George W Gokel

List of Publications by Year
in descending order

73	4,203	28	64
papers	citations	h-index	g-index
		186265	110387

76	76	76	3810
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Crown ethers having side arms: a diverse and versatile supramolecular chemistry. Journal of Coordination Chemistry, 2021, 74, 14-39.	2.2	12
2	Bis(Tryptophan) Amphiphiles Form Ion Conducting Pores and Enhance Antimicrobial Activity against Resistant Bacteria. Antibiotics, 2021, 10, 1391.	3.7	0
3	Supramolecular pore formation as an antimicrobial strategy. Coordination Chemistry Reviews, 2020, 412, 213264.	18.8	15
4	Synthetic ionophores as non-resistant antibiotic adjuvants. RSC Advances, 2019, 9, 2217-2230.	3.6	17
5	Condensation of plasmid DNA by benzyl hydraphiles and lariat ethers: dependence on pH and chain length. Supramolecular Chemistry, 2017, 29, 167-175.	1.2	0
6	Supramolecular cation transporters alter root morphology in the Arabidopsis thaliana plant. Inorganica Chimica Acta, 2017, 468, 183-191.	2.4	1
7	Hydraphiles enhance antimicrobial potency against Escherichia coli, Pseudomonas aeruginosa, and Bacillus subtilis. Bioorganic and Medicinal Chemistry, 2016, 24, 2864-2870.	3.0	4
8	Reversal of Tetracycline Resistance in <i>Escherichia coli</i> by Noncytotoxic <i>bis</i>(Tryptophan)s. Journal of the American Chemical Society, 2016, 138, 10571-10577.	13.7	20
9	Antibiotic Potency against <i>E.â€…coli</i> Is Enhanced by Channelâ€Forming Alkyl Lariat Ethers. ChemBioChem, 2016, 17, 2153-2161.	2.6	23
10	The aqueous medium-dimethylsulfoxide conundrum in biological studies. RSC Advances, 2015, 5, 8088-8093.	3.6	13
11	Morphologies of branched-chain pyrogallol[4]arenes in the solid state. Supramolecular Chemistry, 2014, 26, 506-516.	1.2	7
12	Improved Syntheses of Benzyl Hydraphile Synthetic Cation-Conducting Channels. Synthesis, 2014, 46, 2771-2779.	2.3	9
13	Ion transport through bilayer membranes mediated by pyrogallol[4]arenes. Inorganica Chimica Acta, 2014, 417, 177-185.	2.4	3
14	Hydraphile synthetic ion channels alter root architecture in Arabidopsis thaliana. Chemical Communications, 2014, 50, 11562-11564.	4.1	8
15	Synthetic Ion Channels: From Pores to Biological Applications. Accounts of Chemical Research, 2013, 46, 2824-2833.	15.6	229
16	Properties of long alkyl-chained resorcin[4]arenes in bilayers and on the Langmuir trough. New Journal of Chemistry, 2013, 37, 105-111.	2.8	3
17	Synthetic membrane active amphiphiles. Advanced Drug Delivery Reviews, 2012, 64, 784-796.	13.7	42
18	Pore formation in phospholipid bilayers by amphiphilic cavitands. Organic and Biomolecular Chemistry, 2011, 9, 4498.	2.8	24

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19	UV resonance Raman study of cationâ€"Ï€ interactions in an indole crown ether. Journal of Raman Spectroscopy, 2011, 42, 633-638.	2.5	25
20	Alkali metal and ammonium cationâ€"arene interactions with tetraphenylborate anion. Supramolecular Chemistry, 2010, 22, 73-80.	1.2	10
21	Dianilides of dipicolinic acid function as synthetic chloride channels. Chemical Communications, 2010, 46, 2838.	4.1	88
22	Enhancement of antimicrobial activity by synthetic ion channel synergy. Chemical Communications, 2010, 46, 8166.	4.1	27
23	Pyrogallarene-based ion-conducting pores that show reversible conductance properties. Chemical Communications, 2009, , 6092.	4.1	23
24	Guest molecule entrapment by both capsule and hydrocarbon sidechains in self-assembled pyrogallol[4]arenes. New Journal of Chemistry, 2009, 33, 1563.	2.8	25
25	Transport of chloride ion through phospholipid bilayers mediated by synthetic ionophores. New Journal of Chemistry, 2009, 33, 947.	2.8	93
26	Coordination and transport of alkali metal cations through phospholipid bilayer membranes by hydraphile channels. Coordination Chemistry Reviews, 2008, 252, 886-902.	18.8	45
27	Structure and medium effects on hydraphile synthetic ion channel toxicity to the bacterium E. coli. New Journal of Chemistry, 2005, 29, 205.	2.8	22
28	Dynamic Assessment of Bilayer Thickness by Varying Phospholipid and Hydraphile Synthetic Channel Chain Lengths. Journal of the American Chemical Society, 2005, 127, 636-642.	13.7	62
29	Correlation of bilayer membrane cation transport and biological activity in alkyl-substituted lariat ethers. Organic and Biomolecular Chemistry, 2005, 3, 1647.	2.8	48
30	Crown Ethers:Â Sensors for Ions and Molecular Scaffolds for Materials and Biological Models. Chemical Reviews, 2004, 104, 2723-2750.	47.7	1,314
31	Functional, synthetic organic chemical models of cellular ion channels. Bioorganic and Medicinal Chemistry, 2004, 12, 1291-1304.	3.0	50
32	Ferrocene derivatives as receptors to explore ammonium cationâ€"Ï€ interactions. New Journal of Chemistry, 2004, 28, 907-911.	2.8	15
33	The aromatic sidechains of amino acids as neutral donor groups for alkali metal cations. Chemical Communications, 2003, , 2847.	4.1	84
34	Some thoughts on chemistry and biology. New Journal of Chemistry, 2003, 27, 1157.	2.8	0
35	Replacing proline at the apex of heptapeptide-based chloride ion transporters alters their properties and their ionophoretic efficacy. New Journal of Chemistry, 2003, 27, 60-67.	2.8	33
36	Synthetic Hydraphile Channels of Appropriate Length KillEscherichiacoli. Journal of the American Chemical Society, 2002, 124, 9022-9023.	13.7	88

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37	Lariat Ether Receptor Systems Show Experimental Evidence for Alkali Metal Cationâˆ’Ï€ Interactions. Accounts of Chemical Research, 2002, 35, 878-886.	15.6	226
38	Synthetic models of cation-conducting channels. Chemical Society Reviews, 2001, 30, 274-286.	38.1	253
39	Solid state evidence for Ï€-complexation of sodium cation by carbonâ€“carbon double bonds. Chemical Communications, 2001, , 1858-1859.	4.1	31
40	Hydraphile Synthetic Channel Compounds: Models for Transmembrane, Cation-conducting Transporters. Supramolecular Chemistry, 2001, 13, 391-404.	1.2	1
41	Solid-state bilayer formation from a dialkyl-substituted lariat ether that forms stable vesicles in aqueous suspension. Journal of Physical Organic Chemistry, 2001, 14, 383-391.	1.9	17
42	The effect of twinâ€‘tailed sidearms on sodium cation transport in synthetic hydraphile cation channels. Journal of Heterocyclic Chemistry, 2001, 38, 1393-1400.	2.6	8
43	Solid-State Evidence for Alkali Metal to Arene Pi-Complexation. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2001, 41, 7-12.	1.6	6
44	Artificial Cation-Conducting Channels: Design, Synthesis, and Characterization. Cell Biochemistry and Biophysics, 2001, 35, 211-231.	1.8	6
45	Sodium cation complexation in a macrocycle containing thymines as sidearm donor groups. Journal of Chemical Crystallography, 2000, 30, 227-231.	1.1	4
46	Synthetic, Sodium-Ion-Conducting Tris(Macrocycle) Channels that Function in a Phospholipid Bilayer Membrane: An Overview. Supramolecular Chemistry, 2000, 12, 13-22.	1.2	1
47	Enhancement of cation transport in synthetic hydraphile channels having covalently-linked headgroups. Chemical Communications, 2000, , 2373-2374.	4.1	20
48	The central â€˜relayâ€™ unit in hydraphile channels as a model for the water-and-ion â€˜capsuleâ€™ of channel proteins. Chemical Communications, 2000, , 2371-2372.	4.1	31
49	Pyxophanes: selective gas phase ion complexation by 1,6,13,18-tetraoxa[6.6]paracyclophane-3,15-diyne. Chemical Communications, 2000, , 2377-2378.	4.1	9
50	Aggregate formation from 3-alkylindoles: amphiphilic models for interfacial helix anchoring groups. Chemical Communications, 2000, , 433-434.	4.1	11
51	Evidence for multiple alkali metal cation complexation in membrane-spanning ion transporters. Chemical Communications, 2000, , 2375-2376.	4.1	11
52	Hydraphiles: design, synthesis and analysis of a family of synthetic, cation-conducting channels. Chemical Communications, 2000, , 1-9.	4.1	99
53	<i>N</i>,<i>N</i>-Didansyl-4,13-diaza-18-Crown-6: A Fluorescence-sensitive, Weakly Complexing Macrocycle Used to Probe the Phospholipid Vesicle Environment. Supramolecular Chemistry, 1999, 10, 163-171.	1.2	7
54	Cation-Ï€ Complexation of Potassium Cation with the Phenolic Sidechain of Tyrosine. Journal of the American Chemical Society, 1999, 121, 8405-8406.	13.7	72

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55	A novel oxazine from the condensation of chloroanthraquinone and t-butyl L-prolinate. Journal of Chemical Crystallography, 1998, 28, 47-51.	1.1	0
56	Structure of N-myristoyltransferase with bound myristoylCoA and peptide substrate analogs. Nature Structural Biology, 1998, 5, 1091-1097.	9.7	118
57	A Synthetic Cation-Transporting Calix[4]arene Derivative Active in Phospholipid Bilayers. Angewandte Chemie - International Edition, 1998, 37, 1534-1537.	13.8	68
58	A Redox-switchable Molecular Receptor Based on Anthraquinone. Supramolecular Chemistry, 1998, 9, 199-202.	1.2	7
59	Steroidal Aza-Lariat Ethers: Syntheses and Aggregation Behavior. Supramolecular Chemistry, 1997, 8, 213-223.	1.2	4
60	REDOX-SWITCHED AMPHIPHILES: OXIDIZED FERROCENE DERIVATIVES FORM STABLE VESICLES WHEN EITHER ONE OR TWO ALKYL TAILS ARE PRESENT. Journal of Physical Organic Chemistry, 1997, 10, 323-334.	1.9	23
61	Detection of hydrogen-bonded adenine-thymine base-pair complexes by electrospray mass spectrometry. Supramolecular Chemistry, 1996, 7, 85-90.	1.2	8
62	Molekulare Erkennung an GrenzflÃchen: Bindung von Ferrocenylgruppen, die in einer Monoschicht verankert sind, durch eine amphiphile Calixarenâ€Wirtverbindung. Angewandte Chemie, 1995, 107, 236-239.	2.0	11
63	Ferrocene as a molecular building block in lariat ethers and other complexing agents. Supramolecular Chemistry, 1995, 6, 79-85.	1.2	10
64	Analysis of sodium, potassium, calcium, and ammonium cation binding and selectivity in one- and two-armed nitrogenpivot lariat ethers. Supramolecular Chemistry, 1995, 5, 45-60.	1.2	30
65	Ultrathin monolayer lipid membranes from a new family of crown ether-based bola-amphiphiles. Journal of the American Chemical Society, 1993, 115, 1705-1711.	13.7	78
66	Lariat ether bola-amphiphiles: formation of crown ether based bola-amphisomes. Journal of the Chemical Society Chemical Communications, 1992, , 520-522.	2.0	19
67	MyristoylCoA:protein <i>N</i>â€Myristoyltransferase: Probing Hostâ€Guest Interactions Using Synthetic Substrates. Israel Journal of Chemistry, 1992, 32, 127-133.	2.3	4
68	A direct comparison of extraction and homogeneous binding constants as predictors of efficacy in alkali metal cation transport. Tetrahedron Letters, 1991, 32, 6269-6272.	1.4	43
69	Aggregation of steroidal lariat ethers: the first example of nonionic liposomes (niosomes) formed from neutral crown ether compounds. Journal of the Chemical Society Chemical Communications, 1988, , 836.	2.0	58
70	Electrochemical switching of lariat ethers: enhanced cation binding by one- and two-electron reduction of an anthraquinone sidearm. Journal of the Chemical Society Chemical Communications, 1986, , 220.	2.0	45
71	12-, 15-, and 18-Membered-ring nitrogen-pivot lariat ethers: syntheses, properties, and sodium and ammonium cation binding properties. Journal of the American Chemical Society, 1985, 107, 6659-6668.	13.7	193
72	Electrochemically switched cation binding in nitrobenzene-substituted, nitrogen-pivot lariat ethers. Journal of the American Chemical Society, 1984, 106, 1633-1635.	13.7	50

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73	Lariat ethers. Synthesis and cation binding of macrocyclic polyethers possessing axially disposed secondary donor groups. Journal of the Chemical Society Chemical Communications, 1980, , 1053.	2.0	139