

Frederic Jamme

List of Publications by Year in descending order

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101
papers

2,409
citations

201674

27
h-index

243625

44
g-index

110
all docs

110
docs citations

110
times ranked

3423
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolution of the flax cell wall composition during development and after gravitropism by synchrotron fluorescence imaging. <i>Industrial Crops and Products</i> , 2022, 175, 114256.	5.2	6
2	Detection and localization of calcium oxalate in kidney using synchrotron deep ultraviolet fluorescence microscopy. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 214-223.	2.4	3
3	Evolution of the ultrastructure and polysaccharide composition of flax fibres over time: When history meets science. <i>Carbohydrate Polymers</i> , 2022, 291, 119584.	10.2	17
4	Anticipating global warming effects: A comprehensive study of drought impact of both flax plants and fibres. <i>Industrial Crops and Products</i> , 2022, 184, 115011.	5.2	6
5	Molecular changes tracking through multiscale fluorescence microscopy differentiate Meningioma grades and non-tumoral brain tissues. <i>Scientific Reports</i> , 2021, 11, 3816.	3.3	11
6	Second-Harmonic Generation of Halloysite Nanotubes for Bioimaging. <i>ACS Applied Nano Materials</i> , 2021, 4, 4351-4355.	5.0	2
7	The endosperm cavity of wheat grains contains a highly hydrated gel of arabinoxylan. <i>Plant Science</i> , 2021, 306, 110845.	3.6	10
8	Extensive investigation of the ultrastructure of kink-bands in flax fibres. <i>Industrial Crops and Products</i> , 2021, 164, 113368.	5.2	24
9	Investigations by AFM of Ageing Mechanisms in PLA-Flax Fibre Composites during Garden Composting. <i>Polymers</i> , 2021, 13, 2225.	4.5	8
10	PB1-F2 amyloid-like fibers correlate with proinflammatory signaling and respiratory distress in influenza-infected mice. <i>Journal of Biological Chemistry</i> , 2021, 297, 100885.	3.4	3
11	Lessons on textile history and fibre durability from a 4,000-year-old Egyptian flax yarn. <i>Nature Plants</i> , 2021, 7, 1200-1206.	9.3	10
12	Chemical, morphological and mechanical study of the ageing of textile flax fibers from 17th/18th-century paintings on canvas. <i>Journal of Cultural Heritage</i> , 2021, 52, 202-214.	3.3	7
13	Microfibril angle of elementary flax fibres investigated with polarised second harmonic generation microscopy. <i>Industrial Crops and Products</i> , 2020, 156, 112847.	5.2	16
14	FTIR micro-spectroscopy using synchrotron-based and thermal source-based radiation for probing live bacteria. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 7049-7061.	3.7	14
15	The shell matrix of the european thorny oyster, <i>Spondylus gaederopus</i> : microstructural and molecular characterization. <i>Journal of Structural Biology</i> , 2020, 211, 107497.	2.8	9
16	Synchrotron multimodal imaging in a whole cell reveals lipid droplet core organization. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 772-778.	2.4	7
17	Time resolved transient circular dichroism spectroscopy using synchrotron natural polarization. <i>Structural Dynamics</i> , 2019, 6, 054307.	2.3	14
18	Mobility of pectin methylesterase in pectin/cellulose gels is enhanced by the presence of cellulose and by its catalytic capacity. <i>Scientific Reports</i> , 2019, 9, 12551.	3.3	13

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19	Optical Signatures Derived From Deep UV to NIR Excitation Discriminates Healthy Samples From Low and High Grades Glioma. Scientific Reports, 2019, 9, 8786.	3.3	20
20	Phenolic distribution in apple epidermal and outer cortex tissue by multispectral deep-UV autofluorescence cryo-imaging. Plant Science, 2019, 283, 51-59.	3.6	24
21	Monitoring food structure during digestion using small-angle scattering and imaging techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 570, 96-106.	4.7	11
22	Discrimination between primary low and high grade tumor and secondary metastasis tumor from deep-UV to NIR. , 2019, , .		0
23	Handling Different Spatial Resolutions in Image Fusion by Multivariate Curve Resolution-Alternating Least Squares for Incomplete Image Multisets. Analytical Chemistry, 2018, 90, 6757-6765.	6.5	31
24	Multi-scale characterization of thermoplastic starch structure using Second Harmonic Generation imaging and NMR. Carbohydrate Polymers, 2018, 194, 80-88.	10.2	17
25	Tracking hidden organic carbon in rocks using chemometrics and hyperspectral imaging. Scientific Reports, 2018, 8, 2396.	3.3	12
26	Exploring the breakdown of dairy protein gels during in vitro gastric digestion using time-lapse synchrotron deep-UV fluorescence microscopy. Food Chemistry, 2018, 239, 898-910.	8.2	37
27	Selected case studies presenting advanced methodologies to study food and chemical industry materials: From the structural characterization of raw materials to the multisensory integration of food. Innovative Food Science and Emerging Technologies, 2018, 46, 29-40.	5.6	1
28	Abiotic synthesis of amino acids in the recesses of the oceanic lithosphere. Nature, 2018, 564, 59-63.	27.8	170
29	Cryopreservation-related stresses in Lactobacillus delbrueckii SUBSP. Bulgaricus: Global and multi-scale study. Cryobiology, 2018, 85, 167.	0.7	0
30	Multimodal Analysis of Central Nervous System Tumor Tissue Endogenous Fluorescence With Multiscale Excitation. Frontiers in Physics, 2018, 6, .	2.1	11
31	Synchrotron Time-Lapse Imaging of Lignocellulosic Biomass Hydrolysis: Tracking Enzyme Localization by Protein Autofluorescence and Biochemical Modification of Cell Walls by Microfluidic Infrared Microspectroscopy. Frontiers in Plant Science, 2018, 9, 200.	3.6	23
32	Toxicity of Food-Grade TiO2 to Commensal Intestinal and Transient Food-Borne Bacteria: New Insights Using Nano-SIMS and Synchrotron UV Fluorescence Imaging. Frontiers in Microbiology, 2018, 9, 794.	3.5	52
33	Characterization of Pustular Mats and Related Rivularia-Rich Laminations in Oncoids From the Laguna Negra Lake (Argentina). Frontiers in Microbiology, 2018, 9, 996.	3.5	35
34	Detection of human brain tumor infiltration with multimodal multiscale optical analysis. Proceedings of SPIE, 2017, , .	0.8	0
35	Neighbouring pixel data augmentation: a simple way to fuse spectral and spatial information for hyperspectral imaging data analysis. Journal of Chemometrics, 2017, 31, e2882.	1.3	9
36	Patterns of metal distribution in hypersaline microbialites during early diagenesis: Implications for the fossil record. Geobiology, 2017, 15, 259-279.	2.4	40

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37	Subcellular membrane fluidity of <i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> under cold and osmotic stress. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 6907-6917.	3.6	21
38	Action of lytic polysaccharide monooxygenase on plant tissue is governed by cellular type. <i>Scientific Reports</i> , 2017, 7, 17792.	3.3	21
39	Long-term neurologic and cardiac correction by intrathecal gene therapy in Pompe disease. <i>Acta Neuropathologica Communications</i> , 2017, 5, 66.	5.2	46
40	Oversolubility in the microvicinity of solidâ€“solution interfaces. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14874-14885.	2.8	7
41	Synchrotron Infrared and Deep UV Fluorescent Microspectroscopy Study of PB1-F2 \hat{I}^2 -Aggregated Structures in Influenza A Virus-infected Cells. <i>Journal of Biological Chemistry</i> , 2016, 291, 9060-9072.	3.4	14
42	Interstellar and interplanetary solids in the laboratory. <i>Proceedings of the International Astronomical Union</i> , 2015, 11, 416-419.	0.0	1
43	<i>Escherichia coli</i> under Ionic Silver Stress: An Integrative Approach to Explore Transcriptional, Physiological and Biochemical Responses. <i>PLoS ONE</i> , 2015, 10, e0145748.	2.5	21
44	Deep UV excited muscle cell autofluorescence varies with the fibre type. <i>Analyst, The</i> , 2015, 140, 4189-4196.	3.5	15
45	Understanding the cryotolerance of lactic acid bacteria using combined synchrotron infrared and fluorescence microscopies. <i>Analyst, The</i> , 2015, 140, 5920-5928.	3.5	28
46	Microscopic imaging of biphasic oilâ€“air flow in <scp>F</scp>rench fries using synchrotron radiation. <i>AIChE Journal</i> , 2015, 61, 1427-1446.	3.6	15
47	Hyperspectral Deep Ultraviolet Autofluorescence of Muscle Fibers Is Affected by Postmortem Changes. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 4782-4789.	5.2	13
48	Physiological and Biochemical Responses of <i>Yarrowia lipolytica</i> to Dehydration Induced by Air-Drying and Freezing. <i>PLoS ONE</i> , 2014, 9, e111138.	2.5	16
49	Ion irradiation of Allende meteorite probed by visible, IR, and Raman spectroscopies. <i>Icarus</i> , 2014, 237, 278-292.	2.5	60
50	A multi-scale approach of the mechanisms underlying exopolysaccharide auto-organization in the <i>Proteus mirabilis</i> extracellular matrix. <i>Analyst, The</i> , 2014, 139, 4879-4886.	3.5	2
51	Single vs. two-photon microscopy for label free intrinsic tissue studies in the UV light region. <i>Analyst, The</i> , 2014, 139, 2663-2667.	3.5	4
52	Protein Matrix Involved in the Lipid Retention of <i>Foie Gras</i> during Cooking: A Multimodal Hyperspectral Imaging Study. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 5954-5962.	5.2	10
53	3D Imaging of Enzymes Working in Situ. <i>Analytical Chemistry</i> , 2014, 86, 5265-5270.	6.5	22
54	Synchrotron UV fluorescence microscopy for determining membrane fluidity modification of single bacteria with temperatures. <i>Biomedical Spectroscopy and Imaging</i> , 2014, 3, 203-210.	1.2	7

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55	Interstellar and interplanetary carbonaceous solids in the laboratory. <i>Geochemical Journal</i> , 2014, 48, 511-518.	1.0	6
56	Aspects of Chemical Composition of Exodermal Cell Walls in Roots of Ni-Hyperaccumulating and Non-Hyperaccumulating Genotypes of <i>Senecio coronatus</i> . <i>Microscopy and Microanalysis</i> , 2014, 20, 1276-1277.	0.4	1
57	Microscopies synchrotron Å SOLEIL. <i>Photoniques</i> , 2014, , 30-33.	0.1	0
58	Synchrotron FTIR microspectroscopy of <i>Escherichia coli</i> at single-cell scale under silver-induced stress conditions. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 2685-2697.	3.7	25
59	UltraCarbonaceous Antarctic micrometeorites, probing the Solar System beyond the nitrogen snow-line. <i>Icarus</i> , 2013, 224, 243-252.	2.5	103
60	Chemometric Strategies To Unmix Information and Increase the Spatial Description of Hyperspectral Images: A Single-Cell Case Study. <i>Analytical Chemistry</i> , 2013, 85, 6303-6311.	6.5	43
61	Deep UV autofluorescence microscopy for cell biology and tissue histology. <i>Biology of the Cell</i> , 2013, 105, 277-288.	2.0	101
62	Synchrotron infrared confocal microscope: Application to infrared 3D spectral imaging. <i>Journal of Physics: Conference Series</i> , 2013, 425, 142002.	0.4	9
63	DUV cleaning of aluminium optics left at the atmosphere. <i>Journal of Physics: Conference Series</i> , 2013, 425, 122005.	0.4	1
64	Single Cell Synchrotron FT-IR Microspectroscopy Reveals a Link between Neutral Lipid and Storage Carbohydrate Fluxes in <i>S. cerevisiae</i> . <i>PLoS ONE</i> , 2013, 8, e74421.	2.5	28
65	Tomographie de fluorescence DUV sur des systÃ¨mes d'Ã©tude biologique. , 2013, , 43-45.	0.1	0
66	A comprehensive overview of grain development in <i>Brachypodium distachyon</i> variety Bd21. <i>Journal of Experimental Botany</i> , 2012, 63, 739-755.	4.8	75
67	DISCO synchrotron-radiation circular-dichroism endstation at SOLEIL. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 831-835.	2.4	49
68	Coupling hyperspectral image data having different spatial resolutions using Multiple Co-inertia Analysis. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2012, 117, 200-212.	3.5	18
69	Infra-red imaging of bulk water and water-silica solid interfaces under stable and metastable conditions. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 2864.	2.8	11
70	Coupling hyperspectral image data having different spatial resolutions by extending multivariate inter-battery Tucker analysis. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2012, 113, 43-51.	3.5	8
71	In situ thermal denaturation of myofibre sub-type proteins studied by immunohistofluorescence and synchrotron radiation FT-IR microspectroscopy. <i>Food Chemistry</i> , 2012, 134, 1044-1051.	8.2	31
72	Atmospheric pressure photoionization using tunable VUV synchrotron radiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012, 279, 114-117.	1.4	14

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73	Synchrotron Ultraviolet Microspectroscopy on Rat Cortical Bone: Involvement of Tyrosine and Tryptophan in the Osteocyte and Its Environment. PLoS ONE, 2012, 7, e43930.	2.5	22
74	In Situ Tracking of Enzymatic Breakdown of Starch Granules by Synchrotron UV Fluorescence Microscopy. Analytical Chemistry, 2011, 83, 989-993.	6.5	30
75	Synchrotron UV-Visible Multispectral Luminescence Microimaging of Historical Samples. Analytical Chemistry, 2011, 83, 1737-1745.	6.5	52
76	Synchrotron radiation infrared microspectroscopy to assess the activity of vancomycin against endocarditis vegetation bacteria. Journal of Microbiological Methods, 2011, 85, 235-238.	1.6	4
77	The fusion of lipid droplets is involved in fat loss during cooking of duck "foie gras". Meat Science, 2011, 89, 377-383.	5.5	12
78	Change in wall composition of transfer and aleurone cells during wheat grain development. Planta, 2011, 233, 393-406.	3.2	45
79	Mid-IR, Far-IR, Raman micro-spectroscopy, and FESEM-EDX study of IDP L2021C5: Clues to its origin. Icarus, 2011, 212, 896-910.	2.5	53
80	A differential pumping system to deliver windowless VUV photons at atmospheric pressure. Journal of Synchrotron Radiation, 2011, 18, 546-549.	2.4	22
81	Infrared synchrotron radiation from bending magnet and edge radiation sources for the study of orientation and conformation in anisotropic materials. Review of Scientific Instruments, 2011, 82, 033710.	1.3	13
82	Brachypodium distachyon grain: characterization of endosperm cell walls. Journal of Experimental Botany, 2011, 62, 1001-1015.	4.8	81
83	Diffusion of Ofloxacin in the Endocarditis Vegetation Assessed with Synchrotron Radiation UV Fluorescence Microspectroscopy. PLoS ONE, 2011, 6, e19440.	2.5	11
84	Synchrotron FTIR microspectroscopy of the yeast Saccharomyces cerevisiae after exposure to plasma-deposited nanosilver-containing coating. Analytical and Bioanalytical Chemistry, 2010, 396, 1441-1450.	3.7	37
85	Toxicity and phototoxicity of Hypocrellin A on malignant human cell lines, evidence of a synergistic action of photodynamic therapy with Imatinib mesylate. Journal of Photochemistry and Photobiology B: Biology, 2010, 99, 100-104.	3.8	19
86	The water clock of Proteus mirabilis paces colony periodic and synchronous swarming. Nature Precedings, 2010, , .	0.1	0
87	Photon- and electron-stimulated desorption from laboratory models of interstellar ice grains. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 799-806.	2.1	17
88	Synchrotron UV Fluorescence Microscopy Uncovers New Probes in Cells and Tissues. Microscopy and Microanalysis, 2010, 16, 507-514.	0.4	78
89	Multimodal Spectroscopy Combining Time-of-Flight-Secondary Ion Mass Spectrometry, Synchrotron-FT-IR, and Synchrotron-UV Microspectroscopies on the Same Tissue Section. Analytical Chemistry, 2010, 82, 3963-3968.	6.5	53
90	Macromolecular Orientation in Glassy Starch Materials That Exhibit Shape Memory Behavior. Macromolecules, 2010, 43, 9854-9858.	4.8	20

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91	Fourier Transform Infrared Microspectroscopy of Endocarditis Vegetation. Applied Spectroscopy, 2010, 64, 901-906.	2.2	9
92	Wheat endosperm cell walls: Spatial heterogeneity of polysaccharide structure and composition using micro-scale enzymatic fingerprinting and FT-IR microspectroscopy. Journal of Cereal Science, 2009, 50, 312-317.	3.7	58
93	DISCO: a low-energy multipurpose beamline at synchrotron SOLEIL. Journal of Synchrotron Radiation, 2009, 16, 835-841.	2.4	129
94	Aleurone Cell Walls of Wheat Grain: High Spatial Resolution Investigation Using Synchrotron Infrared Microspectroscopy. Applied Spectroscopy, 2008, 62, 895-900.	2.2	37
95	Photosensitizer effects on cancerous cells: A combined study using synchrotron infrared and fluorescence microscopies. Biochimica Et Biophysica Acta - General Subjects, 2008, 1780, 854-860.	2.4	23
96	Surface science investigations of photoprocesses in model interstellar ices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 919-924.	2.1	18
97	Desorption of Hot Molecules from Photon Irradiated Interstellar Ices. Astrophysical Journal, 2008, 673, 1233-1239.	4.5	30
98	Towards a fully optimised organic LED device: Analysis of surface synthesis using coupling reactions by ToF-SIMS. Applied Surface Science, 2006, 252, 6672-6675.	6.1	13
99	Preferred metabolic pathway of bovine muscle fibre revealed by synchrotron "deep ultraviolet fluorescence imaging. Journal of Spectral Imaging, 0, , .	0.0	1
100	Assessment of adeno-associated virus gene therapies efficacy on acid alpha-glucosidase restoration and glycogen storage correction in cardiac muscle of Pompe disease mice using synchrotron infrared and ultraviolet microspectroscopies. Journal of Spectral Imaging, 0, , .	0.0	1
101	Impact of the influenza protein PB1-F2 on the biochemical composition of human epithelial cells revealed by synchrotron Fourier transform infrared spectromicroscopy. Journal of Spectral Imaging, 0, , .	0.0	0