Patricia Dankers

List of Publications by Year
in descending order

116 papers	5,427 citations	101543 36 h-index	88630 70 g-index
119 all docs	119 docs citations	119 times ranked	6440 citing authors

#	Article	IF	Citations
1	Tough Stimuli-Responsive Supramolecular Hydrogels with Hydrogen-Bonding Network Junctions. Journal of the American Chemical Society, 2014, 136, 6969-6977.	13.7	525
2	A modular and supramolecular approach to bioactive scaffolds for tissue engineering. Nature Materials, 2005, 4, 568-574.	27.5	410
3	From supramolecular polymers to multi-component biomaterials. Chemical Society Reviews, 2017, 46, 6621-6637.	38.1	311
4	A Fast pHâ€Switchable and Selfâ€Healing Supramolecular Hydrogel Carrier for Guided, Local Catheter Injection in the Infarcted Myocardium. Advanced Healthcare Materials, 2014, 3, 70-78.	7.6	261
5	Hierarchical Formation of Supramolecular Transient Networks in Water: A Modular Injectable Delivery System. Advanced Materials, 2012, 24, 2703-2709.	21.0	247
6	Substrates for cardiovascular tissue engineering. Advanced Drug Delivery Reviews, 2011, 63, 221-241.	13.7	235
7	In situ heart valve tissue engineering using a bioresorbable elastomeric implant â€" From material design to 12 months follow-up in sheep. Biomaterials, 2017, 125, 101-117.	11.4	231
8	Aggregation of Ureido-Pyrimidinone Supramolecular Thermoplastic Elastomers into Nanofibers: A Kinetic Analysis. Macromolecules, 2011, 44, 6776-6784.	4.8	163
9	Supramolecular Biomaterials. A Modular Approach towards Tissue Engineering. Bulletin of the Chemical Society of Japan, 2007, 80, 2047-2073.	3.2	121
10	Early in-situ cellularization of a supramolecular vascular graft is modified by synthetic stromal cell-derived factor-1Î± derived peptides. Biomaterials, 2016, 76, 187-195.	11.4	95
11	Chemical and biological properties of supramolecular polymer systems based on oligocaprolactones. Biomaterials, 2006, 27, 5490-5501.	11.4	94
12	Sustained Delivery of Insulin-Like Growth Factor-1/Hepatocyte Growth Factor Stimulates Endogenous Cardiac Repair in the Chronic Infarcted Pig Heart. Journal of Cardiovascular Translational Research, 2014, 7, 232-241.	2.4	93
13	Oligo(trimethylene carbonate)-Based Supramolecular Biomaterials. Macromolecules, 2006, 39, 8763-8771.	4.8	90
14	Bioengineering of living renal membranes consisting of hierarchical, bioactive supramolecular meshes and human tubular cells. Biomaterials, 2011, 32, 723-733.	11.4	88
15	Mesoscale Modulation of Supramolecular Ureidopyrimidinone-Based Poly(ethylene glycol) Transient Networks in Water. Journal of the American Chemical Society, 2013, 135, 11159-11164.	13.7	86
16	Multicomponent Supramolecular Polymers as a Modular Platform for Intracellular Delivery. ACS Nano, 2016, 10, 1845-1852.	14.6	81
17	Development and in-vivo characterization of supramolecular hydrogels for intrarenal drug delivery. Biomaterials, 2012, 33, 5144-5155.	11.4	78
18	Selfâ€Healing Biomaterials: From Molecular Concepts to Clinical Applications. Advanced Materials Interfaces, 2018, 5, 1800118.	3.7	73

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19	Endothelial progenitor cell dysfunction in patients with progressive chronic kidney disease. American Journal of Physiology - Renal Physiology, 2009, 296, F1314-F1322.	2.7	70
20	Enantioselective Cyclization of Racemic Supramolecular Polymers. Journal of the American Chemical Society, 2003, 125, 6860-6861.	13.7	65
21	Modulation of macrophage phenotype and protein secretion via heparin-IL-4 functionalized supramolecular elastomers. Acta Biomaterialia, 2018, 71, 247-260.	8.3	65
22	Molecular Recognition in Poly(Îµ-caprolactone)-Based Thermoplastic Elastomers. Biomacromolecules, 2006, 7, 3385-3395.	5.4	64
23	Controlling and tuning the dynamic nature of supramolecular polymers in aqueous solutions. Chemical Communications, 2017, 53, 2279-2282.	4.1	62
24	A modular approach to easily processable supramolecular bilayered scaffolds with tailorable properties. Journal of Materials Chemistry B, 2014, 2, 2483-2493.	5.8	61
25	Injectable Supramolecular Ureidopyrimidinone Hydrogels Provide Sustained Release of Extracellular Vesicle Therapeutics. Advanced Healthcare Materials, 2019, 8, e1900847.	7.6	61
26	Forced Peptide Synthesis in Nanoscale Confinement under Elastomeric Stamps. Angewandte Chemie - International Edition, 2004, 43, 4190-4193.	13.8	60
27	Engineering the Dynamics of Cell Adhesion Cues in Supramolecular Hydrogels for Facile Control over Cell Encapsulation and Behavior. Advanced Materials, 2021, 33, e2008111.	21.0	52
28	The Small Heat-Shock Proteins HSPB2 and HSPB3 Form Well-defined Heterooligomers in a Unique 3 to 1 Subunit Ratio. Journal of Molecular Biology, 2009, 393, 1022-1032.	4.2	50
29	The Use of Fibrous, Supramolecular Membranes and Human Tubular Cells for Renal Epithelial Tissue Engineering: Towards a Suitable Membrane for a Bioartificial Kidney. Macromolecular Bioscience, 2010, 10, 1345-1354.	4.1	49
30	Carbon Nanotube Reinforced Supramolecular Hydrogels for Bioapplications. Macromolecular Bioscience, 2019, 19, e1800173.	4.1	48
31	Development of Nonâ€Cell Adhesive Vascular Grafts Using Supramolecular Building Blocks. Macromolecular Bioscience, 2016, 16, 350-362.	4.1	47
32	Disulfide Exchange in Hydrogen-Bonded Cyclic Assemblies:â€‰ Stereochemical Self-Selection by Double Dynamic Chemistry. Journal of Organic Chemistry, 2005, 70, 5799-5803.	3.2	42
33	Collagen Targeting Using Protein-Functionalized Micelles: The Strength of Multiple Weak Interactions. Journal of the American Chemical Society, 2009, 131, 7304-7312.	13.7	42
34	Efficient differentiation of CD14+ monocytic cells into endothelial cells on degradable biomaterials. Biomaterials, 2007, 28, 1470-1479.	11.4	41
35	Combining tissue repair and tissue engineering; bioactivating implantable cell-free vascular scaffolds. Heart, 2014, 100, 1825-1830.	2.9	39
36	Mesoscale Characterization of Supramolecular Transient Networks Using SAXS and Rheology. International Journal of Molecular Sciences, 2014, 15, 1096-1111.	4.1	37

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37	Introduction of Nature's Complexity in Engineered Bloodâ€compatible Biomaterials. Advanced Healthcare Materials, 2018, 7, 1700505.	7.6	37
38	Post-Assembly Functionalization of Supramolecular Nanostructures with Bioactive Peptides and Fluorescent Proteins by Native Chemical Ligation. Bioconjugate Chemistry, 2014, 25, 707-717.	3.6	36
39	Introduction of anti-fouling coatings at the surface of supramolecular elastomeric materials via post-modification of reactive supramolecular additives. Polymer Chemistry, 2017, 8, 5228-5238.	3.9	36
40	MRI Visualization of Injectable Ureidopyrimidinone Hydrogelators by Supramolecular Contrast Agent Labeling. Advanced Healthcare Materials, 2018, 7, e1701139.	7.6	35
41	Material dependent differences in inflammatory gene expression by giant cells during the foreign body reaction. Journal of Biomedical Materials Research - Part A, 2007, 83A, 879-886.	4.0	34
42	TOF-Secondary Ion Mass Spectrometry Imaging of Polymeric Scaffolds with Surrounding Tissue after in Vivo Implantation. Analytical Chemistry, 2010, 82, 4337-4343.	6.5	34
43	Multicomponent supramolecular thermoplastic elastomer with peptideâ€modified nanofibers. Journal of Polymer Science Part A, 2011, 49, 1764-1771.	2.3	33
44	Cell and Protein Fouling Properties of Polymeric Mixtures Containing Supramolecular Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.5	33
45	Functional supramolecular bioactivated electrospun mesh improves tissue ingrowth in experimental abdominal wall reconstruction in rats. Acta Biomaterialia, 2020, 106, 82-91.	8.3	33
46	Convenient Solid-Phase Synthesis of Ureido-Pyrimidinone Modified Peptides. European Journal of Organic Chemistry, 2007, 2007, 3622-3632.	2.4	27
47	Peptide functionalised discotic amphiphiles and their self-assembly into supramolecular nanofibres. Soft Matter, 2011, 7, 7980.	2.7	27
48	A bioartificial environment for kidney epithelial cells based on a supramolecular polymer basement membrane mimic and an organotypical culture system. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1820-1834.	2.7	27
49	Efficient Functionalization of Additives at Supramolecular Material Surfaces. Advanced Materials, 2017, 29, 1604652.	21.0	27
50	C60+ Secondary Ion Microscopy Using a Delay Line Detector. Analytical Chemistry, 2010, 82, 801-807.	6.5	26
51	From Molecular Structure to Macromolecular Organization: Keys to Design Supramolecular Biomaterials. Macromolecules, 2013, 46, 8528-8537.	4.8	25
52	Cucurbit[8]uril templated supramolecular ring structure formation and protein assembly modulation. Chemical Communications, 2015, 51, 3147-3150.	4.1	25
53	The degradation and performance of electrospun supramolecular vascular scaffolds examined upon in vitro enzymatic exposure. Acta Biomaterialia, 2019, 92, 48-59.	8.3	25
54	Host Response and Neo-Tissue Development during Resorption of a Fast Degrading Supramolecular Electrospun Arterial Scaffold. Bioengineering, 2018, 5, 61.	3.5	24

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55	Modular synthesis of supramolecular ureidopyrimidinoneâ€“peptide conjugates using an oxime ligation strategy. Chemical Communications, 2012, 48, 1452-1454.	4.1	23
56	Solid-Phase-Based Synthesis of Ureidopyrimidinoneâ€“Peptide ConjugatesÂ for Supramolecular Biomaterials. Synlett, 2015, 26, 2707-2713.	1.8	23
57	From kidney development to drug delivery and tissue engineering strategies in renal regenerative medicine. Journal of Controlled Release, 2011, 152, 177-185.	9.9	22
58	Antimicrobial peptide modification of biomaterials using supramolecular additives. Journal of Polymer Science Part A, 2018, 56, 1926-1934.	2.3	21
59	Introduction of Enzyme-Responsivity in Biomaterials to Achieve Dynamic Reciprocity in Cellâ€“Material Interactions. Biomacromolecules, 2021, 22, 4-23.	5.4	21
60	Modular supramolecular ureidopyrimidinone polymer carriers for intracellular delivery. RSC Advances, 2016, 6, 110600-110603.	3.6	20
61	Experimental reconstruction of an abdominal wall defect with electrospun polycaprolactone-ureidopyrimidinone mesh conserves compliance yet may have insufficient strength. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 431-441.	3.1	19
62	Supramolecular surface functionalization via catechols for the improvement of cellâ€“material interactions. Biomaterials Science, 2017, 5, 1541-1548.	5.4	18
63	In Vivo Retention Quantification of Supramolecular Hydrogels Engineered for Cardiac Delivery. Advanced Healthcare Materials, 2021, 10, e2001987.	7.6	18
64	Protein Micropatterning in 2.5D: An Approach to Investigate Cellular Responses in Multi-Cue Environments. ACS Applied Materials & Interfaces, 2021, 13, 25589-25598.	8.0	18
65	Supramolecular polymer materials bring restorative heart valve therapy to patients. Materials Today, 2022, 52, 175-187.	14.2	18
66	Controlled Release of RNAi Molecules by Tunable Supramolecular Hydrogel Carriers. Chemistry - an Asian Journal, 2018, 13, 3501-3508.	3.3	17
67	Supramolecular Antifouling Additives for Robust and Efficient Functionalization of Elastomeric Materials: Molecular Design Matters. Advanced Functional Materials, 2019, 29, 1805375.	14.9	16
68	Supramolecular Hydrogels for Biomedical Applications. Macromolecular Bioscience, 2019, 19, e1800452.	4.1	16
69	Functional peptide presentation on different hydrogen bonding biomaterials using supramolecular additives. Biomaterials, 2019, 224, 119466.	11.4	15
70	An Injectable and Drug-loaded Supramolecular Hydrogel for Local Catheter Injection into the Pig Heart. Journal of Visualized Experiments, 2015, , e52450.	0.3	14
71	Mechanically Robust Electrospun Hydrogel Scaffolds Crosslinked via Supramolecular Interactions. Macromolecular Bioscience, 2017, 17, 1700053.	4.1	14
72	Optimization of Anti-kinking Designs for Vascular Grafts Based on Supramolecular Materials. Frontiers in Materials, 2020, 7, .	2.4	14

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73	Self-Assembly of Chiral Supramolecular Ureido-Pyrimidinone-Based Poly(ethylene glycol) Polymers via Multiple Pathways. Macromolecules, 2014, 47, 3823-3828.	4.8	13
74	From molecular design to 3D printed life-like materials with unprecedented properties. Current Opinion in Biomedical Engineering, 2017, 2, 43-48.	3.4	13
75	Cholesterol Modification of an Anticancer Drug for Efficient Incorporation into a Supramolecular Hydrogel System. Macromolecular Rapid Communications, 2018, 39, e1800007.	3.9	13
76	Multi-component supramolecular fibers with elastomeric properties and controlled drug release. Biomaterials Science, 2020, 8, 163-173.	5.4	13
77	Anisotropic hygro-expansion in hydrogel fibers owing to uniting 3D electrowriting and supramolecular polymer assembly. European Polymer Journal, 2020, 141, 110099.	5.4	13
78	Supramolecular Additive-Initiated Controlled Atom Transfer Radical Polymerization of Zwitterionic Polymers on Ureido-pyrimidinone-Based Biomaterial Surfaces. Macromolecules, 2020, 53, 4454-4464.	4.8	13
79	Supramolecular Modification of a Sequence-Controlled Collagen-Mimicking Polymer. Biomacromolecules, 2019, 20, 2360-2371.	5.4	12
80	Factors Influencing Retention of Injected Biomaterials to Treat Myocardial Infarction. Advanced Materials Interfaces, 2022, 9, .	3.7	12
81	Supramolecular Platform Stabilizing Growth Factors. Biomacromolecules, 2018, 19, 2610-2617.	5.4	11
82	Inconsistency in Graft Outcome of Bilayered Bioresorbable Supramolecular Arterial Scaffolds in Rats. Tissue Engineering - Part A, 2020, 27, 894-904.	3.1	11
83	Oxidative stress in pancreatic alpha and beta cells as a selection criterion for biocompatible biomaterials. Biomaterials, 2021, 267, 120449.	11.4	11
84	Distinct Effects of Heparin and Interleukinâ€4 Functionalization on Macrophage Polarization and In Situ Arterial Tissue Regeneration Using Resorbable Supramolecular Vascular Grafts in Rats. Advanced Healthcare Materials, 2021, 10, e2101103.	7.6	11
85	Enzymatic Activity at the Surface of Biomaterials via Supramolecular Anchoring of Peptides: The Effect of Material Processing. Macromolecular Bioscience, 2011, 11, 1706-1712.	4.1	10
86	A Supramolecular Platform for the Introduction of Fc-Fusion Bioactive Proteins on Biomaterial Surfaces. ACS Applied Polymer Materials, 2019, 1, 2044-2054.	4.4	10
87	The inâ€vitro biocompatibility of ureidoâ€pyrimidinone compounds and polymer degradation products. Journal of Polymer Science, 2021, 59, 1267-1277.	3.8	10
88	Animal studies for the evaluation of in situ tissue-engineered vascular grafts â€" a systematic review, evidence map, and meta-analysis. Npj Regenerative Medicine, 2022, 7, 17.	5.2	10
89	Coreâ€"Shell Capsules Based on Supramolecular Hydrogels Show Shellâ€Related Erosion and Release Due to Confinement. Macromolecular Bioscience, 2013, 13, 77-83.	4.1	9
90	Cucurbiturilâ€mediated immobilization of fluorescent proteins on supramolecular biomaterials. Journal of Polymer Science Part A, 2017, 55, 3607-3616.	2.3	9

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91	Influence of the Assembly State on the Functionality of a Supramolecular Jagged1-Mimicking Peptide Additive. ACS Omega, 2019, 4, 8178-8187.	3.5	9
92	Towards understanding the messengers of extracellular space: Computational models of outside-in integrin reaction networks. Computational and Structural Biotechnology Journal, 2021, 19, 303-314.	4.1	9
93	Quantifying Guestâ€"Host Dynamics in Supramolecular Assemblies to Analyze Their Robustness. Macromolecular Bioscience, 2019, 19, e1800296.	4.1	8
94	Imaging the In Vivo Degradation of Tissue Engineering Implants by Use of Supramolecular Radiopaque Biomaterials. Macromolecular Bioscience, 2020, 20, e2000024.	4.1	8
95	Biomaterial screening of protein coatings and peptide additives: towards a simple synthetic mimic of a complex natural coating for a bio-artificial kidney. Biomaterials Science, 2021, 9, 2209-2220.	5.4	8
96	Triple-marker cardiac MRI detects sequential tissue changes of healing myocardium after a hydrogel-based therapy. Scientific Reports, 2019, 9, 19366.	3.3	7
97	Renal Epithelial Monolayer Formation on Monomeric and Polymeric Catechol Functionalized Supramolecular Biomaterials. Macromolecular Bioscience, 2019, 19, e1800300.	4.1	7
98	Impact of Additives on Mechanical Properties of Supramolecular Electrospun Scaffolds. ACS Applied Polymer Materials, 2020, 2, 3742-3748.	4.4	7
99	Convenient formulation and application of a supramolecular ureido-pyrimidinone modified poly(ethylene glycol) carrier for intrarenal growth factor delivery. European Polymer Journal, 2015, 72, 484-493.	5.4	6
100	Supramolecular Hydrogels for Regenerative Medicine. Advances in Polymer Science, 2015, , 253-279.	0.8	5
101	The effect of irradiation by ultraviolet light on ureidoâ€pyrimidinone based biomaterials. Journal of Polymer Science Part A, 2016, 54, 81-90.	2.3	5
102	Supramolecular biomaterials based on ureidopyrimidinone and benzene-1,3,5-tricarboxamide moieties. , 2018, , 177-204.		5
103	Combinatorial functionalization with bisureaâ€peptides and antifouling bisurea additives of a supramolecular elastomeric biomaterial. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1725-1735.	2.1	5
104	Renal Epithelial Cell Responses to Supramolecular Thermoplastic Elastomeric Concave and Convex Structures. Advanced Materials Interfaces, 2021, 8, 2001490.	3.7	5
105	Transplantation of Allogeneic PW1pos/Pax7neg Interstitial Cells EnhanceÂEndogenous Repair of InjuredÂPorcine Skeletal Muscle. JACC Basic To Translational Science, 2017, 2, 717-736.	4.1	4
106	Tuning the affinity of amphiphilic guest molecules in a supramolecular polymer transient network. RSC Advances, 2022, 12, 14052-14060.	3.6	4
107	Development of Poor Cell Adhesive Immersion Precipitation Membranes Based on Supramolecular Bisâ€Urea Polymers. Macromolecular Bioscience, 2020, 20, e1900277.	4.1	3
108	Supramolecular Biomaterials in the Netherlands. Tissue Engineering - Part A, 2022, , .	3.1	3

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109	Drug Delivery: A Fast pH-Switchable and Self-Healing Supramolecular Hydrogel Carrier for Guided, Local Catheter Injection in the Infarcted Myocardium (Adv. Healthcare Mater. 1/2014). Advanced Healthcare Materials, 2014, 3, 69-69.	7.6	2
110	Dual Electrospun Supramolecular Polymer Systems for Selective Cell Migration. Macromolecular Bioscience, 2018, 18, e1800004.	4.1	2
111	Advances in the Development of Supramolecular Polymeric Biomaterials. , 2017, , 255-282.		1
112	Effectiveness of cell adhesive additives in different supramolecular polymers. Journal of Polymer Science, 2021, 59, 1253-1266.	3.8	1
113	Biomaterial-driven kidney organoid maturation. Current Opinion in Biomedical Engineering, 2022, 21, 100355.	3.4	1
114	Materiomics using synthetic materials: metals, cements, covalent polymers and supramolecular systems. , 0, , 31-50.		0
115	Cardiac patching and the regeneration of infarcted myocardium: where do we go from here?. Future Cardiology, 2014, 10, 167-170.	1.2	0
116	Polymer Science and Technology in the Institute for Complex Molecular Systems at Eindhoven University of Technology. Journal of Polymer Science, 2021, 59, 1129-1130.	3.8	0