Tudor Luchian

List of Publications by Year
in descending order

75 papers	2,001 citations	236833 25 h-index	265120 42 g-index
80 all docs	80 docs citations	80 times ranked	1539 citing authors

#	Article	IF	Citations
1	Singleâ€molecule, hybridizationâ€based strategies for short nucleic acids detection and recognition with nanopores. Proteomics, 2022, 22, e2100046.	1.3	6
2	A Singleâ€Molecule Insight into the Ionic Strengthâ€dependent, Cationic Peptide Nucleic Acidsâ€Oligonucleotides Interactions. Chemistry - an Asian Journal, 2022, 17, .	1.7	5
3	A Nanopore Sensor for Multiplexed Detection of Short Polynucleotides Based on Length-Variable, Poly-Arginine-Conjugated Peptide Nucleic Acids. Analytical Chemistry, 2022, 94, 8774-8782.	3.2	11
4	The Nanopore-Tweezing-Based, Targeted Detection of Nucleobases on Short Functionalized Peptide Nucleic Acid Sequences. Polymers, 2021, 13, 1210.	2.0	5
5	Teaching an old dog new tricks: a lipid membraneâ€based electric immunosensor for realâ€time probing of the spike S 1 protein subunit from SARSâ€CoVâ€2. Proteomics, 2021, , 2100047.	1.3	3
6	Non-Receptor-Mediated Lipid Membrane Permeabilization by the SARS-CoV-2 Spike Protein S1 Subunit. ACS Applied Materials & Interfaces, 2020, 12, 55649-55658.	4.0	21
7	Unzipping Mechanism of Free and Polyarginine-Conjugated DNA-PNA Duplexes, Preconfined Inside the Î±-Hemolysin Nanopore. Analytical Chemistry, 2020, 92, 7800-7807.	3.2	13
8	Bee venom-derived antimicrobial peptide melectin has broad-spectrum potency, cell selectivity, and salt-resistant properties. Scientific Reports, 2020, 10, 10145.	1.6	38
9	Sequence-specific detection of single-stranded DNA with a gold nanoparticle-protein nanopore approach. Scientific Reports, 2020, 10, 11323.	1.6	15
10	Nanoporeâ€Based Protein Sequencing Using Biopores: Current Achievements and Open Challenges. Small Methods, 2020, 4, 1900595.	4.6	55
11	Mechanism of action of antimicrobial peptide P5 truncations against Pseudomonas aeruginosa and Staphylococcus aureus. AMB Express, 2019, 9, 122.	1.4	44
12	Antimicrobial peptide HPA3NT3-A2 effectively inhibits biofilm formation in mice infected with drug-resistant bacteria. Biomaterials Science, 2019, 7, 5068-5083.	2.6	16
13	Nonfunctionalized PNAs as Beacons for Nucleic Acid Detection in a Nanopore System. ACS Sensors, 2019, 4, 1502-1507.	4.0	13
14	Nanopore-Assisted, Sequence-Specific Detection, and Single-Molecule Hybridization Analysis of Short, Single-Stranded DNAs. Analytical Chemistry, 2019, 91, 8630-8637.	3.2	20
15	Nanoscale Probing of Informational Polymers with Nanopores. Applications to Amyloidogenic Fragments, Peptides, and DNAâ€“PNA Hybrids. Accounts of Chemical Research, 2019, 52, 267-276.	7.6	40
16	If Squeezed, a Camel Passes Through the Eye of a Needle: Voltage-Mediated Stretching of Dendrimers Facilitates Passage Through a Nanopore. Journal of Membrane Biology, 2018, 251, 405-417.	1.0	2
17	Single-Molecule Dynamics and Discrimination between Hydrophilic and Hydrophobic Amino Acids in Peptides, through Controllable, Stepwise Translocation across Nanopores. Polymers, 2018, 10, 885.	2.0	14
18	Pse-T2, an Antimicrobial Peptide with High-Level, Broad-Spectrum Antimicrobial Potency and Skin Biocompatibility against Multidrug-Resistant Pseudomonas aeruginosa Infection. Antimicrobial Agents and Chemotherapy, 2018, 62, .	1.4	37

#	Article	IF	Citations
19	Single-Molecule, Real-Time Dissecting of Peptide Nucleic Acidâ€“DNA Duplexes with a Protein Nanopore Tweezer. Analytical Chemistry, 2018, 90, 7682-7690.	3.2	27
20	Antitumor activity of HPA3P through RIPK3-dependent regulated necrotic cell death in colon cancer. Oncotarget, 2018, 9, 7902-7917.	0.8	18
21	New antimicrobial peptide kills drug-resistant pathogens without detectable resistance. Oncotarget, 2018, 9, 15616-15634.	0.8	26
22	Nanoscale Investigation of Generation 1 PAMAM Dendrimers Interaction with a Protein Nanopore. Scientific Reports, 2017, 7, 6167.	1.6	16
23	Macropis fulvipes Venom component Macropin Exerts its Antibacterial and Anti-Biofilm Properties by Damaging the Plasma Membranes of Drug Resistant Bacteria. Scientific Reports, 2017, 7, 16580.	1.6	19
24	Protein Nanopore-Based Discrimination between Selected Neutral Amino Acids from Polypeptides. Langmuir, 2017, 33, 14451-14459.	1.6	61
25	Myxinidin2 and myxinidin3 suppress inflammatory responses through STAT3 and MAPKs to promote wound healing. Oncotarget, 2017, 8, 87582-87597.	0.8	17
26	Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation. ACS Applied Materials & Interfaces, 2016, 8, 13166-13179.	4.0	113
27	A Protein Nanopore-Based Approach for Bacteria Sensing. Nanoscale Research Letters, 2016, 11, 501.	3.1	12
28	Preface to the special issue on nanopores in bioanalytical sciences. Mikrochimica Acta, 2016, 183, 923-923.	2.5	0
29	Antimicrobial Peptide CMA3 Derived from the CA-MA Hybrid Peptide: Antibacterial and Anti-inflammatory Activities with Low Cytotoxicity and Mechanism of Action in Escherichia coli. Antimicrobial Agents and Chemotherapy, 2016, 60, 495-506.	1.4	48
30	Nanopore tweezers: Voltage-controlled trapping and releasing of analytes. Physical Review E, 2015, 92, 032714.	0.8	27
31	Effect of Regular Exercise on Inflammation Induced by Drug-resistant Staphylococcus aureus 3089 in ICR mice. Scientific Reports, 2015, 5, 16364.	1.6	6
32	Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage-controlled braking of polymer transport through nanometer-scale pores. Scientific Reports, 2015, 5, 10419.	1.6	61
33	Nanopore Investigation of the Stereoselective Interactions between Cu²⁺ and <scp>d</scp>,<scp>l</scp>-Histidine Amino Acids Engineered into an Amyloidic Fragment Analogue. Langmuir, 2015, 31, 387-396.	1.6	12
34	Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores. ACS Applied Materials & Interfaces, 2015, 7, 16706-16714.	4.0	44
35	Electrophysiology Investigation of Trichogin GA IV Activity in Planar Lipid Membranes Reveals Ion Channels of Wellâ€Defined Size. Chemistry and Biodiversity, 2014, 11, 1069-1077.	1.0	7
36	Probing of Various Physiologically Relevant Metals: Amyloid-Î² Peptide Interactions with a Lipid Membrane-Immobilized Protein Nanopore. Journal of Membrane Biology, 2014, 247, 523-530.	1.0	21

#	Article	IF	Citations
37	Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, Î²-Hairpin-like Peptides, through Single-Molecule Probing with Protein Nanopores. ACS Applied Materials & Interfaces, 2014, 6, 13242-13256.	4.0	43
38	Slowing down single-molecule trafficking through a protein nanopore reveals intermediates for peptide translocation. Scientific Reports, 2014, 4, 3885.	1.6	103
39	Correction to Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide. Langmuir, 2013, 29, 6778-6778.	1.6	0
40	Investigation of Cu²⁺ Binding to Human and Rat Amyloid Fragments AÎ² (1â€“16) with a Protein Nanopore. Langmuir, 2013, 29, 15634-15642.	1.6	40
41	The role of tryptophan spatial arrangement for antimicrobial-derived, membrane-active peptides adsorption and activity. Molecular BioSystems, 2012, 8, 2860.	2.9	8
42	The Role of Lys147 in the Interaction between MPSA-Gold Nanoparticles and the Î±-Hemolysin Nanopore. Langmuir, 2012, 28, 15643-15650.	1.6	18
43	Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide. Langmuir, 2012, 28, 17079-17091.	1.6	38
44	Investigation of Single-Molecule Kinetics Mediated by Weak Hydrogen Bonds within a Biological Nanopore. Langmuir, 2011, 27, 19-24.	1.6	27
45	The Kinetics of Ampicillin Complexation by Î³-Cyclodextrins. A Single Molecule Approach. Journal of Physical Chemistry B, 2011, 115, 10173-10181.	1.2	18
46	Balkan science: how to halt the brain drain. Nature, 2011, 470, 335-335.	13.7	0
47	Uniâ€molecular detection and quantification of selected Î²â€lactam antibiotics with a hybrid Î±â€hemolysin protein pore. Journal of Molecular Recognition, 2011, 24, 199-207.	1.1	20
48	Meet Me on the Other Side: Trans-Bilayer Modulation of a Model Voltage-Gated Ion Channel Activity by Membrane Electrostatics Asymmetry. PLoS ONE, 2011, 6, e25276.	1.1	23
49	Unimolecular study of the interaction between the outer membrane protein OmpF from E. coli and an analogue of the HP(2â€“20) antimicrobial peptide. Journal of Bioenergetics and Biomembranes, 2010, 42, 173-180.	1.0	29
50	The role played by lipids unsaturation upon the membrane interaction of the Helicobacter pylori HP(2â€“20) antimicrobial peptide analogue HPA3. Journal of Bioenergetics and Biomembranes, 2009, 41, 79-84.	1.0	11
51	Romanian funding cuts call for more stringent criteria. Nature, 2009, 458, 1101-1101.	13.7	1
52	The RH 421 styryl dye induced, pore model-dependent modulation of antimicrobial peptides activity in reconstituted planar membranes. Biochimica Et Biophysica Acta - General Subjects, 2009, 1790, 809-816.	1.1	29
53	Single-Molecule Investigation of the Influence Played by Lipid Rafts on Ion Transport and Dynamic Features of the Pore-Forming Alamethicin Oligomer. Journal of Membrane Biology, 2008, 224, 45-54.	1.0	4
54	Ion selectivity, transport properties and dynamics of amphotericin B channels studied over a wide range of acidity changes. Colloids and Surfaces B: Biointerfaces, 2008, 67, 99-106.	2.5	17

#	Article	IF	Citations
55	Influence of membrane potentials upon reversible protonation of acidic residues from the OmpF eyelet. Biophysical Chemistry, 2008, 135, 32-40.	1.5	22
56	Single-molecule investigation of the interactions between reconstituted planar lipid membranes and an analogue of the HP(2â€“20) antimicrobial peptide. Biochemical and Biophysical Research Communications, 2008, 373, 467-472.	1.0	31
57	Single-Molecule Covalent Chemistry in a Protein Nanoreactor. Springer Series in Biophysics, 2008, , 251-277.	0.4	48
58	pH modulation of transport properties of alamethicin oligomers inserted in zwitterionic-based artificial lipid membranes. Biophysical Chemistry, 2007, 130, 139-147.	1.5	18
59	Phlorizin- and 6-Ketocholestanol-Mediated Antagonistic Modulation of Alamethicin Activity in Phospholipid Planar Membranes. Langmuir, 2006, 22, 8452-8457.	1.6	40
60	Selective transfer of energy through an alamethicin-doped artificial lipid membrane studied at discrete molecular level. Bioelectrochemistry, 2006, 69, 94-98.	2.4	2
61	Biophysical changes induced by cholesterol on phosphatidylcholine artificial biomembranes containing alamethicin oligomers. Open Physics, 2006, 4, .	0.8	1
62	A virtual instrumentation based protocol for the automated implementation of the inner field compensation method. Open Physics, 2006, 4, .	0.8	1
63	An automated method for generating analogic signals that embody the Markov kinetics of model ionic channels. Journal of Neuroscience Methods, 2005, 147, 8-14.	1.3	2
64	Characterization of electrical charge separation at the interface of two aqueous solutions in the presence of concentration gradients and cation/anion mobility ratio asymmetry. Open Physics, 2005, 3, .	0.8	1
65	How could a chirp be more effective than a louder clock-resonant transfer of energy between subthreshold excitation pulses and excitable tissues. Journal of Cellular and Molecular Medicine, 2005, 9, 446-456.	1.6	1
66	The Modulatory Effect of Calcium Ions Upon Alamethicin Monomers Uptake on Artificial Phospholipid Membranes. Journal of Biological Physics, 2005, 31, 23-33.	0.7	2
67	Kinetics of a Three-Step Reaction Observed at the Single-Molecule Level. Angewandte Chemie, 2003, 115, 1970-1973.	1.6	12
68	Kinetics of a Three-Step Reaction Observed at the Single-Molecule Level. Angewandte Chemie - International Edition, 2003, 42, 1926-1929.	7.2	56
69	Single-Molecule Covalent Chemistry with Spatially Separated Reactants. Angewandte Chemie - International Edition, 2003, 42, 3766-3771.	7.2	99
70	BIOMEMBRANE EXCITABILITY STUDIED WITHIN A WIDE-BAND FREQUENCY OF AN INTERACTING EXOGENOUS ELECTRIC FIELD. Electromagnetic Biology and Medicine, 2002, 21, 287-302.	0.7	2
71	Kinetics of a Reversible Covalent-Bond-Forming Reaction Observed at the Single-Molecule Level. Angewandte Chemie - International Edition, 2002, 41, 3707-3709.	7.2	109
72	The influence exerted by the Î²3 subunit on MVIIA Ï‰-conotoxin binding to neuronal N-type calcium channels. Biochimica Et Biophysica Acta - Biomembranes, 2001, 1512, 329-334.	1.4	7

#	Article	IF	Citations
73	Novel Ï‰-Conotoxins from Conus catus Discriminate among Neuronal Calcium Channel Subtypes. Journal of Biological Chemistry, 2000, 275, 35335-35344.	1.6	199
74	Ion permeation through a G-protein activated (GIRK1/GIRK5) inwardly rectifying potassium channel. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1368, 167-170.	1.4	0
75	Actinic light density dependence of the O intermediate of the photocycle of bacteriorhodopsin. FEBS Letters, 1996, 386, 55-59.	1.3	7