Federico Rastrelli

List of Publications by Year
in descending order

40 papers	1,298 citations	361413 20 h-index	345221 36 g-index
44 all docs	44 docs citations	44 times ranked	1535 citing authors

#	Article	IF	Citations
1	Uniform water-mediated saturation transfer: A sensitivity-improved alternative to WaterLOGSY. Journal of Magnetic Resonance, 2022, 338, 107190.	2.1	3
2	Hybrid nanoreceptors for high sensitivity detection of small molecules by NMR chemosensing. Chemical Communications, 2021, 57, 3002-3005.	4.1	7
3	Poly(lipoic acid)-Based Nanoparticles as Self-Organized, Biocompatible, and Corona-Free Nanovectors. Biomacromolecules, 2021, 22, 467-480.	5.4	22
4	Nanoparticle-assisted NMR spectroscopy: A chemosensing perspective. Progress in Nuclear Magnetic Resonance Spectroscopy, 2020, 117, 70-88.	7.5	14
5	Chromatographic NMR spectroscopy: the effect of hollow silica microspheres on magnetic field inhomogeneities and resonance lineshapes. Physical Chemistry Chemical Physics, 2020, 22, 21383-21392.	2.8	0
6	Hydrolytic Nanozymes. European Journal of Organic Chemistry, 2020, 2020, 5044-5055.	2.4	36
7	Effect of the Sulfonation on the Swollen State Morphology of Styrenic Cross-Linked Polymers. Polymers, 2020, 12, 600.	4.5	5
8	Dynamic Origin of Chirality Transfer between Chiral Surface and Achiral Ligand in Au₃₈ Clusters. ACS Nano, 2019, 13, 7127-7134.	14.6	13
9	Molecularâ€Dynamicsâ€Simulationâ€Directed Rational Design of Nanoreceptors with Targeted Affinity. Angewandte Chemie - International Edition, 2019, 58, 7702-7707.	13.8	31
10	Molecularâ€Dynamicsâ€Simulationâ€Directed Rational Design of Nanoreceptors with Targeted Affinity. Angewandte Chemie, 2019, 131, 7784-7789.	2.0	0
11	¹H NMR Chemosensing of Potassium Ions Enabled by Guestâ€Induced Selectivity Switch of a Gold Nanoparticle/Crown Ether Nanoreceptor. ChemPlusChem, 2019, 84, 1498-1502.	2.8	5
12	Nanoparticle-Assisted NMR Spectroscopy: Enhanced Detection of Analytes by Water-Mediated Saturation Transfer. Journal of the American Chemical Society, 2019, 141, 4870-4877.	13.7	21
13	Detection and identification of designer drugs by nanoparticle-based NMR chemosensing. Chemical Science, 2018, 9, 4777-4784.	7.4	32
14	Ion pairing in 1-butyl-3-methylpyridinium halide ionic liquids studied using NMR and DFT calculations. Physical Chemistry Chemical Physics, 2018, 20, 11470-11480.	2.8	12
15	Nanoparticle-Based Receptors Mimic Protein-Ligand Recognition. CheM, 2017, 3, 92-109.	11.7	74
16	Chromatographic NMR Spectroscopy with Hollow Silica Spheres. Angewandte Chemie, 2016, 128, 2783-2787.	2.0	2
17	Chromatographic NMR Spectroscopy with Hollow Silica Spheres. Angewandte Chemie - International Edition, 2016, 55, 2733-2737.	13.8	17
18	Bioactive Phloroglucinyl Heterodimers: The Tautomeric and Rotameric Equlibria of Arzanol. European Journal of Organic Chemistry, 2016, 2016, 4810-4816.	2.4	0

#	Article	IF	Citations
19	Nanoparticleâ€Assisted Affinity NMR Spectroscopy: High Sensitivity Detection and Identification of Organic Molecules. Chemistry - A European Journal, 2016, 22, 16957-16963.	3.3	18
20	Characterization of Paramagnetic Reactive Intermediates: Predicting the NMR Spectra of Iron(IV)â€“Oxo Complexes by DFT. Chemistry - A European Journal, 2015, 21, 12960-12970.	3.3	15
21	Turning Supramolecular Receptors into Chemosensors by Nanoparticle-Assisted â€œNMR Chemosensingâ€• Journal of the American Chemical Society, 2015, 137, 11399-11406.	13.7	30
22	Conformational Mobility in Monolayer-Protected Nanoparticles: From Torsional Free Energy Profiles to NMR Relaxation. Journal of Physical Chemistry C, 2015, 119, 20100-20110.	3.1	17
23	Nanoparticle-Assisted NMR Detection of Organic Anions: From Chemosensing to Chromatography. Journal of the American Chemical Society, 2015, 137, 886-892.	13.7	55
24	Predicting the spin state of paramagnetic iron complexes by DFT calculation of proton NMR spectra. Dalton Transactions, 2014, 43, 9486-9496.	3.3	33
25	â€œNMR Chemosensingâ€•Using Monolayer-Protected Nanoparticles as Receptors. Journal of the American Chemical Society, 2013, 135, 11768-11771.	13.7	53
26	Dynamic covalent capture of hydrazides by a phosphonate-target immobilized on resin. Organic and Biomolecular Chemistry, 2013, 11, 6580.	2.8	5
27	Lanthanide-Based NMR: A Tool To Investigate Component Distribution in Mixed-Monolayer-Protected Nanoparticles. Journal of the American Chemical Society, 2012, 134, 7200-7203.	13.7	44
28	Mapping the nanoparticle-coating monolayer with NMR pseudocontact shifts. Chemical Communications, 2012, 48, 1523-1525.	4.1	17
29	Thermo-induced lipid oxidation of a culinary oil: The effect of materials used in common food processing on the evolution of oxidised species. Food Chemistry, 2012, 133, 754-759.	8.2	11
30	Predicting the 1H and 13C NMR spectra of paramagnetic Ru(III) complexes by DFT. Magnetic Resonance in Chemistry, 2010, 48, S132-S141.	1.9	40
31	Thermoinduced Lipid Oxidation of a Culinary Oil: A Kinetic Study of the Oxidation Products by Magnetic Resonance Spectroscopies. Journal of Physical Chemistry A, 2010, 114, 10059-10065.	2.5	26
32	Predicting the NMR Spectra of Paramagnetic Molecules by DFT: Application to Organic Free Radicals and Transitionâ€Metal Complexes. Chemistry - A European Journal, 2009, 15, 7990-8004.	3.3	97
33	NMR quantification of trace components in complex matrices by bandâ€selective excitation with adiabatic pulses. Magnetic Resonance in Chemistry, 2009, 47, 868-872.	1.9	29
34	Seeing through Macromolecules: <i>T</i>₂-Filtered NMR for the Purity Assay of Functionalized Nanosystems and the Screening of Biofluids. Journal of the American Chemical Society, 2009, 131, 14222-14224.	13.7	36
35	Aggregation Behavior of Octyl Viologen Di[bis(trifluoromethanesulfonyl)amide] in Nonpolar Solvents. Journal of Physical Chemistry B, 2008, 112, 16566-16574.	2.6	21
36	Prediction of the ¹H and ¹³C NMR Spectra of Î±-<scp>d</scp>-Glucose in Water by DFT Methods and MD Simulations. Journal of Organic Chemistry, 2007, 72, 7373-7381.	3.2	100

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37	Nuclear Spin Relaxation Driven by Intermolecular Dipolar Interactions:Â The Role of Soluteâ˘'Solvent Pair Correlations in the Modeling of Spectral Density Functions. Journal of Physical Chemistry B, 2006, 110, 5676-5689.	2.6	35
38	Selective J-resolved spectra: A double pulsed field gradient spin-echo approach. Journal of Magnetic Resonance, 2006, 182, 29-37.	2.1	11
39	Toward the Complete Prediction of the1H and13C NMR Spectra of Complex Organic Molecules by DFT Methods: Application to Natural Substances. Chemistry - A European Journal, 2006, 12, 5514-5525.	3.3	189
40	Predicting 13C NMR Spectra by DFT Calculations. Journal of Physical Chemistry A, 2003, 107, 9964-9973.	2.5	121