

Zsolt Baranyai

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	How the catalysis of the prototropic exchange affects the properties of lanthanide(III) complexes in their applications as MRI contrast agents. <i>Inorganica Chimica Acta</i> , 2022, 532, 120730.	2.4	6
2	The critical role of ligand topology: strikingly different properties of Gd(III) complexes with regioisomeric AAZTA derivatives. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 2271-2283.	6.0	4
3	Studies of the hydrophobic interaction between a pyrene-containing dye and a tetra-aza macrocyclic gadolinium complex. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3494-3504.	6.0	1
4	[Gd(AAZTA)] ⁿ⁺ Derivatives with n-Alkyl Acid Side Chains Show Improved Properties for Their Application as MRI Contrast Agents**. <i>Chemistry - A European Journal</i> , 2021, 27, 1849-1859.	3.3	4
5	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
6	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
7	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
8	Underlining the Importance of Peripheral Protic Functional Groups to Enhance the Proton Exchange of Gd-Based MRI Contrast Agents. <i>Inorganic Chemistry</i> , 2021, 60, 13626-13636.	4.0	5
9	H-Bonding and intramolecular catalysis of proton exchange affect the CEST properties of Eu(III) complexes with HP-DO3A-like ligands. <i>Chemical Communications</i> , 2021, 57, 3287-3290.	4.1	3
10	The Use of the Macrocyclic Chelator DOTA in Radiochemical Separations. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 36-56.	2.0	44
11	Combined NMR, DFT and X-ray studies highlight structural and hydration changes of [Ln(AAZTA)] ⁿ⁺ complexes across the series. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 795-803.	6.0	16
12	Interaction of macrocyclic gadolinium-based MR contrast agents with Type I collagen. Equilibrium and kinetic studies. <i>Dalton Transactions</i> , 2020, 49, 14863-14870.	3.3	7
13	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
14	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
15	Modifying LnHPDO3A Chelates for Improved T ₁ and CEST MRI Applications. <i>Chemistry - A European Journal</i> , 2019, 25, 4184-4193.	3.3	8
16	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
17	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
18	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

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19	Improved Efficacy of Synthesizing ^{67}Ga -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
20	Exploring the intramolecular catalysis of the proton exchange process to modulate the relaxivity of $\text{Gd}(\text{III})$ -complexes of HP-DO3A-like ligands. <i>Chemical Communications</i> , 2018, 54, 10056-10059.	4.1	13
21	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
22	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
23	Equilibrium, Kinetic and Structural Properties of Gallium(III) and Some Divalent Metal Complexes Formed with the New DATA $^{\text{m}}$ and DATA $^{\text{5m}}$ Ligands. <i>Chemistry - A European Journal</i> , 2017, 23, 10358-10371.	3.3	25
24	Chapter 2. Gadolinium-based Contrast Agents. <i>New Developments in NMR</i> , 2017, , 121-242.	0.1	17
25	Optimising the relaxivities of Mn^{2+} complexes by targeting human serum albumin (HSA). <i>Dalton Transactions</i> , 2017, 46, 8494-8504.	3.3	27
26	A Bisamide Derivative of $[\text{Mn}(1,4\text{-DO2A})]$ - Solution Thermodynamic, Kinetic, and NMR Relaxometric Studies. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 1165-1174.	2.0	29
27	Physico-chemical properties of $\text{Mn}(\text{III})$ 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
28	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
29	Synthesis and Characterization of $\text{Ga}(\text{III})$, $\text{Y}(\text{III})$, and $\text{Lu}(\text{III})$ Complexes with Etifenin and Analogues. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2016, 642, 486-491.	1.2	4
30	A rigidified AAZTA-like ligand as efficient chelator for ^{68}Ga radiopharmaceuticals. <i>ChemistrySelect</i> , 2016, 1, 163-171.	1.5	14
31	cis-IPDTA: An original polyaminopolycarboxylic chelating agent from isophoronediamine. Synthesis and thermodynamic characterization of metal complexes. <i>Polyhedron</i> , 2016, 109, 115-119.	2.2	3
32	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
33	The Role of Equilibrium and Kinetic Properties in the Dissociation of $\text{Gd}[\text{DTPA}^{\text{bis}}(\text{methyamide})]$ (Omniscan) at near to Physiological Conditions. <i>Chemistry - A European Journal</i> , 2015, 21, 4789-4799.	3.3	40
34	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
35	Decomposition of N -Chloroglycine in Alkaline Aqueous Solution: Kinetics and Mechanism. <i>Chemical Research in Toxicology</i> , 2015, 28, 1282-1291.	3.3	15
36	Solution thermodynamics, computational and relaxometric studies of ditopic DO3A-based $\text{Mn}(\text{II})$ complexes. <i>New Journal of Chemistry</i> , 2015, 39, 539-547.	2.8	11

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37	Comprehensive Evaluation of the Physicochemical Properties of Ln ^{III} Complexes of Aminoethyl-DO3A as pH-Responsive <i>T₁</i> -MRI Contrast Agents. <i>Chemistry - A European Journal</i> , 2014, 20, 2933-2944.	3.3	21
38	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
39	Solution Structures, Stabilities, Kinetics, and Dynamics of DO3A and DO3A-Sulphonamide Complexes. <i>Inorganic Chemistry</i> , 2014, 53, 2858-2872.	4.0	50
40	Aryl-Phosphonate Lanthanide Complexes and Their Fluorinated Derivatives: Investigation of Their Unusual Relaxometric Behavior and Potential Application as Dual Frequency <i>T₁</i> -MRI Probes. <i>Chemistry - A European Journal</i> , 2013, 19, 11644-11660.	3.3	18
41	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
42	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
43	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
44	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
45	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
46	Solution properties of the LnIII complexes of a novel octadentate chelator with rigidified iminodiacetate arms. <i>Dalton Transactions</i> , 2012, 41, 12797.	3.3	3
47	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
48	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
49	Synthesis and Characterization of a Hypoxia-Sensitive MRI Probe. <i>Chemistry - A European Journal</i> , 2012, 18, 9669-9676.	3.3	47
50	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
51	Determination of gadolinium-based magnetic resonance imaging contrast agents by micellar electrokinetic capillary chromatography. <i>Electrophoresis</i> , 2011, 32, 2223-2228.	2.4	13
52	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
53	An NMR and DFT Investigation on the Conformational Properties of Lanthanide(III) 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetate Analogues Containing Methylene phosphonate Pendant Arms. <i>Inorganic Chemistry</i> , 2010, 49, 4370-4382.	4.0	52
54	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

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55	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.	3.3	90
56	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.	3.3	38
57	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 . Inorganica Chimica Acta, 2009, 362, 2259-2264.	2.4	7
58	A new bifunctional Gd(III) complex of enhanced efficacy for MR-molecular imaging applications. Dalton Transactions, 2009, , 9712.	3.3	44
59	NorDATA: An original ligand based on the norbornane skeleton. Synthesis and thermodynamic characterization of metal complexes. Polyhedron, 2008, 27, 3683-3687.	2.2	3
60	Synthesis and solution thermodynamic study of rigidified and functionalised EGTA derivatives. Organic and Biomolecular Chemistry, 2008, 6, 2361.	2.8	23
61	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.	4.0	65
62	Kinetics of the Formation of [Ln(DOTAM)] ³⁺ Complexes. European Journal of Inorganic Chemistry, 2007, 2007, 3639-3645.	2.0	24
63	The effects of intramolecular H-bond formation on the stability constant and water exchange rate of the Gd(III)-diethylenetriamine-Na ⁺ -(3-amino-1,1-propylenephosphonic)-N,N,Na ⁺ ,Na ⁺ -tetraacetate complex. Contrast Media and Molecular Imaging, 2007, 2, 94-102.	0.8	17
64	Complexation Properties of N,Na ⁺ ,Na ⁺ ,Na ⁺ -[1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetrayltetrakis(1-oxoethane-2,1-diyl)]tetrakis[glycine], (H ₄ dotagl). Equilibrium, Kinetic, and Relaxation Behavior of the Lanthanide(III) Complexes. Helvetica Chimica Acta, 2005, 88, 604-617.	1.6	35
65	Equilibrium, ¹ H and ¹³ C NMR Spectroscopy, and X-ray Diffraction Studies on the Complexes Bi(DOTA)-and Bi(DO3A-Bu). Inorganic Chemistry, 2003, 42, 2342-2349.	4.0	58
66	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