Fabien Ferrage

List of Publications by Year
in descending order

67 papers	1,502 citations	331670 21 h-index	361022 35 g-index
78 all docs	78 docs citations	78 times ranked	1661 citing authors

#	Article	IF	Citations
1	Synthesis and Properties of Water-Soluble Gold Colloids Covalently Derivatized with Neutral Polymer Monolayers. Journal of the American Chemical Society, 2002, 124, 5811-5821.	13.7	132
2	Nanosecond Time Scale Motions in Proteins Revealed by High-Resolution NMR Relaxometry. Journal of the American Chemical Society, 2013, 135, 18665-18672.	13.7	80
3	Distribution of Pico- and Nanosecond Motions in Disordered Proteins from Nuclear Spin Relaxation. Biophysical Journal, 2015, 109, 988-999.	0.5	77
4	Slow Diffusion of Macromolecular Assemblies by a New Pulsed Field Gradient NMR Methodâ€. Journal of the American Chemical Society, 2003, 125, 2541-2545.	13.7	75
5	Tetrahedral Onsager Crosses for Solubility Improvement and Crystallization Bypass. Journal of the American Chemical Society, 2001, 123, 8177-8188.	13.7	62
6	Accurate Sampling of High-Frequency Motions in Proteins by Steady-State ¹⁵Nâ"{¹H} Nuclear Overhauser Effect Measurements in the Presence of Cross-Correlated Relaxation. Journal of the American Chemical Society, 2009, 131, 6048-6049.	13.7	57
7	Nuclear spin relaxation in isotropic and anisotropic media. Progress in Nuclear Magnetic Resonance Spectroscopy, 2010, 57, 111-158.	7.5	57
8	An Approach To Extract Rate Constants from Reactionâ"Diffusion Dynamics in a Microchannel. Analytical Chemistry, 2005, 77, 3417-3424.	6.5	54
9	Protein dynamics from nuclear magnetic relaxation. Chemical Society Reviews, 2016, 45, 2410-2422.	38.1	44
10	Structure and Dynamics of the Second CARD of Human RIG-I Provide Mechanistic Insights into Regulation of RIG-I Activation. Structure, 2012, 20, 2048-2061.	3.3	41
11	On the measurement of 15Nâ€"{1H} nuclear Overhauser effects. 2. Effects of the saturation scheme and water signal suppression. Journal of Magnetic Resonance, 2010, 207, 294-303.	2.1	40
12	Time-Resolved Protein Side-Chain Motions Unraveled by High-Resolution Relaxometry and Molecular Dynamics Simulations. Journal of the American Chemical Society, 2018, 140, 13456-13465.	13.7	40
13	On the measurement of 15Nâ€"{1H} nuclear Overhauser effects. Journal of Magnetic Resonance, 2008, 192, 302-313.	2.1	37
14	Multiple-Timescale Dynamics of Side-Chain Carboxyl and Carbonyl Groups in Proteins by ¹³C Nuclear Spin Relaxation. Journal of the American Chemical Society, 2008, 130, 15805-15807.	13.7	37
15	Accurate measurement of longitudinal cross-relaxation rates in nuclear magnetic resonance. Journal of Chemical Physics, 2007, 126, 134508.	3.0	35
16	Structure and Dynamics of an Intrinsically Disordered Protein Region That Partially Folds upon Binding by Chemical-Exchange NMR. Journal of the American Chemical Society, 2017, 139, 12219-12227.	13.7	35
17	Time Scales of Slow Motions in Ubiquitin Explored by Heteronuclear Double Resonance. Journal of the American Chemical Society, 2012, 134, 2481-2484.	13.7	30
18	Protein Backbone Dynamics through13Câ€˜â"13CÎ±Cross-Relaxation in NMR Spectroscopy. Journal of the American Chemical Society, 2006, 128, 11072-11078.	13.7	28

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19	High-resolution two-field nuclear magnetic resonance spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 33187-33194.	2.8	26
20	Single or triple gradients?. Journal of Magnetic Resonance, 2008, 193, 110-118.	2.1	24
21	Recovering Invisible Signals by Twoâ€Field NMR Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 9886-9889.	13.8	23
22	Highâ€Resolution NMR of Folded Proteins in Hyperpolarized Physiological Solvents. Chemistry - A European Journal, 2018, 24, 13418-13423.	3.3	20
23	Coherence transfer by single-transition cross-polarization: Quantitation of cross-correlation effects in nuclear magnetic resonance. Journal of Chemical Physics, 2000, 113, 1081-1087.	3.0	19
24	Broadband Dipolar Recoupling for Magnetization Transfer in Solidâ€State NMR Correlation Spectroscopy. ChemPhysChem, 2008, 9, 1104-1106.	2.1	19
25	Protein Dynamics by 15N Nuclear Magnetic Relaxation. Methods in Molecular Biology, 2012, 831, 141-163.	0.9	19
26	Analysis of NMR Spin-Relaxation Data Using an Inverse Gaussian Distribution Function. Biophysical Journal, 2018, 115, 2301-2309.	0.5	19
27	Measuring Solvent Hydrogen Exchange Rates by Multifrequency Excitation ¹⁵N CEST: Application to Protein Phase Separation. Journal of Physical Chemistry B, 2018, 122, 11206-11217.	2.6	19
28	Reducing bias in the analysis of solution-state NMR data with dynamics detectors. Journal of Chemical Physics, 2019, 151, 034102.	3.0	19
29	Methods to determine slow diffusion coefficients of biomolecules. Applications to Engrailed 2, a partially disordered protein. Journal of Biomolecular NMR, 2011, 50, 209-218.	2.8	18
30	Ultra-wide range field-dependent measurements of the relaxivity of Gd1â^'xEuxVO4 nanoparticle contrast agents using a mechanical sample-shuttling relaxometer. Scientific Reports, 2017, 7, 44770.	3.3	18
31	Theoretical and computational framework for the analysis of the relaxation properties of arbitrary spin systems. Application to high-resolution relaxometry. Journal of Magnetic Resonance, 2020, 313, 106718.	2.1	18
32	Detection of Metaboliteâ€“Protein Interactions in Complex Biological Samples by High-Resolution Relaxometry: Toward Interactomics by NMR. Journal of the American Chemical Society, 2021, 143, 9393-9404.	13.7	18
33	Sensitivity-enhanced three-dimensional and carbon-detected two-dimensional NMR of proteins using hyperpolarized water. Journal of Biomolecular NMR, 2020, 74, 161-171.	2.8	17
34	Frequency-Switched Single-Transition Cross-Polarization: A Tool for Selective Experiments in Biomolecular NMR. ChemPhysChem, 2004, 5, 76-84.	2.1	14
35	Structural determination of biomolecular interfaces by nuclear magnetic resonance of proteins with reduced proton density. Journal of Biomolecular NMR, 2010, 47, 41-54.	2.8	14
36	Stochastic Resonance to Control Diffusive Motion in Chemistry. Journal of Physical Chemistry B, 2005, 109, 1318-1328.	2.6	12

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37	Side Chain Dynamics of Carboxyl and Carbonyl Groups in the Catalytic Function of Escherichia coli Ribonuclease H. Journal of the American Chemical Society, 2013, 135, 18024-18027.	13.7	12
38	Simple method for the generation of multiple homogeneous field volumes inside the bore of superconducting magnets. Scientific Reports, 2015, 5, 12200.	3.3	12
39	Sample Shuttling Relaxometry of Contrast Agents: NMRD Profiles above 1 T with a Single Device. Applied Magnetic Resonance, 2016, 47, 237-246.	1.2	12
40	Preservation of heteronuclear multiple-quantum coherences in NMR by double-resonance irradiation. Journal of Chemical Physics, 2009, 130, 074506.	3.0	11
41	Protein Dynamics from Accurate Low-Field Site-Specific Longitudinal and Transverse Nuclear Spin Relaxation. Journal of Physical Chemistry Letters, 2019, 10, 5917-5922.	4.6	11
42	Field-cycling long-lived-state NMR of ¹⁵N₂ spin pairs. Molecular Physics, 2019, 117, 861-867.	1.7	11
43	1H, 13C and 15N resonance assignment of a 114-residue fragment of Engrailed 2 homeoprotein, a partially disordered protein. Biomolecular NMR Assignments, 2011, 5, 229-231.	0.8	10
44	Total Correlation Spectroscopy across All NMR-Active Nuclei by Mixing at Zero Field. Journal of Physical Chemistry Letters, 2020, 11, 7291-7296.	4.6	10
45	How wide is the window opened by high-resolution relaxometry on the internal dynamics of proteins in solution?. Journal of Biomolecular NMR, 2021, 75, 119-131.	2.8	9
46	Heteronuclear double resonance in nuclear magnetic resonance spectroscopy: Relaxation of multiple-quantum coherences. Journal of Chemical Physics, 2009, 131, 224503.	3.0	8
47	Control of Cross Relaxation of Multipleâ€Quantum Coherences Induced by Fast Chemical Exchange under Heteronuclear Doubleâ€Resonance Irradiation. ChemPhysChem, 2011, 12, 333-341.	2.1	8
48	Efficient determination of diffusion coefficients by monitoring transport during recovery delays in NMR. Chemical Communications, 2012, 48, 5307.	4.1	8
49	Quasi-isotropic single-transition cross-polarization in nuclear magnetic resonance. Journal of Chemical Physics, 2002, 116, 10041-10050.	3.0	7
50	Highly Selective Excitation in Biomolecular NMR by Frequency-Switched Single-Transition Cross-Polarization. Journal of the American Chemical Society, 2002, 124, 2076-2077.	13.7	7
51	Determination of Protein ps-ns Motions by High-Resolution Relaxometry. Methods in Molecular Biology, 2018, 1688, 169-203.	0.9	7
52	Joint composite-rotation adiabatic-sweep isotope filtration. Journal of Biomolecular NMR, 2007, 38, 11-22.	2.8	6
53	Cross-correlated relaxation measurements under adiabatic sweeps: determination of local order in proteins. Journal of Biomolecular NMR, 2015, 63, 353-365.	2.8	6
54	Full Correlations across Broad NMR Spectra by Twoâ€Field Total Correlation Spectroscopy. ChemPhysChem, 2017, 18, 2772-2776.	2.1	5

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55	Understanding the methyl-TROSY effect over a wide range of magnetic fields. Journal of Chemical Physics, 2019, 150, 224202.	3.0	5
56	Boosting the resolution of low-field $$^{15}hbox {N}$$ relaxation experiments on intrinsically disordered proteins with triple-resonance NMR. Journal of Biomolecular NMR, 2020, 74, 139-145.	2.8	5
57	Single-Transition Coherence Transfer by Adiabatic Cross Polarization in NMR. ChemPhysChem, 2000, 1, 217-221.	2.1	4
58	Surprising absence of strong homonuclear coupling at low magnetic field explored by two-field nuclear magnetic resonance spectroscopy. Magnetic Resonance, 2020, 1, 237-246.	1.9	4
59	Identification of Hydrophobic Interfaces in Protein-Ligand Complexes by Selective Saturation Transfer NMR Spectroscopy. Molecules, 2015, 20, 21992-21999.	3.8	3
60	Recovering Invisible Signals by Twoâ€Field NMR Spectroscopy. Angewandte Chemie, 2016, 128, 10040-10043.	2.0	3
61	Experimental characterization of the dynamics of IDPs and IDRs by NMR. , 2019, , 65-92.		3
62	Sequential assignment of NMR spectra of peptides at natural isotopic abundance with zero- and ultra-low-field total correlation spectroscopy (ZULF-TOCSY). Physical Chemistry Chemical Physics, 2021, 23, 9715-9720.	2.8	3
63	Nuclear overhauser spectroscopy of chiral CHD methylene groups. Journal of Biomolecular NMR, 2016, 64, 27-37.	2.8	1
64	Chapter 4. Cross-correlation in Biomolecules. New Developments in NMR, 0, , 239-315.	0.1	1
65	Controlled assembly of covalent and supramolecular chemical modules: from engineering of complex structures to high-performance chromatography. Russian Chemical Bulletin, 2004, 53, 1379-1384.	1.5	0
66	Two-field transverse relaxation-optimized spectroscopy for the study of large biomolecules â€“ An in silico investigation. Journal of Magnetic Resonance Open, 2020, 4-5, 100007.	1.1	0
67	Single-Transition Coherence Transfer by Adiabatic Cross Polarization in NMR. ChemPhysChem, 2000, 1, 217-221.	2.1	0