

Patrick van Rijn

List of Publications by Year in descending order

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96
papers

2,984
citations

147726

31
h-index

197736

49
g-index

105
all docs

105
docs citations

105
times ranked

4187
citing authors

#	ARTICLE	IF	CITATIONS
1	Ferritin: A Versatile Building Block for Bionanotechnology. <i>Chemical Reviews</i> , 2015, 115, 1653-1701.	23.0	330
2	Responsive Vesicles from Dynamic Covalent Surfactants. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3421-3424.	7.2	125
3	Surface Topography Guides Morphology and Spatial Patterning of Induced Pluripotent Stem Cell Colonies. <i>Stem Cell Reports</i> , 2017, 9, 654-666.	2.3	120
4	Challenges and advances in the field of self-assembled membranes. <i>Chemical Society Reviews</i> , 2013, 42, 6578.	18.7	96
5	High-Throughput Methods in the Discovery and Study of Biomaterials and Materiobiology. <i>Chemical Reviews</i> , 2021, 121, 4561-4677.	23.0	89
6	Formation of catalytically active gold-polymer microgel hybrids via a controlled in situ reductive process. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13244.	5.2	86
7	Hybrid Capsules via Self-Assembly of Thermo-responsive and Interfacially Active Bionanoparticle-Polymer Conjugates. <i>Advanced Functional Materials</i> , 2011, 21, 2470-2476.	7.8	72
8	Screening Platform for Cell Contact Guidance Based on Inorganic Biomaterial Micro/nanotopographical Gradients. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31433-31445.	4.0	67
9	Antimicrobial Electrodeposited Silver-Containing Calcium Phosphate Coatings. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 5531-5541.	4.0	67
10	Nanogels: A novel approach in antimicrobial delivery systems and antimicrobial coatings. <i>Bioactive Materials</i> , 2021, 6, 3634-3657.	8.6	63
11	Mechanically Induced Generation of Counterions Inside Surface-Grafted Charged Macromolecular Films: Towards Enhanced Mechanotransduction in Artificial Systems. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 7440-7443.	7.2	57
12	Directional nanotopographic gradients: a high-throughput screening platform for cell contact guidance. <i>Scientific Reports</i> , 2015, 5, 16240.	1.6	55
13	Inhibiting Bacterial Adhesion by Mechanically Modulated Microgel Coatings. <i>Biomacromolecules</i> , 2019, 20, 243-253.	2.6	55
14	Pickering emulsion templated soft capsules by self-assembling cross-linkable ferritin-polymer conjugates. <i>Chemical Communications</i> , 2011, 47, 8376.	2.2	51
15	3D impedimetric sensors as a tool for monitoring bacterial response to antibiotics. <i>Lab on A Chip</i> , 2019, 19, 1436-1447.	3.1	48
16	Aggregation-Driven Reversible Formation of Conjugated Polymers in Water. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1998-2001.	7.2	47
17	Biomaterial-stem cell interactions and their impact on stem cell response. <i>RSC Advances</i> , 2014, 4, 53307-53320.	1.7	45
18	Crystal growth mechanism of calcium phosphate coatings on titanium by electrochemical deposition. <i>Surface and Coatings Technology</i> , 2018, 334, 526-535.	2.2	45

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19	Mechanical and biological properties of electrodeposited calcium phosphate coatings. <i>Materials Science and Engineering C</i> , 2019, 100, 475-484.	3.8	43
20	Unidirectional rotating molecular motors dynamically interact with adsorbed proteins to direct the fate of mesenchymal stem cells. <i>Science Advances</i> , 2020, 6, eaay2756.	4.7	42
21	Synergistic Effect of Cell-Derived Extracellular Matrices and Topography on Osteogenesis of Mesenchymal Stem Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25591-25603.	4.0	41
22	Topography induced stiffness alteration of stem cells influences osteogenic differentiation. <i>Biomaterials Science</i> , 2020, 8, 2638-2652.	2.6	41
23	Self-Assembly Process of Soft Ferritin-PNIPAAm Conjugate Bionanoparticles at Polar/Apolar Interfaces. <i>Langmuir</i> , 2013, 29, 276-284.	1.6	40
24	Bionanoparticles and hybrid materials: tailored structural properties, self-assembly, materials and developments in the field. <i>Journal of Materials Chemistry</i> , 2011, 21, 16735.	6.7	38
25	Programmed Morphological Transitions of Multisegment Assemblies by Molecular Chaperone Analogues. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 12285-12289.	7.2	38
26	Cargo shuttling by electrochemical switching of core-shell microgels obtained by a facile one-shot polymerization. <i>Chemical Science</i> , 2019, 10, 1844-1856.	3.7	38
27	High-Throughput Screening and Hierarchical Topography-Mediated Neural Differentiation of Mesenchymal Stem Cells. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000117.	3.9	36
28	Synthetic inorganic materials by mimicking biomineralization processes using native and non-native protein functions. <i>Journal of Materials Chemistry</i> , 2011, 21, 18903.	6.7	35
29	Ultra-Thin Self-Assembled Protein-Polymer Membranes: A New Pore Forming Strategy. <i>Advanced Functional Materials</i> , 2014, 24, 6762-6770.	7.8	34
30	Alkali-Mediated Miscibility of Gelatin/Polycaprolactone for Electrospinning Homogeneous Composite Nanofibers for Tissue Scaffolding. <i>Macromolecular Bioscience</i> , 2017, 17, 1700268.	2.1	33
31	Polymer Directed Protein Assemblies. <i>Polymers</i> , 2013, 5, 576-599.	2.0	32
32	Directing Mesenchymal Stem Cells with Gold Nanowire Arrays. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800334.	1.9	32
33	Macrophage-stroma interactions in fibrosis: biochemical, biophysical, and cellular perspectives. <i>Journal of Pathology</i> , 2021, 254, 344-357.	2.1	32
34	Viruses, Artificial Viruses and Virus-Based Structures for Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2016, 5, 1386-1400.	3.9	30
35	Antimicrobial Nanogels with Nanoinjection Capabilities for Delivery of the Hydrophobic Antibacterial Agent Triclosan. <i>ACS Applied Polymer Materials</i> , 2020, 2, 5779-5789.	2.0	29
36	Directional topography gradients drive optimum alignment and differentiation of human myoblasts. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2019, 13, 2234-2245.	1.3	28

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37	Directional Topography Influences Adipose Mesenchymal Stromal Cell Plasticity: Prospects for Tissue Engineering and Fibrosis. <i>Stem Cells International</i> , 2019, 2019, 1-14.	1.2	28
38	Highly Efficient Antimicrobial and Antifouling Surface Coatings with Triclosan-Loaded Nanogels. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 57721-57731.	4.0	28
39	Liposomes with conjugates of a calix[4]arene and a Gd-DOTA derivative on the outside surface; an efficient potential contrast agent for MRI. <i>Chemical Communications</i> , 2010, 46, 4399.	2.2	27
40	Cross-Linking Density and Temperature Effects on the Self-Assembly of SiO ₂ -PNIPAAm Core-Shell Particles at Interfaces. <i>Chemistry - A European Journal</i> , 2013, 19, 5586-5594.	1.7	27
41	Surface Initiated Polymerizations via e-ATRP in Pure Water. <i>Polymers</i> , 2013, 5, 1229-1240.	2.0	27
42	Photoactuating Artificial Muscles of Motor Amphiphiles as an Extracellular Matrix Mimetic Scaffold for Mesenchymal Stem Cells. <i>Journal of the American Chemical Society</i> , 2022, 144, 3543-3553.	6.6	27
43	Dynamic chirality, chirality transfer and aggregation behaviour of dithienylethene switches. <i>Tetrahedron</i> , 2008, 64, 8324-8335.	1.0	26
44	Rapid and Robust Coating Method to Render Polydimethylsiloxane Surfaces Cell-Adhesive. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41091-41099.	4.0	26
45	Low nanogel stiffness favors nanogel transcytosis across an in vitro blood-brain barrier. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2021, 34, 102377.	1.7	25
46	Development of a Novel Orthogonal Double Gradient for High-Throughput Screening of Mesenchymal Stem Cells-Materials Interaction. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800504.	1.9	24
47	Topography-Mediated Fibroblast Cell Migration Is Influenced by Direction, Wavelength, and Amplitude. <i>ACS Applied Bio Materials</i> , 2020, 3, 2104-2116.	2.3	24
48	Size control and compartmentalization in self-assembled nano-structures of a multisegment amphiphile. <i>Chemical Communications</i> , 2010, 46, 3490.	2.2	23
49	Responsive Macroscopic Materials From Self-Assembled Cross-Linked SiO ₂ -PNIPAAm Core/Shell Structures. <i>Advanced Functional Materials</i> , 2012, 22, 1724-1731.	7.8	23
50	Mechanical Properties of Aligned Nanotopologies for Directing Cellular Behavior. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600275.	1.9	23
51	The Relationship between Bulk Silicone and Benzophenone-Initiated Hydrogel Coating Properties. <i>Polymers</i> , 2018, 10, 534.	2.0	22
52	Biomimetic Multiscale Hierarchical Topography Enhances Osteogenic Differentiation of Human Mesenchymal Stem Cells. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000385.	1.9	20
53	Introduction of Curvature in Amphipathic Oligothiophenes for Defined Aggregate Formation. <i>Chemistry - A European Journal</i> , 2010, 16, 13417-13428.	1.7	19
54	Hierarchical structures via self-assembling protein-polymer hybrid building blocks. <i>Polymer</i> , 2012, 53, 6045-6052.	1.8	19

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55	Double Linear Gradient Biointerfaces for Determining Two-Parameter Dependent Stem Cell Behavior. <i>ChemNanoMat</i> , 2016, 2, 407-413.	1.5	16
56	Non-Covalently Stabilized Alginate Hydrogels as Functional Cell Scaffold Material. <i>Macromolecular Bioscience</i> , 2016, 16, 1693-1702.	2.1	16
57	Physics of Brain Cancer: Multiscale Alterations of Glioblastoma Cells under Extracellular Matrix Stiffening. <i>Pharmaceutics</i> , 2022, 14, 1031.	2.0	16
58	Directed Autonomic Flow: Functional Motility Fluidics. <i>Advanced Materials</i> , 2015, 27, 7401-7406.	11.1	15
59	Collagen morphology influences macrophage shape and marker expression in vitro. <i>Journal of Immunology and Regenerative Medicine</i> , 2018, 1, 13-20.	0.2	15
60	Light-induced molecular rotation triggers on-demand release from liposomes. <i>Chemical Communications</i> , 2020, 56, 8774-8777.	2.2	15
61	Biointerface topography regulates phenotypic switching and cell apoptosis in vascular smooth muscle cells. <i>Biochemical and Biophysical Research Communications</i> , 2020, 526, 841-847.	1.0	15
62	Microstructured Hydrogel Templates for the Formation of Conductive Gold Nanowire Arrays. <i>Macromolecular Rapid Communications</i> , 2016, 37, 1446-1452.	2.0	14
63	Development of an Aptamer-Conjugated Polyrotaxane-Based Biodegradable Magnetic Resonance Contrast Agent for Tumor-Targeted Imaging. <i>ACS Applied Bio Materials</i> , 2019, 2, 406-416.	2.3	14
64	Topography-driven alterations in endothelial cell phenotype and contact guidance. <i>Heliyon</i> , 2020, 6, e04329.	1.4	14
65	Piezoelectric Properties of Non-Polar Block Copolymers. <i>Advanced Materials</i> , 2011, 23, 4047-4052.	11.1	13
66	Single Cell Reactomics: Real-Time Single-Cell Activation Kinetics of Optically Trapped Macrophages. <i>Small Methods</i> , 2021, 5, e2000849.	4.6	13
67	3D-Printable Hierarchical Nanogel-GelMA Composite Hydrogel System. <i>Polymers</i> , 2021, 13, 2508.	2.0	13
68	Full humanization of the glycolytic pathway in <i>Saccharomyces cerevisiae</i> . <i>Cell Reports</i> , 2022, 39, 111010.	2.9	13
69	Self-assembly behaviour of conjugated terthiophenesurfactants in water. <i>New Journal of Chemistry</i> , 2011, 35, 558-567.	1.4	12
70	bFGF and Poly- β -RGD Cooperatively Establish Biointerface for Stem Cell Adhesion, Proliferation, and Differentiation. <i>Advanced Materials Interfaces</i> , 2018, 5, 1700702.	1.9	12
71	Lysozyme-silica hybrid materials: from nanoparticles to capsules and double emulsion mineral capsules. <i>Chemical Communications</i> , 2012, 48, 10210.	2.2	11
72	Topography-Mediated Myotube and Endothelial Alignment, Differentiation, and Extracellular Matrix Organization for Skeletal Muscle Engineering. <i>Polymers</i> , 2020, 12, 1948.	2.0	11

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73	Ultra-sound assisted formation of biodegradable double emulsion capsules from hen egg white. <i>Soft Matter</i> , 2011, 7, 5274.	1.2	10
74	Anti-Microbial Biopolymer Hydrogel Scaffolds for Stem Cell Encapsulation. <i>Polymers</i> , 2017, 9, 149.	2.0	10
75	Amphiphilic conjugated thiophenes for self-assembling antenna systems in water. <i>Chemical Communications</i> , 2009, , 2163.	2.2	9
76	Well Plate Integrated Topography Gradient Screening Technology for Studying Cellâ€”Surface Topography Interactions. <i>Advanced Biology</i> , 2020, 4, e1900218.	3.0	9
77	Bioinspired Silica Mineralization on Viral Templates. <i>Methods in Molecular Biology</i> , 2018, 1776, 337-362.	0.4	8
78	Nanogels with Selective Intracellular Reactivity for Intracellular Tracking and Delivery. <i>Chemistry - A European Journal</i> , 2020, 26, 15084-15088.	1.7	8
79	Adipose Stromal Cell-Secretome Counteracts Profibrotic Signals From IPF Lung Matrices. <i>Frontiers in Pharmacology</i> , 2021, 12, 669037.	1.6	8
80	pH Sensitive Dextran Coated Fluorescent Nanodiamonds as a Biomarker for HeLa Cells Endocytic Pathway and Increased Cellular Uptake. <i>Nanomaterials</i> , 2021, 11, 1837.	1.9	8
81	Artificial Leaves via Reproduction of Hierarchical Structures by a Fast Molding and Curing Process. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1300-1303.	2.0	7
82	Virusâ€”SiO ₂ and Virusâ€”SiO ₂ â€”Au Hybrid Particles with Tunable Morphology. <i>Particle and Particle Systems Characterization</i> , 2015, 32, 43-47.	1.2	7
83	Decoupling the Amplitude and Wavelength of Anisotropic Topography and the Influence on Osteogenic Differentiation of Mesenchymal Stem Cells Using a High-Throughput Screening Approach. <i>ACS Applied Bio Materials</i> , 2020, 3, 3690-3697.	2.3	6
84	Biointerface topography mediates the interplay between endothelial cells and monocytes. <i>RSC Advances</i> , 2020, 10, 13848-13854.	1.7	6
85	Aliphatic Quaternary Ammonium Functionalized Nanogels for Gene Delivery. <i>Pharmaceutics</i> , 2021, 13, 1964.	2.0	5
86	The Unfolded Protein Response Sensor PERK Mediates Stiffness-Dependent Adaptation in Glioblastoma Cells. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6520.	1.8	4
87	Microstructures: Responsive Macroscopic Materials From Self-Assembled Cross-Linked SiO ₂ -PNIPAAm Core/Shell Structures (<i>Adv. Funct. Mater.</i> 8/2012). <i>Advanced Functional Materials</i> , 2012, 22, 1723-1723.	7.8	3
88	Morphology control and surface functionalization of proteinâ€”SiO ₂ hybrid capsules. <i>Journal of Materials Chemistry B</i> , 2013, 1, 6427.	2.9	3
89	Biocatalytically induced surface modification of the tobacco mosaic virus and the bacteriophage M13. <i>Chemical Communications</i> , 2019, 55, 51-54.	2.2	3
90	Topography-Mediated Enhancement of Nonviral Gene Delivery in Stem Cells. <i>Pharmaceutics</i> , 2022, 14, 1096.	2.0	3

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91	Thermoresponsive Capsules: Hybrid Capsules via Self-Assembly of Thermoresponsive and Interfacially Active Bionanoparticle-Polymer Conjugates (Adv. Funct. Mater. 13/2011). Advanced Functional Materials, 2011, 21, 2386-2386.	7.8	1
92	Dynamic Covalent Cross-Linked Nanogel-Stabilized Pickering Emulsion for Responsive Microstructures. Macromolecular Rapid Communications, 2022, 43, e2100766.	2.0	1
93	An Efficient UV-C Disinfection Approach and Biological Assessment Strategy for Microphones. Applied Sciences (Switzerland), 2022, 12, 7239.	1.3	1
94	Self-Assembled Membranes: Ultra-Thin Self-Assembled Protein-Polymer Membranes: A New Pore Forming Strategy (Adv. Funct. Mater. 43/2014). Advanced Functional Materials, 2014, 24, 6896-6896.	7.8	0
95	Morphology: Virus-SiO ₂ and Virus-SiO ₂ -Au Hybrid Particles with Tunable Morphology (Part. Part. Syst. Tj ETQq1 1 0,784314,0gBT /Over 1.2	1.2	0
96	Celebrating 30 Years of <i>Netherlands Society for Biomaterials and Tissue Engineering</i>: Past, Present, and Future. Tissue Engineering - Part A, 2022, 28, 459-460.	1.6	0