

# Franca Castiglione

## List of Publications by Year in descending order

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81  
papers

2,522  
citations

201674

27  
h-index

214800

47  
g-index

82  
all docs

82  
docs citations

82  
times ranked

3079  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interaction of Water with the Model Ionic Liquid [bmim][BF <sub>4</sub> ]: Molecular Dynamics Simulations and Comparison with NMR Data. <i>Journal of Physical Chemistry B</i> , 2008, 112, 7826-7836.	2.6	231
2	Determining the Structure and Mode of Action of Microbisporicin, a Potent Lantibiotic Active Against Multiresistant Pathogens. <i>Chemistry and Biology</i> , 2008, 15, 22-31.	6.0	196
3	Molecular Environment and Enhanced Diffusivity of Li <sup>+</sup> Ions in Lithium-Salt-Doped Ionic Liquid Electrolytes. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 153-157.	4.6	134
4	Structural Organization and Transport Properties of Novel Pyrrolidinium-Based Ionic Liquids with Perfluoroalkyl Sulfonylimide Anions. <i>Journal of Physical Chemistry B</i> , 2009, 113, 10750-10759.	2.6	102
5	A Novel Lantibiotic Acting on Bacterial Cell Wall Synthesis Produced by the Uncommon Actinomycete <i>Planomonospora</i> sp.. <i>Biochemistry</i> , 2007, 46, 5884-5895.	2.5	83
6	HR MAS NMR, powder XRD and Raman spectroscopy study of inclusion phenomena in <sup>12</sup> C nanosponges. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2011, 69, 403-409.	1.6	82
7	Smart Approach To Evaluate Drug Diffusivity in Injectable Agarose/Carbomer Hydrogels for Drug Delivery. <i>Journal of Physical Chemistry B</i> , 2011, 115, 2503-2510.	2.6	79
8	Linking the structures, free volumes, and properties of ionic liquid mixtures. <i>Chemical Science</i> , 2017, 8, 6359-6374.	7.4	74
9	Mesoscopic structural organization in triphilic room temperature ionic liquids. <i>Faraday Discussions</i> , 2013, 167, 499.	3.2	73
10	Blending ionic liquids: how physico-chemical properties change. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 1784.	2.8	69
11	Pyrrolidinium-Based Ionic Liquids Doped with Lithium Salts: How Does Li <sup>+</sup> Coordination Affect Its Diffusivity?. <i>Journal of Physical Chemistry B</i> , 2014, 118, 13679-13688.	2.6	63
12	Anomalous diffusion of Ibuprofen in cyclodextrin nanosponge hydrogels: an HRMAS NMR study. <i>Beilstein Journal of Organic Chemistry</i> , 2014, 10, 2715-2723.	2.2	59
13	Networking Properties of Cyclodextrin-Based Cross-Linked Polymers Probed by Inelastic Light-Scattering Experiments. <i>Journal of Physical Chemistry B</i> , 2012, 116, 5323-5327.	2.6	58
14	Effect of Water on Deep Eutectic Solvent/ <sup>12</sup> -Cyclodextrin Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7277-7285.	6.7	52
15	Effect of Cross-Linking Properties on the Vibrational Dynamics of Cyclodextrins-Based Polymers: An Experimental-Numerical Study. <i>Journal of Physical Chemistry B</i> , 2012, 116, 7952-7958.	2.6	50
16	Pyrazolium- versus Imidazolium-Based Ionic Liquids: Structure, Dynamics and Physicochemical Properties. <i>Journal of Physical Chemistry B</i> , 2013, 117, 668-676.	2.6	49
17	Competitive and Synergistic Interactions between Polymer Micelles, Drugs, and Cyclodextrins: The Importance of Drug Solubilization Locus. <i>Langmuir</i> , 2016, 32, 13174-13186.	3.5	46
18	Phase-controlled supramolecular photochirogenesis in cyclodextrin nanosponges. <i>Chemical Communications</i> , 2013, 49, 3510.	4.1	44

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19	Polymer hydrogel functionalized with biodegradable nanoparticles as composite system for controlled drug delivery. <i>Nanotechnology</i> , 2015, 26, 015602.	2.6	40
20	TEMPO-Nanocellulose/Ca <sup>2+</sup> Hydrogels: Ibuprofen Drug Diffusion and In Vitro Cytocompatibility. <i>Materials</i> , 2020, 13, 183.	2.9	37
21	Cyclodextrin nanosponge-sensitized enantiodifferentiating photoisomerization of cyclooctene and 1,3-cyclooctadiene. <i>Beilstein Journal of Organic Chemistry</i> , 2012, 8, 1305-1311.	2.2	36
22	Aza[6]helicene Platinum Complexes: Chirality Control of <i>cis</i> – <i>trans</i> Isomerism. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5786-5790.	13.8	35
23	Inside New Materials: An Experimental Numerical Approach for the Structural Elucidation of Nanoporous Cross-Linked Polymers. <i>Journal of Physical Chemistry B</i> , 2012, 116, 13133-13140.	2.6	33
24	Cage-Like Local Structure of Ionic Liquids Revealed by a <sup>129</sup> Xe Chemical Shift. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1608-1612.	4.6	31
25	Influence of oligo(ethylene oxide) substituents on pyrrolidinium-based ionic liquid properties, Li <sup>+</sup> solvation and transport. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 21539-21547.	2.8	29
26	Synthesis and Preliminary Biological Characterization of New Semisynthetic Derivatives of Ramoplanin. <i>Journal of Medicinal Chemistry</i> , 2007, 50, 3077-3085.	6.4	28
27	Spectroscopic and Structural Investigation of the Confinement of <sup>d</sup> and <sup>l</sup> Dimethyl Tartrate in Lecithin Reverse Micelles. <i>Journal of Physical Chemistry B</i> , 2009, 113, 3024-3033.	2.6	28
28	Vibrational spectroscopy investigation of swelling phenomena in cyclodextrin nanosponges. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 1463-1469.	2.5	28
29	Synthesis and characterization of a hyper-branched water-soluble β <sup>2</sup> -cyclodextrin polymer. <i>Beilstein Journal of Organic Chemistry</i> , 2014, 10, 2586-2593.	2.2	28
30	Water and polymer dynamics in a model polysaccharide hydrogel: the role of hydrophobic/hydrophilic balance. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 963-971.	2.8	27
31	Do Cyclodextrins Encapsulate Volatiles in Deep Eutectic Systems?. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17397-17405.	6.7	26
32	Understanding Cage Effects in Imidazolium Ionic Liquids by <sup>129</sup> Xe NMR: MD Simulations and Relativistic DFT Calculations. <i>Journal of Physical Chemistry B</i> , 2014, 118, 13963-13968.	2.6	24
33	Drug–Polymer Interactions in Hydrogel-based Drug Delivery Systems: An Experimental and Theoretical Study. <i>ChemPhysChem</i> , 2015, 16, 2818-2825.	2.1	23
34	From Nanoscale to Microscale: Crossover in the Diffusion Dynamics within Two Pyrrolidinium-Based Ionic Liquids. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5196-5202.	4.6	23
35	Investigation of Li <sup>+</sup> Cation Coordination and Transportation, by Molecular Modeling and NMR Studies, in a LiNTf <sub>2</sub> -Doped Ionic Liquid–Vinylene Carbonate Mixture. <i>Journal of Physical Chemistry B</i> , 2018, 122, 8560-8569.	2.6	23
36	Drug Release from Hydrogel: A New Understanding of Transport Phenomena. <i>Journal of Biomedical Nanotechnology</i> , 2011, 7, 476-481.	1.1	22

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37	Multiple points of view of heteronuclear NOE: Long range vs short range contacts in pyrrolidinium based ionic liquids in the presence of Li salts. <i>Journal of Molecular Liquids</i> , 2015, 210, 215-222.	4.9	21
38	On the structural origin of free volume in 1-alkyl-3-methylimidazolium ionic liquid mixtures: a SAXS and <sup>129</sup> Xe NMR study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 5999-6010.	2.8	21
39	Spectral deconvolution in electrophoretic NMR to investigate the migration of neutral molecules in electrolytes. <i>Magnetic Resonance in Chemistry</i> , 2020, 58, 271-279.	1.9	21
40	Effective magnetic moment in cyclodextrinâ€“polynitroxides: potential supramolecular vectors for magnetic resonance imaging. <i>RSC Advances</i> , 2015, 5, 76133-76140.	3.6	19
41	Dynamics and interactions of ibuprofen in cyclodextrin nanosponges by solid-state NMR spectroscopy. <i>Beilstein Journal of Organic Chemistry</i> , 2017, 13, 182-194.	2.2	19
42	Anions as Dynamic Probes for Ionic Liquid Mixtures. <i>Journal of Physical Chemistry B</i> , 2020, 124, 2879-2891.	2.6	19
43	Selective Interaction of 2,6-Di- <i>tert</i> -butyl- $\beta$ -cyclodextrin and Pluronic F127 Micelles Leading to Micellar Rupture: A Nuclear Magnetic Resonance Study. <i>Journal of Physical Chemistry B</i> , 2011, 115, 9005-9013.	2.6	17
44	$\beta$ -Cyclodextrin Nanosponge Hydrogels as Drug Delivery Nanoarchitectonics for Multistep Drug Release Kinetics. <i>ACS Applied Polymer Materials</i> , 2021, 3, 6562-6571.	4.4	17
45	Combining Raman and infrared spectroscopy as a powerful tool for the structural elucidation of cyclodextrin-based polymeric hydrogels. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 10274-10282.	2.8	16
46	Non-destructive and direct determination of the degree of substitution of carboxymethyl cellulose by HR-MAS <sup>13</sup> C NMR spectroscopy. <i>Carbohydrate Polymers</i> , 2017, 169, 16-22.	10.2	16
47	The structure of ethylbenzene as a solute in liquid crystalline solvents via analysis of proton NMR spectra. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 3405-3413.	2.8	14
48	The Role of Drugâ€“Drug Interactions in Hydrogel Delivery Systems: Experimental and Model Study. <i>ChemPhysChem</i> , 2016, 17, 1615-1622.	2.1	14
49	NMR Metabolomics for Stem Cell type discrimination. <i>Scientific Reports</i> , 2017, 7, 15808.	3.3	14
50	Organic Peracids: A Structural Puzzle for <sup>17</sup> O NMR and Ab Initio Chemical Shift Calculations. <i>Journal of Physical Chemistry A</i> , 2012, 116, 1814-1819.	2.5	13
51	Quantum Mechanics Calculations, Basicity and Crystal Structure: The Route to Transition Metal Complexes of Azahelicenes. <i>Molecules</i> , 2012, 17, 463-479.	3.8	13
52	A molecular dynamics study of cyclodextrin nanosponge models. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2013, 75, 263-268.	1.6	13
53	Polydisperse methyl $\beta$ -cyclodextrinâ€“epichlorohydrin polymers: variable contact time <sup>13</sup> C CP-MAS solid-state NMR characterization. <i>Beilstein Journal of Organic Chemistry</i> , 2015, 11, 2785-2794.	2.2	13
54	Synthesis and Structural Properties of Aza[ <i>n</i> ]helicene Platinum Complexes: Control of Cis and Trans Stereochemistry. <i>Inorganic Chemistry</i> , 2016, 55, 2009-2017.	4.0	13

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55	Evidence of superdiffusive nanoscale motion in anionic polymeric hydrogels: Analysis of PGSE- NMR data and comparison with drug release properties. <i>Journal of Controlled Release</i> , 2019, 305, 110-119.	9.9	13
56	Xenon Dynamics in Ionic Liquids: A Combined NMR and MD Simulation Study. <i>Journal of Physical Chemistry B</i> , 2020, 124, 6617-6627.	2.6	12
57	Chiroptical Phenomena in Reverse Micelles: The Case of (1 <i>R</i> ,2 <i>S</i> )-Dodecyl (2-hydroxy-1-methyl-2-phenylethyl)dimethylammonium Bromide (DMEB). <i>Chirality</i> , 2014, 26, 532-538.	2.6	11
58	Assessing the mechanism of the synergistic action of calixarenes and Co-dicarbollides in lanthanide extractions. <i>New Journal of Chemistry</i> , 2010, 34, 2552.	2.8	10
59	Measurement of dipolar couplings in partially oriented molecules by local field NMR spectroscopy with low-power decoupling. <i>Journal of Magnetic Resonance</i> , 2002, 158, 52-59.	2.1	8
60	Spectroscopic characterization of red perylimide/surfactant nanocomposites. <i>Journal of Materials Science</i> , 2011, 46, 6402-6407.	3.7	8
61	Computational <sup>17</sup> O-NMR spectroscopy of organic acids and peracids: comparison of solvation models. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 1130-1140.	2.8	8
62	On the parallelism between the mechanisms behind chromatography and drug delivery: the role of interactions with a stationary phase. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11518-11528.	2.8	8
63	Magnetic Resonance Imaging and Molecular Dynamics Characterization of Ionic Liquid in Poly(ethylene oxide)-Based Polymer Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 23800-23811.	8.0	8
64	Selective excitation in dipole coupled systems. <i>Chemical Physics Letters</i> , 2002, 357, 241-248.	2.6	7
65	MD simulation of xenon in ionic liquids: Disentangling the cationic and anionic cage effects on the structural and dynamic properties. <i>Journal of Molecular Liquids</i> , 2015, 210, 272-278.	4.9	7
66	<sup>17</sup> O NMR. <i>Annual Reports on NMR Spectroscopy</i> , 2015, 85, 143-193.	1.5	7
67	Transport Properties of Ibuprofen Encapsulated in Cyclodextrin Nanosponge Hydrogels: A Proton HR-MAS NMR Spectroscopy Study. <i>Journal of Visualized Experiments</i> , 2016, , .	0.3	7
68	Mechanochemical synthesis of mechanical bonds in M12L8 poly-[n]-catenanes. <i>Dalton Transactions</i> , 2021, 51, 53-58.	3.3	7
69	Association and Diffusion of Li <sup>+</sup> in Carboxymethylcellulose Solutions for Environmentally Friendly Li-ion Batteries. <i>ChemSusChem</i> , 2016, 9, 1804-1813.	6.8	6
70	Xenon Diffusion in Ionic Liquids with Blurred Nanodomain Separation. <i>ChemPhysChem</i> , 2021, 22, 1880-1890.	2.1	6
71	The Intermolecular NOE Depends on Isotope Selection: Short Range vs Long Range Behavior. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8658-8663.	4.6	6
72	The use of heteronuclear multiple quantum spectra in the automatic analysis of NMR spectra of samples dissolved in liquid crystalline phases. <i>Liquid Crystals</i> , 2001, 28, 1403-1413.	2.2	4

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73	Biphasic Porous Structures formed by Monomer/Water Interface Stabilization with Colloidal Nanoparticles. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100991.	3.7	4
74	Self-assembly and intra-cluster reactions of erbium and ytterbium bis(2-ethylhexyl)sulfosuccinates in the gas phase. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 2523-2530.	1.5	3
75	Synthesis of Chiral Ionic Liquids from Natural Monosaccharides. <i>European Journal of Organic Chemistry</i> , 2022, 2022, .	2.4	3
76	NMR Analysis of Unnatural Amino Acids in Natural Antibiotics. <i>Methods in Molecular Biology</i> , 2012, 794, 107-124.	0.9	2
77	Frontispiece: Aza[6]helicene Platinum Complexes: Chirality Control of cis-trans isomerism. <i>Angewandte Chemie - International Edition</i> , 2014, 53, n/a-n/a.	13.8	0
78	Frontispiz: Aza[6]helicene Platinum Complexes: Chirality Control of cis-trans isomerism. <i>Angewandte Chemie</i> , 2014, 126, n/a-n/a.	2.0	0
79	NMR on ionic liquids. , 2016, , 233-258.		0
80	HR-MAS NMR Spectroscopy: novel technologies to measure delivery performance. , 2020, , 83-107.		0
81	Biphasic Porous Structures formed by Monomer/Water Interface Stabilization with Colloidal Nanoparticles (Adv. Mater. Interfaces 21/2021). <i>Advanced Materials Interfaces</i> , 2021, 8, 2170119.	3.7	0