Baojun Wang

List of Publications by Year
in descending order

47 papers	2,108 citations	304602 22 h-index	276775 41 g-index
53 all docs	53 docs citations	53 times ranked	1923 citing authors

#	Article	IF	Citations
1	Engineering modular and orthogonal genetic logic gates for robust digital-like synthetic biology. Nature Communications, 2011, 2, 508.	5.8	330
2	Cascaded amplifying circuits enable ultrasensitive cellular sensors for toxic metals. Nature Chemical Biology, 2019, 15, 540-548.	3.9	199
3	A modular cell-based biosensor using engineered genetic logic circuits to detect and integrate multiple environmental signals. Biosensors and Bioelectronics, 2013, 40, 368-376.	5.3	191
4	CyanoGate: A Modular Cloning Suite for Engineering Cyanobacteria Based on the Plant MoClo Syntax. Plant Physiology, 2019, 180, 39-55.	2.3	123
5	Engineering modular and tunable genetic amplifiers for scaling transcriptional signals in cascaded gene networks. Nucleic Acids Research, 2014, 42, 9484-9492.	6.5	109
6	Amplification of small molecule-inducible gene expression via tuning of intracellular receptor densities. Nucleic Acids Research, 2015, 43, 1955-1964.	6.5	98
7	Synthetic Biology Enables Programmable Cellâ€Based Biosensors. ChemPhysChem, 2020, 21, 132-144.	1.0	94
8	Engineered CRISPRa enables programmable eukaryote-like gene activation in bacteria. Nature Communications, 2019, 10, 3693.	5.8	90
9	Tools and Principles for Microbial Gene Circuit Engineering. Journal of Molecular Biology, 2016, 428, 862-888.	2.0	87
10	Customizing cell signaling using engineered genetic logic circuits. Trends in Microbiology, 2012, 20, 376-384.	3.5	78
11	Scaling up genetic circuit design for cellular computing: advances and prospects. Natural Computing, 2018, 17, 833-853.	1.8	56
12	Comprehensive Profiling of Diverse Genetic Reporters with Application to Whole-Cell and Cell-Free Biosensors. Analytical Chemistry, 2019, 91, 15284-15292.	3.2	56
13	Orthogonality and Burdens of Heterologous AND Gate Gene Circuits in E.Âcoli. ACS Synthetic Biology, 2018, 7, 553-564.	1.9	49
14	An expanded library of orthogonal split inteins enables modular multi-peptide assemblies. Nature Communications, 2020, 11, 1529.	5.8	49
15	Recognizing and engineering digital-like logic gates and switches in gene regulatory networks. Current Opinion in Microbiology, 2016, 33, 74-82.	2.3	44
16	Emerging Species and Genome Editing Tools: Future Prospects in Cyanobacterial Synthetic Biology. Microorganisms, 2019, 7, 409.	1.6	39
17	A novel water-soluble sulfonated porphyrin fluorescence sensor for sensitive assays of H₂O₂and glucose. Analyst, The, 2015, 140, 1655-1661.	1.7	38
18	Designer cell signal processing circuits for biotechnology. New Biotechnology, 2015, 32, 635-643.	2.4	35

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19	Rapid engineering of versatile molecular logic gates using heterologous genetic transcriptional modules. Chemical Communications, 2014, 50, 11642-11644.	2.2	33
20	Orthogonal paper biosensor for mercury(II) combining bioluminescence and colorimetric smartphone detection. Biosensors and Bioelectronics, 2021, 194, 113569.	5.3	32
21	Phage engineering: how advances in molecular biology and synthetic biology are being utilized to enhance the therapeutic potential of bacteriophages. Quantitative Biology, 2017, 5, 42-54.	0.3	27
22	Synthetic protein-binding DNA sponge as a tool to tune gene expression and mitigate protein toxicity. Nature Communications, 2020, 11, 5961.	5.8	27
23	Rewiring cell signalling through chimaeric regulatory protein engineering. Biochemical Society Transactions, 2013, 41, 1195-1200.	1.6	21
24	Engineering the Ultrasensitive Transcription Factors by Fusing a Modular Oligomerization Domain. ACS Synthetic Biology, 2018, 7, 1188-1194.	1.9	18
25	Reprogrammed tracrRNAs enable repurposing of RNAs as crRNAs and sequence-specific RNA biosensors. Nature Communications, 2022, 13, 1937.	5.8	17
26	Synthetic Cell-Based Sensors with Programmed Selectivity and Sensitivity. Methods in Molecular Biology, 2017, 1572, 349-363.	0.4	16
27	A systematic approach to inserting split inteins for Boolean logic gate engineering and basal activity reduction. Nature Communications, 2021, 12, 2200.	5.8	16
28	EEG Recognition Based on Multiple Types of Information by Using Wavelet Packet Transform and Neural Networks. , 2005, 2005, 5377-80.		13
29	Engineering Prokaryote Synthetic Biology Biosensors. , 2019, , 1-37.		12
30	Programming living sensors for environment, health and biomanufacturing. Microbial Biotechnology, 2021, 14, 2334-2342.	2.0	12
31	Synthetic biology enables field-deployable biosensors for water contaminants. TrAC - Trends in Analytical Chemistry, 2022, 146, 116507.	5.8	12
32	Rational Design and Characterization of Nitric Oxide Biosensors in E. coli Nissle 1917 and Mini SimCells. ACS Synthetic Biology, 2021, 10, 2566-2578.	1.9	10
33	Squeeze-and-breathe evolutionary Monte Carlo optimization with local search acceleration and its application to parameter fitting. Journal of the Royal Society Interface, 2012, 9, 1925-1933.	1.5	9
34	Synthetic Biology Enables Programmable Cellâ€Based Biosensors. ChemPhysChem, 2020, 21, 131-131.	1.0	9
35	De Novo Design of the ArsR Regulated P_{ars} Promoter Enables a Highly Sensitive Whole-Cell Biosensor for Arsenic Contamination. Analytical Chemistry, 2022, 94, 7210-7218.	3.2	9
36	Genetic Modification of Cyanobacteria by Conjugation Using the CyanoGate Modular Cloning Toolkit. Journal of Visualized Experiments, 2019, , .	0.2	8

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37	Determination of the Self-Association Residues within a Homomeric and a Heteromeric AAA+ Enhancer Binding Protein. Journal of Molecular Biology, 2014, 426, 1692-1710.	2.0	6
38	A Novel Eukaryoteâ€Like CRISPR Activation Tool in Bacteria: Features and Capabilities. BioEssays, 2020, 42, e1900252.	1.2	6
39	Evaluation and Comparison of the Efficiency of Transcription Terminators in Different Cyanobacterial Species. Frontiers in Microbiology, 2020, 11, 624011.	1.5	6
40	Sense and sensibility: of synthetic biology and the redesign of bioreporter circuits. Microbial Biotechnology, 2022, 15, 103-106.	2.0	5
41	Synthetic microbial consortia with programmable ecological interactions. Methods in Ecology and Evolution, 2022, 13, 1608-1621.	2.2	5
42	Study of A Chaotic Olfactory Neural Network Model and Its Applications on Pattern Classification. , 2005, 2005, 3640-3.		3
43	Synthetic transcription factors allow regulon wide control and shifting the nitrogen/carbon balance in bacteria. New Biotechnology, 2014, 31, S22.	2.4	1
44	Engineering Prokaryote Synthetic Biology Biosensors. , 2022, , 283-318.		1
45	Complexity and Topographic Analysis of EEG under Normal and Simulated High Altitude Acute Hypoxia Conditions. , 0, , .		0
46	Engineering customised cell signalling circuits and their biotechnological applications. New Biotechnology, 2014, 31, S45.	2.4	0
47	New Tools for Rapid and Sensitive Detection of Water Contamination: Whole-Cell Biosensors and Cell-Free TX-TL Systems. NATO Science for Peace and Security Series A: Chemistry and Biology, 2020, , 239-241.	0.5	0