Roberta Pinalli

List of Publications by Year
in descending order

73 papers	1,687 citations	279798 23 h-index	289244 40 g-index
76 all docs	76 docs citations	76 times ranked	1854 citing authors

#	Article	IF	Citations
1	Cavitand-Based Nanoscale Coordination Cages. Journal of the American Chemical Society, 2004, 126, 6516-6517.	13.7	143
2	Biochemical sensing with macrocyclic receptors. Chemical Society Reviews, 2018, 47, 7006-7026.	38.1	136
3	Cavitands at Work: From Molecular Recognition to Supramolecular Sensors. European Journal of Organic Chemistry, 2004, 2004, 451-462.	2.4	116
4	Supramolecular Sensing with Phosphonate Cavitands. Accounts of Chemical Research, 2013, 46, 399-411.	15.6	110
5	Surface-Confined Single Molecules: Assembly and Disassembly of Nanosize Coordination Cages on Gold (111). Chemistry - A European Journal, 2004, 10, 2199-2206.	3.3	74
6	Dynamic and Structural NMR Studies of Cavitand-Based Coordination Cages. Journal of the American Chemical Society, 2005, 127, 7025-7032.	13.7	69
7	The Origin of Selectivity in the Complexation of <i>N</i>-Methyl Amino Acids by Tetraphosphonate Cavitands. Journal of the American Chemical Society, 2016, 138, 8569-8580.	13.7	60
8	Polyethylene vitrimers via silyl ether exchange reaction. Polymer, 2020, 199, 122567.	3.8	57
9	Cucurbit[7]urilâ€Dimethyllysine Recognition in a Model Protein. Angewandte Chemie - International Edition, 2018, 57, 7126-7130.	13.8	56
10	Reprocessable vinylogous urethane cross-linked polyethylene <i>via</i> reactive extrusion. Polymer Chemistry, 2019, 10, 5534-5542.	3.9	56
11	Supramolecular Sensors for the Detection of Alcohols. Angewandte Chemie - International Edition, 1999, 38, 2377-2380.	13.8	50
12	Selective discrimination and classification of G-quadruplex structures with a hostâ€"guest sensing array. Nature Chemistry, 2021, 13, 488-495.	13.6	48
13	Triptyceneâ€Roofed Quinoxaline Cavitands for the Supramolecular Detection of BTEX in Air. Chemistry - A European Journal, 2016, 22, 3312-3319.	3.3	42
14	Environmental Gas Sensing with Cavitands. Chemistry - A European Journal, 2018, 24, 1010-1019.	3.3	42
15	Resorcinarene-based cavitands as building blocks for crystal engineering. CrystEngComm, 2016, 18, 5788-5802.	2.6	37
16	Dynamic Cross-Linking of Polyethylene via Sextuple Hydrogen Bonding Array. Macromolecules, 2018, 51, 7680-7691.	4.8	37
17	Cavitands as superior sorbents for benzene detection at trace levelElectronic supplementary information (ESI) available: synthetic procedures for the preparation of cavitands 2, 3; 29Si and 13C CP/MAS NMR spectra of MeCav and QxCav coated silica; desorption pattern of BTX observed for Tenax TAÂ® at 50â€‰Â°C; GC traces obtained from the desorption at 75â€‰Â°C of the BTX mixture trapped on AXCav trap and Carbotrap 100Â®. See http://www.rsc.org/suppdata/nj/b2/b210942e/. New Journal of Chemistry, 2003, 27, 502-509.	2.8	36
18	Cavitand-Functionalized Porous Silicon as an Active Surface for Organophosphorus Vapor Detection. Langmuir, 2012, 28, 1782-1789.	3.5	36

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19	Conformationally blocked quinoxaline cavitand as solid-phase microextraction coating for the selective detection of BTEX in air. Analytica Chimica Acta, 2016, 905, 79-84.	5.4	35
20	Threshold of toxicological concern approach for the risk assessment of substances used for the manufacture of plastic food contact materials. Trends in Food Science and Technology, 2011, 22, 523-534.	15.1	31
21	In Search of the Ultimate Benzene Sensor: The EtQxBox Solution. ACS Sensors, 2017, 2, 590-598.	7.8	29
22	Cavitand-Based Solid-Phase Microextraction Coating for the Selective Detection of Nitroaromatic Explosives in Air and Soil. Analytical Chemistry, 2014, 86, 10646-10652.	6.5	28
23	Investigation of the Origin of Selectivity in Cavitand-Based Supramolecular Sensors. Chemistry - A European Journal, 2003, 9, 5388-5395.	3.3	24
24	Cavitandâ€Based Coordination Cages: Achievements and Current Challenges. Israel Journal of Chemistry, 2011, 51, 781-797.	2.3	24
25	Reliability of the TTC approach: Learning from inclusion of pesticide active substances in the supporting database. Food and Chemical Toxicology, 2015, 75, 24-38.	3.6	24
26	Damage-Reporting Carbon Fiber Epoxy Composites. ACS Applied Polymer Materials, 2019, 1, 2990-2997.	4.4	21
27	Hierarchical Route for the Fabrication of Cavitand-Modified Nanostructured ZnO Fibers for Volatile Organic Compound Detection. Journal of Physical Chemistry C, 2016, 120, 12611-12617.	3.1	19
28	Supramolecular sensing of short chain alcohols with mixed-bridged thio-phosphonate cavitands. Sensors and Actuators B: Chemical, 2013, 179, 74-80.	7.8	16
29	The odour fingerprint of bitumen. Road Materials and Pavement Design, 2017, 18, 178-188.	4.0	16
30	Cucurbit[7]urilâ€Dimethyllysine Recognition in a Model Protein. Angewandte Chemie, 2018, 130, 7244-7248.	2.0	15
31	Synthesis of phosphonic analogues of AAZTAâ€AAZTA=6-Amino-6-methylperhydro-1,4-diazepine-N,Nâ€²,Nâ€³,Nâ€³-tetraacetic acid.â€ and relaxometric evaluation of the corresponding Gd(III) complexes as potential MRI contrast agents. Tetrahedron Letters, 2015, 56, 1994-1997.	1.4	13
32	Physically cross-linked polyethylene <i>via</i> reactive extrusion. Polymer Chemistry, 2019, 10, 1741-1750.	3.9	12
33	Iodinated Bis(phthalocyaninato)terbium(III) Complexes: Versatile Platforms for Functionalization of Singleâ€Molecule Magnets through Sonogashira Reaction. European Journal of Organic Chemistry, 2015, 2015, 7036-7042.	2.4	11
34	Detection of amphetamine precursors with quinoxaline-bridged cavitands. Supramolecular Chemistry, 2013, 25, 682-687.	1.2	10
35	Sensing of halogenated aromatic hydrocarbons in water with a cavitand coated piezoelectric device. Sensors and Actuators B: Chemical, 2018, 276, 340-348.	7.8	10
36	Hyphenation of a MEMS based pre-concentrator and GC-IMS. Talanta, 2019, 191, 141-148.	5.5	9

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37	Effect of Thin Film Processing on Cavitand Selectivity. Langmuir, 2003, 19, 10454-10456.	3.5	8
38	pH-Driven Conformational Switching of Quinoxaline Cavitands in Polymer Matrices. Synlett, 2018, 29, 2503-2508.	1.8	8
39	Reusable Cavitandâ€Based Electrospun Membranes for the Removal of Polycyclic Aromatic Hydrocarbons from Water. Small, 2022, 18, e2104946.	10.0	8
40	Probing the Structural Determinants of Amino Acid Recognition: X-Ray Studies of Crystalline Ditopic Host-Guest Complexes of the Positively Charged Amino Acids, Arg, Lys, and His with a Cavitand Molecule. Molecules, 2018, 23, 3368.	3.8	7
41	Cavitand-Decorated Silicon Columnar Nanostructures for the Surface Recognition of Volatile Nitroaromatic Compounds. ACS Omega, 2018, 3, 9172-9181.	3.5	7
42	Strain-reporting pyrene-grafted polyethylene. European Polymer Journal, 2019, 111, 69-73.	5.4	7
43	Polyhydroxylated GdDTPA-derivatives as high relaxivity magnetic resonance imaging contrast agents. RSC Advances, 2015, 5, 74734-74743.	3.6	6
44	Inherently chiral phosphonate cavitands as enantioselective receptors for mono-methylated L-amino acids. Supramolecular Chemistry, 2018, 30, 600-609.	1.2	6
45	Methyl Hexadecyl Viologen Inclusion in Cucurbit[8]uril: Coexistence of Three Hostâ€“Guest Complexes with Different Stoichiometry in a Highly Hydrated Crystal. Crystal Growth and Design, 2021, 21, 3650-3655.	3.0	6
46	Selectivity assessment in hostâ€“guest complexes from single-crystal X-ray diffraction data: the cavitandâ€“alcohol case. CrystEngComm, 2014, 16, 10987-10996.	2.6	5
47	Probing Molecular Recognition at the Solidâ€“Gas Interface by Sum-Frequency Vibrational Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 3022-3026.	4.6	5
48	Diphosphonate cavitands as molecular cups forl-lactic acid. CrystEngComm, 2016, 18, 4958-4963.	2.6	5
49	Orthogonal Sensing of Small Molecules Using a Modular Nanoparticleâ€Based Assay. ChemNanoMat, 2016, 2, 489-493.	2.8	5
50	Ultra-sensitive solid-phase Microextractionâ€“Gas Chromatographyâ€“Mass spectrometry determination of polycyclic aromatic hydrocarbons in snow samples using a deep cavity BenzoQxCavitand. Chemosphere, 2022, 303, 135144.	8.2	5
51	The Effect of Number and Position of P=O/P=S Bridging Units on Cavitand Selectivity toward Methyl Ammonium Salts. Molecules, 2015, 20, 4460-4472.	3.8	4
52	The Role of Chain Length in Cucurbit[8]uril Complexation of Methyl Alkyl Viologens. European Journal of Organic Chemistry, 2021, 2021, 1547-1552.	2.4	4
53	Synthesis of quinoxaline cavitand baskets. Supramolecular Chemistry, 2021, 33, 97-106.	1.2	4
54	Metal ion complexation by tetraphosphonate cavitands: The influence of the ionic radius. Inorganica Chimica Acta, 2018, 470, 250-253.	2.4	4

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55	Encapsulation of Trimethine Cyanine in Cucurbit[8]uril: Solution versus Solidâ€State Inclusion Behavior. Chemistry - A European Journal, 2022, , .	3.3	4
56	Tuning the conformational flexibility of quinoxaline cavitands for complexation at the gasâ€“solid interface. Chemical Communications, 2022, 58, 7554-7557.	4.1	4
57	Introduction of Water-Solubilizing Groups at the Lower Rim of Tolylpyridine-Bridged Cavitands. Supramolecular Chemistry, 2007, 19, 67-74.	1.2	3
58	Design and synthesis of a cavitand pillar for MOFs. Supramolecular Chemistry, 2014, 26, 151-156.	1.2	3
59	Probing Cavitandâ€“Organosilane Hybrid Bilayers via Sum-Frequency Vibrational Spectroscopy. Langmuir, 2014, 30, 12843-12849.	3.5	3
60	Assessment of EtQxBox complexation in solution by steady-state and time-resolved fluorescence spectroscopy. RSC Advances, 2018, 8, 16314-16318.	3.6	3
61	Hierarchical self-assembly and controlled disassembly of a cavitand-based hostâ€“guest supramolecular polymer. Polymer Chemistry, 2021, 12, 389-401.	3.9	3
62	Detection of Olfactory Traces by Orthogonal Gas Identification Technologies - DOGGIES. , 2014, , .		2
63	Enantiospecific recognition of 2-butanol by an inherently chiral cavitand in the solid state. CrystEngComm, 2017, 19, 3355-3361.	2.6	2
64	Velcrand Functionalized Polyethylene. Molecules, 2019, 24, 902.	3.8	2
65	Cavitands. , 2017, , 87-115.		1
66	Cavitand Decorated Silica as a Selective Preconcentrator for BTEX Sensing in Air. Nanomaterials, 2022, 12, 2204.	4.1	1
67	Cavitands at Work: From Molecular Recognition to Supramolecular Sensors. ChemInform, 2004, 35, no.	0.0	0
68	Selective environmental benzene monitoring microsystem based on optimized supramolecular receptors. , 2015, , .		0
69	Triptycene-Roofed Quinoxaline Cavitands for the Supramolecular Detection of BTEX in Air. Chemistry - A European Journal, 2016, 22, 3189-3189.	3.3	0
70	Frontispiece: Environmental Gas Sensing with Cavitands. Chemistry - A European Journal, 2018, 24, .	3.3	0
71	Nitrosonium complexation by the tetraphosphonate cavitand 5,11,17,23-tetramethyl-6,10:12,16:18,22:24,4-tetrakis(phenylphosphonato-Îº²<i>O</i>,<i>O</i>)resorcin(4)arene. Acta Crystallographica Section E: Crystallographic Communications, 2017, 73, 1801-1805.	0.5	0
72	A new, deep quinoxaline-based cavitand receptor for the complexation of benzene. Acta Crystallographica Section E: Crystallographic Communications, 2019, 75, 103-108.	0.5	0

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73	Poly[(Î¼4₄-phenylphosphonato)zinc(II)]. IUCrData, 2019, 4, .	0.3	0