Sofiya Kolusheva

List of Publications by Year
in descending order

95 papers	4,897 citations	101543 36 h-index	95266 68 g-index
99 all docs	99 docs citations	99 times ranked	5775 citing authors

#	Article	IF	Citations
1	Carbohydrate Biosensors. Chemical Reviews, 2004, 104, 5987-6016.	47.7	337
2	Self-assembling dipeptide antibacterial nanostructures with membrane disrupting activity. Nature Communications, 2017, 8, 1365.	12.8	299
3	Carbohydrate Biosensors. ChemInform, 2005, 36, no.	0.0	223
4	Cation-Selective Color Sensors Composed of Ionophoreâ˘'Phospholipidâ˘'Polydiacetylene Mixed Vesicles. Journal of the American Chemical Society, 2000, 122, 776-780.	13.7	217
5	A colorimetric assay for rapid screening of antimicrobial peptides. Nature Biotechnology, 2000, 18, 225-227.	17.5	209
6	Green synthesis of gold nanoparticles using plant extracts as reducing agents. International Journal of Nanomedicine, 2014, 9, 4007.	6.7	209
7	The Human Islet Amyloid Polypeptide Forms Transient Membrane-Active Prefibrillar Assemblies. Biochemistry, 2003, 42, 10971-10977.	2.5	168
8	Rapid Colorimetric Detection of Antibodyâ˘'Epitope Recognition at a Biomimetic Membrane Interface. Journal of the American Chemical Society, 2001, 123, 417-422.	13.7	166
9	Peptideâ˘'Membrane Interactions Studied by a New Phospholipid/Polydiacetylene Colorimetric Vesicle Assayâ€. Biochemistry, 2000, 39, 15851-15859.	2.5	162
10	Colorimetric Polydiacetyleneâ€"Aerogel Detector for Volatile Organic Compounds (VOCs). ACS Applied Materials & Interfaces, 2017, 9, 2891-2898.	8.0	139
11	Color Fingerprinting of Proteins by Calixarenes Embedded in Lipid/Polydiacetylene Vesicles. Journal of the American Chemical Society, 2006, 128, 13592-13598.	13.7	130
12	Polymerized lipid vesicles as colorimetric biosensors for biotechnological applications. Biotechnology Advances, 2001, 19, 109-118.	11.7	124
13	Selective Detection of Catecholamines by Synthetic Receptors Embedded in Chromatic Polydiacetylene Vesicles. Journal of the American Chemical Society, 2005, 127, 10000-10001.	13.7	102
14	Membrane interactions of ionic liquids: Possible determinants for biological activity and toxicity. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2967-2974.	2.6	102
15	Interactions of Mouse Paneth Cell Î±-Defensins and Î±-Defensin Precursors with Membranes. Journal of Biological Chemistry, 2003, 278, 13838-13846.	3.4	96
16	Chiral modulation of amyloid beta fibrillation and cytotoxicity by enantiomeric carbon dots. Chemical Communications, 2018, 54, 7762-7765.	4.1	95
17	Rapid Chromatic Detection of Bacteria by Use of a New Biomimetic Polymer Sensor. Applied and Environmental Microbiology, 2006, 72, 7339-7344.	3.1	85
18	Dynamics of Photoinduced Degradation of Perovskite Photovoltaics: From Reversible to Irreversible Processes. ACS Applied Energy Materials, 2018, 1, 799-806.	5.1	85

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19	Membrane analysis with amphiphilic carbon dots. Chemical Communications, 2014, 50, 10299-10302.	4.1	84
20	Poly(methyl methacrylate)-Supported Polydiacetylene Films: Unique Chromatic Transitions and Molecular Sensing. ACS Applied Materials & Interfaces, 2014, 6, 8613-8620.	8.0	70
21	Colorimetric Detection and Fingerprinting of Bacteria by Glass-Supported Lipid/Polydiacetylene Films. Langmuir, 2007, 23, 4682-4687.	3.5	69
22	Intrinsic Fluorescence of Metabolite Amyloids Allows Labelâ€Free Monitoring of Their Formation and Dynamics in Live Cells. Angewandte Chemie - International Edition, 2018, 57, 12444-12447.	13.8	67
23	Structure-Activity Determinants in Paneth Cell Î±-Defensins. Journal of Biological Chemistry, 2004, 279, 11976-11983.	3.4	63
24	Bacoside-A, an Indian Traditional-Medicine Substance, Inhibits Î²-Amyloid Cytotoxicity, Fibrillation, and Membrane Interactions. ACS Chemical Neuroscience, 2017, 8, 884-891.	3.5	60
25	Visualization of Membrane Processes in Living Cells by Surfaceâ€Attached Chromatic Polymer Patches. Angewandte Chemie - International Edition, 2005, 44, 1092-1096.	13.8	59
26	Biomimetic lipid/polymer colorimetric membranes. Journal of Lipid Research, 2003, 44, 65-71.	4.2	58
27	Investigations of antimicrobial peptides in planar film systems. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1393-1407.	2.6	58
28	Membrane binding and permeation by indolicidin analogs studied by a biomimetic lipid/polydiacetylene vesicle assay. Peptides, 2003, 24, 1753-1761.	2.4	57
29	Quantitative interactions between cryptdin-4 amino terminal variants and membranes. Peptides, 2003, 24, 1795-1805.	2.4	53
30	Lipid binding and membrane penetration of polymyxin B derivatives studied in a biomimetic vesicle system. Biochemical Journal, 2003, 375, 405-413.	3.7	53
31	Biomolecular Sensing with Colorimetric Vesicles. , 2007, , 155-180.		52
32	Membrane Interactions of Host-defense Peptides Studied in Model Systems. Current Protein and Peptide Science, 2005, 6, 103-114.	1.4	50
33	Selective Labeling and Growth Inhibition of <i>Pseudomonas aeruginosa</i> by Aminoguanidine Carbon Dots. ACS Infectious Diseases, 2019, 5, 292-302.	3.8	50
34	Rapid Colorimetric Screening of Drug Interaction and Penetration Through Lipid Barriers. Pharmaceutical Research, 2006, 23, 580-588.	3.5	48
35	A new colorimetric assay for studying and rapid screening of membrane penetration enhancers. Pharmaceutical Research, 2001, 18, 943-949.	3.5	47
36	Imaging <i>Pseudomonas aeruginosa</i> Biofilm Extracellular Polymer Scaffolds with Amphiphilic Carbon Dots. ACS Chemical Biology, 2016, 11, 1265-1270.	3.4	43

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37	Cation Diffusion Facilitators Transport Initiation and Regulation Is Mediated by Cation Induced Conformational Changes of the Cytoplasmic Domain. PLoS ONE, 2014, 9, e92141.	2.5	41
38	Structureâ€“function studies of the magnetite-biomineralizing magnetosome-associated protein MamC. Journal of Structural Biology, 2016, 194, 244-252.	2.8	40
39	Bilayer localization of membrane-active peptides studied in biomimetic vesicles by visible and fluorescence spectroscopies. FEBS Journal, 2003, 270, 4478-4487.	0.2	36
40	Detection and analysis of membrane interactions by a biomimetic colorimetric lipid/polydiacetylene assay. Analytical Biochemistry, 2003, 319, 96-104.	2.4	34
41	Glass-supported lipid/polydiacetylene films for colour sensing of membrane-active compounds. Biosensors and Bioelectronics, 2007, 22, 3247-3251.	10.1	34
42	Aggregation of Oligoarginines at Phospholipid Membranes: Molecular Dynamics Simulations, Time-Dependent Fluorescence Shift, and Biomimetic Colorimetric Assays. Journal of Physical Chemistry B, 2013, 117, 11530-11540.	2.6	34
43	Microscopic Visualization of Alamethicin Incorporation into Model Membrane Monolayers. Langmuir, 2004, 20, 11084-11091.	3.5	32
44	Lipid-Bilayer Dynamics Probed by a Carbon Dot-Phospholipid Conjugate. Biophysical Journal, 2016, 110, 2016-2025.	0.5	31
45	Pardaxin, a fish toxin peptide interaction with a biomimetic phospholipid/polydiacetylene membrane assay. Peptides, 2008, 29, 1620-1625.	2.4	30
46	Membrane interactions and lipid binding of casein oligomers and early aggregates. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 2341-2349.	2.6	30
47	Lipid/Polydiacetylene Films for Colorimetric Protein Surface-Charge Analysis. Analytical Chemistry, 2008, 80, 7804-7811.	6.5	28
48	Toxicity Inhibitors Protect Lipid Membranes from Disruption by AÎ²42. ACS Chemical Neuroscience, 2015, 6, 1860-1869.	3.5	28
49	Bolaamphiphilic vesicles encapsulating iron oxide nanoparticles: New vehicles for magnetically targeted drug delivery. International Journal of Pharmaceutics, 2013, 450, 241-249.	5.2	26
50	Membrane Interactions of Novicidin, a Novel Antimicrobial Peptide: Phosphatidylglycerol Promotes Bilayer Insertion. Journal of Physical Chemistry B, 2010, 114, 11053-11060.	2.6	25
51	Lipid Bilayers Significantly Modulate Cross-Fibrillation of Two Distinct Amyloidogenic Peptides. Journal of the American Chemical Society, 2013, 135, 13582-13589.	13.7	25
52	Highly-doped Nd:YAG ceramics fabricated by conventional and high pressure SPS. Ceramics International, 2019, 45, 12279-12284.	4.8	24
53	Arachidonic acid is important for efficient use of light by the microalga Lobosphaera incisa under chilling stress. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2017, 1862, 853-868.	2.4	23
54	Lysineâ€Derived Carbon Dots for Chiral Inhibition of Prion Peptide Fibril Assembly. Advanced Therapeutics, 2018, 1, 1800006.	3.2	23

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55	Phospholipid-Induced Fibrillation of a Prion Amyloidogenic Determinant at the Air/Water Interface. Langmuir, 2009, 25, 12501-12506.	3.5	22
56	Some Phorbol Esters Might Partially Resemble Bryostatin 1 in their Actions on LNCaP Prostate Cancer Cells and U937 Leukemia Cells. ChemBioChem, 2011, 12, 1242-1251.	2.6	22
57	Understanding the Biomineralization Role of Magnetite-Interacting Components (MICs) From Magnetotactic Bacteria. Frontiers in Microbiology, 2018, 9, 2480.	3.5	21
58	Metabolite amyloid-like fibrils interact with model membranes. Chemical Communications, 2018, 54, 4561-4564.	4.1	20
59	Bacoside-A, an anti-amyloid natural substance, inhibits membrane disruption by the amyloidogenic determinant of prion protein through accelerating fibril formation. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 2208-2214.	2.6	18
60	Unilamellar Vesicles from Amphiphilic Graphene Quantum Dots. Chemistry - A European Journal, 2015, 21, 7755-7759.	3.3	16
61	Membrane anchoring of diacylglycerol lactones substituted with rigid hydrophobic acyl domains correlates with biological activities. FEBS Journal, 2010, 277, 233-243.	4.7	15
62	N-terminal aromatic residues closely impact the cytolytic activity of cupiennin 1a, a major spider venom peptide. Toxicon, 2013, 75, 177-186.	1.6	15
63	Membrane Interactions and Metal Ion Effects on Bilayer Permeation of the Lipophilic Ion Modulator DP-109. Biochemistry, 2005, 44, 12077-12085.	2.5	13
64	Chromatic Dendrimer/Polydiacetylene Nanoparticles. ACS Applied Polymer Materials, 2021, 3, 2931-2937.	4.4	12
65	Screening Membrane Interactions of Pesticides by Cells Decorated with Chromatic Polymer Nanopatches. Chemical Research in Toxicology, 2009, 22, 90-96.	3.3	11
66	Synthesis, biological, and biophysical studies of DAG-indololactones designed as selective activators of RasGRP. Bioorganic and Medicinal Chemistry, 2014, 22, 3123-3140.	3.0	11
67	Nanoparticles modulate membrane interactions of human Islet amyloid polypeptide (hIAPP). Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1810-1817.	2.6	11
68	Cardiolipin mediates curcumin interactions with mitochondrial membranes. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 75-82.	2.6	11
69	Imaging membrane processes in erythrocyte ghosts by surface fusion of a chromatic polymer. Analytical Biochemistry, 2006, 348, 151-153.	2.4	10
70	Structure and membrane-targeting of a Bordetella pertussis effector N-terminal domain. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 183054.	2.6	10
71	Membrane processes and biophysical characterization of living cells decorated with chromatic polydiacetylene vesicles. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 1335-1343.	2.6	9
72	<i>N</i>â€Methylâ€Substituted Fluorescent DAGâ€“Indololactone Isomers Exhibit Dramatic Differences in Membrane Interactions and Biological Activity. ChemBioChem, 2011, 12, 2331-2340.	2.6	9

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73	Biofilm Formation on Chromatic Solâ€"Gel/Polydiacetylene Films. ChemPlusChem, 2012, 77, 752-757.	2.8	9
74	Metal binding to the dynamic cytoplasmic domain of the cation diffusion facilitator (CDF) protein MamM induces a â€˜lockedâ€ˆinâ€™ configuration. FEBS Journal, 2019, 286, 2193-2215.	4.7	9
75	Conformationally Constrained Analogues of Diacylglycerol (DAG). 31. Modulation of the Biological Properties of Diacylgycerol Lactones (DAG-lactones) Containing Rigid-Rod Acyl Groups Separated from the Core Lactone by Spacer Units of Different Lengths. Journal of Medicinal Chemistry, 2009, 52, 3274-3283.	6.4	8
76	BtcA, A Class IA Type III Chaperone, Interacts with the BteA N-Terminal Domain through a Globular/Non-Globular Mechanism. PLoS ONE, 2013, 8, e81557.	2.5	8
77	Polydiacetylene-supported silica films formed at the air/water interface. Journal of Colloid and Interface Science, 2011, 364, 428-434.	9.4	7
78	Tyrosine carbon dots inhibit fibrillation and toxicity of the human islet amyloid polypeptide. Nanoscale Advances, 2020, 2, 5866-5873.	4.6	7
79	Colorimetric Polymer Assay for the Diagnosis of Plasma Lipids Atherogenic Quality in Hypercholesterolemic Patients. Molecular Diagnosis and Therapy, 2015, 19, 35-43.	3.8	6
80	Lipoprotein interactions with chromatic membranes as a novel marker for oxidative stress-related diseases. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 2436-2443.	2.6	5
81	A Novel â€œReactomicsâ€• Approach for Cancer Diagnostics. Sensors, 2012, 12, 5572-5585.	3.8	5
82	Characterization of the N-Terminal Domain of BteA: A Bordetella Type III Secreted Cytotoxic Effector. PLoS ONE, 2013, 8, e55650.	2.5	5
83	Ultrashort Cell-Penetrating Peptides for Enhanced Sonophoresis-Mediated Transdermal Transport. ACS Applied Bio Materials, 2020, 3, 8395-8401.	4.6	5
84	Peptide Self-Assembly Is Linked to Antibacterial, but Not Antifungal, Activity of Histatin 5 Derivatives. MSphere, 2020, 5, .	2.9	5
85	Intrinsic Fluorescence of Metabolite Amyloids Allows Labelâ€Free Monitoring of Their Formation and Dynamics in Live Cells. Angewandte Chemie, 2018, 130, 12624-12627.	2.0	4
86	Vesicle-Based Assays to Study Membrane Interactions of Amyloid Peptides. Methods in Molecular Biology, 2019, 1873, 39-51.	0.9	4
87	Visualization of Membrane Processes in Living Cells by Surfaceâ€Attached Chromatic Polymer Patches. Angewandte Chemie, 2005, 117, 1116-1120.	2.0	3
88	Chromatic polymer assays for the analysis of lipid and lipoprotein peroxidation. Lipid Technology, 2015, 27, 86-89.	0.3	3
89	A Surface Study of Ultrathin Ceria Nanoparticles Decorated with Transitionâ€Metal Ions. Particle and Particle Systems Characterization, 2019, 36, 1800452.	2.3	3
90	The cation diffusion facilitator protein MamM's cytoplasmic domain exhibits metal-type dependent binding modes and discriminates against Mn2+. Journal of Biological Chemistry, 2020, 295, 16614-16629.	3.4	3

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91	Membraneâ€Surface Anchoring of Charged Diacylglycerolâ€Lactones Correlates with Biological Activities. ChemBioChem, 2010, 11, 2003-2009.	2.6	2
92	The metal binding site composition of the cation diffusion facilitator protein MamM cytoplasmic domain impacts its metal responsivity. Scientific Reports, 2020, 10, 14022.	3.3	2
93	Imaging Flow Cytometry Illuminates New Dimensions of Amyloid Peptide-Membrane Interactions. Biophysical Journal, 2020, 118, 1270-1278.	0.5	2
94	Colorimetric Biosensor Vesicles for Biotechnological Applications. Materials Research Society Symposia Proceedings, 2002, 724, N7.23.1.	0.1	1
95	Inside Cover: Membrane-Surface Anchoring of Charged Diacylglycerol-Lactones Correlates with Biological Activities (ChemBioChem 14/2010). ChemBioChem, 2010, 11, 1926-1926.	2.6	0