IstvÃ¡n LÃ¡zÃ¡r

List of Publications by Year
in descending order

57 papers	1,324 citations	331670 21 h-index	361022 35 g-index
59 all docs	59 docs citations	59 times ranked	1393 citing authors

#	Article	IF	Citations
1	Kinetics of Formation and Dissociation of Lanthanide(III)-DOTA Complexes. Inorganic Chemistry, 1994, 33, 4070-4076.	4.0	199
2	In vivo Na-23 MR imaging and spectroscopy of rat brain during TmDOTP5â^' infusion. Journal of Magnetic Resonance Imaging, 1992, 2, 385-391.	3.4	69
3	Minimal number of chromatographic test parameters for the characterisation of reversed-phase liquid chromatographic stationary phases. Journal of Chromatography A, 2002, 954, 99-114.	3.7	66
4	Synthesis and complexation properties of a new macrocyclic polyaza polyphosphinate ligand, DOTEP (1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis(methyleneethylphosphinate)). Inorganic Chemistry, 1991, 30, 5016-5019.	4.0	61
5	Optimized synthesis, structure, and solution dynamics of 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis(methylenephosphonic acid) (H8DOTP). Inorganic Chemistry, 1992, 31, 4422-4424.	4.0	60
6	Mechanism of drug release from silica-gelatin aerogelâ€"Relationship between matrix structure and release kinetics. Colloids and Surfaces B: Biointerfaces, 2017, 152, 229-237.	5.0	60
7	Hybrid aerogel preparations as drug delivery matrices for low water-solubility drugs. International Journal of Pharmaceutics, 2015, 496, 360-370.	5.2	51
8	A Continuous Extraction and Pumpless Supercritical CO2 Drying System for Laboratory-Scale Aerogel Production. Gels, 2016, 2, 26.	4.5	42
9	Formation and Dissociation Kinetics of the Complexes Gd(DOTP)5â^' and Gd(DOTPMB)â^'. European Journal of Inorganic Chemistry, 2001, 2001, 813-820.	2.0	41
10	Application of tetraoxadiaza-crown ether derivatives as chiral selector modifiers in capillary electrophoresis. Journal of Chromatography A, 2004, 1028, 325-332.	3.7	37
11	Complexation Properties ofN,Nâ€²,Nâ€³,Nâ€²â€²â€²-[1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetrayltetrakis(1-oxoethane-2,1-diyl)]tetrakis[glycine] (H4dotagl). Equilibrium, Kinetic, and Relaxation Behavior of the Lanthanide(III) Complexes. Helvetica Chimica Acta, 2005, 88, 604-617.	1.6	35
12	Controlled release of methotrexate from functionalized silica-gelatin aerogel microparticles applied against tumor cell growth. International Journal of Pharmaceutics, 2019, 558, 396-403.	5.2	34
13	Synthesis and examination of amine-cyanocarboxyboranes, the boron analogues of Î±-cyanocarboxylic acids: X-ray structural study of the first lactam containing a boron atom in the lactam ring. Journal of Organometallic Chemistry, 2004, 689, 3567-3581.	1.8	33
14	Enantioselective capillary electrophoretic separation of tryptophane- and tyrosine-methylesters in a dual system with a tetra-oxadiaza-crown-ether derivative and a cyclodextrin. Journal of Pharmaceutical and Biomedical Analysis, 2005, 38, 601-608.	2.8	33
15	Photocatalytic performance of highly amorphous titaniaâ€"silica aerogels with mesopores: The adverse effect of the in situ adsorption of some organic substrates during photodegradation. Applied Surface Science, 2015, 356, 521-531.	6.1	30
16	Chelating Tendencies of Bioactive Aminophosphonates. Metal-Based Drugs, 1994, 1, 247-264.	3.8	26
17	Synthesis and study of new functionalized silica aerogel poly(methyl methacrylate) composites for biomedical use. Polymer Composites, 2015, 36, 348-358.	4.6	25
18	The pore network and the adsorption characteristics of mesoporous silica aerogel: adsorption kinetics on a timescale of seconds. RSC Advances, 2015, 5, 107237-107246.	3.6	24

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19	Heat treatment induced phase transformations in zirconia and yttria-stabilized zirconia monolithic aerogels. Journal of Supercritical Fluids, 2019, 149, 54-63.	3.2	24
20	Rare-Earth Zirconate Ln₂Zr₂O₇ (Ln: La, Nd, Gd, and Dy) Powders, Xerogels, and Aerogels: Preparation, Structure, and Properties. Inorganic Chemistry, 2019, 58, 14467-14477.	4.0	23
21	Mechanism of hydration of biocompatible silica-casein aerogels probed by NMR and SANS reveal backbone rigidity. Applied Surface Science, 2020, 531, 147232.	6.1	23
22	NMR and potentiometric studies of 1,4,7-triazacyclononane-N,Nâ€²,Nâ€³-tris(methylenephosphonate) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.4	21
23	Preparation and application of highly porous aerogel-based bioactive materials in dentistry. Frontiers of Materials Science, 2014, 8, 46-52.	2.2	21
24	Complexation Properties of the Di-, Tri-, and Tetraacetate Derivatives of Bis(aminomethyl)phosphinic Acid. European Journal of Inorganic Chemistry, 2007, 2007, 701-713.	2.0	19
25	Biocompatible silica-gelatin hybrid aerogels covalently labeled with fluorescein. Journal of Non-Crystalline Solids, 2017, 473, 17-25.	3.1	18
26	Rapid and High Yield Detosylation of Linear and Macrocyclic p-Toluenesulfonamides. Synthetic Communications, 1995, 25, 3181-3185.	2.1	17
27	Preparation of N,N,Nâ€²,Nâ€²-tetramethylethylenediamine adducts of new monosubstituted boranes. Journal of Organometallic Chemistry, 1988, 344, 29-35.	1.8	16
28	Integration of ground aerogel particles as chromatographic stationary phase into microchip. Journal of Chromatography A, 2011, 1218, 1011-1015.	3.7	15
29	NOTPME: A31P NMR probe for measurementof divalent cations in biological systems. FEBS Letters, 1991, 280, 121-124.	2.8	14
30	Synthesis of Ester Derivatives of 1,4,7-Triazacyclononane-1,4,7-tris(methylenephosphonic Acid) and 1,4,7-Triazacyclononane-1,4,7-tris(methyleneethylphosphinic Acid). Synthesis, 1995, 1995, 453-457.	2.3	14
31	Development of a capillary electrophoretic method for the separation of diastereoisomers of a new human immunodeficiency virus protease inhibitor. Electrophoresis, 2005, 26, 627-632.	2.4	14
32	Sol-gel synthesis, characterization and catalytic activity of silica aerogels functionalized with copper(II) complexes of cyclen and cyclam. Microporous and Mesoporous Materials, 2016, 234, 392-400.	4.4	14
33	Prevention of the Aggregation of Nanoparticles during the Synthesis of Nanogold-Containing Silica Aerogels. Gels, 2018, 4, 55.	4.5	14
34	Effects of side chain amino nitrogen donor atoms on metal complexation of aminohydroxamic acids: New diaminohydroxamates chelating Ni(ii) more strongly than Fe(iii). Dalton Transactions RSC, 2002, , 2632.	2.3	13
35	Effect of the Chemical Composition of Simulated Body Fluids on Aerogel-Based Bioactive Composites. Journal of Composites Science, 2017, 1, 15.	3.0	12
36	Supercritical CO2 extraction and selective adsorption of aroma materials of selected spice plants in functionalized silica aerogels. Journal of Supercritical Fluids, 2019, 148, 16-23.	3.2	11

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37	Synthesis, Potentiometric and ¹H NMR Study of Protonation and Complex Formation of 1,4,7-Triazacyclononane-1,4-Diacetate. Journal of Coordination Chemistry, 2000, 51, 293-304.	2.2	9
38	Bromo derivatives of amine and phosphine complexes of cyanodihydroborane. Synthesis and reactivity. Inorganica Chimica Acta, 1994, 218, 21-26.	2.4	8
39	Simple and high yielding regioselective synthesis of 1,4,8-tri(carbamoylmethyl)-1,4,8,11-tetraazacyclo-tetradecane hydroiodide. Tetrahedron Letters, 1999, 40, 381-382.	1.4	8
40	Synthesis of the first amineâ€“cyanocarboxyboranes, isoelectronic analogues of Î±-cyanocarboxylic acids. Journal of the Chemical Society, Perkin Transactions 1, 2002, , 300-301.	1.3	8
41	Î²-Tricalcium phosphate silica aerogel as an alternative bioactive ceramic for the potential use in dentistry. Advances in Applied Ceramics, 2018, 117, 476-484.	1.1	8
42	Newly synthesized tetraoxa-diaza crown ether derivatives versus commercialized crown ethers in the separation of positional isomers with capillary electrophoresis. Journal of Pharmaceutical and Biomedical Analysis, 2006, 41, 1164-1170.	2.8	6
43	Lanthanide Complexes Formed with the Tri- and Tetraacetate Derivatives of Bis(aminomethyl)phosphinic Acid: Equilibrium, Kinetic and NMR Spectroscopic Studies. European Journal of Inorganic Chemistry, 2012, 2012, 2062-2073.	2.0	6
44	The Effect of Heat Treatment of Î²-Tricalcium Phosphate-Containing Silica-Based Bioactive Aerogels on the Cellular Metabolism and Proliferation of MG63 Cells. Biomedicines, 2022, 10, 662.	3.2	6
45	N,Nâ€²,Nâ€³-tris(methoxymethyl)-1,4,7-triazacyclononane: a new synthetic tool for the synthesis of tris-N-substituted 1,4,7-triazacyclononane derivatives. Journal of the Chemical Society Chemical Communications, 1991, , 1252-1253.	2.0	5
46	Synthesis and properties of bis(amine)carboxyhydroboron(1+) cations. Inorganica Chimica Acta, 1994, 223, 155-157.	2.4	5
47	Synthesis and characterization of cyanohydroisocyanoborates. Reactivity of the isocyano group towards nucleophiles. Polyhedron, 1998, 17, 3175-3180.	2.2	5
48	CONVENIENT SYNTHESIS OF MONO- AND DITOSYLATED 1,4,7-TRIAZACYCLONONANE. Synthetic Communications, 2001, 31, 3141-3144.	2.1	4
49	Synthesis, Conformation and Equilibrium Study of New Piperazine and Azamacrocyclic Ligands with N-(Tetrahydro-2-oxofuran-3-yl) and N-[(Carboxy)(2-hydroxyethyl)methyl] Pendant Arms. European Journal of Organic Chemistry, 2002, 2002, 351-360.	2.4	4
50	The examination of aerogel composite artificial bone substitutes in animal models. Biomechanica Hungarica, 2013, , .	0.1	4
51	Complexation properties of macrocyclic polyoxadiazadiphosphonates. Journal of the Chemical Society Dalton Transactions, 1996, , 1113-1118.	1.1	3
52	Environment-Friendly Catalytic Mineralization of Phenol and Chlorophenols with Cu- and Fe-Tetrakis(4-aminophenyl)-porphyrinâ€”Silica Hybrid Aerogels. Gels, 2022, 8, 202.	4.5	2
53	Î²-Tricalcium phosphate-silica aerogel as an alternative bioactive ceramic for the potential use in dentistry. Advances in Applied Ceramics, 2020, 119, 364-371.	1.1	1
54	Mesoporous silica-calcium phosphate composites for experimental bone substitution. Biomechanica Hungarica, 2010, , .	0.1	1

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55	Iron Oxyhydroxide Aerogels and Xerogels by Hydrolysis of FeCl3 â^™ 6 H2O in Organic Media: Early Stages. Croatica Chemica Acta, 2015, 88, 413-419.	0.4	1
56	Iron oxyhydroxide aerogels and xerogels by controlled hydrolysis of FeCl3Â·6H2O in organic solvents: stages of formation. RSC Advances, 2015, 5, 72716-72727.	3.6	0
57	Determination of the application characteristics of the Slooff-technique with nano-composite bone substitution material by biomechanical tests. Biomechanica Hungarica, 2013, , .	0.1	0