Mark w Vaughn

List of Publications by Year
in descending order

38 papers	1,998 citations	393982 19 h-index	395343 33 g-index
38 all docs	38 docs citations	38 times ranked	1946 citing authors

#	Article	IF	Citations
1	From Langmuir isotherm to Brunauerâ€“Emmettâ€“Teller isotherm. AICHE Journal, 2022, 68, e17523.	1.8	9
2	Maximally asymmetric transbilayer distribution of anionic lipids alters the structure and interaction with lipids of an amyloidogenic protein dimer bound to the membrane surface. Chemistry and Physics of Lipids, 2016, 196, 33-51.	1.5	10
3	Data supporting beta-amyloid dimer structural transitions and proteinâ€“lipid interactions on asymmetric lipid bilayer surfaces using MD simulations on experimentally derived NMR protein structures. Data in Brief, 2016, 7, 658-672.	0.5	2
4	Characterization of 3D Voronoi tessellation nearest neighbor lipid shells provides atomistic lipid disruption profile of protein containing lipid membranes. Biophysical Chemistry, 2015, 198, 22-35.	1.5	6
5	Lipid insertion domain unfolding regulates protein orientational transition behavior in a lipid bilayer. Biophysical Chemistry, 2015, 206, 22-39.	1.5	7
6	Scaling and alpha-helix regulation of protein relaxation in a lipid bilayer. Journal of Chemical Physics, 2014, 141, 225101.	1.2	4
7	A New Monte Carlo Method for Exploring the Surface Area, Volume and Voids of Molecules in Protein Containing Lipid Bilayers with Atomistic Detail. Biophysical Journal, 2012, 102, 597a.	0.2	0
8	Atomistic MD Simulations Reveal the Protective Role of Cholesterol in the Membrane Disruptive Effects of Dimeric Beta-Amyloid in Neuronal Membrane Mimics. Biophysical Journal, 2012, 102, 632a.	0.2	0
9	Molecular Dynamics Simulations Reveal the Protective Role of Cholesterol in Î²-Amyloid Protein-Induced Membrane Disruptions in Neuronal Membrane Mimics. Journal of Physical Chemistry B, 2011, 115, 9795-9812.	1.2	48
10	Computer Simulations of Alzheimer's Beta Amyloid Interactions with Multicomponent Lipid Bilayers. Biophysical Journal, 2010, 98, 239a.	0.2	0
11	The Fertile and Infertile Phases of the Menstrual Cycle are Signaled by Cervical-Vaginal Fluid Die Swell Functions. , 2009, 19, 291-297.		6
12	Cholesterol Modulates the Interaction of Î²-Amyloid Peptide with Lipid Bilayers. Biophysical Journal, 2009, 96, 4299-4307.	0.2	51
13	Morphology and Amine Accessibility of (3â€Aminopropyl) Triethoxysilane Films on Glass Surfaces. Scanning, 2008, 30, 65-77.	0.7	72
14	Cell Detachment Model for an Antibody-Based Microfluidic Cancer Screening System. Biotechnology Progress, 2008, 22, 1426-1433.	1.3	23
15	Small angle X-ray scattering analysis of the effect of cold compaction of Al/MoO₃thermite composites. Physical Chemistry Chemical Physics, 2008, 10, 193-199.	1.3	8
16	Modeling nanoscale ink transport in Dip Pen Nanolithography. Proceedings of SPIE, 2008, , .	0.8	0
17	Molecular Dynamics Studies of the Molecular Structure and Interactions of Cholesterol Superlattices and Random Domains in an Unsaturated Phosphatidylcholine Bilayer Membrane. Journal of Physical Chemistry B, 2007, 111, 11021-11031.	1.2	24
18	Recognition and capture of breast cancer cells using an antibody-based platform in a microelectromechanical systems device. Biomedical Microdevices, 2007, 9, 35-42.	1.4	43

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19	Molecular Dynamics Simulation of Nanoparticle Self-Assembly at a Liquidâˆ'Liquid Interface. Langmuir, 2006, 22, 6385-6390.	1.6	60
20	Cholesterol Supports Headgroup Superlattice Domain Formation in Fluid Phospholipid/Cholesterol Bilayers. Journal of Physical Chemistry B, 2006, 110, 6339-6350.	1.2	30
21	Lipid Headgroup Superlattice Modulates the Activity of Surface-Acting Cholesterol Oxidase in Ternary Phospholipid/Cholesterol Bilayersâ€. Biochemistry, 2006, 45, 10855-10864.	1.2	10
22	Microfluidic-based diagnostics for cervical cancer cells. Biosensors and Bioelectronics, 2006, 21, 1991-1995.	5.3	51
23	Evidence of meniscus interface transport in dip-pen nanolithography: An annular diffusion model. Journal of Chemical Physics, 2006, 125, 144703.	1.2	40
24	First-passage approach for permeable traps. Journal of Chemical Physics, 2005, 123, 134905.	1.2	1
25	Direct Imaging of Meniscus Formation in Atomic Force Microscopy Using Environmental Scanning Electron Microscopy. Langmuir, 2005, 21, 8096-8098.	1.6	211
26	Cholesterol Modulated Antibody Binding in Supported Lipid Membranes as Determined by Total Internal Reflectance Microscopy on a Microfabricated High-throughput Glass Chip. Langmuir, 2005, 21, 9666-9674.	1.6	21
27	Surface Tension Effect on Transmembrane Channel Stability in a Model Membrane. Journal of Physical Chemistry B, 2005, 109, 19474-19483.	1.2	13
28	Diffusion and trapping in a suspension of spheres with simultaneous reaction in the continuous phase. Journal of Chemical Physics, 2004, 120, 9351-9358.	1.2	1
29	Nitric oxide reaction with red blood cells and hemoglobin under heterogeneous conditions. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7763-7768.	3.3	94
30	Erythrocyte Consumption of Nitric Oxide: Competition Experiment and Model Analysis. Nitric Oxide - Biology and Chemistry, 2001, 5, 18-31.	1.2	78
31	Erythrocyte Consumption of Nitric Oxide: Competition Experiment and Model Analysis. Nitric Oxide - Biology and Chemistry, 2001, 5, 425.	1.2	2
32	Modulation of nitric oxide bioavailability by erythrocytes. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 11771-11776.	3.3	160
33	Erythrocytes Possess an Intrinsic Barrier to Nitric Oxide Consumption. Journal of Biological Chemistry, 2000, 275, 2342-2348.	1.6	205
34	Intravascular flow decreases erythrocyte consumption of nitric oxide. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 8757-8761.	3.3	289
35	Estimation of nitric oxide production and reactionrates in tissue by use of a mathematical model. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 274, H2163-H2176.	1.5	240
36	Effective diffusion distance of nitric oxide in the microcirculation. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 274, H1705-H1714.	1.5	164

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37	A Surface Equation of State for a Partially Soluble Ionized Surfactant. Journal of Colloid and Interface Science, 1997, 195, 1-7.	5.0	12
38	Effects of Viscous Normal Stresses in Thin Draining Films. Industrial & Engineering Chemistry Research, 1995, 34, 3185-3186.	1.8	3