Gérald S Remaud

List of Publications by Year in descending order

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76 papers

2,027 citations

186265 28 h-index 265206 42 g-index

78 all docs 78 docs citations

78 times ranked 1102 citing authors

#	Article	IF	Citations
1	Detection of Sophisticated Adulterations of Natural Vanilla Flavors and Extracts:Â Application of the SNIF-NMR Method to Vanillin andp-Hydroxybenzaldehyde. Journal of Agricultural and Food Chemistry, 1997, 45, 859-866.	5.2	120
2	Accurate Quantitative ¹³ C NMR Spectroscopy:  Repeatability over Time of Site-Specific ¹³ C Isotope Ratio Determination. Analytical Chemistry, 2007, 79, 8266-8269.	6.5	90
3	Precise and accurate quantitative 13C NMR with reduced experimental time. Talanta, 2007, 71, 1016-1021.	5.5	86
4	Isotopic 13C NMR spectrometry to assess counterfeiting of active pharmaceutical ingredients: Site-specific 13C content of aspirin and paracetamol. Journal of Pharmaceutical and Biomedical Analysis, 2009, 50, 336-341.	2.8	81
5	Intramolecular ¹³ C pattern in hexoses from autotrophic and heterotrophic C ₃ plant tissues. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18204-18209.	7.1	78
6	Authentication of Bitter Almond Oil and Cinnamon Oil:Â Application of the SNIF-NMR Method to Benzaldehyde. Journal of Agricultural and Food Chemistry, 1997, 45, 4042-4048.	5.2	69
7	Accurate Quantitative Isotopic $<$ sup $>$ 13 $<$ /sup $>$ C NMR Spectroscopy for the Determination of the Intramolecular Distribution of $<$ sup $>$ 13 $<$ /sup $>$ C in Glucose at Natural Abundance. Analytical Chemistry, 2009, 81, 8978-8985.	6.5	68
8	Reference and normalization methods: Essential tools for the intercomparison of NMR spectra. Journal of Pharmaceutical and Biomedical Analysis, 2014, 93, 3-16.	2.8	58
9	Improved Characterization of the Botanical Origin of Sugar by Carbon-13 SNIF-NMR Applied to Ethanol. Journal of Agricultural and Food Chemistry, 2010, 58, 11580-11585.	5.2	55
10	Unexpected Fractionation in Site-Specific 13C Isotopic Distribution Detected by Quantitative 13C NMR at Natural Abundance. Journal of the American Chemical Society, 2008, 130, 414-415.	13.7	52
11	Performance Evaluation of Quantitative Adiabatic ¹³ C NMR Pulse Sequences for Site-Specific Isotopic Measurements. Analytical Chemistry, 2010, 82, 5582-5590.	6.5	51
12	Isotopic finger-printing of active pharmaceutical ingredients by 13C NMR and polarization transfer techniques as a tool to fight against counterfeiting. Talanta, 2011, 85, 1909-1914.	5.5	51
13	A $<$ sup $>$ 13 $<$ /sup $>$ C NMR spectrometric method for the determination of intramolecular $\hat{l}'<$ sup $>$ 13 $<$ /sup $>$ C values in fructose from plant sucrose samples. New Phytologist, 2011, 191, 579-588.	7.3	51
14	The intramolecular ¹³ Câ€distribution in ethanol reveals the influence of the CO ₂ â€fixation pathway and environmental conditions on the siteâ€specific ¹³ C variation in glucose. Plant, Cell and Environment, 2011, 34, 1104-1112.	5.7	50
15	The new face of isotopic NMR at natural abundance. Magnetic Resonance in Chemistry, 2017, 55, 77-90.	1.9	50
16	Hydrogen Isotopic Profile in the Characterization of Sugars. Influence of the Metabolic Pathway. Journal of Agricultural and Food Chemistry, 2002, 50, 1574-1580.	5.2	48
17	Authentication of Lemon Juices and Concentrates by a Combined Multi-isotope Approach Using SNIF-NMR and IRMS. Journal of Agricultural and Food Chemistry, 1998, 46, 2200-2205.	5.2	45
18	Multi-element, multi-compound isotope profiling as a means to distinguish the geographical and varietal origin of fermented cocoa (Theobroma cacao L.) beans. Food Chemistry, 2015, 188, 576-582.	8.2	42

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19	The effect of protecting groups of the nucleobase and the sugar moieties on the acidic hydrolysis of the glycosidic bond of 2deoxyadenosine: a kinet. Tetrahedron, 1987, 43, 4453-4461.	1.9	39
20	Site-specific 13C content by quantitative isotopic 13C Nuclear Magnetic Resonance spectrometry: A pilot inter-laboratory study. Analytica Chimica Acta, 2013, 788, 108-113.	5.4	39
21	NMR spectrometry isotopic fingerprinting: A tool for the manufacturer for tracking Active Pharmaceutical Ingredients from starting materials to final medicines. European Journal of Pharmaceutical Sciences, 2013, 48, 464-473.	4.0	39
22	Biochemical and physiological determinants of intramolecular isotope patterns in sucrose from C3, C4 and CAM plants accessed by isotopic 13C NMR spectrometry: a viewpoint. Natural Product Reports, 2012, 29, 476.	10.3	34
23	Comparison of IRMS and NMR spectrometry for the determination of intramolecular 13C isotope composition: Application to ethanol. Talanta, 2012, 99, 1035-1039.	5.5	33
24	NMR-based isotopic and isotopomic analysis. Progress in Nuclear Magnetic Resonance Spectroscopy, 2020, 120-121, 1-24.	7.5	33
25	Nonstatistical 13C Distribution during Carbon Transfer from Glucose to Ethanol during Fermentation Is Determined by the Catabolic Pathway Exploited. Journal of Biological Chemistry, 2015, 290, 4118-4128.	3.4	32
26	Conditions to obtain precise and true measurements of the intramolecular 13C distribution in organic molecules by isotopic 13C nuclear magnetic resonance spectrometry. Analytica Chimica Acta, 2014, 846, 1-7.	5.4	30
27	Fractionation in position-specific isotope composition during vaporization of environmental pollutants measured with isotope ratio monitoring by 13C nuclear magnetic resonance spectrometry. Environmental Pollution, 2015, 205, 299-306.	7.5	29
28	Olive oil characterization and classification by 13C NMR with a polarization transfer technique: A comparison with gas chromatography and 1H NMR. Food Chemistry, 2018, 245, 717-723.	8.2	29
29	Position-Specific Isotope Analysis of Xanthines: A ¹³ C Nuclear Magnetic Resonance Method to Determine the ¹³ C Intramolecular Composition at Natural Abundance. Analytical Chemistry, 2015, 87, 6600-6606.	6.5	28
30	Quantitative isotopic 13C nuclear magnetic resonance at natural abundance to probe enzyme reaction mechanisms via site-specific isotope fractionation: The case of the chain-shortening reaction for the bioconversion of ferulic acid to vanillin. Analytical Biochemistry, 2009, 393, 182-188.	2.4	27
31	Combination of ¹³ C and ² H <scp>SNIF</scp> â€ <scp>NMR</scp> isotopic fingerprints of vanillin to control its precursors. Flavour and Fragrance Journal, 2019, 34, 133-144.	2.6	26
32	A review of flavors authentication by positionâ€specific isotope analysis by nuclear magnetic resonance spectrometry: the example of vanillin. Flavour and Fragrance Journal, 2017, 32, 77-84.	2.6	25
33	Evidence of 13C non-covalent isotope effects obtained by quantitative 13C nuclear magnetic resonance spectroscopy at natural abundance during normal phase liquid chromatography. Journal of Chromatography A, 2009, 1216, 7043-7048.	3.7	24
34	Internal Referencing for ¹³ C Position-Specific Isotope Analysis Measured by NMR Spectrometry. Analytical Chemistry, 2015, 87, 7550-7554.	6.5	24
35	A retro-biosynthetic approach to the prediction of biosynthetic pathways from position-specific isotope analysis as shown for tramadol. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8296-8301.	7.1	24
36	Quantification of the1Hâ€Decoupling Effects on the Accuracy of13Câ€NMR Measurements. Instrumentation Science and Technology, 2005, 33, 391-399.	1.8	22

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37	Insights into Mechanistic Models for Evaporation of Organic Liquids in the Environment Obtained by Position-Specific Carbon Isotope Analysis. Environmental Science & Technology, 2015, 49, 12782-12788.	10.0	22
38	Enhanced forensic discrimination of pollutants by position-specific isotope analysis using isotope ratio monitoring by 13C nuclear magnetic resonance spectrometry. Talanta, 2016, 147, 383-389.	5.5	21
39	Traceability in quantitative NMR using an electronic signal as working standard. Accreditation and Quality Assurance, 2005, 10, 415-420.	0.8	18
40	¹³ C isotopomics of triacylglycerols using NMR with polarization transfer techniques. Analytical Methods, 2015, 7, 4889-4891.	2.7	18
41	Analytical model for site-specific isotope fractionation in 13C during sorption: Determination by isotopic 13C NMR spectrometry with vanillin as model compound. Chemosphere, 2012, 87, 445-452.	8.2	16
42	Position-Specific ¹³ C Fractionation during Liquid–Vapor Transition Correlated to the Strength of Intermolecular Interaction in the Liquid Phase. Journal of Physical Chemistry B, 2017, 121, 5810-5817.	2.6	16
43	Strategy for specific isotope ratio determination by quantitative NMR on symmetrical molecules: application to glycerol. Tetrahedron: Asymmetry, 2006, 17, 1622-1624.	1.8	15
44	Non-statistical 13C Fractionation Distinguishes Co-incident and Divergent Steps in the Biosynthesis of the Alkaloids Nicotine and Tropine. Journal of Biological Chemistry, 2016, 291, 16620-16629.	3.4	15
45	Suppression of radiation damping for high precision quantitative NMR. Journal of Magnetic Resonance, 2015, 259, 121-125.	2.1	14
46	Chemical and isotopic composition of secondary organic aerosol generated by & amp; t; > ±& t; >-pinene ozonolysis. Atmospheric Chemistry and Physics, 2017, 17, 6373-6391.	4.9	14
47	Full Spectrum Isotopic ¹³ C NMR Using Polarization Transfer for Position-Specific Isotope Analysis. Analytical Chemistry, 2018, 90, 8692-8699.	6.5	14
48	A precise and rapid isotopomic analysis of small quantities of cholesterol at natural abundance by optimized 1H-13C 2D NMR. Analytical and Bioanalytical Chemistry, 2021, 413, 1521-1532.	3.7	13
49	Procedure for the isolation of vanillin from vanilla extracts prior to isotopic authentication by quantitative ¹³ Câ€NMR. Flavour and Fragrance Journal, 2010, 25, 463-467.	2.6	12
50	Comparative study of 13C composition in ethanol and bulk dry wine using isotope ratio monitoring by mass spectrometry and by nuclear magnetic resonance as an indicator of vine water status. Analytical and Bioanalytical Chemistry, 2015, 407, 9053-9060.	3.7	12
51	Insights into the role of methionine synthase in the universal 13 C depletion in O - and N -methyl groups of natural products. Archives of Biochemistry and Biophysics, 2017, 635, 60-65.	3.0	10
52	Impact of the deuterium isotope effect on the accuracy of 13C NMR measurements of site-specific isotope ratios at natural abundance in glucose. Analytical and Bioanalytical Chemistry, 2010, 398, 1979-1984.	3.7	9
53	Predicting equilibrium vapour pressure isotope effects by using artificial neural networks or multi-linear regression – A quantitative structure property relationship approach. Chemosphere, 2015, 134, 521-527.	8.2	8
54	Non-statistical isotope fractionation as a novel "retro-biosynthetic―approach to understanding alkaloid metabolic pathways. Phytochemistry Letters, 2017, 20, 499-506.	1.2	8

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55	Analytical contribution of deuterium 2Dâ€ <scp>NMR</scp> in oriented media to ² H/ssup>1H isotopic characterization: the case of vanillin. Flavour and Fragrance Journal, 2018, 33, 217-229.	2.6	8
56	Limited genotypic and geographic variability of 16-O-methylated diterpene content in Coffea arabica green beans. Food Chemistry, 2020, 329, 127129.	8.2	8
57	Exploring the enantiomeric 13C position-specific isotope fractionation: challenges and anisotropic NMR-based analytical strategy. Analytical and Bioanalytical Chemistry, 2021, 413, 6379-6392.	3.7	8
58	Positionâ€specific ¹⁵ N isotope analysis in organic molecules: A highâ€precision ¹⁵ N NMR method to determine the intramolecular ¹⁵ N isotope composition and fractionation at natural abundance. Magnetic Resonance in Chemistry, 2019, 57, 1136-1142.	1.9	7
59	Expanded uncertainty associated with determination of isotope enrichment factors: Comparison of two point calculation and Rayleigh-plot. Talanta, 2018, 176, 367-373.	5.5	6
60	Forensic application of position-specific isotopic analysis of trinitrotoluene (TNT) by NMR to determine 13C and 15N intramolecular isotopic profiles. Talanta, 2020, 213, 120819.	5 . 5	6
61	Intramolecular non-covalent isotope effects at natural abundance associated with the migration of paracetamol in solid matrices during liquid chromatography. Journal of Chromatography A, 2021, 1639, 461932.	3.7	6
62	Vanillin isotopic intramolecular 13C profile through polarization transfer NMR pulse sequence and statistical modelling. Food Control, 2021, 130, 108345.	5.5	6
63	Position-Specific Isotope Analysis by Isotopic NMR Spectrometry: New Insights on Environmental Pollution Studies. Procedia Earth and Planetary Science, 2015, 13, 92-95.	0.6	4
64	Isotope Ratio Monitoring 13 C Nuclear Magnetic Resonance Spectrometry for the Analysis of Position-Specific Isotope Ratios. Methods in Enzymology, 2017, 596, 369-401.	1.0	4
65	Simulating Stable Isotope Ratios in Plumes of Groundwater Pollutants with <scp>BIOSCREENâ€ATâ€ISO</scp> . Ground Water, 2017, 55, 261-267.	1.3	4
66	Isotopomics by isotope ratio monitoring by $\langle \sup 13 \langle \sup \rangle C$ nuclear magnetic resonance spectrometry on cutting agents in heroin: A new approach for illicit drugs trafficking route elucidation. Drug Testing and Analysis, 2020, 12, 449-457.	2.6	4
67	Authentication of Agave Products through Isotopic Intramolecular ¹³ C Content of Ethanol: Optimization and Validation of ¹³ C Quantitative NMR Methodology. ACS Food Science & Technology, 2021, 1, 1316-1322.	2.7	4
68	Intramolecular isotope effects during permanganate oxidation and acid hydrolysis of methyl tert-butyl ether. Chemosphere, 2020, 248, 125975.	8.2	4
69	Difficulties in Differentiating Natural from Synthetic Alkaloids by Isotope Ratio Monitoring using 13C Nuclear Magnetic Resonance Spectrometry. Planta Medica, 2018, 84, 935-940.	1.3	3
70	Isotope Ratio Monitoring by NMR. Part 1: Recent Advances. , 2016, , 1-26.		2
71	Isotope Ratio Monitoring by NMR Part 2: New Applications in the Field of Defining Biosynthesis. , 2016, , 1-26.		2
72	Position-specific Carbon Isotope Fractionation gives Insights into Mechanistic Models for Evaporation of Organic Liquids in the Environment. Procedia Earth and Planetary Science, 2015, 13, 96-99.	0.6	1

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73	Isotope Ratio Monitoring by NMR: Part 1 – Recent Advances. , 2018, , 1353-1378.		1
74	Carbon-13 composition of bulk dry wines by irm-EA/MS and irm- ¹³ C NMR: An indicator of vine water status. BIO Web of Conferences, 2017, 9, 02021.	0.2	0
75	Isotope Ratio Monitoring by NMR: Part 3 – New Applications for Traceability of Active Pharmaceutical Ingredients. , 2018, , 2233-2251.		O
76	Isotope Ratio Monitoring by NMR: Part 2 – New Applications in the Field of Defining Biosynthesis. , 2018, , 1379-1404.		0