Zsolt Baranyai

List of Publications by Year
in descending order

66	1,681	218381	329751
papers	citations	26 h-index	37 g-index

67	67	67	1566
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Equilibrium and Kinetic Properties of the Lanthanoids(III) and Various Divalent Metal Complexes of the Heptadentate Ligand AAZTA. Chemistry - A European Journal, 2009, 15, 1696-1705.	1.7	90
2	Dissociation Kinetics of Openâ€Chain and Macrocyclic Gadolinium(III)â€Aminopolycarboxylate Complexes Related to Magnetic Resonance Imaging: Catalytic Effect of Endogenous Ligands. Chemistry - A European Journal, 2012, 18, 16426-16435.	1.7	87
3	Synthesis, Potentiometric, Kinetic, and NMR Studies of 1,4,7,10-Tetraazacyclododecane-1,7-bis(acetic) Tj ETQq1 1 0.784314 rgBT /Over Lanthanide(III) Ions. Inorganic Chemistry, 2008, 47, 3851-3862.	1.9	65
4	Equilibrium,1H and13C NMR Spectroscopy, and X-ray Diffraction Studies on the Complexes Bi(DOTA)-and Bi(DO3A-Bu). Inorganic Chemistry, 2003, 42, 2342-2349.	1.9	58
5	AAZTA: An Ideal Chelating Agent for the Development of ⁴⁴Sc PET Imaging Agents. Angewandte Chemie - International Edition, 2017, 56, 2118-2122.	7.2	53
6	An NMR and DFT Investigation on the Conformational Properties of Lanthanide(III) 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetate Analogues Containing Methylenephosphonate Pendant Arms. Inorganic Chemistry, 2010, 49, 4370-4382.	1.9	52
7	Solution Structures, Stabilities, Kinetics, and Dynamics of DO3A and DO3Aâ€“Sulphonamide Complexes. Inorganic Chemistry, 2014, 53, 2858-2872.	1.9	50
8	Equilibrium, Kinetic and Structural Studies of AAZTA Complexes with Ga³⁺, In³⁺ and Cu²⁺. European Journal of Inorganic Chemistry, 2013, 2013, 147-162.	1.0	49
9	A shortcut to high-affinity Ga-68 and Cu-64 radiopharmaceuticals: one-pot click chemistry trimerisation on the TRAP platform. Dalton Transactions, 2015, 44, 11137-11146.	1.6	49
10	Synthesis and Characterization of a Hypoxiaâ€Sensitive MRI Probe. Chemistry - A European Journal, 2012, 18, 9669-9676.	1.7	47
11	A new bifunctional GdIII complex of enhanced efficacy for MR-molecular imaging applications. Dalton Transactions, 2009, , 9712.	1.6	44
12	The Use of the Macrocyclic Chelator DOTA in Radiochemical Separations. European Journal of Inorganic Chemistry, 2020, 2020, 36-56.	1.0	44
13	The Role of Equilibrium and Kinetic Properties in the Dissociation of Gd[DTPAâ€bis(methylamide)] (Omniscan) at near to Physiological Conditions. Chemistry - A European Journal, 2015, 21, 4789-4799.	1.7	40
14	Thermodynamic stability, kinetic inertness and relaxometric properties of monoamide derivatives of lanthanide(<scp>iii</scp>) DOTA complexes. Dalton Transactions, 2015, 44, 5467-5478.	1.6	40
15	Effect of the Nature of Donor Atoms on the Thermodynamic, Kinetic and Relaxation Properties of Mn(II) Complexes Formed With Some Trisubstituted 12-Membered Macrocyclic Ligands. Frontiers in Chemistry, 2018, 6, 232.	1.8	39
16	Lanthanide(III) Complexes of Tris(amide) PCTA Derivatives as Potential Bimodal Magnetic Resonance and Optical Imaging Agents. Chemistry - A European Journal, 2009, 15, 13188-13200.	1.7	38
17	Equilibrium Studies on the Gd³⁺, Cu²⁺ and Zn²⁺ Complexes of BOPTA, DTPA and DTPAâ€BMA Ligands: Kinetics of Metalâ€Exchange Reactions of [Gd(BOPTA)]^{2â€“}. European Journal of Inorganic Chemistry, 2010, 2010, 1948-1956.	1.0	37
18	Lower Ligand Denticity Leading to Improved Thermodynamic and Kinetic Stability of the Gd³⁺ Complex: The Strange Case of OBETA. Chemistry - A European Journal, 2012, 18, 7680-7685.	1.7	37

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19	Physico-chemical properties of MnII complexes formed with cis- and trans-DO2A: thermodynamic, electrochemical and kinetic studies. Journal of Inorganic Biochemistry, 2016, 163, 206-213.	1.5	36
20	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
21	Defining the conditions for the development of the emerging class of Fe^{III}-based MRI contrast agents. Chemical Science, 2021, 12, 11138-11145.	3.7	34
22	Lower Denticity Leading to Higher Stability: Structural and Solution Studies of Ln(III)â€“OBETA Complexes. Inorganic Chemistry, 2014, 53, 12499-12511.	1.9	31
23	Dramatic Increase of Selectivity for Heavy Lanthanide(III) Cations by Tuning the Flexibility of Polydentate Chelators. Inorganic Chemistry, 2010, 49, 616-625.	1.9	30
24	A Bisamide Derivative of [Mn(1,4-DO2A)] - Solution Thermodynamic, Kinetic, and NMR Relaxometric Studies. European Journal of Inorganic Chemistry, 2016, 2016, 1165-1174.	1.0	29
25	High kinetic inertness of a bis-hydrated Gd-complex with a constrained AAZTA-like ligand. Chemical Communications, 2016, 52, 11235-11238.	2.2	29
26	Optimising the relaxivities of Mn²⁺ complexes by targeting human serum albumin (HSA). Dalton Transactions, 2017, 46, 8494-8504.	1.6	27
27	Equilibrium, Kinetic and Structural Properties of Gallium(III) and Some Divalent Metal Complexes Formed with the New DATA^m and DATA^{5m} Ligands. Chemistry - A European Journal, 2017, 23, 10358-10371.	1.7	25
28	Kinetics of the Formation of [Ln(DOTAM)]3+ Complexes. European Journal of Inorganic Chemistry, 2007, 2007, 3639-3645.	1.0	24
29	Synthesis and solution thermodynamic study of rigidified and functionalised EGTA derivatives. Organic and Biomolecular Chemistry, 2008, 6, 2361.	1.5	23
30	Equilibrium and NMR Relaxometric Studies on the s-Triazine-Based Heptadentate Ligand PTDITA Showing High Selectivity for Gd³⁺ Ions. Inorganic Chemistry, 2012, 51, 2597-2607.	1.9	23
31	Exploiting the Proton Exchange as an Additional Route to Enhance the Relaxivity of Paramagnetic MRI Contrast Agents. Inorganic Chemistry, 2018, 57, 5567-5574.	1.9	23
32	Synthesis and Relaxometric Characterization of a MRI Gd-Based Probe Responsive to Glutamic Acid Decarboxylase Enzymatic Activity. Journal of Medicinal Chemistry, 2013, 56, 2466-2477.	2.9	21
33	Comprehensive Evaluation of the Physicochemical Properties of Ln^{III} Complexes of Aminoethylâ€DO3A as pHâ€Responsive T₁â€MRI Contrast Agents. Chemistry - A European Journal, 2014, 20, 2933-2944.	1.7	21
34	Improved Efficacy of Synthesizing *M^{III}-Labeled DOTA Complexes in Binary Mixtures of Water and Organic Solvents. A Combined Radio- and Physicochemical Study. Inorganic Chemistry, 2018, 57, 6107-6117.	1.9	21
35	Arylâ€Phosphonate Lanthanide Complexes and Their Fluorinated Derivatives: Investigation of Their Unusual Relaxometric Behavior and Potential Application as Dual Frequency ¹H/¹⁹Fâ€…MRI Probes. Chemistry - A European Journal, 2013, 19, 11644-11660.	1.7	18
36	The effects of intramolecular H-bond formation on the stability constant and water exchange rate of the Gd(III)-diethylenetriamine-Nâ€²-(3-amino-1,1-propylenephosphonic)-N,N,Nâ€³,Nâ€³-tetraacetate complex. Contrast Media and Molecular Imaging, 2007, 2, 94-102.	0.4	17

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37	Chapter 2. Gadolinium-based Contrast Agents. New Developments in NMR, 2017, , 121-242.	0.1	17
38	Combined NMR, DFT and X-ray studies highlight structural and hydration changes of [Ln(AAZTA)]^{â^'} complexes across the series. Inorganic Chemistry Frontiers, 2020, 7, 795-803.	3.0	16
39	Decomposition of N-Chloroglycine in Alkaline Aqueous Solution: Kinetics and Mechanism. Chemical Research in Toxicology, 2015, 28, 1282-1291.	1.7	15
40	A rigidified AAZTA-like ligand as efficient chelator for68Ga radiopharmaceuticals. ChemistrySelect, 2016, 1, 163-171.	0.7	14
41	Determination of gadoliniumâ€based magnetic resonance imaging contrast agents by micellar electrokinetic capillary chromatography. Electrophoresis, 2011, 32, 2223-2228.	1.3	13
42	Exploring the intramolecular catalysis of the proton exchange process to modulate the relaxivity of Gd(<scp>iii</scp>)-complexes of HP-DO3A-like ligands. Chemical Communications, 2018, 54, 10056-10059.	2.2	13
43	Acid-catalyzed proton exchange as a novel approach for relaxivity enhancement in Gd-HPDO3A-like complexes. Chemical Science, 2020, 11, 7829-7835.	3.7	13
44	Kinetics of the Exchange Reactions between Gd(DTPA)^{2â^'}, Gd(BOPTA)^{2â^'}, and Gd(DTPA-BMA) Complexes, Used As MRI Contrast Agents, and the Triethylenetetraamine-Hexaacetate Ligand. Inorganic Chemistry, 2011, 50, 3471-3478.	1.9	11
45	Solution thermodynamics, computational and relaxometric studies of ditopic DO3A-based Mn(<scp>ii</scp>) complexes. New Journal of Chemistry, 2015, 39, 539-547.	1.4	11
46	AAZTA: An Ideal Chelating Agent for the Development of ⁴⁴Sc PET Imaging Agents. Angewandte Chemie, 2017, 129, 2150-2154.	1.6	11
47	PIDAZTA: Structurally Constrained Chelators for the Efficient Formation of Stable Galliumâ€68 Complexes at Physiological pH. Chemistry - A European Journal, 2019, 25, 10698-10709.	1.7	11
48	Towards ²¹³Bi alpha-therapeutics and beyond: unravelling the foundations of efficient Bi^{III} complexation by DOTP. Inorganic Chemistry Frontiers, 2021, 8, 3893-3904.	3.0	11
49	Influence of gem-Dimethyl Substitution on the Stability, Kinetics and Relaxometric Properties of PDTA Complexes. European Journal of Inorganic Chemistry, 2012, 2012, 2074-2086.	1.0	10
50	Lanthanide(III) complexes of some natural siderophores: A thermodynamic, kinetic and relaxometric study. Journal of Inorganic Biochemistry, 2013, 127, 53-61.	1.5	10
51	Equilibrium Thermodynamics, Formation, and Dissociation Kinetics of Trivalent Iron and Gallium Complexes of Triazacyclononane-Triphosphinate (TRAP) Chelators: Unraveling the Foundations of Highly Selective Ga-68 Labeling. Frontiers in Chemistry, 2018, 6, 170.	1.8	9
52	Enhanced relaxivity of Gd^{III}-complexes with HP-DO3A-like ligands upon the activation of the intramolecular catalysis of the prototropic exchange. Inorganic Chemistry Frontiers, 2021, 8, 1500-1510.	3.0	9
53	Modifying LnHPDO3A Chelates for Improved T₁ and CEST MRI Applications. Chemistry - A European Journal, 2019, 25, 4184-4193.	1.7	8
54	A solution thermodynamic study of the Cu(II) and Zn(II) complexes of EBTA: X-ray crystal structure of the dimeric complex [Cu2(EBTA)(H2O)3]2. Inorganica Chimica Acta, 2009, 362, 2259-2264.	1.2	7

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55	Interaction of macrocyclic gadolinium-based MR contrast agents with Type I collagen. Equilibrium and kinetic studies. Dalton Transactions, 2020, 49, 14863-14870.	1.6	7
56	How the catalysis of the prototropic exchange affects the properties of lanthanide(III) complexes in their applications as MRI contrast agents. Inorganica Chimica Acta, 2022, 532, 120730.	1.2	6
57	Underlining the Importance of Peripheral Protic Functional Groups to Enhance the Proton Exchange of Gd-Based MRI Contrast Agents. Inorganic Chemistry, 2021, 60, 13626-13636.	1.9	5
58	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.	1.2	4
59	Synthesis and Characterization of Ga^{III}, Y^{III}, and Lu^{III} Complexes with Etifenin and Analogues. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2016, 642, 486-491.	0.6	4
60	[Gd(AAZTA)] â^' Derivatives with n â€Alkyl Acid Side Chains Show Improved Properties for Their Application as MRI Contrast Agents**. Chemistry - A European Journal, 2021, 27, 1849-1859.	1.7	4
61	The critical role of ligand topology: strikingly different properties of Gd(<scp>iii</scp>) complexes with regioisomeric AAZTA derivatives. Inorganic Chemistry Frontiers, 2022, 9, 2271-2283.	3.0	4
62	NorDATA: An original ligand based on the norbornane skeleton. Synthesis and thermodynamic characterization of metal complexes. Polyhedron, 2008, 27, 3683-3687.	1.0	3
63	Solution properties of the LnIII complexes of a novel octadentate chelator with rigidified iminodiacetate arms. Dalton Transactions, 2012, 41, 12797.	1.6	3
64	cis-IPDTA: An original polyaminopolycarboxylic chelating agent from isophoronediamine. Synthesis and thermodynamic characterization of metal complexes. Polyhedron, 2016, 109, 115-119.	1.0	3
65	H-Bonding and intramolecular catalysis of proton exchange affect the CEST properties of Eu^{III} complexes with HP-DO3A-like ligands. Chemical Communications, 2021, 57, 3287-3290.	2.2	3
66	Studies of the hydrophobic interaction between a pyrene-containing dye and a tetra-aza macrocyclic gadolinium complex. Inorganic Chemistry Frontiers, 2022, 9, 3494-3504.	3.0	1