

# François Mariette

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,130  
citations

201674

27  
h-index

233421

45  
g-index

62  
all docs

62  
docs citations

62  
times ranked

2457  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative MRI analysis of structural changes in tomato tissues resulting from dehydration. <i>Magnetic Resonance in Chemistry</i> , 2022, 60, 637-650.	1.9	2
2	Impact of chemical exchange on transverse relaxation at low and moderate magnetic field strengths for sugar solutions representative of fruit tissues analyzed by simulation and MRI experiments. <i>Journal of Magnetic Resonance</i> , 2021, 322, 106872.	2.1	7
3	MRI Study of Temperature Dependence of Multi-exponential Transverse Relaxation Times in Tomato. <i>Applied Magnetic Resonance</i> , 2021, 52, 1543-1560.	1.2	2
4	NMR study of fresh cut salads: Influence of temperature and storage time on leaf structure and water distribution in escarole. <i>Magnetic Resonance in Chemistry</i> , 2019, 57, 626-637.	1.9	6
5	NMR Relaxometry and Imaging of Dairy Products. , 2018, , 1535-1557.		3
6	Leaf Development Monitoring and Early Detection of Water Deficiency by Low Field Nuclear Magnetic Resonance Relaxation in <i>Nicotiana tabacum</i> Plants. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 943.	2.5	8
7	A mobile NMR lab for leaf phenotyping in the field. <i>Plant Methods</i> , 2017, 13, 53.	4.3	14
8	NMR Relaxometry and Imaging of Dairy Products. , 2017, , 1-23.		1
9	Nitrogen deficiency impacts on leaf cell and tissue structure with consequences for senescence associated processes in <i>Brassica napus</i> . , 2016, 57, 11.		15
10	Temperature-Associated Proton Dynamics in Wheat Starch-Based Model Systems and Wheat Flour Dough Evaluated by NMR. <i>Food and Bioprocess Technology</i> , 2015, 8, 777-790.	4.7	55
11	MRI investigation of subcellular water compartmentalization and gas distribution in apples. <i>Magnetic Resonance Imaging</i> , 2015, 33, 671-680.	1.8	27
12	Analysis of the dynamic mechanical properties of apple tissue and relationships with the intracellular water status, gas distribution, histological properties and chemical composition. <i>Postharvest Biology and Technology</i> , 2015, 104, 1-16.	6.0	46
13	Assessment of nutrient remobilization through structural changes of palisade and spongy parenchyma in oilseed rape leaves during senescence. <i>Planta</i> , 2015, 241, 333-346.	3.2	28
14	Nanoparticle diffusometry for quantitative assessment of submicron structure in food biopolymer networks. <i>Trends in Food Science and Technology</i> , 2015, 42, 13-26.	15.1	30
15	Translational and rotational diffusion of flexible PEG and rigid dendrimer probes in sodium caseinate dispersions and acid gels. <i>Biopolymers</i> , 2014, 101, 959-965.	2.4	11
16	Multi-scale investigation of eyes in semi-hard cheese. <i>Innovative Food Science and Emerging Technologies</i> , 2014, 24, 106-112.	5.6	22
17	MRI method for investigation of eye growth in semi-hard cheese. <i>Journal of Food Engineering</i> , 2014, 121, 152-158.	5.2	31
18	Investigation of curd grains in Swiss-type cheese using light and confocal laser scanning microscopy. <i>International Dairy Journal</i> , 2013, 33, 10-15.	3.0	11

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19	MSE-MRI sequence optimisation for measurement of bi- and tri-exponential T2 relaxation in a phantom and fruit. <i>Magnetic Resonance Imaging</i> , 2013, 31, 1677-1689.	1.8	26
20	PFG-NMR self-diffusion in casein dispersions: Effects of probe size and protein aggregate size. <i>Food Hydrocolloids</i> , 2013, 31, 248-255.	10.7	17
21	Probe Mobility in Native Phosphocaseinate Suspensions and in a Concentrated Rennet Gel: Effects of Probe Flexibility and Size. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 5870-5879.	5.2	17
22	Structural Changes in Senescing Oilseed Rape Leaves at Tissue and Subcellular Levels Monitored by Nuclear Magnetic Resonance Relaxometry through Water Status. <i>Plant Physiology</i> , 2013, 163, 392-406.	4.8	27
23	Molecular Mobility in Dense Protein Systems: An Investigation through <sup>1</sup> H NMR Relaxometry and Diffusometry. <i>Journal of Physical Chemistry B</i> , 2012, 116, 11744-11753.	2.6	16
24	The rennet coagulation mechanisms of a concentrated casein suspension as observed by PFG-NMR diffusion measurements. <i>Food Hydrocolloids</i> , 2012, 27, 456-463.	10.7	20
25	Evolution of Fat Crystal Network Microstructure Followed by NMR. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 1767-1773.	5.2	32
26	NMR Study of Water Distribution inside Tomato Cells: Effects of Water Stress. <i>Applied Magnetic Resonance</i> , 2010, 38, 455-469.	1.2	36
27	Optimization of a maximum entropy criterion for 2D Nuclear Magnetic Resonance reconstruction. , 2010, , .		4
28	Efficient Maximum Entropy Reconstruction of Nuclear Magnetic Resonance T1-T2 Spectra. <i>IEEE Transactions on Signal Processing</i> , 2010, 58, 6040-6051.	5.3	67
29	Monitoring the postharvest ripening of tomato fruit using quantitative MRI and NMR relaxometry. <i>Postharvest Biology and Technology</i> , 2009, 53, 22-35.	6.0	68
30	An investigation of the structural aspects of the tomato fruit by means of quantitative nuclear magnetic resonance imaging. <i>Magnetic Resonance Imaging</i> , 2009, 27, 709-719.	1.8	35
31	Investigations of food colloids by NMR and MRI. <i>Current Opinion in Colloid and Interface Science</i> , 2009, 14, 203-211.	7.4	109
32	Effects of Crystal Growth and Polymorphism of Triacylglycerols on NMR Relaxation Parameters. 2. Study of a Tricaprin <sup>+</sup> Tristearin Mixture. <i>Crystal Growth and Design</i> , 2009, 9, 4281-4288.	3.0	11
33	Effects of Crystal Growth and Polymorphism of Triacylglycerols on NMR Relaxation Parameters. 1. Evidence of a Relationship between Crystal Size and Spin <sup>+</sup> Lattice Relaxation Time. <i>Crystal Growth and Design</i> , 2009, 9, 4273-4280.	3.0	18
34	NMR relaxometry as a potential non-invasive routine sensor for characterization of phenotype in <i>Crassostrea gigas</i> . <i>Aquaculture</i> , 2009, 291, 74-77.	3.5	10
35	PFG <sup>+</sup> NMR Techniques Provide a New Tool for Continuous Investigation of the Evolution of the Casein Gel Microstructure after Renneting. <i>Macromolecules</i> , 2008, 41, 2071-2078.	4.8	15
36	Effects of Acidification with and without Rennet on a Concentrated Casein System: A Kinetic NMR Probe Diffusion Study. <i>Macromolecules</i> , 2008, 41, 2079-2086.	4.8	24

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37	Water Migration and Molecular Mobility in Cakes During Storage: An NMR Investigation. , 2008, , 125-128.		0
38	Impact of Casein Gel Microstructure on Self-Diffusion Coefficient of Molecular Probes Measured by <sup>1</sup> H PFG-NMR. Journal of Agricultural and Food Chemistry, 2007, 55, 10764-10772.	5.2	42
39	Pulsed Field Gradient NMR Study of Poly(ethylene glycol) Diffusion in Whey Protein Solutions and Gels. Macromolecules, 2006, 39, 1053-1059.	4.8	32
40	Effects of Ionic Strength and Denaturation Time on Polyethyleneglycol Self-Diffusion in Whey Protein Solutions and Gels Visualized by Nuclear Magnetic Resonance. Journal of Agricultural and Food Chemistry, 2006, 54, 5105-5112.	5.2	13
41	Quantification of muscle, subcutaneous fat and intermuscular fat in pig carcasses and cuts by magnetic resonance imaging. Meat Science, 2006, 72, 146-154.	5.5	51
42	Influence of fat globule membrane composition on water holding capacity and water mobility in casein rennet gel: A nuclear magnetic resonance self-diffusion and relaxation study. International Dairy Journal, 2006, 16, 344-353.	3.0	28
43	Sweetness and aroma perceptions in model dairy desserts: an overview. Flavour and Fragrance Journal, 2006, 21, 48-52.	2.6	15
44	Diffusion of polyethyleneglycols in casein solutions and gels as studied by pulsed field gradient NMR. Magnetic Resonance Imaging, 2005, 23, 347-348.	1.8	8
45	NMR Signal Analysis To Attribute the Components to the Solid/Liquid Phases Present in Mixes and Ice Creams. Journal of Agricultural and Food Chemistry, 2005, 53, 1317-1327.	5.2	38
46	Effect of Casein Concentration in Suspensions and Gels on Poly(ethylene glycol)s NMR Self-Diffusion Measurements. Macromolecules, 2005, 38, 9171-9179.	4.8	37
47	NMR assessment of ice cream: Effect of formulation on liquid and solid fat. International Dairy Journal, 2005, 15, 1225-1233.	3.0	37
48	NMR Relaxation and Water Self-Diffusion Studies in Whey Protein Solutions and Gels. Journal of Agricultural and Food Chemistry, 2005, 53, 6784-6790.	5.2	47
49	Relaxation RMN et IRMÂ: un couplage indispensable pour l'Ã©tude des produits alimentaires. Comptes Rendus Chimie, 2004, 7, 221-232.	0.5	11
50	Water, ice and sucrose behavior in frozen sucroseâ€“protein solutions as studied by <sup>1</sup> H NMR. Food Chemistry, 2004, 84, 77-89.	8.2	18
51	Influence of MRI acquisition protocols and image intensity normalization methods on texture classification. Magnetic Resonance Imaging, 2004, 22, 81-91.	1.8	448
52	<sup>1</sup> H Nuclear Magnetic Resonance Relaxometry Study of Water State in Milk Protein Mixtures. Journal of Agricultural and Food Chemistry, 2004, 52, 5449-5455.	5.2	42
53	Effects of Casein and Fat Content on Water Self-Diffusion Coefficients in Casein Systems:â€“ A Pulsed Field Gradient Nuclear Magnetic Resonance Study. Journal of Agricultural and Food Chemistry, 2004, 52, 3988-3995.	5.2	19
54	Determination of water self-diffusion coefficient in complex food products by low field <sup>1</sup> H PFG-NMR: comparison between the standard spin-echo sequence and the T1-weighted spin-echo sequence. Journal of Magnetic Resonance, 2003, 165, 265-275.	2.1	33

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55	Quality analysis of blue-veined cheeses by MRI: a preliminary study. , 2003, , .		3
56	<sup>1</sup> H NMR Diffusometry Study of Water in Casein Dispersions and Gels. Journal of Agricultural and Food Chemistry, 2002, 50, 4295-4302.	5.2	46
57	Rehydration of casein powders: effects of added mineral salts and salt addition methods on water transfer. International Dairy Journal, 2002, 12, 51-57.	3.0	88
58	Assessment of the State of Water in Reconstituted Milk Protein Dispersions by Nuclear Magnetic Resonance (NMR) and Differential Scanning Calorimetry (DSC). LWT - Food Science and Technology, 2001, 34, 299-305.	5.2	18
59	<sup>1</sup> H nuclear magnetic resonance relaxometric characterization of fat and water states in soft and hard cheese. Journal of Dairy Research, 2000, 67, 609-618.	1.4	73
60	Evolution of water proton nuclear magnetic relaxation during milk coagulation and syneresis: Structural implications. Journal of Agricultural and Food Chemistry, 1993, 41, 2259-2266.	5.2	57
61	Multinuclear NMR study of the pH dependent water state in skim milk and caseinate solutions. Journal of Dairy Research, 1993, 60, 175-188.	1.4	50