Ronald J Clarke

List of Publications by Year
in descending order

111 papers	3,543 citations	126907 33 h-index	161849 54 g-index
120 all docs	120 docs citations	120 times ranked	3349 citing authors

#	Article	IF	Citations
1	Order-disorder transitions of cytoplasmic N-termini in the mechanisms of P-type ATPases. Faraday Discussions, 2021, 232, 172-187.	3.2	2
2	Selective ion transport across a lipid bilayer in a protic ionic liquid. Soft Matter, 2021, 17, 2688-2694.	2.7	10
3	Biological Membrane Asymmetry and its Role in Bone Mineralization. Macromolecular Symposia, 2021, 396, 2000243.	0.7	1
4	Fluorescence Enhancement through Confined Oligomerization in Nanochannels: An Anthryl Oligomer in a Metal-Organic Framework. , 2021, 3, 1599-1604.		4
5	Antibacterial Activity and Iron Release of Organic-Inorganic Hybrid Biomaterials Synthesized via the Sol-Gel Route. Applied Sciences (Switzerland), 2021, 11, 9311.	2.5	8
6	Penetration of phospholipid membranes by poly-l-lysine depends on cholesterol and phospholipid composition. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183128.	2.6	10
7	Polarity of the ATP binding site of the Na+,K+-ATPase, gastric H+,K+-ATPase and sarcoplasmic reticulum Ca2+-ATPase. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183138.	2.6	10
8	Peptide Ligation at High Dilution via Reductive Diselenide-Selenoester Ligation. Journal of the American Chemical Society, 2020, 142, 1090-1100.	13.7	61
9	Physiological roles of transverse lipid asymmetry of animal membranes. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183382.	2.6	60
10	Evidence for ATP Interaction with Phosphatidylcholine Bilayers. Langmuir, 2019, 35, 9944-9953.	3.5	8
11	Evidence for ATP Interaction with Phosphatidylcholine Bilayers. Biophysical Journal, 2019, 116, 229a.	0.5	0
12	General and specific interactions of the phospholipid bilayer with P-type ATPases. Biophysical Reviews, 2019, 11, 353-364.	3.2	30
13	Cholesterol depletion inhibits Na+,K+-ATPase activity in a near-native membrane environment. Journal of Biological Chemistry, 2019, 294, 5956-5969.	3.4	25
14	Effect of Cholesterol on the Dipole Potential of Lipid Membranes. Advances in Experimental Medicine and Biology, 2019, 1115, 135-154.	1.6	10
15	Polar Interactions Play an Important Role in the Energetics of the Main Phase Transition of Phosphatidylcholine Membranes. ACS Omega, 2019, 4, 518-527.	3.5	12
16	Mechanism of Action of Surface Immobilized Antimicrobial Peptides Against Pseudomonas aeruginosa. Frontiers in Microbiology, 2019, 10, 3053.	3.5	47
17	Kinetic contribution to extracellular Na + /K + selectivity in the Na + /K + pump. FEBS Open Bio, 2018, 8, 854-859.	2.3	1
18	Interaction of N-terminal peptide analogues of the Na+,K+-ATPase with membranes. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1282-1291.	2.6	26

#	Article	IF	Citations
19	Evolutionary Analysis of the Lysine-Rich N-terminal Cytoplasmic Domains of the Gastric H+,K+-ATPase and the Na+,K+-ATPase. Journal of Membrane Biology, 2018, 251, 653-666.	2.1	13
20	The voltage-sensitive dye RH421 detects a Na+,K+-ATPase conformational change at the membrane surface. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 813-823.	2.6	13
21	Electrostatic Stabilization Plays a Central Role in Autoinhibitory Regulation of the Na+,K+-ATPase. Biophysical Journal, 2017, 112, 288-299.	0.5	22
22	Glutathionylation-Dependence of Na + -K + -Pump Currents Can Mimic Reduced Subsarcolemmal Na + Diffusion. Biophysical Journal, 2016, 110, 1099-1109.	0.5	11
23	Stimulation of Na+,K+-ATPase Activity as a Possible Driving Force in Cholesterol Evolution. Journal of Membrane Biology, 2016, 249, 251-259.	2.1	8
24	Excess molar volumes, refractive indices and transport properties of aqueous solutions of poly(ethylene glycol)s at (303.15â€“323.15) K. Journal of Molecular Liquids, 2015, 202, 176-188.	4.9	14
25	Dipole-Potential-Mediated Effects on Ion Pump Kinetics. Biophysical Journal, 2015, 109, 1513-1520.	0.5	23
26	Membrane accessibility of glutathione. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 2430-2436.	2.6	12
27	Effects of Lipid Composition on Biological Membrane Electrostatics. Biophysical Journal, 2014, 106, 80a.	0.5	0
28	The High and Low Affinity Binding Sites of Digitalis Glycosides to Na,K-ATPase. Arabian Journal for Science and Engineering, 2014, 39, 75-85.	1.1	2
29	Identification of Electric-Field-Dependent Steps in the Na+,K+-Pump Cycle. Biophysical Journal, 2014, 107, 1352-1363.	0.5	18
30	Mechanisms of cell uptake and toxicity of the anticancer drug cisplatin. Metallomics, 2014, 6, 2126-2133.	2.4	123
31	Glutathionylation of the Î²1 Subunit Prevents the E1Na3 to E2P Forward Reaction in the Na+, K+ ATPase. Biophysical Journal, 2014, 106, 427a.	0.5	1
32	Supramolecular Î²-Cyclodextrin Adducts of Boron-Rich DNA Metallointercalators Containing Dicarba-closo-dodecaborane(12). Inorganic Chemistry, 2013, 52, 10356-10367.	4.0	13
33	Extracellular Allosteric Na+ Binding to the Na+,K+-ATPase in Cardiac Myocytes. Biophysical Journal, 2013, 105, 2695-2705.	0.5	11
34	Volumetric, viscosimetric and surface properties of aqueous solutions of triethylene glycol, tetraethylene glycol, and tetraethylene glycol dimethyl ether. Journal of Molecular Liquids, 2013, 177, 11-18.	4.9	69
35	Quantitative calculation of the role of the Na+,K+-ATPase in thermogenesis. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 1205-1212.	1.0	39
36	Redox-dependent regulation of the Na+â€“K+ pump: New twists to an old target for treatment of heart failure. Journal of Molecular and Cellular Cardiology, 2013, 61, 94-101.	1.9	24

#	Article	IF	Citations
37	Susceptibility of Î²1 Na+-K+ Pump Subunit to Glutathionylation and Oxidative Inhibition Depends on Conformational State of Pump. Journal of Biological Chemistry, 2012, 287, 12353-12364.	3.4	43
38	BIOPHYSCHEM2011: A Joint Meeting of the Australian Society for Biophysics and the RACI Physical Chemistry Division. Australian Journal of Chemistry, 2012, 65, 439.	0.9	0
39	Synthesis and Supramolecular Studies of Chiral Boronated Platinum(II) Complexes: Insights into the Molecular Recognition of Carboranes by Î²â€Cyclodextrin. Chemistry - A European Journal, 2012, 18, 14413-14425.	3.3	20
40	Kinetic Comparisons of Heart and Kidney Na+,K+-ATPases. Biophysical Journal, 2012, 103, 677-688.	0.5	6
41	Comparison on protein adsorption properties of diamond-like carbon and nitrogen-containing plasma polymer surfaces. Thin Solid Films, 2012, 520, 3021-3025.	1.8	15
42	Rapid Reaction Kinetics: Lessons Learnt from Ion Pumps. Australian Journal of Chemistry, 2011, 64, 5.	0.9	1
43	Densities, Viscosities, and Surface Tensions of the System Water + Diethylene Glycol. Journal of Chemical & Engineering Data, 2011, 56, 303-306.	1.9	31
44	Kinetics of K+ Occlusion by the Phosphoenzyme of the Na+,K+-ATPase. Biophysical Journal, 2011, 100, 70-79.	0.5	12
45	Synthesis, carbohydrate- and DNA-binding studies of cationic 2,2â€²:6â€²,2â€²â€²-terpyridineplatinum(ii) complexes containing N- and S-donor boronic acid ligands. Dalton Transactions, 2011, 40, 506-513.	3.3	15
46	A Perspective on Biophysical Chemistry. Australian Journal of Chemistry, 2011, 64, 3.	0.9	0
47	Pumping ions. Clinical and Experimental Pharmacology and Physiology, 2011, 38, 726-733.	1.9	21
48	Mechanism of Cytotoxicity and Cellular Uptake of Lipophilic Inert Dinuclear Polypyridylruthenium(II) Complexes. ChemMedChem, 2011, 6, 848-858.	3.2	66
49	Inside Cover: Mechanism of Cytotoxicity and Cellular Uptake of Lipophilic Inert Dinuclear Polypyridylruthenium(II) Complexes (ChemMedChem 5/2011). ChemMedChem, 2011, 6, 742-742.	3.2	0
50	Electrogenic plasma membrane H+-ATPase activity using voltage sensitive dyes. Journal of Bioenergetics and Biomembranes, 2010, 42, 387-393.	2.3	0
51	Investigation of the enzymatic activity of the Na+,K+-ATPase via isothermal titration microcalorimetry. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1540-1545.	1.0	23
52	Potassium-activated GTPase Reaction in the G Protein-coupled Ferrous Iron Transporter B. Journal of Biological Chemistry, 2010, 285, 14594-14602.	3.4	51
53	Electric Field Sensitive Dyes. Springer Series on Fluorescence, 2010, , 331-344.	0.8	7
54	Interaction of ATP with the Phosphoenzyme of the Na⁺,K⁺-ATPase. Biochemistry, 2010, 49, 1248-1258.	2.5	16

#	Article	IF	Citations
55	Dual Mechanisms of Allosteric Acceleration of the Na+,K+-ATPase by ATP. Biophysical Journal, 2010, 98, 2290-2298.	0.5	12
56	The local electric field within phospholipid membranes modulates the charge transfer reactions in reaction centres. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 1039-1049.	1.0	13
57	Effect of headgroup on the dipole potential of phospholipid vesicles. European Biophysics Journal, 2009, 39, 103-110.	2.2	58
58	Mechanism of allosteric effects of ATP on the kinetics of P-type ATPases. European Biophysics Journal, 2009, 39, 3-17.	2.2	24
59	Structural basis of GDP release and gating in G protein coupled Fe2+ transport. EMBO Journal, 2009, 28, 2677-2685.	7.8	43
60	Mechanism of Mg2+ Binding in the Na+,K+-ATPase. Biophysical Journal, 2009, 96, 3753-3761.	0.5	25
61	Solvent Dependence of the Photochemistry of the Styrylpyridinium Dye RH421. Journal of Physical Chemistry B, 2008, 112, 6513-6520.	2.6	30
62	ATP Binding Equilibria of the Na⁺,K⁺-ATPase. Biochemistry, 2008, 47, 13103-13114.	2.5	14
63	Alloxan-induced diabetes reduces sarcolemmal Na+-K+ pump function in rabbit ventricular myocytes. American Journal of Physiology - Cell Physiology, 2007, 292, C1070-C1077.	4.6	29
64	Comparison of excitation and emission ratiometric fluorescence methods for quantifying the membrane dipole potential. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 107-114.	2.6	46
65	Orientational polarisability of lipid membrane surfaces. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 562-570.	2.6	37
66	Allosteric Effect of ATP on Na+,K+-ATPase Conformational Kineticsâ€. Biochemistry, 2007, 46, 7034-7044.	2.5	35
67	Two Gears of Pumping by the Sodium Pump. Biophysical Journal, 2007, 93, 4187-4196.	0.5	38
68	Cholesterol Effect on the Dipole Potential of Lipid Membranes. Biophysical Journal, 2006, 90, 4060-4070.	0.5	134
69	Photochemical Behavior and Na+,K+-ATPase Sensitivity of Voltage-sensitive Styrylpyridinium Fluorescent Membrane Probes. Photochemistry and Photobiology, 2006, 82, 495.	2.5	7
70	The nitric oxide donor sodium nitroprusside stimulates the Na+-K+pump in isolated rabbit cardiac myocytes. Journal of Physiology, 2005, 565, 815-825.	2.9	46
71	Electric field strength of membrane lipids from vertebrate species: membrane lipid composition and Na+-K+-ATPase molecular activity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 288, R663-R670.	1.8	61
72	Dietary cholesterol alters Na+/K+ selectivity at intracellular Na+/K+ pump sites in cardiac myocytes. American Journal of Physiology - Cell Physiology, 2004, 286, C398-C405.	4.6	20

#	Article	IF	Citations
73	Fluorescence and Light Scattering. Journal of Chemical Education, 2004, 81, 705.	2.3	28
74	Identification of Potential Regulatory Sites of the Na+,K+-ATPase by Kinetic Analysisâ€. Biochemistry, 2004, 43, 2241-2250.	2.5	22
75	Interaction between DMPC liposomes and HM-PNIPAM polymer. Biophysical Chemistry, 2003, 104, 449-458.	2.8	10
76	Kinetic Investigations of the Mechanism of the Rateâ€Ðetermining Step of the Na⁺,K⁺â€ATPase Pump Cycle. Annals of the New York Academy of Sciences, 2003, 986, 159-162.	3.8	5
77	Examination of the Photophysical Processes of Chlorophyll d Leading to a Clarification of Proposed Uphill Energy Transfer Processes in Cells of Acaryochloris marinaÂ¶. Photochemistry and Photobiology, 2003, 77, 628.	2.5	26
78	Examination of the Photophysical Processes of Chlorophyll d Leading to a Clarification of Proposed Uphill Energy Transfer Processes in Cells of Acaryochloris marinaÂ¶. Photochemistry and Photobiology, 2003, 77, 628-637.	2.5	2
79	Mechanism of the Rate-Determining Step of the Na+,K+-ATPase Pump Cycleâ€. Biochemistry, 2002, 41, 9496-9507.	2.5	36
80	Hydrophobic Ion Hydration and the Magnitude of the Dipole Potential. Biophysical Journal, 2002, 82, 3081-3088.	0.5	78
81	Dependence of Na⁺-K⁺ pump current-voltage relationship on intracellular Na⁺, K⁺, and Cs⁺ in rabbit cardiac myocytes. American Journal of Physiology - Cell Physiology, 2002, 283, C1511-C1521.	4.6	18
82	Rate Limitation of the Na+,K+-ATPase Pump Cycle. Biophysical Journal, 2001, 81, 2069-2081.	0.5	57
83	Mg2+-Induced tRNA Foldingâ€,â€¡. Biochemistry, 2001, 40, 6688-6698.	2.5	57
84	Influence of allosteric effectors on the kinetics and equilibrium binding of phosphoenolpyruvate (PEP) to phosphoenolpyruvate carboxylase (PEPC) from Zea mays. Biophysical Chemistry, 2001, 92, 53-64.	2.8	8
85	The dipole potential of phospholipid membranes and methods for its detection. Advances in Colloid and Interface Science, 2001, 89-90, 263-281.	14.7	234
86	Electrogenic properties of the Na+,K+-ATPase probed by presteady state and relaxation studies. Journal of Bioenergetics and Biomembranes, 2001, 33, 401-405.	2.3	7
87	P3-[2-(4-hydroxyphenyl)-2-oxo]ethyl ATP for the Rapid Activation of the Na+,K+-ATPase. Biophysical Journal, 2000, 79, 1346-1357.	0.5	41
88	Hofmeister Effects of Anions on the Kinetics of Partial Reactions of the Na + ,K + -ATPase. Biophysical Journal, 1999, 77, 267-281.	0.5	31
89	Influence of Anions and Cations on the Dipole Potential of Phosphatidylcholine Vesicles: A Basis for the Hofmeister Effect. Biophysical Journal, 1999, 76, 2614-2624.	0.5	198
90	Dephosphorylation Kinetics of Pig Kidney Na+,K+-ATPaseâ€. Biochemistry, 1998, 37, 4581-4591.	2.5	30

#	Article	IF	Citations
91	Kinetics of Na+-Dependent Conformational Changes of Rabbit Kidney Na+,K+-ATPase. Biophysical Journal, 1998, 75, 1340-1353.	0.5	43
92	Stopped-Flow Kinetic Investigations of Conformational Changes of Pig Kidney Na+,K+-ATPase. Biochemistry, 1997, 36, 13406-13420.	2.5	62
93	Optical detection of membrane dipole potential: avoidance of fluidity and dye-induced effects. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1323, 223-239.	2.6	129
94	Effect of lipid structure on the dipole potential of phosphatidylcholine bilayers. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1327, 269-278.	2.6	116
95	Interaction of the fluorescent probe RH421 with ribulose-1,5-bisphosphate carboxylase/oxygenase and with Na+,K+-ATPase membrane fragments. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1280, 51-64.	2.6	20
96	Voltage sensitivity of the fluorescent probe RH421 in a model membrane system. Biophysical Journal, 1995, 68, 1406-1415.	0.5	53
97	Time-Resolved Fluorescence Investigations of the Interaction of the Voltage-Sensitive Probe RH421 with Lipid Membranes and Proteins. Biochemistry, 1995, 34, 11777-11784.	2.5	40
98	Time-resolved polarized fluorescence of the potential-sensitive dye RH421 in organic solvents and micelles. Chemical Physics Letters, 1994, 231, 551-560.	2.6	18
99	Kinetics of the Solubilization of Styryl Dye Aggregates by Lipid Vesicles. The Journal of Physical Chemistry, 1994, 98, 1732-1738.	2.9	29
100	A theoretical description of non-steady-state diffusion of hydrophobic ions across lipid vesicle membranes including effects of ionâ€”ion interactions. Biophysical Chemistry, 1993, 46, 131-143.	2.8	8
101	Static and dynamic studies of the potential-sensitive membrane probe RH421 in dimyristoylphosphatidylcholine vesicles. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1153, 203-212.	2.6	25
102	Spectroscopic investigations of the potential-sensitive membrane probe RH421. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1112, 142-152.	2.6	29
103	An adsorption isotherm for the interaction of membrane-permeable hydrophobic ions with lipid vesicles. Biophysical Chemistry, 1992, 42, 63-72.	2.8	5
104	Binding and diffusion kinetics of the interaction of a hydrophobic potential-sensitive dye with lipid vesicles. Biophysical Chemistry, 1991, 39, 91-106.	2.8	16
105	A stopped-flow kinetic study of the interaction of potential-sensitive oxonol dyes with lipid vesicles. Biophysical Chemistry, 1989, 34, 225-237.	2.8	37
106	Pump current and Na+/K+ coupling ratio of Na+/K+-ATPase in reconstituted lipid vesicles. Biochimica Et Biophysica Acta - Biomembranes, 1989, 981, 326-336.	2.6	23
107	A fluorescene stopped-flow kinetic study of the displacement of 2-[(2-bis[carboxymethyl]amino-5-methylphenoxy)methyl]-6-methoxy-8-bis[carboxymethyl]aminoquinoline (quin2) from its Ca2+, Pr3+, Tb3+, Dy3+, and Yb3+ complexes by ethylenedinitrilotetraacetate (edta) in aqueous solution. Inorganica Chimica Acta, 1988, 153, 21-24.	2.4	10
108	Inclusion Complexes of the Cyclomalto-Oligosaccharides (Cyclodextrins). Advances in Carbohydrate Chemistry and Biochemistry, 1988, 46, 205-249.	0.9	172

#	Article	IF	Citations
109	Complexation of roccellin by Î²- and Î³-cyclodextrin. Journal of the Chemical Society Faraday Transactions I, 1986, 82, 2333.	1.0	11
110	Kinetic and equilibrium studies of cyclomalto-octaose (Î³-cyclodextrin)-methyl orange inclusion complexes. Carbohydrate Research, 1984, 127, 181-191.	2.3	45
111	Complexation of tropaeolin 000 No. 2 by Î²- and Î³-cyclodextrin. Journal of the Chemical Society Faraday Transactions I, 1984, 80, 3119.	1.0	22