Bing Yuan

List of Publications by Year
in descending order

70 papers	1,329 citations	331259 21 h-index	414034 32 g-index
70 all docs	70 docs citations	70 times ranked	1861 citing authors

#	Article	IF	Citations
1	A review of optical imaging and therapy using nanosized graphene and graphene oxide. Biomaterials, 2013, 34, 9519-9534.	5.7	160
2	How Melittin Inserts into Cell Membrane: Conformational Changes, Inter-Peptide Cooperation, and Disturbance on the Membrane. Molecules, 2019, 24, 1775.	1.7	68
3	Cooperative Transmembrane Penetration of Nanoparticles. Scientific Reports, 2015, 5, 10525.	1.6	51
4	Optimizing the free radical content of graphene oxide by controlling its reduction. Carbon, 2017, 116, 703-712.	5.4	45
5	Molecular Response and Cooperative Behavior during the Interactions of Melittin with a Membrane: Dissipative Quartz Crystal Microbalance Experiments and Simulations. Journal of Physical Chemistry B, 2012, 116, 9432-9438.	1.2	39
6	Molecular details on the intermediate states of melittin action on a cell membrane. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 2234-2241.	1.4	39
7	Influence of geometric nanoparticle rotation on cellular internalization process. Nanoscale, 2013, 5, 7998.	2.8	37
8	Self-Assembly of Highly Oriented Lamellar Nanoparticle-Phospholipid Nanocomposites on Solid Surfaces. Journal of the American Chemical Society, 2007, 129, 11332-11333.	6.6	36
9	Designing Melittinâ€Graphene Hybrid Complexes for Enhanced Antibacterial Activity. Advanced Healthcare Materials, 2019, 8, e1801521.	3.9	36
10	Tunable dual-stimuli response of a microgel composite consisting of reduced graphene oxide nanoparticles and poly(N-isopropylacrylamide) hydrogel microspheres. Journal of Materials Chemistry B, 2014, 2, 3791-3798.	2.9	34
11	Self-assembly of multilayered functional films based on graphene oxide sheets for controlled release. Journal of Materials Chemistry, 2011, 21, 3471.	6.7	33
12	Controlled Drug Loading and Release of a Stimuli-Responsive Lipogel Consisting of Poly(<i>N</i>-isopropylacrylamide) Particles and Lipids. Journal of Physical Chemistry B, 2013, 117, 9677-9682.	1.2	30
13	Graphene oxide as antibacterial sensitizer: Mechanically disturbed cell membrane for enhanced poration efficiency of melittin. Carbon, 2019, 149, 248-256.	5.4	30
14	The key structural features governing the free radicals and catalytic activity of graphite/graphene oxide. Physical Chemistry Chemical Physics, 2020, 22, 3112-3121.	1.3	30
15	Reduced graphene oxide directed self-assembly of phospholipid monolayers in liquid and gel phases. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1203-1211.	1.4	29
16	Controlling the Nanoscale Rotational Behaviors of Nanoparticles on the Cell Membranes: A Computational Model. Small, 2016, 12, 1140-1146.	5.2	26
17	Vesicle deposition and subsequent membraneâ€"melittin interactions on different substrates: A QCM-D experiment. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1918-1925.	1.4	25
18	Molecular dynamics simulations informed by membrane lipidomics reveal the structureâ€"interaction relationship of polymyxins with the lipid A-based outer membrane of <i>Acinetobacter baumannii</i>. Journal of Antimicrobial Chemotherapy, 2020, 75, 3534-3543.	1.3	25

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19	Correlation between Single-Molecule Dynamics and Biological Functions of Antimicrobial Peptide Melittin. Journal of Physical Chemistry Letters, 2020, 11, 4834-4841.	2.1	24
20	Individual Roles of Peptides PGLa and Magainin 2 in Synergistic Membrane Poration. Langmuir, 2020, 36, 7190-7199.	1.6	24
21	Kinetically Controlled Homogenization and Transformation of Crystalline Fiber Networks in Supramolecular Materials. Crystal Growth and Design, 2011, 11, 3227-3234.	1.4	22
22	Control of crystallization in supramolecular soft materials engineering. Soft Matter, 2013, 9, 435-442.	1.2	22
23	Influence of Surface Chemistry on Particle Internalization into Giant Unilamellar Vesicles. Langmuir, 2013, 29, 8039-8045.	1.6	21
24	Molecular modeling of transmembrane delivery of paclitaxel by shock waves with nanobubbles. Applied Physics Letters, 2017, 110, .	1.5	21
25	Outer Membranes of Polymyxin-Resistant <i>Acinetobacter baumannii</i> with Phosphoethanolamine-Modified Lipid A and Lipopolysaccharide Loss Display Different Atomic-Scale Interactions with Polymyxins. ACS Infectious Diseases, 2020, 6, 2698-2708.	1.8	19
26	Structureâ€“Interaction Relationship of Polymyxins with the Membrane of Human Kidney Proximal Tubular Cells. ACS Infectious Diseases, 2020, 6, 2110-2119.	1.8	18
27	Penetration and Saturation of Lysozyme in Phospholipid Bilayers. Journal of Physical Chemistry B, 2007, 111, 6151-6155.	1.2	17
28	Volume confinement induced microstructural transitions and property enhancements of supramolecular soft materials. Soft Matter, 2011, 7, 1708-1713.	1.2	17
29	Partner-facilitating transmembrane penetration of nanoparticles: a biological test in silico. Nanoscale, 2018, 10, 11670-11678.	2.8	16
30	Encapsulation of Hydrophobic Phthalocyanine with Poly(N-isopropylacrylamide)/Lipid Composite Microspheres for Thermo-Responsive Release and Photodynamic Therapy. Materials, 2014, 7, 3481-3493.	1.3	15
31	Residue-Specialized Membrane Poration Kinetics of Melittin and Its Variants: Insight from Mechanistic Landscapes*. Communications in Theoretical Physics, 2019, 71, 887.	1.1	15
32	Lipid-specific interactions determine the organization and dynamics of membrane-active peptide melittin. Soft Matter, 2020, 16, 3498-3504.	1.2	15
33	A molecular architectural design that promises potent antimicrobial activity against multidrug-resistant pathogens. NPG Asia Materials, 2021, 13, .	3.8	15
34	Partitioning of nanoscale particles on a heterogeneous multicomponent lipid bilayer. Physical Chemistry Chemical Physics, 2018, 20, 28241-28248.	1.3	14
35	Simulations of octapeptinâ€“outer membrane interactions reveal conformational flexibility is linked to antimicrobial potency. Journal of Biological Chemistry, 2020, 295, 15902-15912.	1.6	13
36	Coarse-grained simulations uncover Gram-negative bacterial defense against polymyxins by the outer membrane. Computational and Structural Biotechnology Journal, 2021, 19, 3885-3891.	1.9	13

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37	A novel chemical biology and computational approach to expedite the discovery of new-generation polymyxins against life-threatening <i>Acinetobacter baumannii</i>. Chemical Science, 2021, 12, 12211-12220.	3.7	13
38	Lipid merging, protrusion and vesicle release triggered by shrinking/swelling of poly(N-isopropylacrylamide) microgel particles. Applied Surface Science, 2014, 296, 95-99.	3.1	12
39	Membrane perturbation of fullerene and graphene oxide distinguished by pore-forming peptide melittin. Carbon, 2021, 180, 67-76.	5.4	12
40	Membrane-curvature-mediated co-endocytosis of bystander and functional nanoparticles. Nanoscale, 2021, 13, 9626-9633.	2.8	12
41	Curvature Changes of Bilayer Membranes Studied by Computer Simulations. Journal of Physical Chemistry B, 2012, 116, 7196-7202.	1.2	11
42	Synergistic Coassembly of Two Structurally Different Molecular Gelators. Langmuir, 2016, 32, 12175-12183.	1.6	10
43	Controlling the Supramolecular Architecture of Molecular Gels with Surfactants. Langmuir, 2016, 32, 1171-1177.	1.6	10
44	Chiral carbon dots â€“ a functional domain for tyrosinase Cu active site modulation <i>via</i> remote target interaction. Nanoscale, 2022, 14, 1202-1210.	2.8	10
45	Twist-diameter coupling drives DNA twist changes with salt and temperature. Science Advances, 2022, 8, eabn1384.	4.7	10
46	Effect of Receptor Structure and Length on the Wrapping of a Nanoparticle by a Lipid Membrane. Materials, 2014, 7, 3855-3866.	1.3	9
47	Plasmon-enhanced fluorescence imaging with silicon-based silver chips for protein and nucleic acid assay. Analytica Chimica Acta, 2017, 955, 98-107.	2.6	9
48	Manipulating the fractal fiber network of a molecular gel with surfactants. Journal of Colloid and Interface Science, 2018, 526, 356-365.	5.0	9
49	Biophysical Impact of Lipid A Modification Caused by Mobile Colistin Resistance Gene on Bacterial Outer Membranes. Journal of Physical Chemistry Letters, 2021, 12, 11629-11635.	2.1	9
50	Real-time monitoring the interfacial dynamic processes at model cell membranes: Taking cell penetrating peptide TAT as an example. Journal of Colloid and Interface Science, 2022, 609, 707-717.	5.0	9
51	Antimicrobial and Bioactive Silk Peptide Hybrid Hydrogel with a Heterogeneous Double Network Formed by Orthogonal Assembly. ACS Biomaterials Science and Engineering, 2022, 8, 89-99.	2.6	9
52	Electrical bistability in self-assembled hybrid multilayers of phospholipid and nanoparticles. Nanotechnology, 2011, 22, 315303.	1.3	8
53	Modulated enhancement in ion transport through carbon nanotubes by lipid decoration. Carbon, 2017, 111, 459-466.	5.4	8
54	Cardiolipin Selectively Binds to the Interface of <i>Vs</i>SemiSWEET and Regulates Its Dimerization. Journal of Physical Chemistry Letters, 2021, 12, 1940-1946.	2.1	7

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55	Lipid Phase Influences the Dynamic Interactions between Graphene Oxide Nanosheets and a Phospholipid Membrane. Journal of Physical Chemistry B, 2021, 125, 3589-3597.	1.2	6
56	Tail-structure regulated phase behaviors of a lipid bilayer*. Chinese Physics B, 2020, 29, 128701.	0.7	6
57	Single molecular kinetics during the interactions between melittin and a bi-component lipid membrane. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 108701.	0.2	6
58	Interactions between polymyxin B and various bacterial membrane mimics: A molecular dynamics study. Colloids and Surfaces B: Biointerfaces, 2022, 211, 112288.	2.5	6
59	Cholesterols Work as a Molecular Regulator of the Antimicrobial Peptide-Membrane Interactions. Frontiers in Molecular Biosciences, 2021, 8, 638988.	1.6	5
60	Photo-Voltage Transients for Real-Time Analysis of the Interactions between Molecules and Membranes. ACS Applied Bio Materials, 2021, 4, 620-629.	2.3	5
61	Self-assembly of monolayered lipid membranes for surface-coating of a nanoconfined Bombyx mori silk fibroin film. RSC Advances, 2015, 5, 65684-65689.	1.7	4
62	In-situ GISAXS investigation of the structure evolution mechanism of template removal of ordered mesoporous films prepared via a soft-templating method. Applied Surface Science, 2019, 479, 776-785.	3.1	4
63	Bifunctional graphene oxide nanosheets for interfacially robust polymer actuators with instant solvent-induced self-folding. Polymer, 2020, 186, 122037.	1.8	4
64	Computational design of a minimal â€œprotein-likeâ€•conjugate for potent membrane poration. Giant, 2021, 8, 100071.	2.5	4
65	Single-molecule study on the interactions between melittin and a lipid membrane. Wuli Xuebao/Acta Physica Sinica, 2021, .	0.2	2
66	Ligand-decoration determines the translational and rotational dynamics of nanoparticles on a lipid bilayer membrane. Physical Chemistry Chemical Physics, 2021, 23, 9158-9165.	1.3	2
67	A real-time and in-situ monitoring of the molecular interactions between drug carrier polymers and a phospholipid membrane. Colloids and Surfaces B: Biointerfaces, 2022, 209, 112161.	2.5	2
68	One-pot synthesis of silicon based nanoparticles with incorporated phthalocyanine for long-term bioimaging and photo-dynamic therapy of tumors. Nanotechnology, 2017, 28, 135601.	1.3	1
69	Photoluminescence modulation of silicon nanoparticles via highly ordered arrangement with phospholipid membranes. Colloids and Surfaces B: Biointerfaces, 2018, 170, 656-662.	2.5	1
70	Real-time monitoring the staged interactions between cationic surfactants and a phospholipid bilayer membrane. Physical Chemistry Chemical Physics, 2022, 24, 5360-5370.	1.3	0