Fei Sun

List of Publications by Year
in descending order

48 papers	2,244 citations	218677 26 h-index	223800 46 g-index
48 all docs	48 docs citations	48 times ranked	2878 citing authors

#	Article	IF	Citations
1	Synthesis of bioactive protein hydrogels by genetically encoded SpyTag-SpyCatcher chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11269-11274.	7.1	221
2	Controlling Macromolecular Topology with Genetically Encoded SpyTagâ€“SpyCatcher Chemistry. Journal of the American Chemical Society, 2013, 135, 13988-13997.	13.7	188
3	Protein cysteine phosphorylation of SarA/MgrA family transcriptional regulators mediates bacterial virulence and antibiotic resistance. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15461-15466.	7.1	151
4	B ₁₂ -dependent photoresponsive protein hydrogels for controlled stem cell/protein release. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5912-5917.	7.1	131
5	Proteome-wide Quantification and Characterization of Oxidation-Sensitive Cysteines in Pathogenic Bacteria. Cell Host and Microbe, 2013, 13, 358-370.	11.0	111
6	In the<i>Staphylococcus aureus</i>Two-Component System<i>sae</i>, the Response Regulator SaeR Binds to a Direct Repeat Sequence and DNA Binding Requires Phosphorylation by the Sensor Kinase SaeS. Journal of Bacteriology, 2010, 192, 2111-2127.	2.2	104
7	Quorum-sensing <i>agr</i> mediates bacterial oxidation response via an intramolecular disulfide redox switch in the response regulator AgrA. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9095-9100.	7.1	92
8	Protein Hydrogel Microbeads for Selective Uranium Mining from Seawater. ACS Applied Materials & Interfaces, 2017, 9, 2035-2039.	8.0	92
9	Reversible hydrogels with tunable mechanical properties for optically controlling cell migration. Nano Research, 2018, 11, 5556-5565.	10.4	91
10	AirSR, a [2Fe-2S] Cluster-Containing Two-Component System, Mediates Global Oxygen Sensing and Redox Signaling in Staphylococcus aureus. Journal of the American Chemical Society, 2012, 134, 305-314.	13.7	78
11	The auxiliary protein complex <scp>SaePQ</scp> activates the phosphatase activity of sensor kinase <scp>SaeS</scp> in the <scp>SaeRS</scp> twoâ€component system of <i><scp>S</scp>taphylococcus aureus</i>. Molecular Microbiology, 2012, 86, 331-348.	2.5	74
12	CcpA Mediates Proline Auxotrophy and Is Required for<i>Staphylococcus aureus</i>Pathogenesis. Journal of Bacteriology, 2010, 192, 3883-3892.	2.2	72
13	Expression of Multidrug Resistance Efflux Pump Gene <i>norA</i> Is Iron Responsive in Staphylococcus aureus. Journal of Bacteriology, 2012, 194, 1753-1762.	2.2	69
14	Synthetic Multienzyme Complexes, Catalytic Nanomachineries for Cascade Biosynthesis <i>In Vivo</i>. ACS Nano, 2019, 13, 9895-9906.	14.6	65
15	Microfluidics and microbial engineering. Lab on A Chip, 2016, 16, 432-446.	6.0	62
16	Genetically Encoded Spy Peptide Fusion System to Detect Plasma Membrane-Localized Proteins InÂVivo. Chemistry and Biology, 2015, 22, 1108-1121.	6.0	56
17	Targeting MgrA-Mediated Virulence Regulation in Staphylococcus aureus. Chemistry and Biology, 2011, 18, 1032-1041.	6.0	55
18	Molecular mechanism of quinone signaling mediated through S-quinonization of a YodB family repressor QsrR. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5010-5015.	7.1	40

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19	Unleashing chemical power from protein sequence space toward genetically encoded â€œclickâ€• chemistry. Chinese Chemical Letters, 2017, 28, 2078-2084.	9.0	40
20	Injectable, photoresponsive hydrogels for delivering neuroprotective proteins enabled by metal-directed protein assembly. Science Advances, 2020, 6, .	10.3	40
21	Aureusimines in Staphylococcus aureus Are Not Involved in Virulence. PLoS ONE, 2010, 5, e15703.	2.5	40
22	Staphylococcus aureus CymR Is a New Thiol-based Oxidation-sensing Regulator of Stress Resistance and Oxidative Response. Journal of Biological Chemistry, 2012, 287, 21102-21109.	3.4	38
23	An Intrinsically Disordered Peptide-Peptide Stapler for Highly Efficient Protein Ligation Both <i>in Vivo</i> and <i>in Vitro</i>. Journal of the American Chemical Society, 2018, 140, 17474-17483.	13.7	36
24	Steady-State Hydrogen Peroxide Induces Glycolysis in Staphylococcus aureus and Pseudomonas aeruginosa. Journal of Bacteriology, 2014, 196, 2499-2513.	2.2	35
25	Entirely recombinant protein-based hydrogels for selective heavy metal sequestration. Polymer Chemistry, 2017, 8, 6158-6164.	3.9	28
26	Genetically Programming Stress-Relaxation Behavior in Entirely Protein-Based Molecular Networks. ACS Macro Letters, 2018, 7, 1468-1474.	4.8	28
27	Versatile Engineered Protein Hydrogels Enabling Decoupled Mechanical and Biochemical Tuning for Cell Adhesion and Neurite Growth. ACS Applied Nano Materials, 2018, 1, 1579-1585.	5.0	24
28	Dynamically Tunable, Macroscopic Molecular Networks Enabled by Cellular Synthesis of 4-Arm Star-like Proteins. Matter, 2020, 2, 233-249.	10.0	24
29	Genetically Encoded Click Chemistry^{â€}. Chinese Journal of Chemistry, 2020, 38, 894-896.	4.9	21
30	Cobalt-Cross-Linked, Redox-Responsive Spy Network Protein Hydrogels. ACS Macro Letters, 2019, 8, 773-778.	4.8	20
31	A Versatile and Robust Approach to Stimuli-Responsive Protein Multilayers with Biologically Enabled Unique Functions. Biomacromolecules, 2018, 19, 1065-1073.	5.4	18
32	Modular functionalization of crystalline graphene by recombinant proteins: a nanoplatform for probing biomolecules. Nanoscale, 2018, 10, 22572-22582.	5.6	12
33	Synthesis of Entirely Protein-Based Hydrogels by Enzymatic Oxidation Enabling Water-Resistant Bioadhesion and Stem Cell Encapsulation. ACS Applied Bio Materials, 2018, 1, 1735-1740.	4.6	11
34	Genetically engineered materials: Proteins and beyond. Science China Chemistry, 2022, 65, 486-496.	8.2	10
35	B₁₂-Dependent Protein Oligomerization Facilitates Layer-by-Layer Growth of Photo/Thermal Responsive Nanofilms. ACS Macro Letters, 2018, 7, 514-518.	4.8	9
36	Enzymatic assembly of adhesive molecular networks with sequence-dependent mechanical properties inspired by mussel foot proteins. Polymer Chemistry, 2019, 10, 823-826.	3.9	7

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37	Calcium-responsive hydrogels enabled by inducible proteinâ€“protein interactions. Polymer Chemistry, 2020, 11, 4973-4977.	3.9	7
38	Harnessing proteins for engineered living materials. Current Opinion in Solid State and Materials Science, 2021, 25, 100896.	11.5	7
39	B ₁₂ -induced reassembly of split photoreceptor protein enables photoresponsive hydrogels with tunable mechanics. Science Advances, 2022, 8, eabm5482.	10.3	7
40	Controlling synthetic membraneless organelles by a red-light-dependent singlet oxygen-generating protein. Nature Communications, 2022, 13, .	12.8	7
41	Reaction: Engineer Biology for Uranium. CheM, 2021, 7, 274-275.	11.7	6
42	Cu3PdxN nanocrystals for efficient CO2 electrochemical reduction to methane. Electrochimica Acta, 2021, 371, 137793.	5.2	6
43	Synthesis of bio-inspired viscoelastic molecular networks by metal-induced protein assembly. Molecular Systems Design and Engineering, 2020, 5, 117-124.	3.4	4
44	Editorial: Synthesis of Novel Hydrogels With Unique Mechanical Properties. Frontiers in Chemistry, 2020, 8, 595392.	3.6	2
45	B12-dependent photoreceptor protein as an emerging tool for materials synthetic biology. Smart Materials in Medicine, 2022, 3, 297-303.	6.7	2
46	Self-Assembly and Genetically Engineered Hydrogels. Advances in Biochemical Engineering/Biotechnology, 2021, 178, 169-196.	1.1	1
47	The Spy that links: Creation of nonlinear protein architectures and materials using SpyTag/SpyCatcher chemistry. Methods in Enzymology, 2021, 647, 283-301.	1.0	1
48	From 4-arm star proteins to diverse stimuli-responsive molecular networks enabled by orthogonal genetically encoded click chemistries. Polymer Chemistry, 0, , .	3.9	1