Qian Yu

List of Publications by Year
in descending order

83 papers	5,129 citations	71102 41 h-index	88630 70 g-index
84 all docs	84 docs citations	84 times ranked	5275 citing authors

#	Article	IF	Citations
1	Dual-function antibacterial surfaces for biomedical applications. Acta Biomaterialia, 2015, 16, 1-13.	8.3	354
2	Smart Antibacterial Surfaces with Switchable Bacteria-Killing and Bacteria-Releasing Capabilities. ACS Applied Materials & Interfaces, 2017, 9, 37511-37523.	8.0	308
3	Anti-fouling bioactive surfaces. Acta Biomaterialia, 2011, 7, 1550-1557.	8.3	280
4	Responsive and Synergistic Antibacterial Coatings: Fighting against Bacteria in a Smart and Effective Way. Advanced Healthcare Materials, 2019, 8, e1801381.	7.6	270
5	Nanopatterned Smart Polymer Surfaces for Controlled Attachment, Killing, and Release of Bacteria. ACS Applied Materials & Interfaces, 2013, 5, 9295-9304.	8.0	225
6	Construction of nanomaterials with targeting phototherapy properties to inhibit resistant bacteria and biofilm infections. Chemical Engineering Journal, 2019, 358, 74-90.	12.7	170
7	Polyimide/cellulose acetate core/shell electrospun fibrous membranes for oil-water separation. Separation and Purification Technology, 2017, 177, 71-85.	7.9	147
8	A Smart Antibacterial Surface for the Onâ€Demand Killing and Releasing of Bacteria. Advanced Healthcare Materials, 2016, 5, 449-456.	7.6	128
9	Smart Biointerface with Photoswitched Functions between Bactericidal Activity and Bacteria-Releasing Ability. ACS Applied Materials & Interfaces, 2017, 9, 25767-25774.	8.0	120
10	Surface Modified with a Host Defense Peptide-Mimicking Î²-Peptide Polymer Kills Bacteria on Contact with High Efficacy. ACS Applied Materials & Interfaces, 2018, 10, 15395-15400.	8.0	117
11	Smart, Photothermally Activated, Antibacterial Surfaces with Thermally Triggered Bacteria-Releasing Properties. ACS Applied Materials & Interfaces, 2020, 12, 21283-21291.	8.0	116
12	Multifunctional and Regenerable Antibacterial Surfaces Fabricated by a Universal Strategy. ACS Applied Materials & Interfaces, 2016, 8, 30048-30057.	8.0	114
13	Photothermal bactericidal surfaces: killing bacteria using light instead of biocides. Biomaterials Science, 2021, 9, 10-22.	5.4	109
14	Protein Adsorption and Cell Adhesion/Detachment Behavior on Dual-Responsive Silicon Surfaces Modified with Poly(<i>N</i>-isopropylacrylamide)-<i>block</i>-polystyrene Copolymer. Langmuir, 2010, 26, 8582-8588.	3.5	108
15	Nanopatterned antimicrobial enzymatic surfaces combining biocidal and fouling release properties. Nanoscale, 2014, 6, 4750-4757.	5.6	98
16	Dual-function antibacterial surfaces to resist and kill bacteria: Painting a picture with two brushes simultaneously. Journal of Materials Science and Technology, 2021, 70, 24-38.	10.7	93
17	Protein adsorption on poly(N-isopropylacrylamide)-modified silicon surfaces: Effects of grafted layer thickness and protein size. Colloids and Surfaces B: Biointerfaces, 2010, 76, 468-474.	5.0	91
18	Practical Preparation of Infection-Resistant Biomedical Surfaces from Antimicrobial Î²-Peptide Polymers. ACS Applied Materials & Interfaces, 2019, 11, 18907-18913.	8.0	77

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19	Surface Modification to Control Protein/Surface Interactions. Macromolecular Bioscience, 2011, 11, 1031-1040.	4.1	73
20	Regenerable smart antibacterial surfaces: full removal of killed bacteria <i>via</i> a sequential degradable layer. Journal of Materials Chemistry B, 2018, 6, 3946-3955.	5.8	71
21	Supramolecular Platform with Switchable Multivalent Affinity: Photo-Reversible Capture and Release of Bacteria. ACS Applied Materials & Interfaces, 2017, 9, 3505-3513.	8.0	70
22	High antibacterial efficiency of pDMAEMA modified silicon nanowire arrays. Colloids and Surfaces B: Biointerfaces, 2011, 83, 355-359.	5.0	67
23	Modification of Silicone Elastomer Surfaces with Zwitterionic Polymers: Short-Term Fouling Resistance and Triggered Biofouling Release. ACS Applied Materials & Interfaces, 2015, 7, 25586-25591.	8.0	63
24	Nanopatterned polymer brushes: conformation, fabrication and applications. Nanoscale, 2016, 8, 680-700.	5.6	63
25	Fabrication of Supramolecular Bioactive Surfaces via Î²-Cyclodextrin-Based Hostâ€“Guest Interactions. ACS Applied Materials & Interfaces, 2018, 10, 36585-36601.	8.0	58
26	Self-assembled proteinaceous wound dressings attenuate secondary trauma and improve wound healing <i>in vivo</i>. Journal of Materials Chemistry B, 2018, 6, 4645-4655.	5.8	57
27	A Universal Platform for Macromolecular Deliveryinto Cells Using Gold Nanoparticle Layers via the Photoporation Effect. Advanced Functional Materials, 2016, 26, 5787-5795.	14.9	55
28	Multistimulus Responsive Biointerfaces with Switchable Bioadhesion and Surface Functions. ACS Applied Materials & Interfaces, 2020, 12, 5447-5455.	8.0	55
29	Bioinspired Blood Compatible Surface Having Combined Fibrinolytic and Vascular Endotheliumâ€Like Properties via a Sequential Coimmobilization Strategy. Advanced Functional Materials, 2015, 25, 5206-5213.	14.9	53
30	Shape-memory and self-healing polyurethanes based on cyclic poly(Îµ-caprolactone). Polymer Chemistry, 2016, 7, 6789-6797.	3.9	53
31	Tissue-engineered Vascular Grafts: Balance of the Four Major Requirements. Colloids and Interface Science Communications, 2018, 23, 34-44.	4.1	53
32	Release of VEGF and BMP9 from injectable alginate based composite hydrogel for treatment of myocardial infarction. Bioactive Materials, 2021, 6, 520-528.	15.6	53
33	A Facile Approach to Modify Polyurethane Surfaces for Biomaterial Applications. Macromolecular Bioscience, 2009, 9, 1165-1168.	4.1	51
34	RIR-MAPLE deposition of multifunctional films combining biocidal and fouling release properties. Journal of Materials Chemistry B, 2014, 2, 4371-4378.	5.8	50
35	A reusable supramolecular platform for the specific capture and release of proteins and bacteria. Journal of Materials Chemistry B, 2017, 5, 444-453.	5.8	47
36	Superhydrophobic photothermal coatings based on candle soot for prevention of biofilm formation. Journal of Materials Science and Technology, 2023, 132, 18-26.	10.7	46

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37	Nanopatterned Polymer Brushes for Triggered Detachment of Anchorageâ€Dependent Cells. Advanced Functional Materials, 2014, 24, 3751-3759.	14.9	45
38	A new avenue to the synthesis of GAG-mimicking polymers highly promoting neural differentiation of embryonic stem cells. Chemical Communications, 2015, 51, 15434-15437.	4.1	45
39	Universal Antifouling and Photothermal Antibacterial Surfaces Based on Multifunctional Metalâ€“Phenolic Networks for Prevention of Biofilm Formation. ACS Applied Materials & Interfaces, 2021, 13, 48403-48413.	8.0	44
40	A Universal and Versatile Approach for Surface Biofunctionalization: Layerâ€byâ€Layer Assembly Meets Hostâ€“Guest Chemistry. Advanced Materials Interfaces, 2016, 3, 1600600.	3.7	43
41	Antimicrobial and bacteria-releasing multifunctional surfaces: Oligo (p-phenylene-ethynylene)/poly (N-isopropylacrylamide) films deposited by RIR-MAPLE. Colloids and Surfaces B: Biointerfaces, 2015, 126, 328-334.	5.0	41
42	Sweet Switch: Sugar-Responsive Bioactive Surfaces Based on Dynamic Covalent Bonding. ACS Applied Materials & Interfaces, 2018, 10, 10647-10655.	8.0	41
43	Inhibition of protein adsorption and cell adhesion on PNIPAAm-grafted polyurethane surface: Effect of graft molecular weight. Colloids and Surfaces B: Biointerfaces, 2011, 85, 26-31.	5.0	40
44	Exploration of smart antibacterial coatings for practical applications. Current Opinion in Chemical Engineering, 2021, 34, 100727.	7.8	39
45	Nanopatterned polymer brushes as switchable bioactive interfaces. Nanoscale, 2013, 5, 3632.	5.6	37
46	Gold nanoparticle layer: a versatile nanostructured platform for biomedical applications. Materials Chemistry Frontiers, 2018, 2, 2175-2190.	5.9	36
47	pH-Reversible, High-Capacity Binding of Proteins on a Substrate with Nanostructure. Langmuir, 2010, 26, 17812-17815.	3.5	35
48	Vertical SiNWAs for biomedical and biotechnology applications. Journal of Materials Chemistry B, 2014, 2, 7849-7860.	5.8	35
49	Two-in-One Platform for High-Efficiency Intracellular Delivery and Cell Harvest: When a Photothermal Agent Meets a Thermoresponsive Polymer. ACS Applied Materials & Interfaces, 2019, 11, 12357-12366.	8.0	35
50	An antithrombotic hydrogel with thrombin-responsive fibrinolytic activity: breaking down the clot as it forms. Materials Horizons, 2016, 3, 556-562.	12.2	34
51	A Universal Platform for Highâ€Efficiency â€œEngineeringâ€• Living Cells: Integration of Cell Capture, Intracellular Delivery of Biomolecules, and Cell Harvesting Functions. Advanced Functional Materials, 2020, 30, 1906362.	14.9	34
52	Effective and biocompatible antibacterial surfaces via facile synthesis and surface modification of peptide polymers. Bioactive Materials, 2021, 6, 4531-4541.	15.6	34
53	Dual-Functional Surfaces Based on an Antifouling Polymer and a Natural Antibiofilm Molecule: Prevention of Biofilm Formation without Using Biocides. ACS Applied Materials & Interfaces, 2021, 13, 45191-45200.	8.0	33
54	The synergistic effects of stimuli-responsive polymers with nano- structured surfaces: wettability and protein adsorption. RSC Advances, 2011, 1, 262.	3.6	31

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55	Dual-functional bacterial cellulose modified with phase-transitioned proteins and gold nanorods combining antifouling and photothermal bactericidal properties. Journal of Materials Science and Technology, 2022, 110, 14-23.	10.7	31
56	Using porous magnetic iron oxide nanomaterials as a facile photoporation nanoplatform for macromolecular delivery. Journal of Materials Chemistry B, 2018, 6, 4427-4436.	5.8	29
57	Photothermally Activated Electrospun Nanofiber Mats for High-Efficiency Surface-Mediated Gene Transfection. ACS Applied Materials & Interfaces, 2020, 12, 7905-7914.	8.0	29
58	A surface decorated with diblock copolymer for biomolecular conjugation. Soft Matter, 2010, 6, 2616.	2.7	28
59	Antimicrobial oligo(p-phenylene-ethynylene) film deposited by resonant infrared matrix-assisted pulsed laser evaporation. Colloids and Surfaces B: Biointerfaces, 2014, 116, 786-792.	5.0	28
60	A supramolecular approach for versatile biofunctionalization of magnetic nanoparticles. Journal of Materials Chemistry B, 2018, 6, 2198-2203.	5.8	27
61	Reversible Bacterial Adhesion on Mixed Poly(dimethylaminoethyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 502 Td (methacrylate)	3.5	24
62	Biomaterials based cardiac patches for the treatment of myocardial infarction. Journal of Materials Science and Technology, 2021, 94, 77-89.	10.7	24
63	Regulation of Protein Binding Capability of Surfaces via Hostâ€"Guest Interactions: Effects of Localized and Average Ligand Density. Langmuir, 2015, 31, 6172-6178.	3.5	23
64	Photothermal scaffolds/surfaces for regulation of cell behaviors. Bioactive Materials, 2022, 8, 449-477.	15.6	23
65	Intracellular Delivery Platform for â€œRecalcitrantâ€•Cells: When Polymeric Carrier Marries Photoporation. ACS Applied Materials & Interfaces, 2017, 9, 21593-21598.	8.0	22
66	Surface-Mediated Intracellular Delivery by Physical Membrane Disruption. ACS Applied Materials & Interfaces, 2020, 12, 31054-31078.	8.0	22
67	Reusable nanoengineered surfaces for bacterial recruitment and decontamination. Biointerphases, 2016, 11, 019003.	1.6	20
68	A multifunctional surface for blood contact with fibrinolytic activity, ability to promote endothelial cell adhesion and inhibit smooth muscle cell adhesion. Journal of Materials Chemistry B, 2017, 5, 604-611.	5.8	20
69	â€œNano-catalystâ€•for DNA transformation. Journal of Materials Chemistry, 2011, 21, 6148.	6.7	19
70	Controlled synthesis of diverse single-chain polymeric nanoparticles using polymers bearing furan-protected maleimide moieties. Polymer Chemistry, 2018, 9, 3238-3247.	3.9	17
71	A hemocompatible polyurethane surface having dual fibrinolytic and nitric oxide generating functions. Journal of Materials Chemistry B, 2017, 5, 980-987.	5.8	16
72	Promoting neural differentiation of embryonic stem cells using Î²-cyclodextrin sulfonate. Journal of Materials Chemistry B, 2017, 5, 1896-1900.	5.8	16

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73	Effects of polymer topology on biointeractions of polymer brushes: Comparison of cyclic and linear polymers. Colloids and Surfaces B: Biointerfaces, 2017, 159, 527-532.	5.0	13
74	A supramolecular bioactive surface for specific binding of protein. Colloids and Surfaces B: Biointerfaces, 2017, 152, 192-198.	5.0	12
75	Antibacterial Coatings: Responsive and Synergistic Antibacterial Coatings: Fighting against Bacteria in a Smart and Effective Way (Adv. Healthcare Mater. 3/2019). Advanced Healthcare Materials, 2019, 8, 1970007.	7.6	12
76	Dynamic furan/maleimide bond-incorporated cyclic polymer for topology transformation. Reactive and Functional Polymers, 2017, 116, 41-48.	4.1	11
77	A Photothermal Nanoplatform with Sugar-Triggered Cleaning Ability for High-Efficiency Intracellular Delivery. ACS Applied Materials & Interfaces, 2022, 14, 2618-2628.	8.0	8
78	REGULATION OF PROTEIN ADSORPTION ON pH-RESPONSIVE SURFACES. Acta Polymerica Sinica, 2011, 011, 812-816.	0.0	3
79	Photoporation: A Universal Platform for Macromolecular Deliveryinto Cells Using Gold Nanoparticle Layers via the Photoporation Effect (Adv. Funct. Mater. 32/2016). Advanced Functional Materials, 2016, 26, 5770-5770.	14.9	2
80	Regulation of protein adsorption and cell adhesion on surfaces modified by block copolymer brushes. Chinese Science Bulletin, 2010, 55, 2808-2814.	0.7	2
81	INTERACTION BETWEEN PNIPAAM MODIFIED SILICON SURFACES AND PLASMA PROTEINS. Acta Polymerica Sinica, 2011, 011, 537-542.	0.0	2
82	PREPARATION OF BIOACTIVE SURFACES FOR PROMOTING CELL ADHESION. Acta Polymerica Sinica, 2011, 011, 622-627.	0.0	1
83	Interactions of Biomaterial Surfaces with Proteins and Cells. , 2016, , 103-121.		0