Juan Pelta

List of Publications by Year
in descending order

49 papers	2,905 citations	201674 27 h-index	223800 46 g-index
49 all docs	49 docs citations	49 times ranked	1980 citing authors

#	Article	IF	Citations
1	DNA Aggregation Induced by Polyamines and Cobalthexamine. Journal of Biological Chemistry, 1996, 271, 5656-5662.	3.4	324
2	Electrical recognition of the twenty proteinogenic amino acids using an aerolysin nanopore. Nature Biotechnology, 2020, 38, 176-181.	17.5	308
3	Dynamics of Unfolded Protein Transport through an Aerolysin Pore. Journal of the American Chemical Society, 2011, 133, 2923-2931.	13.7	204
4	Identification of single amino acid differences in uniformly charged homopolymeric peptides with aerolysin nanopore. Nature Communications, 2018, 9, 966.	12.8	204
5	Dynamics of Completely Unfolded and Native Proteins through Solid-State Nanopores as a Function of Electric Driving Force. ACS Nano, 2011, 5, 3628-3638.	14.6	175
6	Sensing Proteins through Nanopores: Fundamental to Applications. ACS Chemical Biology, 2012, 7, 1935-1949.	3.4	164
7	Thermal Unfolding of Proteins Probed at the Single Molecule Level Using Nanopores. Analytical Chemistry, 2012, 84, 4071-4076.	6.5	127
8	Protein Transport through a Narrow Solid-State Nanopore at High Voltage: Experiments and Theory. ACS Nano, 2012, 6, 6236-6243.	14.6	126
9	Wild Type, Mutant Protein Unfolding and Phase Transition Detected by Single-Nanopore Recording. ACS Chemical Biology, 2012, 7, 652-658.	3.4	119
10	High-Resolution Size-Discrimination of Single Nonionic Synthetic Polymers with a Highly Charged Biological Nanopore. ACS Nano, 2015, 9, 6443-6449.	14.6	106
11	Probing driving forces in aerolysin and Î±-hemolysin biological nanopores: electrophoresis versus electroosmosis. Nanoscale, 2016, 8, 18352-18359.	5.6	78
12	Evidence of Unfolded Protein Translocation through a Protein Nanopore. ACS Nano, 2014, 8, 11350-11360.	14.6	74
13	Kinetics of Enzymatic Degradation of High Molecular Weight Polysaccharides through a Nanopore: Experiments and Data-Modeling. Analytical Chemistry, 2013, 85, 8488-8492.	6.5	67
14	Elasticity, Adhesion, and Tether Extrusion on Breast Cancer Cells Provide a Signature of Their Invasive Potential. ACS Applied Materials & Interfaces, 2016, 8, 27426-27431.	8.0	55
15	Dynamics and Energy Contributions for Transport of Unfolded Pertactin through a Protein Nanopore. ACS Nano, 2015, 9, 9050-9061.	14.6	52
16	Exploration of Neutral Versus Polyelectrolyte Behavior of Poly(ethylene glycol)s in Alkali Ion Solutions using Single-Nanopore Recording. Journal of Physical Chemistry Letters, 2013, 4, 2202-2208.	4.6	49
17	Aerolysin, a Powerful Protein Sensor for Fundamental Studies and Development of Upcoming Applications. ACS Sensors, 2019, 4, 530-548.	7.8	47
18	Selfâ€Healing: An Emerging Technology for Nextâ€Generation Smart Batteries. Advanced Energy Materials, 2022, 12, 2102652.	19.5	47

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19	Temperature Effect on Ionic Current and ssDNA Transport through Nanopores. Biophysical Journal, 2015, 109, 1600-1607.	0.5	45
20	Urea denaturation of Î±-hemolysin pore inserted in planar lipid bilayer detected by single nanopore recording: Loss of structural asymmetry. FEBS Letters, 2007, 581, 3371-3376.	2.8	44
21	Electroosmosis through Î±-Hemolysin That Depends on Alkali Cation Type. Journal of Physical Chemistry Letters, 2014, 5, 4362-4367.	4.6	42
22	Functionalized Solid-State Nanopore Integrated in a Reusable Microfluidic Device for a Better Stability and Nanoparticle Detection. ACS Applied Materials & Interfaces, 2017, 9, 41634-41640.	8.0	42
23	The Promise of Nanopore Technology: Advances in the Discrimination of Protein Sequences and Chemical Modifications. Small Methods, 2020, 4, 2000090.	8.6	40
24	Polyelectrolyte Entry and Transport through an Asymmetric Î±-Hemolysin Channel. Journal of Physical Chemistry B, 2008, 112, 14687-14691.	2.6	36
25	Single-sulfur atom discrimination of polysulfides with a protein nanopore for improved batteries. Communications Materials, 2020, 1, .	6.9	36
26	Transport of Long Neutral Polymers in the Semidilute Regime through a Protein Nanopore. Physical Review Letters, 2012, 108, 088104.	7.8	35
27	Biomimetic Nanotubes Based on Cyclodextrins for Ion-Channel Applications. Nano Letters, 2015, 15, 7748-7754.	9.1	30
28	Polyelectrolyte and unfolded protein pore entrance depends on the pore geometry. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1377-1386.	2.6	27
29	Polymorphism of DNA/Multi-cationic Lipid Complexes Driven by Temperature and Salts. Journal of Physical Chemistry B, 2001, 105, 5291-5297.	2.6	26
30	Focus on Protein Unfolding Through Nanopores. BioNanoScience, 2014, 4, 111-118.	3.5	23
31	High Temperature Extends the Range of Size Discrimination of Nonionic Polymers by a Biological Nanopore. Scientific Reports, 2016, 6, 38675.	3.3	23
32	Solid-State Nanopore Easy Chip Integration in a Cheap and Reusable Microfluidic Device for Ion Transport and Polymer Conformation Sensing. ACS Sensors, 2018, 3, 2129-2137.	7.8	21
33	Gelâ€“sol transition can describe the proteolysis of extracellular matrix gels. Biochimica Et Biophysica Acta - General Subjects, 2000, 1524, 110-117.	2.4	20
34	Selective target protein detection using a decorated nanopore into a microfluidic device. Biosensors and Bioelectronics, 2021, 183, 113195.	10.1	17
35	Versatile cyclodextrin nanotube synthesis with functional anchors for efficient ion channel formation: design, characterization and ion conductance. Nanoscale, 2018, 10, 15303-15316.	5.6	11
36	Protein Unfolding Through Nanopores. Protein and Peptide Letters, 2014, 21, 266-274.	0.9	11

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37	Focus on using nanopore technology for societal health, environmental, and energy challenges. Nano Research, 2022, 15, 9906-9920.	10.4	11
38	Biomimetic ion channels formation by emulsion based on chemically modified cyclodextrin nanotubes. Faraday Discussions, 2018, 210, 41-54.	3.2	8
39	Mapping and Modeling the Nanomechanics of Bare and Protein-Coated Lipid Nanotubes. Physical Review X, 2020, 10, .	8.9	7
40	Mapping the Conformational Stability of Maltose Binding Protein at the Residue Scale Using Nuclear Magnetic Resonance Hydrogen Exchange Experiments. Biochemistry, 2012, 51, 8919-8930.	2.5	5
41	DNA Unzipping and Protein Unfolding Using Nanopores. Methods in Molecular Biology, 2012, 870, 55-75.	0.9	4
42	Metal-Organic Polyhedra to Control the Conductance of a Lipid Membrane. CheM, 2017, 2, 459-460.	11.7	4
43	From current trace to the understanding of confined media. European Physical Journal E, 2018, 41, 99.	1.6	4
44	Nanoparticle Electrical Analysis and Detection with a Solid-state Nanopore in a Microfluidic Device. Procedia Engineering, 2016, 168, 1475-1478.	1.2	3
45	Processes at nanopores and bio-nanointerfaces: general discussion. Faraday Discussions, 2018, 210, 145-171.	3.2	3
46	Dynamics of a polyelectrolyte through aerolysin channel as a function of applied voltage and concentrationâ‹†. European Physical Journal E, 2018, 41, 58.	1.6	1
47	Microphases of spermidine-condensed DNA. Structural analysis by cryoelectron microscopy. Biology of the Cell, 1995, 84, 225-225.	2.0	0
48	Editorial Peptides and Proteins View by Nanopores: Experiments, Simulations and Theory. Protein and Peptide Letters, 2014, 21, 201-201.	0.9	0
49	Energy conversion at nanointerfaces: general discussion. Faraday Discussions, 2018, 210, 333-351.	3.2	0