019, 30, 1165-1172.	1.6	1
16	Characterization of Tissue Transglutaminase as a Potential Biomarker for Tissue Response toward Biomaterials. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 5979-5989.	2.6	5
17	Amides as Non-polymerizable Catalytic Adjuncts Enable the Ring-Opening Polymerization of Lactide With Ferrous Acetate Under Mild Conditions. <i>Frontiers in Chemistry</i> , 2019, 7, 346.	1.8	3
18	Oligodepsipeptide (nano)carriers: Computational design and analysis of enhanced drug loading. <i>Journal of Controlled Release</i> , 2019, 301, 146-156.	4.8	20

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19	Thiol Michael-Type Reactions of Optically Active Mercapto-Acids in Aqueous Medium. <i>MRS Advances</i> , 2019, 4, 2515-2525.	0.5	2
20	Interplay between stiffness and degradation of architected gelatin hydrogels leads to differential modulation of chondrogenesis in vitro and in vivo. <i>Acta Biomaterialia</i> , 2018, 69, 83-94.	4.1	52
21	Sequential alkyne-azide cycloadditions for functionalized gelatin hydrogel formation. <i>European Polymer Journal</i> , 2018, 100, 77-85.	2.6	16
22	Angiogenic potential of endothelial and tumor cells seeded on gelatin-based hydrogels in response to electrical stimulations. <i>Clinical Hemorheology and Microcirculation</i> , 2017, 64, 941-949.	0.9	11
23	Monolayer formation and shear-resistance of human vein endothelial cells on gelatin-based hydrogels with tailorable elasticity and degradability. <i>Clinical Hemorheology and Microcirculation</i> , 2017, 64, 699-710.	0.9	4
24	Polydepsipeptide Block-Stabilized Polyplexes for Efficient Transfection of Primary Human Cells. <i>Biomacromolecules</i> , 2017, 18, 3819-3833.	2.6	15
25	Adipogenic differentiation of human adipose derived mesenchymal stem cells in 3D architected gelatin based hydrogels (ArcGel). <i>Clinical Hemorheology and Microcirculation</i> , 2017, 67, 297-307.	0.9	10
26	Enzymatic action as switch of bulk to surface degradation of clicked gelatin-based networks. <i>Polymers for Advanced Technologies</i> , 2017, 28, 1318-1324.	1.6	10
27	Engineering of cell-laden gelatin-based microgels for cell delivery and immobilization in regenerative therapies. <i>Clinical Hemorheology and Microcirculation</i> , 2017, 67, 251-259.	0.9	6
28	Bone regeneration induced by a 3D architected hydrogel in a rat critical-size calvarial defect. <i>Biomaterials</i> , 2017, 113, 158-169.	5.7	58
29	Poly[acrylonitrile-co-(N-vinyl pyrrolidone)] nanoparticles – Composition-dependent skin penetration enhancement of a dye probe and biocompatibility. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2017, 116, 66-75.	2.0	11
30	Influence of surfactants on depeptide submicron particle formation. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2017, 116, 61-65.	2.0	5
31	Response of encapsulated cells to a gelatin matrix with varied bulk and microenvironmental elastic properties. <i>Polymers for Advanced Technologies</i> , 2017, 28, 1245-1251.	1.6	5
32	RGD constructs with physical anchor groups as polymer co-electrospinnable cell adhesives. <i>Polymers for Advanced Technologies</i> , 2017, 28, 1312-1317.	1.6	3
33	Gelatin-based Hydrogel Degradation and Tissue Interaction <i>in vivo</i> : Insights from Multimodal Preclinical Imaging in Immunocompetent Nude Mice. <i>Theranostics</i> , 2016, 6, 2114-2128.	4.6	96
34	Mechanical Properties of Architected Gelatin-Based Hydrogels on Different Hierarchical Levels. <i>MRS Advances</i> , 2016, 1, 1995-2001.	0.5	1
35	Advanced Functional Polymers for Medicine. <i>Macromolecular Bioscience</i> , 2016, 16, 1743-1744.	2.1	4
36	Influence of metal softness on the metal-organic catalyzed polymerization of morpholin-2,5-diones to oligodepsipeptides. <i>European Polymer Journal</i> , 2016, 85, 139-149.	2.6	16

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37	Supramolecular hydrogel networks formed by molecular recognition of collagen and a peptide grafted to hyaluronic acid. <i>Acta Biomaterialia</i> , 2016, 38, 1-10.	4.1	17
38	Nanocarriers for drug delivery into and through the skin – Do existing technologies match clinical challenges?. <i>Journal of Controlled Release</i> , 2016, 242, 3-15.	4.8	116
39	Secondary Structure of Decorin-Derived Peptides in Solution. <i>MRS Advances</i> , 2016, 1, 1965-1970.	0.5	0
40	Classifying Calpain Inhibitors for the Treatment of Cataracts: A Self Organising Map (SOM) ANN/KM Approach in Drug Discovery. <i>Studies in Computational Intelligence</i> , 2016, , 161-212.	0.7	0
41	Immuno-compatibility of desaminotyrosine and desaminotyrosyl tyrosine functionalized star-shaped oligo(ethylene glycol)s with different molecular weights. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1718, 97-102.	0.1	1
42	Influence of glycidylmethacrylate functional groups attached to gelatin on the formation and properties of hydrogels. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1718, 103-108.	0.1	3
43	Anisotropic Composites of Desaminotyrosine and Desaminotyrosyl Tyrosine Functionalized Gelatin and Bioactive Glass Microparticles. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1718, 9-14.	0.1	0
44	Hydrogels: One Step Creation of Multifunctional 3D Architected Hydrogels Inducing Bone Regeneration (<i>Adv. Mater.</i> 10/2015). <i>Advanced Materials</i> , 2015, 27, 1800-1800.	11.1	1
45	Design of Decorin-Based Peptides That Bind to Collagen...I and their Potential as Adhesion Moieties in Biomaterials. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 10980-10984.	7.2	24
46	Conditional Ultrasound Sensitivity of Poly[(N-isopropylacrylamide)-co-(vinyl imidazole)] Microgels for Controlled Lipase Release. <i>Macromolecular Rapid Communications</i> , 2015, 36, 1891-1896.	2.0	5
47	Synthesis and characterization of star-shaped oligo(ethylene glycol) with tyrosine derived moieties under variation of their molecular weight. <i>Clinical Hemorheology and Microcirculation</i> , 2015, 60, 13-23.	0.9	5
48	Advanced Functional Polymers in Medicine (AFPM). <i>Clinical Hemorheology and Microcirculation</i> , 2015, 60, 1-2.	0.9	1
49	Going Beyond Compromises in Multifunctionality of Biomaterials. <i>Advanced Healthcare Materials</i> , 2015, 4, 642-645.	3.9	7
50	One Step Creation of Multifunctional 3D Architected Hydrogels Inducing Bone Regeneration. <i>Advanced Materials</i> , 2015, 27, 1738-1744.	11.1	100
51	Effect of diisocyanate linkers on the degradation characteristics of copolyester urethanes as potential drug carrier matrices. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2015, 95, 18-26.	2.0	14
52	Advanced Functional Polymers for Medicine. <i>Advanced Healthcare Materials</i> , 2014, 3, 1939-1940.	3.9	8
53	Crosslinking of gelatin by ring opening metathesis under aqueous conditions – an exploratory study. <i>Polymers for Advanced Technologies</i> , 2014, 25, 1371-1375.	1.6	3
54	Multivalent grafting of hyperbranched oligo- and polyglycerols shielding rough membranes to mediate hemocompatibility. <i>Journal of Materials Chemistry B</i> , 2014, 2, 3626-3635.	2.9	26

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55	Biocompatibility and inflammatory response in vitro and in vivo to gelatin-based biomaterials with tailorable elastic properties. <i>Biomaterials</i> , 2014, 35, 9755-9766.	5.7	89
56	Protein Interactions with Polymer Coatings and Biomaterials. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8004-8031.	7.2	614
57	Interaction of Human Plasma Proteins with Thin Gelatin-Based Hydrogel Films: A QCM-D and ToF-SIMS Study. <i>Biomacromolecules</i> , 2014, 15, 2398-2406.	2.6	29
58	A High Content Screening Assay for Evaluation of Biomaterial-Mediated Cell Fusion Processes. <i>Macromolecular Symposia</i> , 2014, 346, 91-99.	0.4	2
59	Micellization of Aminoterminated Poly(ethylene glycol)- <i>block</i> -poly(propylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 5 <i>Symposia</i> , 2014, 345, 91-97.	0.4	1
60	Tailoring of Mechanical Properties of Diisocyanate Crosslinked Gelatin-Based Hydrogels. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1569, 3-8.	0.1	4
61	Efficient synthesis of pure monotosylated beta-cyclodextrin and its dimers. <i>Carbohydrate Research</i> , 2013, 381, 59-63.	1.1	56
62	Poly(ethylene glycol) Grafting to Poly(ether imide) Membranes: Influence on Protein Adsorption and Thrombocyte Adhesion. <i>Macromolecular Bioscience</i> , 2013, 13, 1720-1729.	2.1	31
63	Recent Trends in the Chemistry of Shape-Memory Polymers. <i>Macromolecular Chemistry and Physics</i> , 2013, 214, 527-536.	1.1	92
64	Polyalkylcyanoacrylates as in situ formed diffusion barriers in multimaterial drug carriers. <i>Journal of Controlled Release</i> , 2013, 169, 321-328.	4.8	9
65	A multifunctional bilayered microstent as glaucoma drainage device. <i>Journal of Controlled Release</i> , 2013, 172, 1002-1010.	4.8	7
66	Progress in biopolymer-based biomaterials and their application in controlled drug delivery. <i>Expert Review of Medical Devices</i> , 2013, 10, 813-833.	1.4	41
67	Immunological investigations of oligoethylene glycols functionalized with desaminotyrosine and desaminotyrosyltyrosine. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1569, 9-14.	0.1	4
68	Influence of physically crosslinked gelatins on the vasculature in the avian chorioallantoic membrane. <i>Clinical Hemorheology and Microcirculation</i> , 2013, 55, 133-142.	0.9	4
69	Influence of diisocyanate reactivity and water solubility on the formation and the mechanical properties of gelatin-based networks in water. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1569, 15-20.	0.1	3
70	Influence of Drying Procedures on Network Formation and Properties of Hydrogels from Functionalized Gelatin. <i>Macromolecular Symposia</i> , 2013, 334, 24-32.	0.4	5
71	Advanced Functional Polymers for Medicine. <i>Macromolecular Bioscience</i> , 2013, 13, 1639-1639.	2.1	0
72	Dynamic in vitro hemocompatibility testing of poly(ether imide) membranes functionalized with linear, methylated oligoglycerol and oligo(ethylene glycol). <i>Clinical Hemorheology and Microcirculation</i> , 2013, 54, 235-248.	0.9	11

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73	A multifunctional bilayered microstent as glaucoma drainage device. <i>Journal of Controlled Release</i> , 2013, 172, 1002-10.	4.8	2
74	Thermal Gelation and Stability of Pectin Grafted with PEPE. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1403, 226.	0.1	0
75	Synthesis and Characterization of Oligo(Ethylene Glycol)s Functionalized with Desaminotyrosine or Desaminotyrosyltyrosine. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012, 10, 170-176.	0.7	3
76	Characterization of Oligo(Ethylene Glycol) and Oligoglycerol Functionalized Poly(Ether Imide) by Angle-Dependent X-Ray Photoelectron Spectroscopy. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2012, 10, 215-222.	0.7	3
77	Physically crosslinked gelatins functionalized with tyrosine moieties do not induce angiogenesis or thrombus formation in the developing vasculature in the avian chorioallantoic membrane. <i>Clinical Hemorheology and Microcirculation</i> , 2012, 50, 55-63.	0.9	6
78	Quantifying Protein Adsorption to Physically Crosslinked Gelatin-Based Networks. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1403, 196.	0.1	0
79	Using Mass Spectrometry to Investigate the Structural Features of Photocrosslinked Co-Networks based on Gelatin and Poly(ethylene glycol) Methacrylates. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1403, 13.	0.1	0
80	Photocrosslinked Co-Networks from Glycidylmethacrylated Gelatin and Poly(ethylene glycol) Methacrylates. <i>Macromolecular Bioscience</i> , 2012, 12, 484-493.	2.1	37
81	Surface Functionalization of Poly(ether imide) Membranes with Linear, Methylated Oligoglycerols for Reducing Thrombogenicity. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1487-1492.	2.0	39
82	Viability of Human Mesenchymal Stem Cells Seeded on Crosslinked Entropy-Elastic Gelatin-Based Hydrogels. <i>Macromolecular Bioscience</i> , 2012, 12, 312-321.	2.1	44
83	Influence of Tyrosine-Derived Moieties and Drying Conditions on the Formation of Helices in Gelatin. <i>Biomacromolecules</i> , 2011, 12, 75-81.	2.6	48
84	Reducing the Endotoxin Burden of Desaminotyrosine- and Desaminotyrosyl Tyrosine-Functionalized Gelatin. <i>Macromolecular Symposia</i> , 2011, 309-310, 182-189.	0.4	16
85	Why Are So Few Degradable Polymeric Biomaterials Currently Established in Clinical Applications?. <i>International Journal of Artificial Organs</i> , 2011, 34, 71-75.	0.7	21
86	Understanding Instability and Rupture of Poly(Alkyl-2-Cyanoacrylate) Capsules. <i>International Journal of Artificial Organs</i> , 2011, 34, 243-248.	0.7	7
87	A Molecular Dynamic Analysis of Gelatin as an Amorphous Material: Prediction of Mechanical Properties of Gelatin Systems. <i>International Journal of Artificial Organs</i> , 2011, 34, 139-151.	0.7	12
88	Hyaluronic Acid-Based Hydrogels Crosslinked by Copper-Catalyzed Azide-Alkyne Cycloaddition with Tailorable Mechanical Properties. <i>International Journal of Artificial Organs</i> , 2011, 34, 192-197.	0.7	32
89	Polymers and drugs suitable for the development of a drug delivery drainage system in glaucoma surgery. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 97B, 388-395.	1.6	26
90	Gelatin functionalization with tyrosine derived moieties to increase the interaction with hydroxyapatite fillers. <i>Acta Biomaterialia</i> , 2011, 7, 1693-1701.	4.1	60

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91	Synthesis and Characterization of Gelatin Fragments Obtained by Controlled Degradation. <i>Macromolecular Symposia</i> , 2011, 309-310, 199-204.	0.4	1
92	A Blend of Poly(ϵ -caprolactone) and Poly[(ϵ -caprolactone)- <i>co</i> -glycolide] with Remarkable Mechanical Features and Wide Applicability as Biomaterial. <i>Macromolecular Symposia</i> , 2011, 309-310, 59-67.	0.4	4
93	Synthesis and Characterization of Polyetherimides with 3-Methoxy-1,2-propanediol Moieties. <i>Macromolecular Symposia</i> , 2011, 309-310, 40-48.	0.4	1
94	Synthesis and Characterization of a Telechelic Peptide as a Precursor for Supramolecular Networks. <i>Macromolecular Symposia</i> , 2011, 309-310, 205-212.	0.4	0
95	In Vitro and In Vivo Evaluation of a Multifunctional Hyaluronic acid Based Hydrogel System for Local Application on the Retina. <i>Macromolecular Symposia</i> , 2011, 309-310, 229-235.	0.4	5
96	Comparing techniques for drug loading of shape-memory polymer networks – effect on their functionalities. <i>European Journal of Pharmaceutical Sciences</i> , 2010, 41, 136-147.	1.9	39
97	Controlled Change of Mechanical Properties during Hydrolytic Degradation of Polyester Urethane Networks. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 182-194.	1.1	52
98	Knowledge-Based Tailoring of Gelatin-Based Materials by Functionalization with Tyrosine-Derived Groups. <i>Macromolecular Rapid Communications</i> , 2010, 31, 1534-1539.	2.0	39
99	AB-polymer Networks with Cooligoester and Poly(<i>n</i> -butyl acrylate) Segments as a Multifunctional Matrix for Controlled Drug Release. <i>Macromolecular Bioscience</i> , 2010, 10, 1063-1072.	2.1	33
100	An entropy-elastic gelatin-based hydrogel system. <i>Journal of Materials Chemistry</i> , 2010, 20, 8875.	6.7	94
101	Thermomechanical Properties and Shape-Memory Capability of Drug Loaded Semi-Crystalline Polyester methacrylate Networks. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1190, 113.	0.1	6
102	Amorphous Polymer Networks Combining Three Functionalities – Shape-memory, Biodegradability, and Drug Release. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1190, 184.	0.1	4
103	Evaluation of a degradable shape-memory polymer network as matrix for controlled drug release. <i>Journal of Controlled Release</i> , 2009, 138, 243-250.	4.8	215
104	Polymer Networks Combining Controlled Drug Release, Biodegradation, and Shape Memory Capability. <i>Advanced Materials</i> , 2009, 21, 3394-3398.	11.1	163
105	Unprecedented, Low Cytotoxicity of Spongelike Calcium Phosphate/Poly(ethylene imine) Hydrogel Composites. <i>Macromolecular Bioscience</i> , 2009, 9, 179-186.	2.1	35
106	Molecular Modeling, Synthesis, and Biological Evaluation of Macrocyclic Calpain Inhibitors. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1455-1458.	7.2	64
107	Controlled Drug Release from Biodegradable Shape-Memory Polymers. <i>Advances in Polymer Science</i> , 2009, , 177-205.	0.4	44
108	Synthesis, biological evaluation and molecular modelling of N-heterocyclic dipeptide aldehydes as selective calpain inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 6911-6923.	1.4	20

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109	Investigation into the P3Binding Domain of m-Calpain Using Photoswitchable Diazo- and Triazene-dipeptide Aldehydes: A New Anticataract Agents. <i>Journal of Medicinal Chemistry</i> , 2007, 50, 2916-2920.	2.9	42
110	Rational Optimization of the Binding Affinity of CD4 Targeting Peptidomimetics with Potential Anti HIV Activity. <i>Journal of Medicinal Chemistry</i> , 2007, 50, 3482-3488.	2.9	27
111	Synthesis and optimization of peptidomimetics as HIV entry inhibitors against the receptor protein CD4 using STD NMR and ligand docking. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 3259.	1.5	17
112	Synthesis and evaluation of eight-membered cyclic pseudo-dipeptides. <i>Peptides</i> , 2005, 26, 251-258.	1.2	7
113	Developments in the design and synthesis of calpain inhibitors. <i>Current Opinion in Drug Discovery & Development</i> , 2005, 8, 684-700.	1.9	9
114	A Peptidomimetic HIV-Entry Inhibitor Directed against the CD4 Binding Site of the Viral Glycoprotein gp120. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 2937-2940.	7.2	19
115	Ethylene oxide sterilization of electrospun poly(l-lactide)/poly(d-lactide) core/shell nanofibers. <i>MRS Advances</i> , 0, , 1.	0.5	0