Mohammad Abu Sayem Karal

List of Publications by Year
in descending order

28 papers	737 citations	566801 15 h-index	552369 26 g-index
28 all docs	28 docs citations	28 times ranked	433 citing authors

#	Article	IF	Citations
1	Stretch-Activated Pore of the Antimicrobial Peptide, Magainin 2. Langmuir, 2015, 31, 3391-3401.	1.6	102
2	The single GUV method for revealing the functions of antimicrobial, pore-forming toxin, and cell-penetrating peptides or proteins. Physical Chemistry Chemical Physics, 2014, 16, 15752-15767.	1.3	79
3	Mechanism of Initial Stage of Pore Formation Induced by Antimicrobial Peptide Magainin 2. Langmuir, 2018, 34, 3349-3362.	1.6	75
4	Experimental Estimation of Membrane Tension Induced by Osmotic Pressure. Biophysical Journal, 2016, 111, 2190-2201.	0.2	67
5	Effects of Lipid Composition on the Entry of Cell-Penetrating Peptide Oligoarginine into Single Vesicles. Biochemistry, 2016, 55, 4154-4165.	1.2	60
6	Electrostatic interaction effects on tension-induced pore formation in lipid membranes. Physical Review E, 2015, 92, 012708.	0.8	43
7	Communication: Activation energy of tension-induced pore formation in lipid membranes. Journal of Chemical Physics, 2015, 143, 081103.	1.2	43
8	Analysis of constant tension-induced rupture of lipid membranes using activation energy. Physical Chemistry Chemical Physics, 2016, 18, 13487-13495.	1.3	40
9	Effects of electrically-induced constant tension on giant unilamellar vesicles using irreversible electroporation. European Biophysics Journal, 2019, 48, 731-741.	1.2	28
10	Study of molecular transport through a single nanopore in the membrane of a giant unilamellar vesicle using COMSOL simulation. European Biophysics Journal, 2020, 49, 59-69.	1.2	22
11	Low cost non-electromechanical technique for the purification of giant unilamellar vesicles. European Biophysics Journal, 2019, 48, 349-359.	1.2	21
12	Electrostatic interaction effects on the size distribution of self-assembled giant unilamellar vesicles. Physical Review E, 2020, 101, 012404.	0.8	19
13	Deformation and poration of giant unilamellar vesicles induced by anionic nanoparticles. Chemistry and Physics of Lipids, 2020, 230, 104916.	1.5	18
14	A new six-electrode electrical impedance technique for probing deep organs in the human body. European Biophysics Journal, 2019, 48, 711-719.	1.2	17
15	Influence of cholesterol on electroporation in lipid membranes of giant vesicles. European Biophysics Journal, 2020, 49, 361-370.	1.2	16
16	Kinetics of irreversible pore formation under constant electrical tension in giant unilamellar vesicles. European Biophysics Journal, 2020, 49, 371-381.	1.2	14
17	Effects of cholesterol on the size distribution and bending modulus of lipid vesicles. PLoS ONE, 2022, 17, e0263119.	1.1	13
18	Effects of osmotic pressure on the irreversible electroporation in giant lipid vesicles. PLoS ONE, 2021, 16, e0251690.	1.1	12

#	Article	IF	Citations
19	Electrostatic effects on the electrical tension-induced irreversible pore formation in giant unilamellar vesicles. Chemistry and Physics of Lipids, 2020, 231, 104935.	1.5	11
20	Recent developments in the kinetics of ruptures of giant vesicles under constant tension. RSC Advances, 2021, 11, 29598-29619.	1.7	9
21	Location of Peptide-Induced Submicron Discontinuities in the Membranes of Vesicles Using ImageJ. Journal of Fluorescence, 2020, 30, 735-740.	1.3	8
22	A new purification technique to obtain specific size distribution of giant lipid vesicles using dual filtration. PLoS ONE, 2021, 16, e0254930.	1.1	5
23	Quantification of pulsed electric field for the rupture of giant vesicles with various surface charges, cholesterols and osmotic pressures. PLoS ONE, 2022, 17, e0262555.	1.1	5
24	Analysis of purification of charged giant vesicles in a buffer using their size distribution. European Physical Journal E, 2021, 44, 62.	0.7	4
25	Effects of sugar concentration on the electroporation, size distribution and average size of charged giant unilamellar vesicles. European Biophysics Journal, 2022, 51, 401-412.	1.2	3
26	An investigation into the critical tension of electroporation in anionic lipid vesicles. European Biophysics Journal, 2021, 50, 99-106.	1.2	1
27	Development of an Irreversible Electroporation (IRE) Device for Vesicle Ablation. , 2020, , .		1
28	Effects of hydrocarbon chain on the vesicle size distribution, kinetics of average size, bending modulus, and elastic modulus of lipid membranes. European Physical Journal E, 2022, 45, .	0.7	1