Geoffrey D Bothun

List of Publications by Year
in descending order

65 papers	2,051 citations	257450 24 h-index	254184 43 g-index
79 all docs	79 docs citations	79 times ranked	3221 citing authors

#	Article	IF	Citations
1	Controlled Release from Bilayer-Decorated Magnetoliposomes via Electromagnetic Heating. ACS Nano, 2010, 4, 3215-3221.	14.6	210
2	Nanoparticles Meet Cell Membranes: Probing Nonspecific Interactions using Model Membranes. Environmental Science & Technology, 2014, 48, 873-880.	10.0	198
3	Hydrophobic silver nanoparticles trapped in lipid bilayers: Size distribution, bilayer phase behavior, and optical properties. Journal of Nanobiotechnology, 2008, 6, 13.	9.1	131
4	Stimuli-responsive liposome-nanoparticle assemblies. Expert Opinion on Drug Delivery, 2011, 8, 1025-1040.	5.0	107
5	Impact of impurities in biodiesel-derived crude glycerol on the fermentation by Clostridium pasteurianum ATCC 6013. Applied Microbiology and Biotechnology, 2012, 93, 1325-1335.	3.6	97
6	Multicomponent folate-targeted magnetoliposomes: design, characterization, and cellular uptake. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 797-805.	3.3	67
7	Structural and Thermal Analysis of Lipid Vesicles Encapsulating Hydrophobic Gold Nanoparticles. ACS Nano, 2012, 6, 4678-4685.	14.6	61
8	Liposome Fluidization and Melting Point Depression by Pressurized CO2 Determined by Fluorescence Anisotropy. Langmuir, 2005, 21, 530-536.	3.5	57
9	Compressed solvents for the extraction of fermentation products within a hollow fiber membrane contactor. Journal of Supercritical Fluids, 2003, 25, 119-134.	3.2	55
10	Hepatoma Cell Uptake of Cationic Multifluorescent Quantum Dot Liposomes. Journal of Physical Chemistry B, 2009, 113, 7725-7728.	2.6	50
11	Effect of lamellarity and size on calorimetric phase transitions in single component phosphatidylcholine vesicles. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 532-543.	2.6	49
12	Biofilm Formation by Hydrocarbon-Degrading Marine Bacteria and Its Effects on Oil Dispersion. ACS Sustainable Chemistry and Engineering, 2019, 7, 14490-14499.	6.7	49
13	Low-dose chemotherapy of hepatocellular carcinoma through triggered-release from bilayer-decorated magnetoliposomes. Colloids and Surfaces B: Biointerfaces, 2014, 116, 452-458.	5.0	41
14	Hydrophobicity drives the cellular uptake of short cationic peptide ligands. European Biophysics Journal, 2011, 40, 727-736.	2.2	38
15	Lipid-Assisted Formation and Dispersion of Aqueous and Bilayer-Embedded Nano-C₆₀. Langmuir, 2009, 25, 4875-4879.	3.5	37
16	Mass transfer in hollow fiber membrane contactor extraction using compressed solvents. Journal of Membrane Science, 2003, 227, 183-196.	8.2	36
17	Particle Formation in Precipitation Polymerization:Â Continuous Precipitation Polymerization of Acrylic Acid in Supercritical Carbon Dioxide. Macromolecules, 2006, 39, 6489-6494.	4.8	34
18	Efficient dispersion of crude oil by blends of food-grade surfactants: Toward greener oil-spill treatments. Marine Pollution Bulletin, 2015, 101, 92-97.	5.0	34

#	Article	IF	Citations
19	Centrifugation-based assay for examining nanoparticleâ€“lipid membrane binding and disruption. Analyst, The, 2014, 139, 973.	3.5	30
20	Critical new insights into the binding of poly- and perfluoroalkyl substances (PFAS) to albumin protein. Chemosphere, 2022, 287, 131979.	8.2	30
21	Partitioning of perfluorooctanoate into phosphatidylcholine bilayers is chain length-independent. Chemistry and Physics of Lipids, 2010, 163, 300-308.	3.2	27
22	Hydration repulsion effects on the formation of supported lipid bilayers. Soft Matter, 2011, 7, 1936.	2.7	27
23	Attachment of <i>Alcanivorax borkumensis</i> to Hexadecane-In-Artificial Sea Water Emulsion Droplets. Langmuir, 2018, 34, 5352-5357.	3.5	27
24	Bilayer heating in magnetite nanoparticleâ€“liposome dispersions via fluorescence anisotropy. Journal of Colloid and Interface Science, 2011, 357, 70-74.	9.4	26
25	A solvent-free lecithin-Tween 80 system for oil dispersion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 533, 218-223.	4.7	26
26	Bilayer disruption and liposome restructuring by a homologous series of small Arg-rich synthetic peptides. Colloids and Surfaces B: Biointerfaces, 2010, 76, 76-81.	5.0	24
27	Peptide Amphiphile Containing Arginine and Fatty Acyl Chains as Molecular Transporters. Molecular Pharmaceutics, 2013, 10, 4717-4727.	4.6	24
28	Hydrophobic Nanoparticles Modify the Thermal Release Behavior of Liposomes. Journal of Physical Chemistry B, 2017, 121, 5040-5047.	2.6	24
29	Dominant entropic binding of perfluoroalkyl substances (PFASs) to albumin protein revealed by 19F NMR. Chemosphere, 2021, 263, 128083.	8.2	24
30	Homeoviscous response of Clostridium pasteurianum to butanol toxicity during glycerol fermentation. Journal of Biotechnology, 2014, 179, 8-14.	3.8	23
31	Near-Infrared Responsive Goldâ€“Layersome Nanoshells. Langmuir, 2017, 33, 5321-5327.	3.5	23
32	Cationic Gel-Phase Liposomes with â€œDecoratedâ€•Anionic SPIO Nanoparticles: Morphology, Colloidal, and Bilayer Properties. Langmuir, 2011, 27, 8645-8652.	3.5	21
33	Phospholipid Bilayer Softening Due to Hydrophobic Gold Nanoparticle Inclusions. Langmuir, 2018, 34, 13416-13425.	3.5	21
34	Replacement per- and polyfluoroalkyl substances (PFAS) are potent modulators of lipogenic and drug metabolizing gene expression signatures in primary human hepatocytes. Toxicology and Applied Pharmacology, 2022, 442, 115991.	2.8	21
35	n-Butanol Partitioning and Phase Behavior in DPPC/DOPC Membranes. Journal of Physical Chemistry B, 2012, 116, 5919-5924.	2.6	19
36	Carbon Nanotubeâ€“Liposome Complexes in Hydrogels for Controlled Drug Delivery via Near-Infrared Laser Stimulation. ACS Applied Nano Materials, 2021, 4, 331-342.	5.0	19

#	Article	IF	Citations
37	Radiofrequency and Near-Infrared Responsive Coreâ€“Shell Nanostructures Using Layersome Templates for Cancer Treatment. ACS Applied Bio Materials, 2020, 3, 273-281.	4.6	17
38	Gas antisolvent fractionation of semicrystalline and amorphous poly(lactic acid) using compressed CO2. Polymer, 2002, 43, 4445-4452.	3.8	16
39	Solubility and partitioning of carbamazepine in a two-phase supercritical carbon dioxide/polyvinylpyrrolidone system. International Journal of Pharmaceutics, 2011, 403, 96-100.	5.2	15
40	Role of tail chemistry on liquid and gas transport through organosilane-modified mesoporous ceramic membranes. Journal of Membrane Science, 2007, 301, 162-170.	8.2	13
41	Transformation of Lipid Vesicles into Micelles by Adding Nonionic Surfactants: Elucidating the Structural Pathway and the Intermediate Structures. Journal of Physical Chemistry B, 2022, 126, 2208-2216.	2.6	13
42	Radio Frequency-Activated Nanoliposomes for Controlled Combination Drug Delivery. AAPS PharmSciTech, 2015, 16, 1335-1343.	3.3	12
43	Patchy Layersomes Formed by Layer-by-Layer Coating of Liposomes with Strong Biopolyelectrolytes. Biomacromolecules, 2016, 17, 3838-3844.	5.4	12
44	Organic Anion Detection with Functionalized SERS Substrates via Coupled Electrokinetic Preconcentration, Analyte Capture, and Charge Transfer. ACS Applied Materials & Interfaces, 2022, 14, 23964-23972.	8.0	12
45	Solvent-dependent permeability in asymmetric ceramic membranes with tortuous or non-tortuous mesopores. Journal of Membrane Science, 2008, 325, 982-988.	8.2	10
46	Surface Activity of Lysozyme and Dipalmitoyl Phosphatidylcholine Vesicles at Compressed and Supercritical Fluid Interfaces. Journal of Physical Chemistry B, 2005, 109, 24495-24501.	2.6	9
47	Formation of Lipid Sheaths around Nanoparticleâ€Supported Lipid Bilayers. Small, 2012, 8, 1740-1751.	10.0	9
48	<i>n</i>-Butanol Partitioning into Phase-Separated Heterogeneous Lipid Monolayers. Langmuir, 2013, 29, 10817-10823.	3.5	9
49	Cooperative effects of fatty acids and n-butanol on lipid membrane phase behavior. Colloids and Surfaces B: Biointerfaces, 2016, 139, 62-67.	5.0	9
50	Does the Solvent in a Dispersant Impact the Efficiency of Crude-Oil Dispersion?. Langmuir, 2019, 35, 16630-16639.	3.5	9
51	Carbon Black Templated Gold Nanoparticles for Detection of a Broad Spectrum of Analytes by Surface-Enhanced Raman Scattering. ACS Applied Nano Materials, 2020, 3, 2605-2613.	5.0	9
52	Effects of Membrane Defects and Polymer Hydrophobicity on Networking Kinetics of Vesicles. Langmuir, 2017, 33, 5745-5751.	3.5	8
53	Surface Activity of Poly(ethylene glycol)-Coated Silver Nanoparticles in the Presence of a Lipid Monolayer. Langmuir, 2018, 34, 2039-2045.	3.5	8
54	Liposome fluidization and melting point depression by compressed and liquid n-alkanes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 279, 50-57.	4.7	7

#	Article	IF	Citations
55	Molecular and phase toxicity of compressed and supercritical fluids in biphasic continuous cultures ofClostridium thermocellum. Biotechnology and Bioengineering, 2005, 89, 32-41.	3.3	6
56	Phase and sedimentation behavior of oil (octane) dispersions in the presence of model mineral aggregates. Marine Pollution Bulletin, 2014, 87, 164-170.	5.0	6
57	Tuning the Multifunctionality of Iron Oxide Nanoparticles Using Self-Assembled Mixed Lipid Layers. Bioconjugate Chemistry, 2017, 28, 2729-2736.	3.6	6
58	Albumin protein coronas render nanoparticles surface active: consonant interactions at airâ€“water and at lipid monolayer interfaces. Environmental Science: Nano, 2021, 8, 160-173.	4.3	6
59	PFAS fluidize synthetic and bacterial lipid monolayers based on hydrophobicity and lipid charge. Journal of Environmental Chemical Engineering, 2022, 10, 107351.	6.7	6
60	In situ SERS detection of dissolved nitrate on hydrated gold substrates. Nanoscale Advances, 2021, 3, 4098-4105.	4.6	5
61	Sorption and hydration effects on liquid carbon dioxide transport through mesoporous Î³-alumina and titania membranes. Journal of Membrane Science, 2006, 281, 149-155.	8.2	4
62	Using Microemulsion Phase Behavior as a Predictive Model for Lecithinâ€“Tween 80 Marine Oil Dispersant Effectiveness. Langmuir, 2021, 37, 8115-8128.	3.5	2
63	Ultrafiltration of W/CO2Microemulsions in Ceramic Membranes. Separation Science and Technology, 2006, 41, 2603-2612.	2.5	1
64	Role of Ionic Strength on <i>n</i>-Butanol Partitioning into Anionic Dipalmitoyl Phosphatidylcholine/Phosphatidylglycerol Vesicles. Journal of Physical Chemistry B, 2013, 117, 8484-8489.	2.6	1
65	Transport of liquid and supercritical CO2 and selected organic solvents through surface modified mesoporous Î³-alumina and titania membranes. Separation Science and Technology, 2019, 54, 2098-2111.	2.5	1