

# Alessandro Barge

## List of Publications by Year in descending order

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105  
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4,135  
citations

126907

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123424

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113  
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113  
docs citations

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times ranked

4494  
citing authors

#	ARTICLE	IF	CITATIONS
1	Paramagnetic Lanthanide(III) complexes as pH-sensitive chemical exchange saturation transfer (CEST) contrast agents for MRI applications. <i>Magnetic Resonance in Medicine</i> , 2002, 47, 639-648.	3.0	365
2	NMR, Relaxometric, and Structural Studies of the Hydration and Exchange Dynamics of Cationic Lanthanide Complexes of Macrocyclic Tetraamide Ligands. <i>Journal of the American Chemical Society</i> , 1999, 121, 5762-5771.	13.7	267
3	How to determine free Gd and free ligand in solution of Gd chelates. A technical note. <i>Contrast Media and Molecular Imaging</i> , 2006, 1, 184-188.	0.8	249
4	The synthesis and application of polyamino polycarboxylic bifunctional chelating agents. <i>Chemical Society Reviews</i> , 2011, 40, 3019.	38.1	153
5	Crystal structure and solution dynamics of the lutetium(III) chelate of DOTA. <i>Inorganica Chimica Acta</i> , 1996, 246, 423-429.	2.4	141
6	Direct NMR Spectroscopic Observation of a Lanthanide-Coordinated Water Molecule whose Exchange Rate Is Dependent on the Conformation of the Complexes. <i>Angewandte Chemie - International Edition</i> , 1998, 37, 2673-2675.	13.8	133
7	Prototropic vs Whole Water Exchange Contributions to the Solvent Relaxation Enhancement in the Aqueous Solution of a Cationic Gd <sup>3+</sup> -Macrocyclic Complex. <i>Journal of the American Chemical Society</i> , 1997, 119, 4767-4768.	13.7	108
8	Alkyne-azide click reaction catalyzed by metallic copper under ultrasound. <i>Nature Protocols</i> , 2010, 5, 607-616.	12.0	103
9	Targeting Cells with MR Imaging Probes Based on Paramagnetic Gd(III) Chelates. <i>Current Pharmaceutical Biotechnology</i> , 2004, 5, 509-518.	1.6	97
10	Syntheses and Relaxation Properties of Mixed Gadolinium Hydroxypyridinonate MRI Contrast Agents. <i>Inorganic Chemistry</i> , 2000, 39, 5747-5756.	4.0	95
11	Cellular labeling with Gd(III) chelates: only high thermodynamic stabilities prevent the cells acting as "sponges" of Gd <sup>3+</sup> ions. <i>Contrast Media and Molecular Imaging</i> , 2006, 1, 23-29.	0.8	89
12	A Novel Compound in the Lanthanide(III) DOTA Series. X-ray Crystal and Molecular Structure of the Complex Na[La(DOTA)La(HDOTA)]·10H <sub>2</sub> O. <i>Inorganic Chemistry</i> , 1997, 36, 4287-4289.	4.0	87
13	Optimization of the Relaxivity of MRI Contrast Agents: Effect of Poly(ethylene glycol) Chains on the Water-Exchange Rates of Gd(III) Complexes. <i>Journal of the American Chemical Society</i> , 2001, 123, 10758-10759.	13.7	87
14	Ternary Complexes between Cationic Gd(III) Chelates and Anionic Metabolites in Aqueous Solution: An NMR Relaxometric Study. <i>Chemistry - A European Journal</i> , 2003, 9, 2102-2109.	3.3	87
15	Ultrasound-Promoted Copper-Catalyzed Azide-Alkyne Cycloaddition. <i>ACS Combinatorial Science</i> , 2010, 12, 13-15.	3.3	82
16	Efficient, solventless N-Boc protection of amines carried out at room temperature using sulfamic acid as recyclable catalyst. <i>Tetrahedron Letters</i> , 2007, 48, 8318-8322.	1.4	81
17	A Multinuclear NMR Study on the Structure and Dynamics of Lanthanide(III) Complexes of the Poly(amino carboxylate) EGTA <sup>4-</sup> in Aqueous Solution. <i>Inorganic Chemistry</i> , 1997, 36, 5104-5112.	4.0	74
18	Dependence of the relaxivity and luminescence of gadolinium and europium amino-acid complexes on hydrogencarbonate and pH. <i>Chemical Communications</i> , 1999, , 1047-1048.	4.1	71

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19	Controlling the variation of axial water exchange rates in macrocyclic lanthanide(III) complexes. Electronic supplementary information (ESI) available: experimental section. See <a href="http://www.rsc.org/suppdata/cc/b2/b202862j/">http://www.rsc.org/suppdata/cc/b2/b202862j/</a> . <i>Chemical Communications</i> , 2002, , 1120-1121.	4.1	69
20	In Vitro and in Vivo Magnetic Resonance Detection of Tumor Cells by Targeting Glutamine Transporters with Gd-Based Probes. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 4926-4936.	6.4	69
21	UAE, MAE, SFE-CO <sub>2</sub> and classical methods for the extraction of <i>Mitragyna speciosa</i> leaves. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 591-595.	8.2	62
22	Synthesis of cyclodextrin-based polymers and their use as debittering agents. <i>Journal of Applied Polymer Science</i> , 2008, 107, 2549-2557.	2.6	61
23	Heck Reactions with Very Low Ligandless Catalyst Loads Accelerated by Microwaves or Simultaneous Microwaves/Ultrasound Irradiation. <i>Advanced Synthesis and Catalysis</i> , 2007, 349, 2338-2344.	4.3	57
24	MRI-Guided Neutron Capture Therapy by Use of a Dual Gadolinium/Boron Agent Targeted at Tumour Cells through Upregulated Low-Density Lipoprotein Transporters. <i>Chemistry - A European Journal</i> , 2011, 17, 8479-8486.	3.3	56
25	Bifunctional ligands based on the DOTA-monoamide cage. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 1176.	2.8	49
26	New cyclodextrin dimers and trimers capable of forming supramolecular adducts with shape-specific ligands. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 370-379.	2.8	42
27	A Calix[4]arene Gd(III) Complex Endowed with High Stability, Relaxivity, and Binding Affinity to Serum Albumin. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 4737-4739.	13.8	41
28	Pd-catalyzed Reactions Promoted by Ultrasound and/or Microwave Irradiation. <i>Current Organic Chemistry</i> , 2008, 12, 1588-1612.	1.6	39
29	Highly shifted LIPOCEST agents based on the encapsulation of neutral polynuclear paramagnetic shift reagents. <i>Chemical Communications</i> , 2008, , 600-602.	4.1	38
30	Fast, Solvent-Free, Microwave-Promoted Friedländer Annulation with a Reusable Solid Catalyst. <i>Synthetic Communications</i> , 2009, 40, 120-128.	2.1	38
31	Recent advances in the synthesis of cyclodextrin derivatives under microwaves and power ultrasound. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2007, 57, 3-7.	1.6	36
32	Click Chemistry Under Microwave or Ultrasound Irradiation. <i>Current Organic Chemistry</i> , 2011, 15, 189-203.	1.6	36
33	Porphyrin-Loaded Pluronic Nanobubbles: A New US-Activated Agent for Future Theranostic Applications. <i>Bioconjugate Chemistry</i> , 2018, 29, 234-240.	3.6	36
34	Synthesis of Gd(III)-C-palmitamidomethyl-Ca <sup>2+</sup> -DOTAMA-C6-o-carborane: a new dual agent for innovative MRI/BNCT applications. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 4460.	2.8	33
35	Magnetic resonance imaging visualization of targeted cells by the internalization of supramolecular adducts formed between avidin and biotinylated Gd <sup>3+</sup> chelates. <i>Journal of Biological Inorganic Chemistry</i> , 2005, 10, 78-86.	2.6	32
36	A Carborane-Derivative -Click-Reaction under Heterogeneous Conditions for the Synthesis of a Promising Lipophilic MRI/GdBNCT Agent. <i>Chemistry - A European Journal</i> , 2013, 19, 721-728.	3.3	32

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37	New paramagnetic supramolecular adducts for MRI applications based on non-covalent interactions between Gd(III)-complexes and $\beta^2$ - or $\beta^3$ -cyclodextrin units anchored to chitosan. <i>Journal of Inorganic Biochemistry</i> , 2006, 100, 931-938.	3.5	31
38	Interplay Between Mechanochemistry and Sonochemistry. <i>Topics in Current Chemistry</i> , 2014, 369, 239-284.	4.0	31
39	Stearoyl-Chitosan Coated Nanoparticles Obtained by Microemulsion Cold Dilution Technique. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3833.	4.1	30
40	The nature of the counter-anion can determine the rate of water exchange in a metal aqua complex. Electronic supplementary information (ESI) available: representative NMRD profile (298 K) and 17O-NMR analysis for the chloride complex. See <a href="http://www.rsc.org/suppdata/cc/b3/b302211k/">http://www.rsc.org/suppdata/cc/b3/b302211k/</a> . <i>Chemical Communications</i> , 2003, , 1386.	4.1	29
41	Improved syntheses of bis( $\beta^2$ -cyclodextrin) derivatives, new carriers for gadolinium complexes. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 1124.	2.8	29
42	N-Acetyl-3-aminopyrazoles block the non-canonical NF- $\kappa$ B cascade by selectively inhibiting NIK. <i>MedChemComm</i> , 2018, 9, 963-968.	3.4	27
43	The unseen evidence of Reduced Ionicity: The elephant in (the) room temperature ionic liquids. <i>Journal of Molecular Liquids</i> , 2021, 324, 115069.	4.9	27
44	Relationship between ligand structure and electrochemical and relaxometric properties of acyclic poly(aminocarboxylate) complexes of Eu(II). Electronic supplementary information (ESI) available: complete series of the plots reporting the diffusion coefficients D vs. temperature for Eu(III)aq and [Eu(III)L] (L = edta, dtpa, bopta, ttha). See <a href="http://www.rsc.org/suppdata/dt/b2/b211533f/">http://www.rsc.org/suppdata/dt/b2/b211533f/</a> . <i>Dalton Transactions</i> , 2003, , 1628-1633.	3.3	25
45	Improved adhesion to mucosal cells of water-soluble chitosan tetraalkylammonium salts. <i>International Journal of Pharmaceutics</i> , 2008, 362, 88-92.	5.2	24
46	4-Hydroxy-N-[3,5-bis(trifluoromethyl)phenyl]-1,2,5-thiadiazole-3-carboxamide: a novel inhibitor of the canonical NF- $\kappa$ B cascade. <i>MedChemComm</i> , 2017, 8, 1850-1855.	3.4	23
47	Novel MRI and fluorescent probes responsive to the Factor XIII transglutaminase activity. <i>Contrast Media and Molecular Imaging</i> , 2010, 5, 213-222.	0.8	22
48	Target Visualization by MRI Using the Avidin/Biotin Amplification Route: Synthesis and Testing of a Biotin- $\epsilon$ -Gd-DOTA Monoamide Trimer. <i>Chemistry - A European Journal</i> , 2010, 16, 8080-8087.	3.3	22
49	Heterodinuclear Ln $\epsilon$ /Na Complexes with an Asymmetric Macrocyclic Compartmental Schiff Base. <i>Chemistry - A European Journal</i> , 2002, 8, 3917-3926.	3.3	21
50	New CD derivatives as self-assembling contrast agents for magnetic resonance imaging (MRI). <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2007, 57, 489-495.	1.6	19
51	Tuning Glutamine Binding Modes in Gd-DOTA-Based Probes for an Improved MRI Visualization of Tumor Cells. <i>Chemistry - A European Journal</i> , 2009, 15, 76-85.	3.3	19
52	Combined Microwaves/Ultrasound, a Hybrid Technology. <i>Topics in Current Chemistry</i> , 2016, 374, 79.	5.8	19
53	Microwave-assisted Maillard reactions for the preparation of advanced glycation end products (AGEs). <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 2473.	2.8	18
54	A novel synthesis of <i>N</i> -hydroxy-3-aryloxyindoles and 3-aryloxyindoles. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 6853-6859.	2.8	18

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55	Solid lipid nanoparticles carrying lipophilic derivatives of doxorubicin: preparation, characterization, and <i>in vitro</i> cytotoxicity studies. <i>Journal of Microencapsulation</i> , 2016, 33, 381-390.	2.8	18
56	A New Access to Homo- and Heterodimers of $\beta$ -, $\gamma$ -, and $\delta$ -Cyclodextrin by a Microwave-Promoted Huisgen Cycloaddition. <i>Synlett</i> , 2008, 2008, 2642-2646.	1.8	17
57	Intensification of organic reactions with hybrid flow reactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 930-935.	3.6	17
58	Design and Synthesis of a $\beta$ -Cyclodextrin Oligomer: A New Platform with Potential Application as a Dendrimeric Multicarrier. <i>Chemistry - A European Journal</i> , 2013, 19, 12086-12092.	3.3	17
59	Effects of the Molecular Weight of Hyaluronic Acid in a Carbon Nanotube Drug Delivery Conjugate. <i>Frontiers in Chemistry</i> , 2020, 8, 578008.	3.6	17
60	Selectivity of Asymmetric Macrocyclic Compartmental Lanthanide(III) Complexes towards Alkali and Alkaline-Earth Metal Ions. <i>European Journal of Inorganic Chemistry</i> , 2005, 2005, 1492-1499.	2.0	16
61	Chemical modifications of bile acids under high-intensity ultrasound or microwave irradiation. <i>Steroids</i> , 2005, 70, 77-83.	1.8	16
62	Inhibitory Effect of Umbelliferone Aminoalkyl Derivatives on Oxidosqualene Cyclases from <i>S. cerevisiae</i> , <i>T. cruzi</i> , <i>P. carinii</i> , <i>H. sapiens</i> , and <i>A. thaliana</i> : a Structure-Activity Study. <i>ChemMedChem</i> , 2007, 2, 226-233.	3.6	16
63	Lipophilic Prodrug of Floxuridine Loaded into Solid Lipid Nanoparticles: <i>In Vitro</i> Cytotoxicity Studies on Different Human Cancer Cell Lines. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 556-563.	0.9	16
64	Natural origin of ascorbic acid: Validation by $^{13}\text{C}$ NMR and IRMS. <i>Food Chemistry</i> , 2009, 112, 715-720.	8.2	15
65	Synthesis, characterization and cell viability test of six vanadyl complexes with acetylacetonate derivatives. <i>Journal of Inorganic Biochemistry</i> , 2013, 128, 26-37.	3.5	15
66	Microwave-Assisted Synthesis and Physicochemical Characterization of Tetrafuranylporphyrin-Grafted Reduced Graphene Oxide. <i>Chemistry - A European Journal</i> , 2016, 22, 1608-1613.	3.3	15
67	NMR studies of BPTI aggregation by using paramagnetic relaxation reagents. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006, 1764, 856-862.	2.3	14
68	$^1\text{H}$ and $^{17}\text{O}$ NMR relaxometric study in aqueous solution of Gd(III) complexes of EGTA-like derivatives bearing methylenephosphonic groups. <i>Magnetic Resonance in Chemistry</i> , 2008, 46, S86-S93.	1.9	14
69	Regioselective $\text{N}$ -Alkylation of Ethyl 4-benzyloxy-1,2,3-triazolecarboxylate: A Useful Tool for the Synthesis of Carboxylic Acid Bioisosteres. <i>Journal of Heterocyclic Chemistry</i> , 2019, 56, 501-519.	2.6	14
70	A community-built calibration system: The case study of quantification of metabolites in grape juice by qNMR spectroscopy. <i>Talanta</i> , 2020, 214, 120855.	5.5	14
71	Hetero-dinuclear sodium-lanthanide(III) complexes with an asymmetric compartmental macrocycle. <i>Chemical Communications</i> , 2000, , 145-146.	4.1	13
72	Detection and Quantification of Lanthanide Complexes in Cell Lysates by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 2004, 76, 6012-6016.	6.5	13

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73	Synthesis of 1-octacosanol and GC-C-IRMS discrimination of samples from different origin. <i>Natural Product Research</i> , 2010, 24, 428-439.	1.8	13
74	Microwave-assisted extraction of edible <i>Cicerbita alpina</i> shoots and its phenolic profile. <i>Journal of the Science of Food and Agriculture</i> , 2013, 93, 2676-2682.	3.5	13
75	A novel SWCNT platform bearing DOTA and $\beta$ -cyclodextrin units. One shot-multidecoration under microwave irradiation. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 4708-4715.	2.8	13
76	Multinuclear and multifrequency NMR study of gadolinium(III) complexes with bis-amide derivatives of ethylenedioxydiethylenedinitrilotetraacetic acid. <i>Dalton Transactions RSC</i> , 2000, , 3435-3440.	2.3	12
77	Synthesis of functionalised HP-DO3A chelating agents for conjugation to biomolecules. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 3810.	2.8	11
78	A Cross-Flow Ultrasound-Assisted Extraction of Curcuminoids from <i>Curcuma longa</i> L.: Process Design to Avoid Degradation. <i>Foods</i> , 2020, 9, 743.	4.3	11
79	Microwave Irradiation in Micro-Meso-Fluidic Systems; Hybrid Technology has Issued the Challenge. <i>Chemical Record</i> , 2019, 19, 98-117.	5.8	10
80	High Relaxivity Contrast Agents for MRI and Molecular Imaging. , 2005, , 99-121.		9
81	Towards improved boron neutron capture therapy agents: evaluation of in vitro cellular uptake of a glutamine-functionalized carborane. <i>Journal of Biological Inorganic Chemistry</i> , 2009, 14, 883-890.	2.6	9
82	Synthesis, characterization and potential application of monoacyl-cyclodextrins. <i>Carbohydrate Research</i> , 2010, 345, 191-198.	2.3	9
83	Optimizing the high-field relaxivity by self-assembling of macrocyclic Gd(III) complexes. <i>Dalton Transactions</i> , 2015, 44, 4910-4917.	3.3	9
84	Synthesis and characterization of porphyrin functionalized nanodiamonds. <i>Diamond and Related Materials</i> , 2019, 91, 22-28.	3.9	9
85	Modulation of the Prototropic Exchange Rate at the Water Molecule Coordinated to a Gd(III) Ion. <i>European Journal of Inorganic Chemistry</i> , 2003, 2003, 2045-2048.	2.0	8
86	SWCNT-porphyrin nano-hybrids selectively activated by ultrasound: an interesting model for sonodynamic applications. <i>RSC Advances</i> , 2020, 10, 21736-21744.	3.6	8
87	Polyhydroxylated GdDTPA-derivatives as high relaxivity magnetic resonance imaging contrast agents. <i>RSC Advances</i> , 2015, 5, 74734-74743.	3.6	6
88	Solid Lipid Nanoparticles Loaded with Antitumor Lipophilic Prodrugs Aimed to Glioblastoma Treatment: Preliminary Studies on Cultured Cells. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 3606-3614.	0.9	6
89	Alkaloid Profiles and Activity in Different <i>Mitragyna speciosa</i> Strains. <i>Natural Product Communications</i> , 2018, 13, 1934578X1801300.	0.5	6
90	Highly-Efficient Caffeine Recovery from Green Coffee Beans under Ultrasound-Assisted SC-CO <sub>2</sub> Extraction. <i>Processes</i> , 2020, 8, 1062.	2.8	6

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91	Laser-Synthesis of NV-Centers-Enriched Nanodiamonds: Effect of Different Nitrogen Sources. <i>Micromachines</i> , 2020, 11, 579.	2.9	6
92	Exploiting Lipid and Polymer Nanocarriers to Improve the Anticancer Sonodynamic Activity of Chlorophyll. <i>Pharmaceutics</i> , 2020, 12, 605.	4.5	6
93	Visualization through Magnetic Resonance Imaging of DNA Internalized Following <i>in Vivo</i> Electroporation. <i>Molecular Imaging</i> , 2005, 4, 153535002005041.	1.4	5
94	Cyclization reactions of coumarin derivatives: Chemo- and regioselectivity effects of oxygen/sulfur isosteric replacement. <i>Journal of Heterocyclic Chemistry</i> , 2007, 44, 411-418.	2.6	5
95	4-Methylzymosterone and Other Intermediates of Sterol Biosynthesis from Yeast Mutants Engineered in the <i>ERG27</i> Gene Encoding 3-Ketosteroid Reductase. <i>Lipids</i> , 2016, 51, 1103-1113.	1.7	4
96	Extensive methodology screening of meso-tetrakis-(furan-2-yl)-porphyrin microwave-assisted synthesis. <i>New Journal of Chemistry</i> , 2016, 40, 2574-2581.	2.8	4
97	Mechanochemistry Applied to the Synthesis of X-ray Contrast Agent. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 12825-12830.	6.7	4
98	Fast multigram scale microwave-assisted synthesis of vitamin E and C10-, C15-analogues under vacuum. <i>RSC Advances</i> , 2016, 6, 63515-63518.	3.6	3
99	EPR and photophysical characterization of six bioactive oxidovanadium(IV) complexes in the conditions of <i>in vitro</i> cell tests. <i>Journal of Inorganic Biochemistry</i> , 2017, 170, 55-62.	3.5	3
100	A New, Practical and Efficient Method for Protecting Alcohols as tert-Butyl Ethers. <i>Synlett</i> , 2010, 2010, 812-816.	1.8	2
101	Paramagnetic Metal Complexes As Contrast Agents for Magnetic Resonance Imaging. , 2005, , 541-560.		1
102	Efficient Regioselective Opening of Epoxides by Nucleophiles in Water under Simultaneous Ultrasound/Microwave Irradiation. <i>Synlett</i> , 2007, 2007, 2041-2044.	1.8	1
103	A New, Easy Access to the 6-Aminoperhydro-1,4-diazepine Scaffold under Ultrasound and Microwave Irradiation. <i>Synthesis</i> , 2008, 2008, 1879-1882.	2.3	1
104	Microwave-Assisted, One-Pot Synthesis of Doxycycline under Heterogeneous Catalysis in Water. <i>Antibiotics</i> , 2021, 10, 1084.	3.7	1
105	Effects of Vanadyl Complexes with Acetylacetonate Derivatives on Non-Tumor and Tumor Cell Lines. <i>Molecules</i> , 2021, 26, 5534.	3.8	1