## Shawn D Wettig

List of Publications by Year in descending order

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74 2,906 32 papers citations h-index

32 52
h-index g-index

75 75 all docs citations

75 times ranked 3243 citing authors

#	Article	IF	CITATIONS
1	Microemulsion utility in pharmaceuticals: Implications for multi-drug delivery. International Journal of Pharmaceutics, 2017, 526, 425-442.	5.2	284
2	Thermodynamic Studies of Aqueous m–s–m Gemini Surfactant Systems. Journal of Colloid and Interface Science, 2001, 235, 310-316.	9.4	175
3	Gemini Surfactants: A New Family of Building Blocks for Non-Viral Gene Delivery Systems. Current Gene Therapy, 2008, 8, 9-23.	2.0	139
4	Thermodynamic and Aggregation Properties of Gemini Surfactants with Hydroxyl Substituted Spacers in Aqueous Solution. Langmuir, 2002, 18, 5354-5359.	3.5	108
5	Effect of Chemical Permeation Enhancers on Stratum Corneum Barrier Lipid Organizational Structure and Interferon Alpha Permeability. Molecular Pharmaceutics, 2013, 10, 2248-2260.	4.6	100
6	Topical non-invasive gene delivery using gemini nanoparticles in interferon-Î <sup>3</sup> -deficient mice. European Journal of Pharmaceutics and Biopharmaceutics, 2007, 65, 414-422.	4.3	87
7	Advancing nonviral gene delivery: lipid- and surfactant-based nanoparticle design strategies. Nanomedicine, 2010, 5, 1103-1127.	3.3	82
8	Structural and transfection properties of amineâ€substituted gemini surfactantâ€based nanoparticles. Journal of Gene Medicine, 2007, 9, 649-658.	2.8	77
9	Enhanced gene expression in epithelial cells transfected with amino acid-substituted gemini nanoparticles. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 75, 311-320.	4.3	77
10	Modified gelatin nanoparticles for gene delivery. International Journal of Pharmaceutics, 2019, 554, 224-234.	5.2	75
11	Investigation of complexes formed by interaction of cationic gemini surfactants with deoxyribonucleic acid. Physical Chemistry Chemical Physics, 2007, 9, 1616.	2.8	68
12	Studies of the Interaction of Cationic Gemini Surfactants with Polymers and Triblock Copolymers in Aqueous Solution. Journal of Colloid and Interface Science, 2001, 244, 377-385.	9.4	66
13	Thermodynamic and Aggregation Properties of Gemini Surfactants with Ethoxylated Spacers in Aqueous Solution. Langmuir, 2003, 19, 3666-3670.	3.5	63
14	Interactions between DNA and Gemini surfactant: impact on gene therapy: part I. Nanomedicine, 2016, 11, 289-306.	3.3	61
15	Structural characterization of novel gemini non-viral DNA delivery systems for cutaneous gene therapy. Journal of Experimental Nanoscience, 2006, 1, 165-176.	2.4	57
16	Interactions between 12-EOx-12 Gemini Surfactants and Pluronic ABA Block Copolymers (F108 and P103) Studied by Isothermal Titration Calorimetry. Langmuir, 2004, 20, 579-586.	3.5	56
17	Thermodynamic investigation of M-DNA: a novel metal ion–DNA complex. Journal of Inorganic Biochemistry, 2003, 94, 94-99.	3.5	52
18	Thermodynamic and aggregation properties of aza- and imino-substituted gemini surfactants designed for gene delivery. Physical Chemistry Chemical Physics, 2007, 9, 871-877.	2.8	51

#	Article	IF	Citations
19	The dicarboxylate carrier plays a role in mitochondrial malate transport and in the regulation of glucose-stimulated insulin secretion from rat pancreatic beta cells. Diabetologia, 2011, 54, 135-145.	6.3	50
20	Immunocompatibility of Bacteriophages as Nanomedicines. Journal of Nanotechnology, 2012, 2012, 1-13.	3.4	47
21	M-DNA: A Self-Assembling Molecular Wire for Nanoelectronics and Biosensing Analytical Sciences, 2003, 19, 23-26.	1.6	46
22	Designing pH-sensitive gemini nanoparticles for non-viral gene delivery into keratinocytes. Journal of Materials Chemistry, 2012, 22, 6232.	6.7	46
23	Isothermal titration calorimetry and dynamic light scattering studies of interactions between gemini surfactants of different structure and Pluronic block copolymers. Journal of Colloid and Interface Science, 2005, 282, 466-477.	9.4	45
24	Synthesis of curcumin-functionalized gold nanoparticles and cytotoxicity studies in human prostate cancer cell line. Applied Nanoscience (Switzerland), 2018, 8, 347-357.	3.1	44
25	Synthesis, Characterization, and Use of Asymmetric Pyrenyl-Gemini Surfactants as Emissive Components in DNAâ^'Lipoplex Systems. Langmuir, 2007, 23, 8995-9001.	3.5	40
26	Synergistic behaviour of ZnO nanoparticles and gemini surfactants on the dynamic and equilibrium oil/water interfacial tension. Physical Chemistry Chemical Physics, 2015, 17, 7122-7129.	2.8	40
27	Continuous Langmuir–Blodgett Deposition and Transfer by Controlled Edge-to-Edge Assembly of Floating 2D Materials. Langmuir, 2019, 35, 51-59.	3.5	38
28	Topical Delivery of Interferon Alpha by Biphasic Vesicles: Evidence for a Novel Nanopathway across the Stratum Corneum. Molecular Pharmaceutics, 2010, 7, 751-762.	4.6	37
29	Synthesis and aggregation properties of dissymmetric phytanyl-gemini surfactants for use as improved DNA transfection vectors. Physical Chemistry Chemical Physics, 2011, 13, 637-642.	2.8	35
30	Biodistribution and Physiologically-Based Pharmacokinetic Modeling of Gold Nanoparticles in Mice with Interspecies Extrapolation. Pharmaceutics, 2019, 11, 179.	4.5	35
31	Aryl Hydrocarbon Receptor Nuclear Translocator/Hypoxia-inducible Factor- $1\hat{l}^2$ Plays a Critical Role in Maintaining Glucose-stimulated Anaplerosis and Insulin Release from Pancreatic $\hat{l}^2$ -Cells. Journal of Biological Chemistry, 2011, 286, 1014-1024.	3.4	34
32	An Overview of Nanotechnologies for Drug Delivery to the Brain. Pharmaceutics, 2022, 14, 224.	4.5	34
33	Signal Transduction through Dye-Labeled M-DNA Y-Branched Junctions:  Switching Modulated by Chemical Reduction of Anthraquinone. Nano Letters, 2003, 3, 617-622.	9.1	33
34	Characterization of the Behavior of a Pyrene Substituted Gemini Surfactant in Water by Fluorescence. Langmuir, 2011, 27, 3361-3371.	3.5	33
35	Synthesis and solution properties of gemini surfactants containing oleyl chains. Physical Chemistry Chemical Physics, 2005, 7, 3172.	2.8	32
36	M-DNA: A novel metal ion complex of DNA studied by fluorescence techniques. Journal of Inorganic Biochemistry, 2005, 99, 2093-2101.	<b>3.</b> 5	31

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37	Synthesis and evaluation of alendronate-modified gelatin biopolymer as a novel osteotropic nanocarrier for gene therapy. Nanomedicine, 2016, 11, 2251-2273.	3.3	31
38	Biphasic Vesicles for Topical Delivery of Interferon Alpha in Human Volunteers and Treatment of Patients with Human Papillomavirus Infections. Current Drug Delivery, 2011, 8, 307-319.	1.6	30
39	Transfection and structural properties of phytanyl substituted gemini surfactant-based vectors for gene delivery. Physical Chemistry Chemical Physics, 2013, 15, 20510.	2.8	29
40	Investigating the Phospholipid Effect on the Bioaccessibility of Rosmarinic Acid-Phospholipid Complex through a Dynamic Gastrointestinal in Vitro Model. Pharmaceutics, 2019, 11, 156.	4.5	28
41	Mixed aggregate formation in gemini surfactant/1,2-dialkyl-sn-glycero-3-phosphoethanolamine systems. Journal of Colloid and Interface Science, 2012, 377, 237-243.	9.4	26
42	Long Range Molecular Wire Behaviour in a Metal Complex of DNA. Journal of Biomolecular Structure and Dynamics, 2002, 20, 93-98.	3.5	25
43	Addressing the Challenge: Current and Future Directions in Ovarian Cancer Therapy. Current Gene Therapy, 2009, 9, 434-458.	2.0	25
44	Synthesis and characterization of asymmetrical gemini surfactants. Physical Chemistry Chemical Physics, 2017, 19, 1953-1962.	2.8	24
45	Dependence of DNA Electronic Structure on Environmental and Structural Variations. Journal of Physical Chemistry B, 2006, 110, 15742-15748.	2.6	21
46	Thermodynamic investigation of the binding of dissymmetric pyrenyl-gemini surfactants to DNA. Physical Chemistry Chemical Physics, 2010, 12, 4821.	2.8	21
47	Interactions between DNA and gemini surfactant: impact on gene therapy: part II. Nanomedicine, 2016, 11, 403-420.	3.3	20
48	Effect of spacer length on the interfacial behavior of N,N′-bis(dimethylalkyl)-α,ω-alkanediammonium dibromide gemini surfactants in the absence and presence of ZnO nanoparticles. Journal of Colloid and Interface Science, 2017, 486, 204-210.	9.4	20
49	Challenges of Dissolution Methods Development for Soft Gelatin Capsules. Pharmaceutics, 2021, 13, 214.	4.5	20
50	Impact of DNA Vector Topology on Non-Viral Gene Therapeutic Safety and Efficacy. Current Gene Therapy, 2014, 14, 309-329.	2.0	19
51	Effect of counterions on the micellization and monolayer behaviour of cationic gemini surfactants. Physical Chemistry Chemical Physics, 2017, 19, 10825-10834.	2.8	18
52	Studies of the Aggregation Behavior of Cyclic Gemini Surfactants. Journal of Colloid and Interface Science, 2002, 247, 456-462.	9.4	17
53	Solid versus solution: Examining the electronic structure of metallic DNA with soft x-ray spectroscopy. Physical Review B, 2006, 74, .	3.2	17
54	Synthesis of Two-Dimensional Plasmonic Molybdenum Oxide Nanomaterials by Femtosecond Laser Irradiation. Chemistry of Materials, 2021, 33, 4510-4521.	6.7	15

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55	Interactions between gemini and nonionic pharmaceutical surfactants. Canadian Journal of Chemistry, 2010, 88, 1262-1270.	1.1	13
56	Avocado-derived polyols for use as novel co-surfactants in low energy self-emulsifying microemulsions. Scientific Reports, 2020, 10, 5566.	3.3	13
57	Cationic Gemini Surfactant–Plasmid Deoxyribonucleic Acid Condensates as a Single Amphiphilic Entity. Journal of Physical Chemistry B, 2018, 122, 194-199.	2.6	12
58	<i>m-s-m</i> cationic gemini and zwitterionic surfactants – a thermodynamic analysis of their mixed micelle formation. RSC Advances, 2020, 10, 3221-3232.	<b>3.</b> 6	12
59	Electronic structure and charge carriers in metallic DNA investigated by soft x-ray spectroscopy. Physical Review B, 2006, 73, .	3.2	10
60	Temperature effects on the chemical composition of nickel–phosphorus alloy thin films. Thin Solid Films, 2010, 518, 2045-2049.	1.8	10
61	Physical Characterization of Gemini Surfactant-Based Synthetic Vectors for the Delivery of Linear Covalently Closed (LCC) DNA Ministrings. PLoS ONE, 2015, 10, e0142875.	2.5	10
62	Optimization of a One-Step Heat-Inducible In Vivo Mini DNA Vector Production System. PLoS ONE, 2014, 9, e89345.	2.5	9
63	Phase Behavior of Nonâ€lonic <scp>Surfactantâ€Medium</scp> Chain <scp>Triglycerideâ€Water</scp> Microemulsion Systems. Journal of Surfactants and Detergents, 2021, 24, 603-629.	2.1	7
64	Separation and purification of linear covalently closed deoxyribonucleic acid by Q-anion exchange membrane chromatography. Journal of Chromatography A, 2014, 1339, 214-218.	3.7	5
65	ParAB-mediated intermolecular association of plasmid P1 parS Sites. Virology, 2011, 421, 192-201.	2.4	4
66	Non-viral Gene Delivery. Experientia Supplementum (2012), 2018, 110, 3-68.	0.9	4
67	Mixing behaviour of Pluronics with gemini surfactant/plasmid DNA condensates: effect of Pluronic composition. Physical Chemistry Chemical Physics, 2020, 22, 26121-26135.	2.8	4
68	Nanomedicine Based Approaches to Cancer Diagonsis and Therapy. , 0, , .		2
69	Kelvin probe force microscopy to study electrostatic interactions of DNA with lipid–gemini surfactant monolayers for gene delivery. Soft Matter, 2021, 17, 826-833.	2.7	2
70	Thermodynamic Studies of DNA-Cationic Components Interactions Using Titration Calorimetry. Journal of Thermodynamics & Catalysis, 2012, 04, .	0.2	2
71	Calorimetric Investigations of Non-Viral DNA Transfection Systems. , 0, , .		1
72	Fluorescence-based techniques to assess the miscibility and physical stability of a drug–lipid complex. Canadian Journal of Chemistry, 2019, 97, 496-503.	1.1	1

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73	Local Structure of M-DNA at the Nitrogen K-edge: Evidence Towards a Metal Ion Induced Conduction Band in DNA. Journal of Nanoscience and Nanotechnology, 2005, 5, 1557-1560.	0.9	1
74	Chemical Switching and Molecular Logic in Fluorescent-Labeled M-DNA. Lecture Notes in Computer Science, 2004, , 19-31.	1.3	0