Lea Rems

List of Publications by Year
in descending order

25 papers	1,326 citations	471509 17 h-index	642732 23 g-index
30 all docs	30 docs citations	30 times ranked	1232 citing authors

#	Article	IF	Citations
1	Revisiting the role of pulsed electric fields in overcoming the barriers to in vivo gene electrotransfer. Bioelectrochemistry, 2022, 144, 107994.	4.6	20
2	Identification of electroporation sites in the complex lipid organization of the plasma membrane. ELife, 2022, 11, .	6.0	11
3	Actin networks regulate the cell membrane permeability during electroporation. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183468.	2.6	36
4	Molecular Dynamics of Cell Membrane Electroporation. Biophysical Journal, 2021, 120, 42a.	0.5	0
5	DNA-membrane complex formation during electroporation is DNA size-dependent. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183089.	2.6	19
6	Pulsed Electric Fields Can Create Pores in the Voltage Sensors of Voltage-Gated Ion Channels. Biophysical Journal, 2020, 119, 190-205.	0.5	43
7	The contribution of lipid peroxidation to membrane permeability in electropermeabilization: A molecular dynamics study. Bioelectrochemistry, 2019, 125, 46-57.	4.6	71
8	Response of an actin network in vesicles under electric pulses. Scientific Reports, 2019, 9, 8151.	3.3	43
9	Membrane Electroporation and Electropermeabilization: Mechanisms and Models. Annual Review of Biophysics, 2019, 48, 63-91.	10.0	417
10	Assessing the electro-deformation and electro-poration of biological cells using a three-dimensional finite element model. Applied Physics Letters, 2019, 114, .	3.3	33
11	DNA translocation to giant unilamellar vesicles during electroporation is independent of DNA size. Soft Matter, 2019, 15, 9187-9194.	2.7	8
12	The role of gel-phase domains in electroporation of vesicles. Scientific Reports, 2018, 8, 4758.	3.3	21
13	Lipid vesicles in pulsed electric fields: Fundamental principles of the membrane response and its biomedical applications. Advances in Colloid and Interface Science, 2017, 249, 248-271.	14.7	64
14	Lipid Pores: Molecular and Continuum Models. , 2017, , 3-23.		1
15	Biological Responses. , 2017, , 155-274.		3
16	Applicative Use of Electroporation Models. Advances in Biomembranes and Lipid Self-Assembly, 2017, 26, 1-50.	0.6	4
17	Quantification of cell membrane permeability induced by monopolar and high-frequency bipolar bursts of electrical pulses. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 2689-2698.	2.6	81
18	Tutorial: Electroporation of cells in complex materials and tissue. Journal of Applied Physics, 2016, 119, .	2.5	145

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19	Flow of DNA in micro/nanofluidics: From fundamentals to applications. Biomicrofluidics, 2016, 10, 043403.	2.4	42
20	Properties of lipid electropores II: Comparison of continuum-level modeling of pore conductance to molecular dynamics simulations. Bioelectrochemistry, 2016, 112, 112-124.	4.6	25
21	Properties of lipid electropores I: Molecular dynamics simulations of stabilized pores by constant charge imbalance. Bioelectrochemistry, 2016, 109, 108-116.	4.6	42
22	Modeling electroporation of the non-treated and vacuum impregnated heterogeneous tissue of spinach leaves. Innovative Food Science and Emerging Technologies, 2015, 29, 55-64.	5.6	23
23	Electroporation of Intracellular Liposomes Using Nanosecond Electric Pulsesâ€"A Theoretical Study. IEEE Transactions on Biomedical Engineering, 2013, 60, 2624-2635.	4.2	61
24	Cell electrofusion using nanosecond electric pulses. Scientific Reports, 2013, 3, 3382.	3.3	110
25	The Influence of Intracellular Vesicle Size and Position on the Transmembrane Voltage Induced by Nanosecond Electric Fields. IFMBE Proceedings, 2011, , 255-258.	0.3	0