Chan Cao

List of Publications by Year
in descending order

44 papers	1,855 citations	304368 22 h-index	301761 39 g-index
44 all docs	44 docs citations	44 times ranked	1337 citing authors

#	Article	IF	Citations
1	Discrimination of oligonucleotides of different lengths with a wild-type aerolysin nanopore. Nature Nanotechnology, 2016, 11, 713-718.	15.6	333
2	The emerging landscape of single-molecule protein sequencing technologies. Nature Methods, 2021, 18, 604-617.	9.0	198
3	Biological Nanopores: Confined Spaces for Electrochemical Single-Molecule Analysis. Accounts of Chemical Research, 2018, 51, 331-341.	7.6	130
4	Single molecule analysis by biological nanopore sensors. Analyst, The, 2014, 139, 3826-3835.	1.7	93
5	Accurate Data Process for Nanopore Analysis. Analytical Chemistry, 2015, 87, 907-913.	3.2	92
6	Single-molecule sensing of peptides and nucleic acids by engineered aerolysin nanopores. Nature Communications, 2019, 10, 4918.	5.8	74
7	Analysis of a Single Î±-Synuclein Fibrillation by the Interaction with a Protein Nanopore. Analytical Chemistry, 2013, 85, 8254-8261.	3.2	67
8	A single biomolecule interface for advancing the sensitivity, selectivity and accuracy of sensors. National Science Review, 2018, 5, 450-452.	4.6	64
9	Identification of Essential Sensitive Regions of the Aerolysin Nanopore for Single Oligonucleotide Analysis. Analytical Chemistry, 2018, 90, 7790-7794.	3.2	61
10	Mapping the sensing spots of aerolysin for single oligonucleotides analysis. Nature Communications, 2018, 9, 2823.	5.8	60
11	A Stimuli-Responsive Nanopore Based on a Photoresponsive Host-Guest System. Scientific Reports, 2013, 3, 1662.	1.6	58
12	Aerolysin nanopores decode digital information stored in tailored macromolecular analytes. Science Advances, 2020, 6, .	4.7	57
13	Rationally Designed Sensing Selectivity and Sensitivity of an Aerolysin Nanopore via Site-Directed Mutagenesis. ACS Sensors, 2018, 3, 779-783.	4.0	55
14	Detection of Peptides with Different Charges and Lengths by Using the Aerolysin Nanopore. ChemElectroChem, 2019, 6, 126-129.	1.7	55
15	Selective and Sensitive Detection of Methylcytosine by Aerolysin Nanopore under Serum Condition. Analytical Chemistry, 2017, 89, 11685-11689.	3.2	52
16	Driven Translocation of Polynucleotides Through an Aerolysin Nanopore. Analytical Chemistry, 2016, 88, 5046-5049.	3.2	51
17	Construction of an aerolysin nanopore in a lipid bilayer for single-oligonucleotide analysis. Nature Protocols, 2017, 12, 1901-1911.	5.5	50
18	Direct Readout of Single Nucleobase Variations in an Oligonucleotide. Small, 2017, 13, 1702011.	5.2	39

#	Article	IF	Citations
19	Real-Time and Accurate Identification of Single Oligonucleotide Photoisomers via an Aerolysin Nanopore. Analytical Chemistry, 2018, 90, 4268-4272.	3.2	34
20	A Time-Resolved Single-Molecular Train Based on Aerolysin Nanopore. CheM, 2018, 4, 1893-1901.	5.8	33
21	Single molecule study of initial structural features on the amyloidosis process. Chemical Communications, 2016, 52, 5542-5545.	2.2	26
22	Biological nanopores for single-molecule sensing. IScience, 2022, 25, 104145.	1.9	25
23	A General Strategy of Aerolysin Nanopore Detection for Oligonucleotides with the Secondary Structure. Small, 2018, 14, e1704520.	5.2	21
24	Enhanced Resolution of Low Molecular Weight Poly(Ethylene Glycol) in Nanopore Analysis. Analytical Chemistry, 2014, 86, 11946-11950.	3.2	20
25	Reply to Comment on Accurate Data Process for Nanopore Analysis. Analytical Chemistry, 2015, 87, 10653-10656.	3.2	15
26	Monitoring disulfide bonds making and breaking in biological nanopore at single molecule level. Science China Chemistry, 2018, 61, 1385-1388.	4.2	14
27	Real-time monitoring of the oxidative response of a membraneâ€“channel biomimetic system to free radicals. Chemical Communications, 2013, 49, 6584.	2.2	13
28	Single-molecule studies of amyloid proteins: from biophysical properties to diagnostic perspectives. Quarterly Reviews of Biophysics, 2020, 53, e12.	2.4	12
29	A Low Noise Amplifier System for Nanopore-based Single Molecule Analysis. Chinese Journal of Analytical Chemistry, 2015, 43, 971-976.	0.9	11
30	Detection of Single Oligonucleotide by an Aerolysin Nanopore. Acta Chimica Sinica, 2016, 74, 734.	0.5	11
31	Real-time plasmonic monitoring of electrocatalysis on single nanorods. Journal of Electroanalytical Chemistry, 2016, 781, 257-264.	1.9	10
32	Single-Molecule Analysis of Colorectal Cancer-associated MicroRNAs via a Biological Nanopore. Acta Chimica Sinica, 2017, 75, 1087.	0.5	7
33	Dynamics of nanointerfaces: general discussion. Faraday Discussions, 2018, 210, 451-479.	1.6	4
34	Biosensing: A General Strategy of Aerolysin Nanopore Detection for Oligonucleotides with the Secondary Structure (Small 18/2018). Small, 2018, 14, 1870080.	5.2	3
35	Detection of DNA Methylation with Aerolysin Nanopore. Biophysical Journal, 2017, 112, 332a.	0.2	2
36	Ultrasensitive Label-Free Detection of Proteinâ€“Membrane Interaction Exemplified by Toxin-Liposome Insertion. Journal of Physical Chemistry Letters, 2022, 13, 3197-3201.	2.1	2

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37	Alkyl detection facilitated by a DNA conjugate with an Î±-hemolysin nanopore. RSC Advances, 2016, 6, 105-108.	1.7	1
38	Processes at nanoelectrodes: general discussion. Faraday Discussions, 2018, 210, 235-265.	1.6	1
39	Decoding Digital Information Stored in Polymer by Nanopore. Biophysical Journal, 2021, 120, 98a.	0.2	1
40	Single-Molecule Masspic Analysis of Short-Chain PEG. Biophysical Journal, 2016, 110, 639a.	0.2	0
41	Single Nucleotide Discrimination with Electro-Optical Nanopore. Biophysical Journal, 2016, 110, 656a.	0.2	0
42	Single Oligonucleotide Discrimination with Aerolysin Nanopore. Biophysical Journal, 2016, 110, 654a.	0.2	0
43	Length- and Species-Selective Detection of Short Oligonucleotides using a Microelectrode Cavity Array of Biological Nanopores. Biophysical Journal, 2016, 110, 200a.	0.2	0
44	Direct Identification of Adenine, Thymine, Cytosine and Guanine using Aerolysin Nanopore. Biophysical Journal, 2017, 112, 460a.	0.2	0