George W Gokel

List of Publications by Year
in descending order

73 papers	4,203 citations	186265 28 h-index	110387 64 g-index
76 all docs	76 docs citations	76 times ranked	3810 citing authors

#	Article	IF	Citations
1	Crown Ethers:Â Sensors for Ions and Molecular Scaffolds for Materials and Biological Models. Chemical Reviews, 2004, 104, 2723-2750.	47.7	1,314
2	Synthetic models of cation-conducting channels. Chemical Society Reviews, 2001, 30, 274-286.	38.1	253
3	Synthetic Ion Channels: From Pores to Biological Applications. Accounts of Chemical Research, 2013, 46, 2824-2833.	15.6	229
4	Lariat Ether Receptor Systems Show Experimental Evidence for Alkali Metal Cationâ^'Ï€ Interactions. Accounts of Chemical Research, 2002, 35, 878-886.	15.6	226
5	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
6	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
7	Structure of N-myristoyltransferase with bound myristoylCoA and peptide substrate analogs. Nature Structural Biology, 1998, 5, 1091-1097.	9.7	118
8	Hydraphiles: design, synthesis and analysis of a family of synthetic, cation-conducting channels. Chemical Communications, 2000, , 1-9.	4.1	99
9	Transport of chloride ion through phospholipid bilayers mediated by synthetic ionophores. New Journal of Chemistry, 2009, 33, 947.	2.8	93
10	Synthetic Hydraphile Channels of Appropriate Length KillEscherichiacoli. Journal of the American Chemical Society, 2002, 124, 9022-9023.	13.7	88
11	Dianilides of dipicolinic acid function as synthetic chloride channels. Chemical Communications, 2010, 46, 2838.	4.1	88
12	The aromatic sidechains of amino acids as neutral donor groups for alkali metal cations. Chemical Communications, 2003, , 2847.	4.1	84
13	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
14	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
15	A Synthetic Cation-Transporting Calix[4]arene Derivative Active in Phospholipid Bilayers. Angewandte Chemie - International Edition, 1998, 37, 1534-1537.	13.8	68
16	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
17	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
18	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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19	Functional, synthetic organic chemical models of cellular ion channels. Bioorganic and Medicinal Chemistry, 2004, 12, 1291-1304.	3.0	50
20	Correlation of bilayer membrane cation transport and biological activity in alkyl-substituted lariat ethers. Organic and Biomolecular Chemistry, 2005, 3, 1647.	2.8	48
21	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
22	Coordination and transport of alkali metal cations through phospholipid bilayer membranes by hydraphile channels. Coordination Chemistry Reviews, 2008, 252, 886-902.	18.8	45
23	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
24	Synthetic membrane active amphiphiles. Advanced Drug Delivery Reviews, 2012, 64, 784-796.	13.7	42
25	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
26	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
27	Solid state evidence for Ï€-complexation of sodium cation by carbonâ€“carbon double bonds. Chemical Communications, 2001, , 1858-1859.	4.1	31
28	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
29	Enhancement of antimicrobial activity by synthetic ion channel synergy. Chemical Communications, 2010, 46, 8166.	4.1	27
30	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
31	UV resonance Raman study of cationâ€“Ï€ interactions in an indole crown ether. Journal of Raman Spectroscopy, 2011, 42, 633-638.	2.5	25
32	Pore formation in phospholipid bilayers by amphiphilic cavitands. Organic and Biomolecular Chemistry, 2011, 9, 4498.	2.8	24
33	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
34	Pyrogallarene-based ion-conducting pores that show reversible conductance properties. Chemical Communications, 2009, , 6092.	4.1	23
35	Antibiotic Potency against <i>E.â€…coli</i> Is Enhanced by Channelâ€Forming Alkyl Lariat Ethers. ChemBioChem, 2016, 17, 2153-2161.	2.6	23
36	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

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37	Enhancement of cation transport in synthetic hydraphile channels having covalently-linked headgroups. Chemical Communications, 2000, , 2373-2374.	4.1	20
38	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
39	Lariat ether bola-amphiphiles: formation of crown ether based bola-amphisomes. Journal of the Chemical Society Chemical Communications, 1992, , 520-522.	2.0	19
40	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
41	Synthetic ionophores as non-resistant antibiotic adjuvants. RSC Advances, 2019, 9, 2217-2230.	3.6	17
42	Ferrocene derivatives as receptors to explore ammonium cationâ€“Ï€ interactions. New Journal of Chemistry, 2004, 28, 907-911.	2.8	15
43	Supramolecular pore formation as an antimicrobial strategy. Coordination Chemistry Reviews, 2020, 412, 213264.	18.8	15
44	The aqueous medium-dimethylsulfoxide conundrum in biological studies. RSC Advances, 2015, 5, 8088-8093.	3.6	13
45	Crown ethers having side arms: a diverse and versatile supramolecular chemistry. Journal of Coordination Chemistry, 2021, 74, 14-39.	2.2	12
46	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
47	Aggregate formation from 3-alkylindoles: amphiphilic models for interfacial helix anchoring groups. Chemical Communications, 2000, , 433-434.	4.1	11
48	Evidence for multiple alkali metal cation complexation in membrane-spanning ion transporters. Chemical Communications, 2000, , 2375-2376.	4.1	11
49	Ferrocene as a molecular building block in lariat ethers and other complexing agents. Supramolecular Chemistry, 1995, 6, 79-85.	1.2	10
50	Alkali metal and ammonium cationâ€“arene interactions with tetraphenylborate anion. Supramolecular Chemistry, 2010, 22, 73-80.	1.2	10
51	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
52	Improved Syntheses of Benzyl Hydraphile Synthetic Cation-Conducting Channels. Synthesis, 2014, 46, 2771-2779.	2.3	9
53	Detection of hydrogen-bonded adenine-thymine base-pair complexes by electrospray mass spectrometry. Supramolecular Chemistry, 1996, 7, 85-90.	1.2	8
54	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

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55	Hydraphile synthetic ion channels alter root architecture in Arabidopsis thaliana. Chemical Communications, 2014, 50, 11562-11564.	4.1	8
56	A Redox-switchable Molecular Receptor Based on Anthraquinone. Supramolecular Chemistry, 1998, 9, 199-202.	1.2	7
57	<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
58	Morphologies of branched-chain pyrogallol[4]arenes in the solid state. Supramolecular Chemistry, 2014, 26, 506-516.	1.2	7
59	Solid-State Evidence for Alkali Metal to Arene Pi-Complexation. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2001, 41, 7-12.	1.6	6
60	Artificial Cation-Conducting Channels: Design, Synthesis, and Characterization. Cell Biochemistry and Biophysics, 2001, 35, 211-231.	1.8	6
61	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
62	Steroidal Aza-Lariat Ethers: Syntheses and Aggregation Behavior. Supramolecular Chemistry, 1997, 8, 213-223.	1.2	4
63	Sodium cation complexation in a macrocycle containing thymines as sidearm donor groups. Journal of Chemical Crystallography, 2000, 30, 227-231.	1.1	4
64	Hydraphiles enhance antimicrobial potency against Escherichia coli, Pseudomonas aeruginosa, and Bacillus subtilis. Bioorganic and Medicinal Chemistry, 2016, 24, 2864-2870.	3.0	4
65	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
66	Ion transport through bilayer membranes mediated by pyrogallol[4]arenes. Inorganica Chimica Acta, 2014, 417, 177-185.	2.4	3
67	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
68	Hydraphile Synthetic Channel Compounds: Models for Transmembrane, Cation-conducting Transporters. Supramolecular Chemistry, 2001, 13, 391-404.	1.2	1
69	Supramolecular cation transporters alter root morphology in the Arabidopsis thaliana plant. Inorganica Chimica Acta, 2017, 468, 183-191.	2.4	1
70	A novel oxazine from the condensation of chloroanthraquinone and t-butyl L-prolinate. Journal of Chemical Crystallography, 1998, 28, 47-51.	1.1	0
71	Some thoughts on chemistry and biology. New Journal of Chemistry, 2003, 27, 1157.	2.8	0
72	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

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73	Bis(Tryptophan) Amphiphiles Form Ion Conducting Pores and Enhance Antimicrobial Activity against Resistant Bacteria. Antibiotics, 2021, 10, 1391.	3.7	0