

# Jacques Courtieu

## List of Publications by Year in descending order

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45  
papers

2,244  
citations

159585

30  
h-index

214800

47  
g-index

51  
all docs

51  
docs citations

51  
times ranked

785  
citing authors

#	ARTICLE	IF	CITATIONS
1	Theoretical and experimental aspects of enantiomeric differentiation using natural abundance multinuclear nmr spectroscopy in chiral polypeptide liquid crystals. <i>Chemical Communications</i> , 2000, , 2069-2081.	4.1	203
2	Natural Abundance Deuterium NMR Spectroscopy in Polypeptide Liquid Crystals as a New and Incisive Means for the Enantiodifferentiation of Chiral Hydrocarbons. <i>Chemistry - A European Journal</i> , 2003, 9, 1724-1745.	3.3	106
3	Director dynamics and NMR applications of nematic liquid crystals spinning at various angles from the magnetic field. <i>Journal of Chemical Physics</i> , 1982, 77, 723-730.	3.0	103
4	Weakly Oriented Liquid-Crystal NMR Solvents as a General Tool to Determine Relative Configurations. <i>Chemistry - A European Journal</i> , 2003, 9, 4536-4539.	3.3	102
5	Two-Dimensional Deuterium NMR Spectroscopy of Chiral Molecules Oriented in a Polypeptide Liquid Crystal: Applications for the Enantiomeric Analysis through Natural Abundance Deuterium NMR. <i>Journal of the American Chemical Society</i> , 1999, 121, 5249-5258.	13.7	96
6	Natural abundance deuterium NMR spectroscopy: Developments and analytical applications in liquids, liquid crystals and solid phases. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2009, 55, 128-159.	7.5	92
7	Enantiomeric visualization using proton-decoupled natural abundance deuterium NMR in poly( <sup>13</sup> -benzyl-l-glutamate) liquid crystalline solutions. <i>Tetrahedron: Asymmetry</i> , 1998, 9, 1871-1881.	1.8	79
8	Calculation of the Molecular Ordering Parameters of (±)-3-Butyn-2-ol Dissolved in an Organic Solution of Poly( <sup>13</sup> -benzyl-l-glutamate). <i>Journal of Physical Chemistry A</i> , 1997, 101, 5719-5724.	2.5	77
9	Nuclear Magnetic Resonance Using a Spatial Frequency Encoding: Application to <sup>13</sup> C Edited Spectroscopy along the Sample. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 3481-3484.	13.8	77
10	NMR Experimental Evidence of the Differentiation of Enantiotopic Directions in C <sub>s</sub> and C <sub>2v</sub> Molecules Using Partially Oriented, Chiral Media. <i>Journal of the American Chemical Society</i> , 2001, 123, 12059-12066.	13.7	71
11	Enantiomeric excess measurements in weakly oriented chiral liquid crystal solvents through 2D <sup>1</sup> H selective refocusing experiments. <i>Journal of Magnetic Resonance</i> , 2002, 158, 169-172.	2.1	64
12	Enzymatic Fluorination in <i>Streptomyces cattleya</i> Takes Place with an Inversion of Configuration Consistent with an S <sub>N</sub> 2 Reaction Mechanism. <i>ChemBioChem</i> , 2004, 5, 685-690.	2.6	63
13	The relationship between molecular symmetry and second-rank orientational order parameters for molecules in chiral liquid crystalline solvents. <i>Journal of Chemical Physics</i> , 1999, 111, 6890-6896.	3.0	62
14	Visualization of enantiomers in a polypeptide liquid-crystal solvent through carbon-13 NMR spectroscopy. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995, 91, 1371.	1.7	60
15	Is Enantiomer Assignment Possible by NMR Spectroscopy Using Residual Dipolar Couplings from Chiral Nonracemic Alignment Media? A Critical Assessment. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8388-8391.	13.8	60
16	Application of a <sup>1</sup> H resolved 2D NMR experiment to the visualization of enantiomers in chiral environment, using sample spatial encoding and selective echoes. <i>Magnetic Resonance in Chemistry</i> , 2009, 47, 300-306.	1.9	57
17	Deuterium NMR stereochemical analysis of threo-erythro isomers bearing remote stereogenic centres in racemic and non-racemic liquid crystalline solvents. <i>Tetrahedron: Asymmetry</i> , 2000, 11, 1911-1918.	1.8	53
18	Modified z-gradient filtering as a mean to obtain phased deuterium autocorrelation 2D NMR spectra in oriented solvents. <i>Journal of Magnetic Resonance</i> , 2004, 171, 135-142.	2.1	52

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19	Measurement and Analysis of the Molecular Ordering Tensors of Two Enantiomers Oriented in a Polypeptide Liquid Crystalline System. <i>The Journal of Physical Chemistry</i> , 1995, 99, 14871-14875.	2.9	51
20	First successful enantiomeric discrimination of chiral alkanes using NMR spectroscopy. <i>Chemical Communications</i> , 2000, , 1113-1114.	4.1	51
21	Spinning near the magic angle: a means of obtaining first-order dipolar NMR spectra of molecules dissolved in nematic liquid crystals. <i>Journal of the American Chemical Society</i> , 1981, 103, 6783-6784.	13.7	48
22	Empirical determination of the absolute configuration of small chiral molecules using natural abundance <sup>2</sup> H NMR in chiral liquid crystals. <i>Chemical Communications</i> , 2007, , 4737.	4.1	47
23	Enantiomeric and Enantiotopic Analysis of Cone-Shaped Compounds with C <sub>3</sub> and C <sub>3v</sub> Symmetry Using NMR Spectroscopy in Chiral Anisotropic Solvents. <i>Journal of the American Chemical Society</i> , 2002, 124, 10071-10082.	13.7	45
24	Description of natural abundance deuterium 2D-NMR experiments in weakly ordered liquid-crystalline solvents using a tailored cartesian spin-operator formalism. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 2283-2290.	2.8	43
25	Assay for the Enantiomeric Analysis of [2H <sup>1</sup> ]-Fluoroacetic Acid: Insight into the Stereochemical Course of Fluorination during Fluorometabolite Biosynthesis in <i>Streptomyces cattleya</i> . <i>Journal of the American Chemical Society</i> , 2003, 125, 379-387.	13.7	40
26	Structural Ambiguities Revisited in Two Bridged Ring Systems Exhibiting Enantiotopic Elements, Using Natural Abundance Deuterium NMR in Chiral Liquid Crystals. <i>Journal of Physical Chemistry A</i> , 2003, 107, 10911-10918.	2.5	39
27	Analysis of the <sup>13</sup> C NMR Spectra of Molecules, Chiral by Isotopic Substitution, Dissolved in a Chiral Oriented Environment: Towards the Absolute Assignment of the pro-R/pro-S Character of Enantiotopic Ligands in Prochiral Molecules. <i>Chemistry - A European Journal</i> , 2004, 10, 3741-3746.	3.3	36
28	Double diastereoselection in asymmetric [2+3] cycloaddition of chiral oxazoline N-oxides: application to the kinetic resolution of a racemic $\hat{\pm}$ , $\hat{1}^2$ -unsaturated $\hat{1}^{\prime}$ -lactone. <i>Tetrahedron: Asymmetry</i> , 1999, 10, 3197-3207.	1.8	35
29	Measurement of the optical purity of fluorinated compounds using proton decoupled <sup>19</sup> F NMR spectroscopy in a chiral liquid crystal solvent. <i>Journal of Fluorine Chemistry</i> , 1997, 86, 149-153.	1.7	33
30	Simplification of the <sup>1</sup> H NMR spectra of enantiomers dissolved in chiral liquid crystals, combining variable angle sample spinning and selective refocusing experiments. <i>Magnetic Resonance in Chemistry</i> , 2006, 44, 1096-1101.	1.9	33
31	Spin-coupling edition in chiral liquid crystal NMR solvent. <i>Journal of Magnetic Resonance</i> , 2011, 209, 315-322.	2.1	28
32	Diastereomeric Shape Recognition Using NMR Spectroscopy in a Chiral Liquid Crystalline Solvent. <i>Angewandte Chemie - International Edition</i> , 1999, 38, 2391-2393.	13.8	26
33	Selective NMR Excitations in Chiral Analysis. <i>Annual Reports on NMR Spectroscopy</i> , 2007, , 283-293.	1.5	23
34	Enantiomeric recognition of chiral invertomers through NMR in chiral oriented phases: a study of cis-decalin. <i>Tetrahedron: Asymmetry</i> , 2001, 12, 737-744.	1.8	19
35	The elimination of degeneracies in spin systems of magnetically equivalent nuclei by nematic solvents and spin tickling. <i>Journal of Chemical Physics</i> , 1976, 65, 1202-1205.	3.0	17
36	Molecular motion in anisotropic medium. II. The proton relaxation study of CH <sub>3</sub> CN: The general A <sub>3</sub> spin system. <i>Journal of Chemical Physics</i> , 1982, 76, 257-264.	3.0	17

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37	Analysis of natural abundance deuterium NMR spectra of enantiomers in chiral liquid crystals via 2D auto-correlation experiments. <i>Chemical Communications</i> , 1998, , 2301-2302.	4.1	17
38	An achiral deuterated derivatizing agent for enantiomeric analysis through NMR in a liquid crystalline solvent. <i>Tetrahedron: Asymmetry</i> , 1997, 8, 485-494.	1.8	16
39	Achiral deuterated derivatizing agent for enantiomeric analysis of carboxylic acids by NMR in a chiral liquid crystalline solvent. <i>Tetrahedron: Asymmetry</i> , 2000, 11, 3635-3644.	1.8	16
40	Enantiomeric discrimination of water soluble compounds using deuterium NMR in a glucoPON/buffered water/n-hexanol chiral lyotropic liquid crystal. <i>Tetrahedron: Asymmetry</i> , 2004, 15, 1315-1318.	1.8	16
41	Enantiodifferentiation of acyclic phosphonium salts in chiral liquid crystalline solutions. <i>Tetrahedron: Asymmetry</i> , 2006, 17, 1424-1429.	1.8	12
42	Visualisation of axial chirality using $2\text{H}\{-^1\text{H}\}$ NMR in poly( $^3\text{-benzyl L-glutamate}$ ), a chiral liquid crystal solvent. <i>Chemical Communications</i> , 1997, , 2031-2032.	4.1	11
43	NMR in chiral polypeptide liquid crystals: the problem of amines. <i>Tetrahedron: Asymmetry</i> , 2007, 18, 1511-1516.	1.8	9
44	Coherent reduction of dipolar interactions in molecules dissolved in liquid-crystal solvents using a new multiple-pulse technique during acquisition. <i>Journal of Magnetic Resonance</i> , 1991, 93, 225-241.	0.5	8
45	The use of exchangeable nuclei to observe enantiomers through deuterium NMR in chiral liquid crystalline solvents. <i>Magnetic Resonance in Chemistry</i> , 2012, 50, S12-6.	1.9	7