

# nathalie Dupuy Or n Dupuy

## List of Publications by Year in descending order

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110  
papers

3,078  
citations

147726

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197736

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110  
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110  
docs citations

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times ranked

3421  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geographic origins and compositions of virgin olive oils determined by chemometric analysis of NIR spectra. <i>Analytica Chimica Acta</i> , 2007, 595, 136-144.	2.6	164
2	Prediction of Cassava Starch Edible Film Properties by Chemometric Analysis of Infrared Spectra. <i>Spectroscopy Letters</i> , 2005, 38, 749-767.	0.5	122
3	Relationship between baking behavior of modified cassava starches and starch chemical structure determined by FTIR spectroscopy. <i>Carbohydrate Polymers</i> , 2000, 42, 149-158.	5.1	117
4	Comparison of PLS1-DA, PLS2-DA and SIMCA for classification by origin of crude petroleum oils by MIR and virgin olive oils by NIR for different spectral regions. <i>Vibrational Spectroscopy</i> , 2011, 55, 132-140.	1.2	101
5	TRENDS IN RECOVERY OF MEDITERRANEAN SOIL CHEMICAL PROPERTIES AND MICROBIAL ACTIVITIES AFTER INFREQUENT AND FREQUENT WILDFIRES. <i>Land Degradation and Development</i> , 2013, 24, 115-128.	1.8	98
6	Comparison between NIR, MIR, concatenated NIR and MIR analysis and hierarchical PLS model. Application to virgin olive oil analysis. <i>Analytica Chimica Acta</i> , 2010, 666, 23-31.	2.6	87
7	Classification of edible fats and oils by principal component analysis of Fourier transform infrared spectra. <i>Food Chemistry</i> , 1996, 57, 245-251.	4.2	86
8	Origin of French Virgin Olive Oil Registered Designation of Origins Predicted by Chemometric Analysis of Synchronous Excitation-Emission Fluorescence Spectra. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 9361-9368.	2.4	83
9	Authentication of Tunisian virgin olive oils by chemometric analysis of fatty acid compositions and NIR spectra. Comparison with Maghrebian and French virgin olive oils. <i>Food Chemistry</i> , 2015, 173, 122-132.	4.2	81
10	Monitoring of the evolution of an industrial compost and prediction of some compost properties by NIR spectroscopy. <i>Science of the Total Environment</i> , 2009, 407, 2390-2403.	3.9	65
11	Comparative chemometric analyses of geographic origins and compositions of lavandin var. Grosso essential oils by mid infrared spectroscopy and gas chromatography. <i>Analytica Chimica Acta</i> , 2008, 613, 31-39.	2.6	64
12	Rapid quantitative determination of oleuropein in olive leaves ( <i>Olea europaea</i> ) using mid-infrared spectroscopy combined with chemometric analyses. <i>Industrial Crops and Products</i> , 2012, 37, 292-297.	2.5	63
13	Composition and authentication of virgin olive oil from French PDO regions by chemometric treatment of Raman spectra. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 1540-1547.	1.2	61
14	Automated Principal Component-Based Orthogonal Signal Correction Applied to Fused Near Infrared-Mid-Infrared Spectra of French Olive Oils. <i>Analytical Chemistry</i> , 2009, 81, 7160-7169.	3.2	59
15	Vibrational Spectroscopic Study of L-Phenylalanine: Effect of pH. <i>Applied Spectroscopy</i> , 2001, 55, 901-907.	1.2	57
16	Infrared study of aging of edible oils by oxidative spectroscopic index and MCR-ALS chemometric method. <i>Talanta</i> , 2009, 77, 1748-1756.	2.9	57
17	On-Line Monitoring of a Latex Emulsion Polymerization by Fiber-Optic FT-Raman Spectroscopy. Part I: Calibration. <i>Applied Spectroscopy</i> , 2000, 54, 528-535.	1.2	56
18	CIE L*a*b* color space predictive models for colorimetry devices - Analysis of perfume quality. <i>Talanta</i> , 2013, 104, 58-66.	2.9	47

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19	Study of jojoba oil aging by FTIR. <i>Analytica Chimica Acta</i> , 2009, 642, 163-170.	2.6	44
20	PLS regression on spectroscopic data for the prediction of crude oil quality: API gravity and aliphatic/aromatic ratio. <i>Fuel</i> , 2012, 98, 5-14.	3.4	42
21	Chemometrics as a tool for the analysis of evolved gas during the thermal treatment of sewage sludge using coupled TG-FTIR. <i>Thermochimica Acta</i> , 2003, 404, 97-108.	1.2	41
22	Chemometric analysis of combined NIR and MIR spectra to characterize French olives. <i>European Journal of Lipid Science and Technology</i> , 2010, 112, 463-475.	1.0	40
23	Identification of Modified Starches Using Infrared Spectroscopy and Artificial Neural Network Processing. <i>Applied Spectroscopy</i> , 1998, 52, 329-338.	1.2	39
24	Chemometric analysis of French lavender and lavandin essential oils by near infrared spectroscopy. <i>Industrial Crops and Products</i> , 2016, 80, 156-164.	2.5	37
25	FTIR and SUVF spectroscopy as an alternative method in reservoir studies. Application to Western Mediterranean oils. <i>Fuel</i> , 2005, 84, 159-168.	3.4	35
26	XPS analysis of PE and EVA samples irradiated at different $\hat{1}^3$ -doses. <i>Applied Surface Science</i> , 2018, 427, 966-972.	3.1	35
27	Quantitative analysis of water-soluble vitamins by ATR-FTIR spectroscopy. <i>Food Chemistry</i> , 1998, 63, 133-140.	4.2	34
28	Application of chemometric methods to synchronous UV fluorescence spectra of petroleum oils. <i>Fuel</i> , 2006, 85, 2653-2661.	3.4	33
29	FTIR study of ageing of $\hat{1}^3$ -irradiated biopharmaceutical EVA based film. <i>Polymer Degradation and Stability</i> , 2016, 129, 19-25.	2.7	33
30	Lipid Compositions and French Registered Designations of Origins of Virgin Olive Oils Predicted by Chemometric Analysis of Mid-Infrared Spectra. <i>Applied Spectroscopy</i> , 2008, 62, 583-590.	1.2	32
31	Investigation of gamma radiation effect on the anion exchange resin Amberlite IRA-400 in hydroxide form by Fourier transformed infrared and $^{13}C$ nuclear magnetic resonance spectroscopies. <i>Analytica Chimica Acta</i> , 2012, 717, 110-121.	2.6	31
32	Degradation of $\hat{1}^3$ -irradiated polyethylene-ethylene vinyl alcohol-polyethylene multilayer films: An ESR study. <i>Polymer Degradation and Stability</i> , 2015, 122, 169-179.	2.7	31
33	Quantitative Analysis of Glucose Syrups by ATR/FT-IR Spectroscopy. <i>Applied Spectroscopy</i> , 1993, 47, 1187-1191.	1.2	30
34	Recognition of starches by Raman spectroscopy. <i>Carbohydrate Polymers</i> , 2002, 49, 83-90.	5.1	30
35	One year monitoring by FTIR of $\hat{1}^3$ -irradiated multilayer film PE/EVOH/PE. <i>Radiation Physics and Chemistry</i> , 2016, 125, 115-121.	1.4	30
36	Classification of Green Coffees by FT-IR Analysis of Dry Extract. <i>Applied Spectroscopy</i> , 1995, 49, 580-585.	1.2	29

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37	FTIR Multivariate curve resolution monitoring of photo-Fenton degradation of phenolic aqueous solutions. <i>Talanta</i> , 2008, 77, 200-209.	2.9	29
38	Soil organic matter quality and microbial catabolic functions along a gradient of wildfire history in a Mediterranean ecosystem. <i>Applied Soil Ecology</i> , 2011, 48, 81-93.	2.1	29
39	Characterisation and authentication of <i>A. senegal</i> and <i>A. seyal</i> exudates by infrared spectroscopy and chemometrics. <i>Food Chemistry</i> , 2012, 135, 2554-2560.	4.2	29
40	Identification of metabolomic markers of lavender and lavandin essential oils using mid-infrared spectroscopy. <i>Vibrational Spectroscopy</i> , 2016, 85, 79-90.	1.2	28
41	Quantitative analysis of latex in paper coatings by ATR-FTIR spectroscopy. <i>Journal of Chemometrics</i> , 1994, 8, 333-347.	0.7	26
42	Self-Modeling Mixture Analysis Applied to FT-Raman Spectral Data of Hydrogen Peroxide Activation by Nitriles. <i>Applied Spectroscopy</i> , 1997, 51, 407-415.	1.2	26
43	Prediction of Source Rock Origin by Chemometric Analysis of Fourier Transform Infrared Attenuated Total Reflectance Spectra of Oil Petroleum: Evaluation of Aliphatic and Aromatic Fractions by Self-Modeling Mixture Analysis. <i>Applied Spectroscopy</i> , 2006, 60, 304-314.	1.2	26
44	Water Evaporation Analysis of L-Phenylalanine from Initial Aqueous Solutions to Powder State by Vibrational Spectroscopy. <i>Applied Spectroscopy</i> , 2006, 60, 1040-1053.	1.2	26
45	Assessing petroleum oils biodegradation by chemometric analysis of spectroscopic data. <i>Talanta</i> , 2008, 75, 857-871.	2.9	26
46	Discrimination of five Tunisian cultivars by Mid InfraRed spectroscopy combined with chemometric analyses of olive <i>Olea europaea</i> leaves. <i>Food Chemistry</i> , 2012, 131, 360-366.	4.2	26
47	Chemometric analysis of mid infrared and gas chromatography data of Indonesian nutmeg essential oils. <i>Industrial Crops and Products</i> , 2013, 43, 596-601.	2.5	26
48	A FTIR/chemometrics approach to characterize the gamma radiation effects on iodine/epoxy-paint interactions in Nuclear Power Plants. <i>Analytica Chimica Acta</i> , 2017, 960, 53-62.	2.6	25
49	Contribution of external parameter orthogonalisation for calibration transfer in short waves Near infrared spectroscopy application to gasoline quality. <i>Analytica Chimica Acta</i> , 2009, 642, 6-11.	2.6	23
50	<i>Artemisia arborescens</i> Essential Oil Composition, Enantiomeric Distribution, and Antimicrobial Activity from Different Wild Populations from the Mediterranean Area. <i>Chemistry and Biodiversity</i> , 2016, 13, 1095-1102.	1.0	22
51	Analysis of the major chiral compounds of <i>Artemisia herba-alba</i> essential oils (EOs) using reconstructed vibrational circular dichroism (VCD) spectra: En route to a VCD chiral signature of EOs. <i>Analytica Chimica Acta</i> , 2016, 903, 121-130.	2.6	21
52	Infrared study of light-induced reactivation of neutralized dopants in hydrogenated n-type GaAs doped with silicon. <i>Applied Physics Letters</i> , 1998, 73, 644-646.	1.5	20
53	Simulated aging of lubricant oils by chemometric treatment of infrared spectra: Potential antioxidant properties of sulfur structures. <i>Talanta</i> , 2013, 107, 219-224.	2.9	20
54	Artificial vision and chemometrics analyses of olive stones for varietal identification of five French cultivars. <i>Computers and Electronics in Agriculture</i> , 2014, 102, 98-105.	3.7	20

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55	Quantitative analysis of paper coatings using artificial neural networks. Chemometrics and Intelligent Laboratory Systems, 1997, 36, 125-140.	1.8	18
56	Influence of Near-Infrared Radiation on the pKa Values of L-Phenylalanine. Applied Spectroscopy, 2006, 60, 648-652.	1.2	18
57	Raman spectroscopy for identification and quantification analysis of essential oil varieties: a multivariate approach applied to lavender and lavandin essential oils. Journal of Raman Spectroscopy, 2015, 46, 577-585.	1.2	18
58	Production of Coconut Aroma in Solid-State Cultivation: Screening and Identification of <i>Trichoderma</i> Strains for 6-Pentyl-Alpha-Pyrone and Conidia Production. Journal of Chemistry, 2019, 2019, 1-7.	0.9	17
59	Control chart and data fusion for varietal origin discrimination: Application to olive oil. Talanta, 2020, 217, 121115.	2.9	16
60	In situ characterisation of peroxybenzimidic acid by FT-Raman and ATR/FTIR spectroscopy. Journal of Molecular Structure, 1996, 384, 165-174.	1.8	15
61	Attempts to separate (−)-α-thujone, (+)-α-thujone epimers from camphor enantiomers by enantioselective HPLC with polarimetric detection. Journal of Separation Science, 2013, 36, 832-839.	1.3	15
62	Reconciliation of pH, conductivity, total organic carbon with carboxylic acids detected by ion chromatography in solution after contact with multilayer films after <sup>13</sup> C-irradiation. European Journal of Pharmaceutical Sciences, 2018, 117, 216-226.	1.9	15
63	The Effect of Aeration for 6-Pentyl-alpha-pyrone, Conidia and Lytic Enzymes Production by <i>Trichoderma asperellum</i> Strains Grown in Solid-State Fermentation. Waste and Biomass Valorization, 2020, 11, 5711-5720.	1.8	15
64	Fire impact on forest soils evaluated using near-infrared spectroscopy and multivariate calibration. Talanta, 2009, 80, 39-47.	2.9	14
65	Infrared spectroscopy as a useful tool to predict land use depending on Mediterranean contrasted climate conditions: A case study on soils from olive-orchards and forests. Science of the Total Environment, 2019, 686, 179-190.	3.9	14
66	Pre-treatment of a sugarcane bagasse-based substrate prior to saccharification: Effect of coffee pulp and urea on laccase and cellulase activities of <i>Pycnoporus sanguineus</i> . Journal of Environmental Management, 2019, 239, 178-186.	3.8	14
67	Quantitative determination of polymer and mineral content in paper coatings by infrared spectroscopy. Improvements by non-linear treatments. Analytica Chimica Acta, 1996, 335, 79-85.	2.6	13
68	Chiroptical fingerprints to characterize lavender and lavandin essential oils. Journal of Chromatography A, 2020, 1610, 460568.	1.8	13
69	Near-Infrared Spectroscopy Analysis of Heavy Fuel Oils Using a New Diffusing Support. Applied Spectroscopy, 2015, 69, 1137-1143.	1.2	12
70	Isolation of the major chiral compounds from <i>Bubonium graveolens</i> essential oil by HPLC and absolute configuration determination by VCD. Chirality, 2017, 29, 70-79.	1.3	12
71	Monitoring of the discoloration on <sup>13</sup> C-irradiated PE and EVA films to evaluate antioxidant stability. Journal of Applied Polymer Science, 2018, 135, 46114.	1.3	12
72	Volatile components as chemical markers of the botanical origin of Corsican honeys. Flavour and Fragrance Journal, 2018, 33, 52-62.	1.2	12

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73	Solid state fermentation pilot-scaled plug flow bioreactor, using partial least square regression to predict the residence time in a semicontinuous process. <i>Biochemical Engineering Journal</i> , 2019, 149, 107248.	1.8	12
74	Challenges of Enzymes, <i>Conidia</i> and 6-Pentyl-alpha-pyrone Production from Solid-State-Fermentation of Agroindustrial Wastes Using Experimental Design and <i>T. asperellum</i> Strains. <i>Waste and Biomass Valorization</i> , 2020, 11, 5699-5710.	1.8	12
75	Multivariate Determination of Sugar Powders by Attenuated Total Reflectance Infrared Spectroscopy. <i>Applied Spectroscopy</i> , 1993, 47, 452-457.	1.2	11
76	Hierarchical Neural Network Modeling for Infrared Spectra Interpretation of Modified Starches. <i>Journal of Chemical Information and Computer Sciences</i> , 1999, 39, 1027-1036.	2.8	11
77	Highlighting metabolic indicators of olive oil during storage by the AComDim method. <i>Food Chemistry</i> , 2016, 203, 104-116.	4.2	11
78	Impact of $\text{I}^{137}$ -irradiation, ageing and their interactions on multilayer films followed by AComDim. <i>Analytica Chimica Acta</i> , 2017, 981, 11-23.	2.6	11
79	Evaluation of multilayer film stability by Raman spectroscopy after gamma-irradiation sterilization process. <i>Vibrational Spectroscopy</i> , 2018, 96, 52-59.	1.2	11
80	Generation of $\text{O}_2$ -Permeation Barrier during the Gamma-Irradiation of Polyethylene/Ethylene-Vinyl Alcohol/Polyethylene Multilayer Film. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 14115-14123.	1.8	11
81	Multiblock chemometrics for the discrimination of three extra virgin olive oil varieties. <i>Food Chemistry</i> , 2020, 309, 125588.	4.2	11
82	Exploring the Scientific Interest for Olive Oil Origin: A Bibliometric Study from 1991 to 2018. <i>Foods</i> , 2020, 9, 556.	1.9	11
83	Development of near infrared sensors: Detection of influential factors by the AComDim method. <i>Analytica Chimica Acta</i> , 2010, 675, 16-23.	2.6	10
84	Influence of Gamma Irradiation on Electric Cables Models: Study of Additive Effects by Mid-Infrared Spectroscopy. <i>Polymers</i> , 2021, 13, 1451.	2.0	10
85	Reliability of the contribution profiles obtained through the SIMPLISMA approach and used as reference in a calibration process. <i>Analytica Chimica Acta</i> , 2003, 495, 205-215.	2.6	9
86	Effect of gamma irradiation on the oxygen barrier properties in ethylacrylate/ethylenevinyl alcohol/ethylacrylate multilayer film. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49361.	1.3	9
87	One-year ageing FTIR monitoring of PE/EVOH/PE film after gamma or electron beam irradiation. <i>Polymer Degradation and Stability</i> , 2022, 195, 109790.	2.7	9
88	Quantitative analysis by mid-infrared spectrometry in food and agro-industrial fields. <i>Journal of Molecular Structure</i> , 1993, 294, 223-226.	1.8	8
89	Identification of chemical species created during $\text{I}^{137}$ -irradiation of antioxidant used in polyethylene and polyethylenevinyl acetate multilayer film. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49336.	1.3	8
90	Effects of X-ray, electron beam and gamma irradiation on PE/EVOH/PE multilayer film properties. <i>Chemical Communications</i> , 2021, 57, 11049-11051.	2.2	8

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91	Characterization of Aqueous and Solid Inclusion Complexes of Diuron and Isoproturon with $\beta$ -Cyclodextrin. <i>Applied Spectroscopy</i> , 2004, 58, 711-718.	1.2	7
92	Comparative study of the alignment method on experimental and simulated chromatographic data. <i>Journal of Separation Science</i> , 2014, 37, 3276-3291.	1.3	7
93	Infra-red spectroscopy reveals chemical interactions driving water availability for enzyme activities in litters of typical Mediterranean tree species. <i>Soil Biology and Biochemistry</i> , 2017, 114, 72-81.	4.2	7
94	Influence of yeast extract enrichment and <i>Pycnoporus sanguineus</i> inoculum on the dephenolisation of sugar-cane bagasse for production of second-generation ethanol. <i>Fuel</i> , 2020, 260, 116370.	3.4	7
95	Quantitative Analysis of Lavender (&lt;i>Lavandula angustifolia&lt;/i>) Essential Oil Using Multiblock Data from Infrared Spectroscopy. <i>American Journal of Analytical Chemistry</i> , 2014, 05, 633-645.	0.3	7
96	Discrimination of extra virgin olive oils from five French cultivars: En route to a control chart approach. <i>Food Control</i> , 2019, 106, 106691.	2.8	6
97	Authentication and Chemometric Discrimination of Six Greek PDO Table Olive Varieties through Morphological Characteristics of Their Stones. <i>Foods</i> , 2021, 10, 1829.	1.9	6
98	AComDim, a multivariate tool to highlighting impact of agroclimatic factors on <i>Moringa oleifera</i> Lam. leaf's composition from their FTIR-ATR profiles. <i>Vibrational Spectroscopy</i> , 2021, 116, 103297.	1.2	6
99	Effects of X-Rays, Electron Beam, and Gamma Irradiation on Chemical and Physical Properties of EVA Multilayer Films. <i>Frontiers in Chemistry</i> , 2022, 10, .	1.8	6
100	Molecular structure and vibrational spectroscopy of isoproturon. <i>Journal of Molecular Structure</i> , 2006, 788, 232-237.	1.8	5
101	Evaluation of a characterization method of Egyptian human mummy balms by chemometric treatments of infrared data. <i>Talanta</i> , 2021, 225, 121949.	2.9	5
102	Chemometric Discrimination of the Varietal Origin of Extra Virgin Olive Oils: Usefulness of $^{13}\text{C}$ Distortionless Enhancement by Polarization Transfer Pulse Sequence and $^1\text{H}$ Nuclear Magnetic Resonance Data and Effectiveness of Fusion with Mid-Infrared Spectroscopy Data. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 4177-4190.	2.4	5
103	Mapping the scientific research on the gamma irradiated polymers degradation (1975â€“2018). <i>Radiation Physics and Chemistry</i> , 2020, 168, 108577.	1.4	4
104	Monitoring of Peroxide in Gamma Irradiated EVA Multilayer Film Using Methionine Probe. <i>Polymers</i> , 2020, 12, 3024.	2.0	4
105	Investigations at the Product, Macromolecular, and Molecular Level of the Physical and Chemical Properties of a $\beta$ -Irradiated Multilayer EVA/EVOH/EVA Film: Comprehensive Analysis and Mechanistic Insights. <i>Polymers</i> , 2021, 13, 2671.	2.0	3
106	Biotechnological potential of Zymotisâ€™2 bioreactor for the cultivation of filamentous fungi. <i>Biotechnology Journal</i> , 2022, 17, e2100288.	1.8	2
107	Study of the mechanical behavior of gamma-irradiated single-use bag seals. <i>Food Packaging and Shelf Life</i> , 2020, 26, 100582.	3.3	1
108	Mapping the scientific research on the ionizing radiation impacts on polymers (1975â€“2019). <i>E-Polymers</i> , 2021, 21, 770-778.	1.3	1

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109	Monitoring of peroxide in gamma irradiated PE/EVOH/PE multilayer film using methionine probe. Food and Bioproducts Processing, 2022, 132, 226-232.	1.8	1
110	Discrimination by Infrared Spectroscopy: Application to Micronized Locust Bean and Guar Gums. , 2020, , .		0