

Zsolt Baranyai

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Equilibrium and Kinetic Properties of the Lanthanoids(III) and Various Divalent Metal Complexes of the Heptadentate Ligand AAZTA. <i>Chemistry - A European Journal</i> , 2009, 15, 1696-1705.	3.3	90
2	Dissociation Kinetics of Open-Chain and Macrocyclic Gadolinium(III)-Aminopolycarboxylate Complexes Related to Magnetic Resonance Imaging: Catalytic Effect of Endogenous Ligands. <i>Chemistry - A European Journal</i> , 2012, 18, 16426-16435.	3.3	87
3	Synthesis, Potentiometric, Kinetic, and NMR Studies of 1,4,7,10-Tetraazacyclododecane-1,7-bis(acetic) Lanthanide(III) Ions. <i>Inorganic Chemistry</i> , 2008, 47, 3851-3862.	4.0	65
4	Equilibrium, ¹ H and ¹³ C NMR Spectroscopy, and X-ray Diffraction Studies on the Complexes Bi(DOTA)- and Bi(DO3A-Bu). <i>Inorganic Chemistry</i> , 2003, 42, 2342-2349.	4.0	58
5	AAZTA: An Ideal Chelating Agent for the Development of ⁴⁴ Sc PET Imaging Agents. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2118-2122.	13.8	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. <i>Inorganic Chemistry</i> , 2010, 49, 4370-4382.	4.0	52
7	Solution Structures, Stabilities, Kinetics, and Dynamics of DO3A and DO3A-Sulphonamide Complexes. <i>Inorganic Chemistry</i> , 2014, 53, 2858-2872.	4.0	50
8	Equilibrium, Kinetic and Structural Studies of AAZTA Complexes with Ga ³⁺ , In ³⁺ and Cu ²⁺ . <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 147-162.	2.0	49
9	A shortcut to high-affinity Ga-68 and Cu-64 radiopharmaceuticals: one-pot click chemistry trimerisation on the TRAP platform. <i>Dalton Transactions</i> , 2015, 44, 11137-11146.	3.3	49
10	Synthesis and Characterization of a Hypoxia-Sensitive MRI Probe. <i>Chemistry - A European Journal</i> , 2012, 18, 9669-9676.	3.3	47
11	A new bifunctional GdIII complex of enhanced efficacy for MR-molecular imaging applications. <i>Dalton Transactions</i> , 2009, , 9712.	3.3	44
12	The Use of the Macrocyclic Chelator DOTA in Radiochemical Separations. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 36-56.	2.0	44
13	The Role of Equilibrium and Kinetic Properties in the Dissociation of Gd[DTPA-bis(methylamide)] (Omniscan) at near to Physiological Conditions. <i>Chemistry - A European Journal</i> , 2015, 21, 4789-4799.	3.3	40
14	Thermodynamic stability, kinetic inertness and relaxometric properties of monoamide derivatives of lanthanide(III) DOTA complexes. <i>Dalton Transactions</i> , 2015, 44, 5467-5478.	3.3	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. <i>Frontiers in Chemistry</i> , 2018, 6, 232.	3.6	39
16	Lanthanide(III) Complexes of Tris(amide) PCTA Derivatives as Potential Bimodal Magnetic Resonance and Optical Imaging Agents. <i>Chemistry - A European Journal</i> , 2009, 15, 13188-13200.	3.3	38
17	Equilibrium Studies on the Gd ³⁺ , Cu ²⁺ and Zn ²⁺ Complexes of BOPTA, DTPA and DTPA-BMA Ligands: Kinetics of Metal-Exchange Reactions of [Gd(BOPTA)] ²⁺ . <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 1948-1956.	2.0	37
18	Lower Ligand Denticity Leading to Improved Thermodynamic and Kinetic Stability of the Gd ³⁺ Complex: The Strange Case of OBETA. <i>Chemistry - A European Journal</i> , 2012, 18, 7680-7685.	3.3	37

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19	Physico-chemical properties of MnII complexes formed with cis- and trans-DO2A: thermodynamic, electrochemical and kinetic studies. <i>Journal of Inorganic Biochemistry</i> , 2016, 163, 206-213.	3.5	36
20	Complexation Properties of N,N,N',N'-[1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetrayl]tetrakis(1-oxoethane-2,1-diyl)]tetrakis[glycine] (H4dotagI). Equilibrium, Kinetic, and Relaxation Behavior of the Lanthanide(III) Complexes. <i>Helvetica Chimica Acta</i> , 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. <i>Chemical Science</i> , 2021, 12, 11138-11145.	7.4	34
22	Lower Denticity Leading to Higher Stability: Structural and Solution Studies of Ln(III)-OBETA Complexes. <i>Inorganic Chemistry</i> , 2014, 53, 12499-12511.	4.0	31
23	Dramatic Increase of Selectivity for Heavy Lanthanide(III) Cations by Tuning the Flexibility of Polydentate Chelators. <i>Inorganic Chemistry</i> , 2010, 49, 616-625.	4.0	30
24	A Bisamide Derivative of [Mn(1,4-DO2A)] - Solution Thermodynamic, Kinetic, and NMR Relaxometric Studies. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 1165-1174.	2.0	29
25	High kinetic inertness of a bis-hydrated Gd-complex with a constrained AAZTA-like ligand. <i>Chemical Communications</i> , 2016, 52, 11235-11238.	4.1	29
26	Optimising the relaxivities of Mn ²⁺ complexes by targeting human serum albumin (HSA). <i>Dalton Transactions</i> , 2017, 46, 8494-8504.	3.3	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. <i>Chemistry - A European Journal</i> , 2017, 23, 10358-10371.	3.3	25
28	Kinetics of the Formation of [Ln(DOTAM)] ³⁺ Complexes. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 3639-3645.	2.0	24
29	Synthesis and solution thermodynamic study of rigidified and functionalised EGTA derivatives. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 2361.	2.8	23
30	Equilibrium and NMR Relaxometric Studies on the <i>s</i> -Triazine-Based Heptadentate Ligand PTDITA Showing High Selectivity for Gd ³⁺ Ions. <i>Inorganic Chemistry</i> , 2012, 51, 2597-2607.	4.0	23
31	Exploiting the Proton Exchange as an Additional Route to Enhance the Relaxivity of Paramagnetic MRI Contrast Agents. <i>Inorganic Chemistry</i> , 2018, 57, 5567-5574.	4.0	23
32	Synthesis and Relaxometric Characterization of a MRI Gd-Based Probe Responsive to Glutamic Acid Decarboxylase Enzymatic Activity. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 2466-2477.	6.4	21
33	Comprehensive Evaluation of the Physicochemical Properties of Ln ^{III} Complexes of Aminoethyl-DO3A as pH-Responsive <i>T</i> ₁ -MRI Contrast Agents. <i>Chemistry - A European Journal</i> , 2014, 20, 2933-2944.	3.3	21
34	Improved Efficacy of Synthesizing ^M -Labeled DOTA Complexes in Binary Mixtures of Water and Organic Solvents. A Combined Radio- and Physicochemical Study. <i>Inorganic Chemistry</i> , 2018, 57, 6107-6117.	4.0	21
35	Aryl-Phosphonate Lanthanide Complexes and Their Fluorinated Derivatives: Investigation of Their Unusual Relaxometric Behavior and Potential Application as Dual Frequency ¹ H/ ¹⁹ F-...MRI Probes. <i>Chemistry - A European Journal</i> , 2013, 19, 11644-11660.	3.3	18
36	The effects of intramolecular H-bond formation on the stability constant and water exchange rate of the Gd(III)-diethylenetriamine-N ² -(3-amino-1,1-propylenephosphonic)-N,N,N ³ ,N ³ -tetraacetate complex. <i>Contrast Media and Molecular Imaging</i> , 2007, 2, 94-102.	0.8	17

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37	Chapter 2. Gadolinium-based Contrast Agents. <i>New Developments in NMR</i> , 2017, , 121-242.	0.1	17
38	Combined NMR, DFT and X-ray studies highlight structural and hydration changes of [Ln(AAZTA)] ³⁺ complexes across the series. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 795-803.	6.0	16
39	Decomposition of <i>N</i> -Chloroglycine in Alkaline Aqueous Solution: Kinetics and Mechanism. <i>Chemical Research in Toxicology</i> , 2015, 28, 1282-1291.	3.3	15
40	A rigidified AAZTA-like ligand as efficient chelator for ⁶⁸ Ga radiopharmaceuticals. <i>ChemistrySelect</i> , 2016, 1, 163-171.	1.5	14
41	Determination of gadolinium-based magnetic resonance imaging contrast agents by micellar electrokinetic capillary chromatography. <i>Electrophoresis</i> , 2011, 32, 2223-2228.	2.4	13
42	Exploring the intramolecular catalysis of the proton exchange process to modulate the relaxivity of Gd(III)-complexes of HP-DO3A-like ligands. <i>Chemical Communications</i> , 2018, 54, 10056-10059.	4.1	13
43	Acid-catalyzed proton exchange as a novel approach for relaxivity enhancement in Gd-HPDO3A-like complexes. <i>Chemical Science</i> , 2020, 11, 7829-7835.	7.4	13
44	Kinetics of the Exchange Reactions between Gd(DTPA) ²⁺ , Gd(BOPTA) ²⁺ , and Gd(DTPA-BMA) Complexes, Used As MRI Contrast Agents, and the Triethylenetetraamine-Hexaacetate Ligand. <i>Inorganic Chemistry</i> , 2011, 50, 3471-3478.	4.0	11
45	Solution thermodynamics, computational and relaxometric studies of ditopic DO3A-based Mn(II) complexes. <i>New Journal of Chemistry</i> , 2015, 39, 539-547.	2.8	11
46	AAZTA: An Ideal Chelating Agent for the Development of ⁴⁴ Sc PET Imaging Agents. <i>Angewandte Chemie</i> , 2017, 129, 2150-2154.	2.0	11
47	PIDAZTA: Structurally Constrained Chelators for the Efficient Formation of Stable Gallium-68 Complexes at Physiological pH. <i>Chemistry - A European Journal</i> , 2019, 25, 10698-10709.	3.3	11
48	Towards ²¹³ Bi alpha-therapeutics and beyond: unravelling the foundations of efficient Bi(III) complexation by DOTP. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 3893-3904.	6.0	11
49	Influence of gem-Dimethyl Substitution on the Stability, Kinetics and Relaxometric Properties of PDTA Complexes. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 2074-2086.	2.0	10
50	Lanthanide(III) complexes of some natural siderophores: A thermodynamic, kinetic and relaxometric study. <i>Journal of Inorganic Biochemistry</i> , 2013, 127, 53-61.	3.5	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. <i>Frontiers in Chemistry</i> , 2018, 6, 170.	3.6	9
52	Enhanced relaxivity of Gd(III)-complexes with HP-DO3A-like ligands upon the activation of the intramolecular catalysis of the prototropic exchange. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 1500-1510.	6.0	9
53	Modifying LnHPDO3A Chelates for Improved <i>T₁</i> and CEST MRI Applications. <i>Chemistry - A European Journal</i> , 2019, 25, 4184-4193.	3.3	8
54	A solution thermodynamic study of the Cu(II) and Zn(II) complexes of EBTA: X-ray crystal structure of the dimeric complex [Cu ₂ (EBTA)(H ₂ O) ₃] ₂ . <i>Inorganica Chimica Acta</i> , 2009, 362, 2259-2264.	2.4	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.	3.3	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.	2.4	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.	4.0	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.	2.4	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.	1.2	4
60	[Gd(AAZTA)] ⁿ⁺ Derivatives with n-Alkyl Acid Side Chains Show Improved Properties for Their Application as MRI Contrast Agents**. Chemistry - A European Journal, 2021, 27, 1849-1859.	3.3	4
61	The critical role of ligand topology: strikingly different properties of Gd(III) complexes with regioisomeric AAZTA derivatives. Inorganic Chemistry Frontiers, 2022, 9, 2271-2283.	6.0	4
62	NorDATA: An original ligand based on the norbornane skeleton. Synthesis and thermodynamic characterization of metal complexes. Polyhedron, 2008, 27, 3683-3687.	2.2	3
63	Solution properties of the Ln(III) complexes of a novel octadentate chelator with rigidified iminodiacetate arms. Dalton Transactions, 2012, 41, 12797.	3.3	3
64	cis-IPDTA: An original polyaminopolycarboxylic chelating agent from isophoronediamine. Synthesis and thermodynamic characterization of metal complexes. Polyhedron, 2016, 109, 115-119.	2.2	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.	4.1	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.	6.0	1