

Jan Kotek

List of Publications by Year in descending order

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citations

109311

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133244

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103
all docs

103
docs citations

103
times ranked

3607
citing authors

#	ARTICLE	IF	CITATIONS
1	Gadolinium(iii) complexes as MRI contrast agents: ligand design and properties of the complexes. Dalton Transactions, 2008, , 3027.	3.3	451
2	Complexes of tetraazacycles bearing methylphosphinic/phosphonic acid pendant arms with copper(II), zinc(II) and lanthanides(III). A comparison with their acetic acid analogues. Coordination Chemistry Reviews, 2001, 216-217, 287-312.	18.8	228
3	A Triazacyclononane-Based Bifunctional Phosphinate Ligand for the Preparation of Multimeric ⁶⁸ Ga Tracers for Positron Emission Tomography. Chemistry - A European Journal, 2010, 16, 7174-7185.	3.3	138
4	Optical imaging of localized chemical events using programmable diamond quantum nanosensors. Nature Communications, 2017, 8, 14701.	12.8	135
5	A Bisphosphonate Monoamide Analogue of DOTA: A Potential Agent for Bone Targeting. Journal of the American Chemical Society, 2005, 127, 16477-16485.	13.7	130
6	Gallium(III) Complexes of DOTA and DOTA-Monoamide: Kinetic and Thermodynamic Studies. Inorganic Chemistry, 2010, 49, 10960-10969.	4.0	127
7	Mn ²⁺ Complexes with Pyridine-Containing 15-Membered Macrocycles: Thermodynamic, Kinetic, Crystallographic, and ¹ H/ ¹⁷ O Relaxation Studies. Inorganic Chemistry, 2010, 49, 3224-3238.	4.0	112
8	Lanthanide(III) Complexes of a Mono(methylphosphonate) Analogue of H ₄ dota: The Influence of Protonation of the Phosphonate Moiety on the TSAP/SAP Isomer Ratio and the Water Exchange Rate. Chemistry - A European Journal, 2005, 11, 2373-2384.	3.3	110
9	Synthesis of a bifunctional monophosphinic acid DOTA analogue ligand and its lanthanide(iii) complexes. A gadolinium(iii) complex endowed with an optimal water exchange rate for MRI applications. Organic and Biomolecular Chemistry, 2005, 3, 112-117.	2.8	84
10	Crystal Structures of Lanthanide(III) Complexes with Cyclen Derivative Bearing Three Acetate and One Methylphosphonate Pendants. Inorganic Chemistry, 2005, 44, 5591-5599.	4.0	84
11	Lanthanide(III) Complexes of Novel Mixed Carboxylic-Phosphorus Acid Derivatives of Diethylenetriamine: A Step towards More Efficient MRI Contrast Agents. Chemistry - A European Journal, 2003, 9, 5899-5915.	3.3	83
12	High Thermodynamic Stability and Extraordinary Kinetic Inertness of Copper(II) Complexes with 1,4,8,11-Tetraazacyclotetradecane-1,8-bis(methylphosphonic acid): Example of a Rare Isomerism between Kinetically Inert Penta- and Hexacoordinated Copper(II) Complexes. Chemistry - A European Journal, 2003, 9, 233-248.	3.3	81
13	Thermodynamic study of lanthanide(iii) complexes with bifunctional monophosphinic acid analogues of H ₄ dota and comparative kinetic study of yttrium(iii) complexes. Dalton Transactions, 2007, , 535-549.	3.3	81
14	Mn ²⁺ Complexes with 12-Membered Pyridine Based Macrocycles Bearing Carboxylate or Phosphonate Pendant Arm: Crystallographic, Thermodynamic, Kinetic, Redox, and ¹ H/ ¹⁷ O Relaxation Studies. Inorganic Chemistry, 2011, 50, 12785-12801.	4.0	75
15	Gadolinium(iii) complexes of mono- and diethyl esters of monophosphonic acid analogue of DOTA as potential MRI contrast agents: solution structures and relaxometric studies. Dalton Transactions, 2007, , 493-501.	3.3	72
16	A Gadolinium(III) Complex of a Carboxylic-Phosphorus Acid Derivative of Diethylenetriamine Covalently Bound to Inulin, a Potential Macromolecular MRI Contrast Agent. Bioconjugate Chemistry, 2004, 15, 881-889.	3.6	66
17	Aminoalkylbis(phosphonates): Their Complexation Properties in Solution and in the Solid State. European Journal of Inorganic Chemistry, 2007, 2007, 333-344.	2.0	64
18	Thermodynamic and Kinetic Studies of Lanthanide(III) Complexes with H ₅ do3ap (1,4,7,10-Tetraazacyclododecane-1,4,7-triacetic-10-(methylphosphonic Acid)), a Monophosphonate Analogue of H ₄ dota. Collection of Czechoslovak Chemical Communications, 2005, 70, 1909-1942.	1.0	62

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19	Lanthanide(III) Complexes of Phosphorus Acid Analogues of H ₄ DOTA as Model Compounds for the Evaluation of the Second-Sphere Hydration. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 119-136.	2.0	55
20	Thermodynamic and Kinetic Study of Scandium(III) Complexes of DTPA and DOTA: A Step Toward Scandium Radiopharmaceuticals. <i>Chemistry - A European Journal</i> , 2014, 20, 7944-7955.	3.3	55
21	Cyclodextrin-Based Bimodal Fluorescence/MRI Contrast Agents: An Efficient Approach to Cellular Imaging. <i>Chemistry - A European Journal</i> , 2010, 16, 10094-10102.	3.3	49
22	Self-Assembled Thermoresponsive Polymeric Nanogels for ¹⁹ F MR Imaging. <i>Biomacromolecules</i> , 2018, 19, 3515-3524.	5.4	49
23	Cyclam (1,4,8,11-tetraazacyclotetradecane) with one methylphosphonate pendant arm: a new ligand for selective copper(ii) binding. <i>Dalton Transactions</i> , 2005, , 2908.	3.3	46
24	Lanthanide(III) Complexes of 4,10-Bis(phosphonomethyl)-1,4,7,10-tetraazacyclododecane-1,7-diacetic acid (<i>trans</i> -H ₆ do2a2p) in Solution and in the Solid State: Structural Studies Along the Series. <i>Chemistry - A European Journal</i> , 2010, 16, 8446-8465.	3.3	44
25	Mn ²⁺ complexes of 1-oxa-4,7-diazacyclononane based ligands with acetic, phosphonic and phosphinic acid pendant arms: Stability and relaxation studies. <i>Dalton Transactions</i> , 2011, 40, 10131.	3.3	44
26	Bis(methylphosphonic Acid) Derivatives of 1,4,8,11-Tetraazacyclotetradecane (Cyclam). Synthesis, Crystal and Molecular Structures, and Solution Properties. <i>Collection of Czechoslovak Chemical Communications</i> , 2000, 65, 1289-1316.	1.0	43
27	Lanthanide(III) Complexes of Pyridine- <i>N</i> -Oxide Analogues of DOTA in Solution and in the Solid State. A New Kind of Isomerism in Complexes of DOTA-like Ligands. <i>Inorganic Chemistry</i> , 2009, 48, 466-475.	4.0	43
28	Phosphonate-Titanium Dioxide Assemblies: Platform for Multimodal Diagnostic-Therapeutic Nanoprobes. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 5185-5194.	6.4	42
29	A Clean Conversion of D-Glucosamine Hydrochloride to a Pyrazine in the Presence of Phenylboronate or Borate. <i>European Journal of Organic Chemistry</i> , 2001, 2001, 3899-3901.	2.4	41
30	Phosphinic derivative of DTPA conjugated to a G5 PAMAM dendrimer: an ¹⁷ O and ¹ H relaxation study of its Gd(III) complex. <i>Dalton Transactions</i> , 2006, , 3399-3406.	3.3	41
31	Crystal Structures and Reactivity of 3a,5a,8a,10a-Tetraazaperhydropyrene Derivatives. An Alternative Approach to Selective Nitrogen Alkylation of 1,4,8,11-Tetraazacyclotetradecane (Cyclam). <i>Collection of Czechoslovak Chemical Communications</i> , 2000, 65, 243-266.	1.0	40
32	Three in One: TSA, TSA ⁻ , and SA Units in One Crystal Structure of a Yttrium(III) Complex with a Monophosphinated H ₄ dota Analogue. <i>Inorganic Chemistry</i> , 2006, 45, 3097-3102.	4.0	40
33	Pyridine- <i>N</i> -oxide Analogues of DOTA and Their Gadolinium(III) Complexes Endowed with a Fast Water Exchange on the Square-Antiprismatic Isomer. <i>Inorganic Chemistry</i> , 2009, 48, 455-465.	4.0	39
34	Gd(III) complex of a monophosphate-bis(phosphonate) DOTA analogue with a high relaxivity; Lanthanide(III) complexes for imaging and radiotherapy of calcified tissues. <i>Dalton Transactions</i> , 2009, , 3204.	3.3	37
35	Dual imaging probes for magnetic resonance imaging and fluorescence microscopy based on perovskite manganite nanoparticles. <i>Journal of Materials Chemistry</i> , 2011, 21, 157-164.	6.7	35
36	NOTA Complexes with Copper(II) and Divalent Metal Ions: Kinetic and Thermodynamic Studies. <i>Inorganic Chemistry</i> , 2018, 57, 3061-3072.	4.0	34

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37	Anion recognition by β -arylazo-N-confused calix[4]pyrroles. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 2921.	2.8	33
38	Cyclam Derivatives with a Bis(phosphinate) or a Phosphinato-Phosphonate Pendant Arm: Ligands for Fast and Efficient Copper(II) Complexation for Nuclear Medical Applications. <i>Inorganic Chemistry</i> , 2015, 54, 11751-11766.	4.0	33
39	Gadolinium complexes of monophosphinic acid DOTA derivatives conjugated to cyclodextrin scaffolds: efficient MRI contrast agents for higher magnetic fields. <i>Dalton Transactions</i> , 2012, 41, 13509.	3.3	32
40	Lanthanide(III) Complexes That Contain a Self-Immolative Arm: Potential Enzyme Responsive Contrast Agents for Magnetic Resonance Imaging. <i>Chemistry - A European Journal</i> , 2012, 18, 1408-1418.	3.3	32
41	Study of Thermodynamic and Kinetic Stability of Transition Metal and Lanthanide Complexes of DTPA Analogues with a Phosphorus Acid Pendant Arm. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 1976-1986.	2.0	31
42	Paramagnetic ^{19}F Relaxation Enhancement in Nickel(II) Complexes of <i>N</i> -Trifluoroethyl Cyclam Derivatives and Cell Labeling for ^{19}F MRI. <i>Inorganic Chemistry</i> , 2017, 56, 13337-13348.	4.0	30
43	Novel polymeric metal complexes of calix[4]arene-1,1,2,3-diphosphonic acid: synthesis and structure determination. <i>Inorganica Chimica Acta</i> , 2002, 335, 27-35.	2.4	29
44	Thermodynamic, kinetic and solid-state study of divalent metal complexes of 1,4,8,11-tetraazacyclotetradecane (cyclam) bearing two trans (1,8)-methylphosphonic acid pendant arms. <i>Dalton Transactions</i> , 2006, , 5184-5197.	3.3	29
45	Metal Complexes of 4,11-Dimethyl-1,4,8,11-tetraazacyclotetradecane-1,8-bis(methylphosphonic acid) - Thermodynamic and Formation/Decomplexation Kinetic Studies. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 3577-3592.	2.0	29
46	Neuro-inflammatory effects of photodegradative products of bilirubin. <i>Scientific Reports</i> , 2018, 8, 7444.	3.3	27
47	Modification of Nanocrystalline TiO ₂ with Phosphonate- and Bis(phosphonate)-Bearing Macrocyclic Complexes: Sorption and Stability Studies. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 1981-1989.	2.0	26
48	The cis/trans-isomerism on cobalt(III) complexes with 1,4,8,11-tetraazacyclotetradecane-1,8-bis(methylphosphonic acid). <i>Inorganica Chimica Acta</i> , 2001, 317, 324-330.	2.4	25
49	Coordination properties of cyclam (1,4,8,11-tetraazacyclotetradecane) endowed with two methylphosphonic acid pendant arms in the 1,4-positions. <i>Dalton Transactions</i> , 2008, , 5378.	3.3	25
50	Gadolinium- and Manganese-Based Contrast Agents with Fluorescent Probes for Both Magnetic Resonance and Fluorescence Imaging of Pancreatic Islets: A Comparative Study. <i>ChemMedChem</i> , 2013, 8, 614-621.	3.2	25
51	Nickel(II) complexes of N-CH ₂ CF ₃ cyclam derivatives as contrast agents for ^{19}F magnetic resonance imaging. <i>Dalton Transactions</i> , 2016, 45, 474-478.	3.3	24
52	Towards MRI contrast agents responsive to Ca(II) and Mg(II) ions: metal-induced oligomerization of dota-bisphosphonate conjugates. <i>Contrast Media and Molecular Imaging</i> , 2010, 5, 294-296.	0.8	21
53	Synthesis and coordination properties of palladium(II) and platinum(II) complexes with phosphonated triphenylphosphine derivatives. <i>Journal of Organometallic Chemistry</i> , 2006, 691, 2409-2423.	1.8	20
54	Unsymmetrically substituted side-bridged cyclam derivatives and their Cu(II) and Zn(II) complexes. <i>New Journal of Chemistry</i> , 2008, 32, 496-504.	2.8	20

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55	1-hydroxy-1,1-bis(H-phosphinates): Synthesis, stability, and sorption properties. <i>Heteroatom Chemistry</i> , 2012, 23, 195-201.	0.7	20
56	Lanthanide(III) complexes of aminoethyl-DO3A as PARACEST contrast agents based on decoordination of the weakly bound amino group. <i>Dalton Transactions</i> , 2013, 42, 15735.	3.3	20
57	Unusual cis/trans Isomerism in Octahedral Nickel(II) Complexes with 1,4,8,11-Tetraazacyclotetradecane-1,8-bis(methylphosphonic Acid) as a Ligand. <i>Collection of Czechoslovak Chemical Communications</i> , 2001, 66, 363-381.	1.0	19
58	Ternary Complexes of Zinc(II), Cyclen and Pyridinecarboxylic Acids. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 3974-3987.	2.0	19
59	Bifunctional Cyclam-Based Ligands with Phosphorus Acid Pendant Moieties for Radiocopper Separation: Thermodynamic and Kinetic Studies. <i>Chemistry - A European Journal</i> , 2015, 21, 4671-4687.	3.3	18
60	¹ H NMR relaxivity of aqueous suspensions of titanium dioxide nanoparticles coated with a gadolinium(III) chelate of a DOTA-monoamide with a phenylphosphonate pendant arm. <i>Journal of Materials Chemistry</i> , 2009, 19, 1494.	6.7	17
61	Paramagnetic Cobalt(II) Complexes with Cyclam Derivatives: Toward ¹⁹ F MRI Contrast Agents. <i>Inorganic Chemistry</i> , 2020, 59, 10071-10082.	4.0	15
62	Methylene-bis[(aminomethyl)phosphinic acids]: synthesis, acid-base and coordination properties. <i>Dalton Transactions</i> , 2013, 42, 2414-2422.	3.3	14
63	Aminoalkyl-1,1-bis(phosphinic acids): Stability, Acid-Base, and Coordination Properties. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 4357-4368.	2.0	14
64	Ln(III)-complexes of a DOTA analogue with an ethylenediamine pendant arm as pH-responsive PARACEST contrast agents. <i>Dalton Transactions</i> , 2016, 45, 3486-3496.	3.3	13
65	Eu(III) Complex with DO3A-amino-phosphonate Ligand as a Concentration-Independent pH-Responsive Contrast Agent for Magnetic Resonance Spectroscopy (MRS). <i>Inorganic Chemistry</i> , 2017, 56, 2078-2091.	4.0	13
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73	Selective Protection of 1,4,8,11-Tetraazacyclotetradecane (Cyclam) in Position 1,4 with the Phosphonothioyl Group and Synthesis of a Cyclam-1,4-bis(methylphosphonic Acid). Crystal Structures of Several Cyclic Phosphonothioamides. Collection of Czechoslovak Chemical Communications, 2006, 71, 337-367.	1.0	9
74	Ten-membered Rings or Larger with One or More Nitrogen Atoms. , 2008, , 613-666.		9
75	Formation and dissociation kinetics of copper(II) complexes with tetraphosphorus acid DOTA analogs. Polyhedron, 2014, 67, 449-455.	2.2	9
76	Low-molecular-weight paramagnetic ¹⁹ F contrast agents for fluorine magnetic resonance imaging. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2019, 32, 115-122.	2.0	9
77	Cross-Bridged Cyclam with Phosphonate and Phosphinate Pendant Arms: Chelators for Copper Radioisotopes with Fast Complexation. Inorganic Chemistry, 2020, 59, 8432-8443.	4.0	8
78	Formation of gadolinium ³⁺ ferritin from clinical magnetic resonance contrast agents. Nanoscale Advances, 2020, 2, 5567-5571.	4.6	7
79	Complexes of phosphonate and phosphinate derivatives of dipicolylamine. New Journal of Chemistry, 2018, 42, 7713-7722.	2.8	6
80	Capillary electrophoretic separation and kinetic study of inert copper(II) complexes of 1,8-bis(methylphosphonate) derivative of cyclam. Polyhedron, 2006, 25, 1884-1892.	2.2	5
81	Synthesis and Coordination Behavior of Symmetrical Tetraamine Phosphinic Acids. European Journal of Inorganic Chemistry, 2007, 2007, 3881-3891.	2.0	5
82	A New Tris(phosphonomethyl) Monoacetic Acid Cyclam Derivative: Synthesis, Acid-Base and Metal Complexation Studies. European Journal of Inorganic Chemistry, 2011, 2011, 527-538.	2.0	5
83	Coordination Behavior of 1,4-Disubstituted Cyclen Endowed with Phosphonate, Phosphonate Monoethylster, and H-Phosphinate Pendant Arms. Molecules, 2019, 24, 3324.	3.8	5
84	Selective and clean synthesis of aminoalkyl- <i>H</i> -phosphinic acids from hypophosphorous acid by phospho-Mannich reaction. RSC Advances, 2020, 10, 21329-21349.	3.6	5
85	Complexes of hydrophilic triphenylphosphines modified with gem-bis(phosphonate) moiety. An unusual simultaneous cis and trans arrangements in the Pt(II) dinuclear complex. Dalton Transactions, 2009, , 4942.	3.3	4
86	The solid-state structures and ligand cavity evaluation of lanthanide(III) complexes of a DOTA analogue with a (dibenzylamino)methylphosphinate pendant arm. Dalton Transactions, 2020, 49, 1555-1569.	3.3	4
87	A Clean Conversion of D-Glucosamine Hydrochloride to a Pyrazine in the Presence of Phenylboronate or Borate. European Journal of Organic Chemistry, 2001, 2001, 3899.	2.4	4
88	Cyclam with a phosphinate-bis(phosphonate) pendant arm is a bone-targeting carrier of copper radionuclides. Dalton Transactions, 0, , .	3.3	4
89	Bis(phosphonate) Building Blocks Modified with Fluorescent Dyes. Heteroatom Chemistry, 2013, 24, 413-425.	0.7	3
90	Synthesis and characterization of monophosphinic acid DOTA derivative: A smart tool with functionalities for multimodal imaging. Bioorganic and Medicinal Chemistry, 2017, 25, 4297-4303.	3.0	3

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91	Transition metal complexes of tris(aminomethyl)phosphine oxide (tampo) – Thermodynamic and X-ray diffraction studies. <i>Inorganica Chimica Acta</i> , 2018, 469, 217-226.	2.4	3
92	Analysis of wild <i>Taraxacum bicornis</i> Dahlst. (Compositae – Crepidinae) as a potential alternative natural rubber crop. <i>Genetic Resources and Crop Evolution</i> , 2019, 66, 1341-1361.	1.6	3
93	Complexes of cyclen side-bridged with a methylene-bis(phosphinate) group. <i>Polyhedron</i> , 2021, 196, 114994.	2.2	3
94	Phosphinate Analogues of Ida and Nta with Low Basicity of Nitrogen Atom: Acid-Base and Complexation Properties. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2014, 189, 933-945.	1.6	2
95	Ten-Membered Rings or Larger With One or More Nitrogen Atoms. , 2022, , 591-683.		1
96	1,4,7-Triazacyclononane (tacn) with N,N-bridging methylene-bis(phosphinic acid) group and its complexes. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 1261-1268.	1.2	1
97	Al(III)-NTA-fluoride: a simple model system for Al – F binding with interesting thermodynamics. <i>Dalton Transactions</i> , 2020, 49, 13726-13736.	3.3	0
98	Complexes of NTA – monoamides with CuII ion: Structural, equilibrium and kinetic study. <i>European Journal of Inorganic Chemistry</i> , 0, , .	2.0	0