Spiro D Alexandratos

List of Publications by Year
in descending order

75 papers	2,057 citations	236925 25 h-index	254184 43 g-index
75 all docs	75 docs citations	75 times ranked	1922 citing authors

#	Article	IF	Citations
1	Ion-Exchange Resins: A Retrospective from <i>Industrial and Engineering Chemistry Research</i>. Industrial & Engineering Chemistry Research, 2009, 48, 388-398.	3.7	281
2	Development of Bifunctional Anion-Exchange Resins with Improved Selectivity and Sorptive Kinetics for Pertechnetate:Â Batch-Equilibrium Experiments. Environmental Science & Technology, 2000, 34, 3761-3766.	10.0	122
3	Synthesis of ion-selective polymer-supported crown ethers: a review. Reactive and Functional Polymers, 2004, 60, 3-16.	4.1	88
4	Polymer-Supported Reagents:Â Application to Separation Science. Industrial & Engineering Chemistry Research, 1996, 35, 635-644.	3.7	84
5	Polymer-Supported Bifunctional Amidoximes for the Sorption of Uranium from Seawater. Industrial & Engineering Chemistry Research, 2016, 55, 4208-4216.	3.7	76
6	Synthesis and characterization of bifunctional phosphinic acid resins. Macromolecules, 1985, 18, 829-835.	4.8	72
7	Synthesis and Ion-Binding Affinities of Calix[4]arenes Immobilized on Cross-Linked Polystyrene. Macromolecules, 2001, 34, 206-210.	4.8	63
8	Polystyrene-Supported Amines:Â Affinity for Mercury(II) as a Function of the Pendant Groups and the Hg(II) Counterion. Industrial & Engineering Chemistry Research, 2005, 44, 8605-8610.	3.7	58
9	Dual-mechanism bifunctional polymers: polystyrene-based ion-exchange/redox resins. Macromolecules, 1986, 19, 280-287.	4.8	54
10	ImmobilizedN-Methyl-d-glucamine as an Arsenate-Selective Resin. Environmental Science & Technology, 2004, 38, 6139-6146.	10.0	48
11	Synthesis and Ion-Complexing Properties of a Novel Polymer-Supported Reagent with Diphosphonate Ligands. Macromolecules, 1996, 29, 1021-1026.	4.8	46
12	Development of a new ion-exchange/coordinating phosphate ligand for the sorption of U(VI) and trivalent ions from phosphoric acid solutions. Chemical Engineering Science, 2015, 127, 126-132.	3.8	45
13	Coordination Chemistry of Phosphorylated Calixarenes and Their Application to Separations Science. Industrial & Engineering Chemistry Research, 2000, 39, 3998-4010.	3.7	44
14	New polymer-supported ion-complexing agents: Design, preparation and metal ion affinities of immobilized ligands. Journal of Hazardous Materials, 2007, 139, 467-470.	12.4	44
15	Synthesis and characterization of bifunctional ion-exchange/coordination resins. Macromolecules, 1987, 20, 1191-1196.	4.8	43
16	Bifunctionality as a Means of Enhancing Complexation Kinetics in Selective Ion Exchange Resins. Industrial & Engineering Chemistry Research, 1995, 34, 251-254.	3.7	41
17	Engineering selectivity into polymer-supported reagents for transition metal ion complex formation. Reactive and Functional Polymers, 2010, 70, 545-554.	4.1	41
18	Bifunctional Coordinating Polymers:Â Auxiliary Groups as a Means of Tuning the Ionic Affinity of Immobilized Phosphate Ligands. Macromolecules, 2005, 38, 5981-5986.	4.8	37

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19	Synthesis and Characterization of High-Stability Solvent-Impregnated Resins. Industrial & Engineering Chemistry Research, 1998, 37, 4756-4760.	3.7	32
20	Sustaining Water Resources: Environmental and Economic Impact. ACS Sustainable Chemistry and Engineering, 2019, 7, 2879-2888.	6.7	32
21	Synthesis and characterization of a bifunctional ion exchange resin with polystyrene-immobilized diphosphonic acid ligands. Journal of Applied Polymer Science, 1996, 61, 273-278.	2.6	30
22	Functionalized polymer foams as metal ion chelating agents with rapid complexation kinetics. Journal of Applied Polymer Science, 1998, 68, 1911-1916.	2.6	30
23	Effects of molecular entanglements during electrospray of high molecular weight polymers. Journal of the American Society for Mass Spectrometry, 1998, 9, 299-304.	2.8	29
24	Synthesis of bifunctional ion-exchange resins through the Arbusov reaction: Effect on selectivity and kinetics. Journal of Applied Polymer Science, 1994, 52, 1273-1277.	2.6	28
25	Polymer-Supported Primary Amines for the Recovery of Uranium from Seawater. Industrial & Engineering Chemistry Research, 2013, 52, 11792-11797.	3.7	28
26	Affinity and Selectivity of Immobilized N-Methyl-d-glucamine for Mercury(II) Ions. Industrial & Engineering Chemistry Research, 2005, 44, 7490-7495.	3.7	26
27	Design and Development of Polymer-Based Separations: Dual Mechanism Bifunctional Polymers as a New Category of Metal Ion Complexing Agents with Enhanced Ionic Recognition. Separation and Purification Reviews, 1988, 17, 67-102.	0.8	25
28	ION-SELECTIVE POLYMER-SUPPORTED REAGENTS. Solvent Extraction and Ion Exchange, 2000, 18, 779-807.	2.0	24
29	High-affinity ion-complexing polymer-supported reagents: Immobilized phosphate ligands and their affinity for the uranyl ion. Reactive and Functional Polymers, 2007, 67, 375-382.	4.1	24
30	Synthesis of Î±-, Î²-, and Î³-Ketophosphonate Polymer-Supported Reagents:â€‰ The Role of Intra-ligand Cooperation in the Complexation of Metal Ions. Macromolecules, 1998, 31, 3235-3238.	4.8	23
31	Bifunctional Phosphinic Acid Resins for the Complexation of Lanthanides and Actinides. Separation Science and Technology, 1987, 22, 983-995.	2.5	22
32	Enhanced ionic recognition by polymer-supported reagents: synthesis and characterization of ion-exchange/precipitation resins. Macromolecules, 1988, 21, 2905-2910.	4.8	22
33	Microenvironmental Effect in Polymer-Supported Reagents. 1. Influence of Copolymer Architecture on the Mitsunobu Reaction. Macromolecules, 1996, 29, 8025-8029.	4.8	20
34	Complexing Properties of Diphonix, a New Chelating Resin with Diphosphonate Ligands, Toward Ga(III) and In(III). Separation Science and Technology, 1994, 29, 543-549.	2.5	19
35	A MECHANISM FOR ENHANCING IONIC ACCESSIBILITY INTO SELECTIVE ION EXCHANGE RESINS. Solvent Extraction and Ion Exchange, 1998, 16, 951-966.	2.0	18
36	Amination of Poly(vinylbenzyl chloride) withN,N-Dimethylformamide. Macromolecules, 2003, 36, 3436-3439.	4.8	17

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37	High Stability Solvent Impregnated Resins: Metal Ion Complexation as a Function of Time. Solvent Extraction and Ion Exchange, 2004, 22, 713-720.	2.0	17
38	Intraligand cooperation in metal-ion binding by immobilized ligands: The effect of bifunctionality. Journal of Applied Polymer Science, 2004, 91, 463-468.	2.6	17
39	Immobilization of lithium-selective 14-crown-4 on crosslinked polymer supports. Polymer, 2005, 46, 6347-6352.	3.8	17
40	Modification of Hydroxyapatite with Ion-Selective Complexants: 1-Hydroxyethane-1,1-diphosphonic Acid. Industrial & Engineering Chemistry Research, 2015, 54, 585-596.	3.7	17
41	The role of polarizability in determining metal ion affinities in polymer-supported reagents: monoprotic phosphates and the effect of hydrogen bonding. New Journal of Chemistry, 2015, 39, 5366-5373.	2.8	17
42	Polymer-Supported Reagents with Enhanced Ionic Recognition. Separation and Purification Reviews, 1992, 21, 1-22.	0.8	15
43	Enhanced metal ion affinities by supported ligand synergistic interaction in bifunctional polymer-supported aminomethylphosphonates. Separation Science and Technology, 2002, 37, 2587-2605.	2.5	14
44	From ion exchange resins to polymerâ€supported reagents: an evolution of critical variables. Journal of Chemical Technology and Biotechnology, 2018, 93, 20-27.	3.2	14
45	Mechanism of Ionic Recognition by Polymer-Supported Reagents: Immobilized Tetramethylmalonamide and the Complexation of Lanthanide Ions. Inorganic Chemistry, 2010, 49, 1008-1016.	4.0	13
46	Preface to the Special Issue: Uranium in Seawater. Industrial & Engineering Chemistry Research, 2016, 55, 4101-4102.	3.7	13
47	The Effect of Hydrogen Bonding in Enhancing the Ionic Affinities of Immobilized Monoprotic Phosphate Ligands. Materials, 2017, 10, 968.	2.9	13
48	Microenvironmental Effect in Polymer-Supported Reagents. 2. The Prins Reaction and the Influence of Neighboring Group Content on Catalytic Efficiency. Macromolecules, 2000, 33, 2011-2015.	4.8	12
49	Polymer-Supported Aminomethylphosphinate as a Ligand with a High Affinity for U(VI) from Phosphoric Acid Solutions: Combining Variables to Optimize Ligandâ€"Ion Communication. Solvent Extraction and Ion Exchange, 2016, 34, 290-295.	2.0	12
50	Immobilized Tris(hydroxymethyl)aminomethane as a Scaffold for Ion-Selective Ligands:Â The Auxiliary Group Effect on Metal Ion Binding at the Phosphate Ligand. Inorganic Chemistry, 2007, 46, 2139-2147.	4.0	10
51	Polyols as Scaffolds in the Development of Ion-Selective Polymer-Supported Reagents: The Effect of Auxiliary Groups on the Mechanism of Metal Ion Complexation. Inorganic Chemistry, 2008, 47, 2831-2836.	4.0	10
52	Design and Synthesis of Hydroxyapatite with Organic Modifiers for Application to Environmental Remediation. Waste and Biomass Valorization, 2010, 1, 157-162.	3.4	10
53	Through-bond communication between polymer-bound phosphinic acid ligands and trivalent metal ions probed with FTIR spectroscopy. Vibrational Spectroscopy, 2018, 95, 80-89.	2.2	9
54	Uptake and Removal of Uranium by and from Human Teeth. Chemical Research in Toxicology, 2021, 34, 880-891.	3.3	9

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55	Immobilized Phosphate Ligands with Enhanced Ionic Affinity through Supported Ligand Synergistic Interaction. Separation Science and Technology, 2008, 43, 1296-1309.	2.5	8
56	The importance of hydrogen bonding in the complexation of lanthanide ions by polymer-bound malonamide-type ligands. Inorganica Chimica Acta, 2010, 363, 3448-3452.	2.4	8
57	ATR-FTIR spectroscopy as a probe for metal ion binding onto immobilized ligands. Materials Chemistry and Physics, 2018, 218, 196-203.	4.0	7
58	Novel Bifunctional Resins in Metal Ion Separations: Ion Exchange/Coordination Resins and Ion Exchange/Precipitation Resins. Separation Science and Technology, 1988, 23, 1915-1927.	2.5	6
59	NETWORK STRUCTURE AS A VARIABLE IN MOLECULAR RECOGNITION BY POLYMER-SUPPORTED REAGENTS. Solvent Extraction and Ion Exchange, 1991, 9, 309-318.	2.0	5
60	Solidâ€state ³¹P NMR characterization of bifunctional ionâ€exchange resins. Magnetic Resonance in Chemistry, 1994, 32, S40.	1.9	5
61	Recent Advances in the Chemistry and Applications of the Diphonix Resins. ACS Symposium Series, 1999, , 206-218.	0.5	5
62	Design and development of ion-selective polymer-supported reagents: The immobilization of heptamolybdate anions for the complexation of silicate through Keggin structure formation. Polymer, 2010, 51, 383-389.	3.8	5
63	The role of polarizability in determining metal ion affinities in polymer-supported reagents: Phosphorylated ethylene glycol. Reactive and Functional Polymers, 2014, 81, 77-81.	4.1	5
64	MECHANISM OF POLYMER-BASED SEPARATIONS. I. COMPARISON OF PHOSPHINIC ACID WITH SULFONIC ACID ION EXCHANGE RESINS. Solvent Extraction and Ion Exchange, 1989, 7, 511-525.	2.0	4
65	Studies on the Uptake and Column Chromatographic Separation of Eu, Th, U, and Am by Tetramethylmalonamide Resin. Solvent Extraction and Ion Exchange, 2014, 32, 27-43.	2.0	4
66	POLYMER-SUPPORTED REAGENTS FOR MOLECULAR SEPARATIONS. Solvent Extraction and Ion Exchange, 1989, 7, 909-923.	2.0	3
67	REACTION KINETICS OF POLYSTYRENE-BASED PHOSPHINIC ACID ION EXCHANGE/REDOX RESINS WITH METAL IONS. Solvent Extraction and Ion Exchange, 1992, 10, 539-557.	2.0	3
68	Distinguishing between organic and inorganic phosphorus in hydroxyapatite by elemental analysis. Microchemical Journal, 2013, 110, 263-265.	4.5	3
69	Bifunctional Interpenetrating Polymer Networks. Advances in Chemistry Series, 1994, , 197-203.	0.6	2
70	Design of Novel Polymer-Supported Reagents for Metal Ion Separations. ACS Symposium Series, 1999, , 194-205.	0.5	2
71	Effect of hydrogenâ€bonding in the development of highâ€affinity metal ion complexants: Polymerâ€bound phosphorylated cyclodextrin. Journal of Applied Polymer Science, 2011, 121, 1137-1142.	2.6	2
72	Functionalization of polymerâ€supported pentaerythritol as a general synthesis for the preparation of ionâ€binding polymers. Journal of Applied Polymer Science, 2013, 127, 1758-1764.	2.6	2

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73	MECHANISM OF POLYMER-BASED SEPARATIONS. III. METAL ION LOADING CAPACITIES OF REACTIVE POLYMERS WITH SPECIFIC RECOGNITION MECHANISMS. Solvent Extraction and Ion Exchange, 1989, 7, 1103-1109.	2.0	1
74	Polymer-supported urea: The effect of hydrogen bonding on lanthanide ion affinities. Inorganica Chimica Acta, 2012, 391, 130-134.	2.4	1
75	Binding of Divalent Transition Metal Ions to Immobilized Phosphinic Acid Ligands. Part I. Characterization by Fourier Transform Infrared Spectroscopy. Solvent Extraction and Ion Exchange, 2021, 39, 152-165.	2.0	1