Pierre Giusti

List of Publications by Year
in descending order

74 papers	1,655 citations	236925 25 h-index	330143 37 g-index
75 all docs	75 docs citations	75 times ranked	1162 citing authors

#	Article	IF	Citations
1	Deeper investigation of oxygen-containing compounds in oleaginous feedstock (animal fat) by preparative column chromatography and comprehensive two-dimensional gas chromatography coupled with high-resolution time-of-flight mass spectrometry. Talanta, 2022, 238, 123019.	5.5	2
2	Molecular analysis of nitrogen-containing compounds in vacuum gas oils hydrodenitrogenation by (ESI+/-)-FTICR-MS. Fuel, 2022, 323, 124302.	6.4	5
3	Characterization of Crude Oil Molecules Adsorbed onto Carbonate Rock Surface Using LDI FT-ICR MS. Energy & Fuels, 2022, 36, 6159-6166.	5.1	1
4	Speciation and Semiquantification of Nitrogen-Containing Species in Complex Mixtures: Application to Plastic Pyrolysis Oil. ACS Omega, 2022, 7, 19428-19436.	3.5	6
5	Fractionation by flash chromatography and molecular characterization of bio-oil by ultra-high-resolution mass spectrometry and NMR spectroscopy. Journal of Analytical and Applied Pyrolysis, 2022, 166, 105611.	5.5	8
6	Advanced monoâ€•and multiâ€dimensional gas chromatographyâ€“mass spectrometry techniques for oxygenâ€containing compound characterization in biomass and biofuel samples. Journal of Separation Science, 2021, 44, 115-134.	2.5	15
7	Cyclic Ion Mobility Spectrometry Coupled to High-Resolution Time-of-Flight Mass Spectrometry Equipped with Atmospheric Solid Analysis Probe for the Molecular Characterization of Combustion Particulate Matter. Journal of the American Society for Mass Spectrometry, 2021, 32, 206-217.	2.8	6
8	Direct Insertion Analysis of Polymer-Modified Bitumen by Atmospheric Pressure Chemical Ionization Ultrahigh-Resolution Mass Spectrometry. Energy & Fuels, 2021, 35, 2165-2173.	5.1	5
9	Structural analysis of petroporphyrins from asphaltene by trapped ion mobility coupled with Fourier transform ion cyclotron resonance mass spectrometry. Analyst, The, 2021, 146, 4161-4171.	3.5	11
10	Exploring Complex Mixtures by Cyclic Ion Mobility High-Resolution Mass Spectrometry: Application Toward Petroleum. Analytical Chemistry, 2021, 93, 5872-5881.	6.5	25
11	Advances and Challenges in the Molecular Characterization of Petroporphyrins. Energy & Fuels, 2021, 35, 18056-18077.	5.1	23
12	Effect of the Ionization Source on the Targeted Analysis of Nickel and Vanadyl Porphyrins in Crude Oil. Energy & Fuels, 2021, 35, 14542-14552.	5.1	4
13	Reactive Desorption Electrospray Ionization Mass Spectrometry To Determine Intrinsic Degradability of Poly(lactic-co-glycolic acid) Chains. Analytical Chemistry, 2021, 93, 12041-12048.	6.5	4
14	Study of Biocrudes Obtained via Hydrothermal Liquefaction (HTL) of Wild Alga Consortium under Different Conditions. Processes, 2021, 9, 1494.	2.8	10
15	Characterization of Heavy Products from Lignocellulosic Biomass Pyrolysis by Chromatography and Fourier Transform Mass Spectrometry: A Review. Energy & Fuels, 2021, 35, 17979-18007.	5.1	22
16	Comprehensive Chemical Description of Pyrolysis Chars from Low-Density Polyethylene by Thermal Analysis Hyphenated to Different Mass Spectrometric Approaches. Energy & Fuels, 2021, 35, 18185-18193.	5.1	9
17	Distributed Properties of Asphaltene Nanoaggregates in Crude Oils: A Review. Energy & Fuels, 2021, 35, 18078-18103.	5.1	37
18	Molecular Characterization of a Mixed Plastic Pyrolysis Oil from Municipal Wastes by Direct Infusion Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Energy & Fuels, 2021, 35, 14828-14837.	5.1	8

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19	Lessons Learned from a Decade-Long Assessment of Asphaltenes by Ultrahigh-Resolution Mass Spectrometry and Implications for Complex Mixture Analysis. Energy & Fuels, 2021, 35, 16335-16376.	5.1	21
20	Petroleomics at the National High Magnetic Field Laboratory: A Pictorial History. Energy & Fuels, 2021, 35, 17973-17978.	5.1	0
21	Paraffin-Inert Atmospheric Solid Analysis Probe: A Fast and Easy Approach To Characterize Extremely Air-Sensitive Organometallic Complexes by Mass Spectrometry. Analytical Chemistry, 2020, 92, 2922-2925.	6.5	3
22	Careful Investigations of PTV Injection Parameters for the Analysis of Vacuum Gas Oil by High-Temperature Comprehensive GC Ã— GC. Energy & Fuels, 2020, 34, 12010-12017.	5.1	10
23	Understanding the Vanadiumâ€“Asphaltene Nanoaggregate Link with Silver Triflate Complexation and GPC ICP-MS Analysis. Energy & Fuels, 2020, 34, 13759-13766.	5.1	8
24	Understanding Asphaltene Fraction Behavior through Combined Quartz Crystal Resonator Sensor, FT-ICR MS, GPC ICP HR-MS, and AFM Characterization. Part I: Extrography Fractionations. Energy & Fuels, 2020, 34, 13903-13915.	5.1	23
25	Fractionation and Characterization of Petroleum Asphaltene: Focus on Metalopetroleomics. Processes, 2020, 8, 1504.	2.8	38
26	Chemical Characterization Using Different Analytical Techniques to Understand Processes: The Case of the Paraffinic Base Oil Production Line. Processes, 2020, 8, 1472.	2.8	3
27	Probing Aggregation Tendencies in Asphaltenes by Gel Permeation Chromatography. Part 2: Online Detection by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry and Inductively Coupled Plasma Mass Spectrometry. Energy & Fuels, 2020, 34, 10915-10925.	5.1	26
28	Characterization of Polyethylene Branching by Thermal Analysis-Photoionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 2362-2369.	2.8	2
29	Speciation of Metals in Asphaltenes by High-Performance Thin-Layer Chromatography and Solidâ€“Liquid Extraction Hyphenated with Elemental and Molecular Identification. Energy & Fuels, 2020, 34, 12449-12456.	5.1	7
30	Compositional Trends for Total Vanadium Content and Vanadyl Porphyrins in Gel Permeation Chromatography Fractions Reveal Correlations between Asphaltene Aggregation and Ion Production Efficiency in Atmospheric Pressure Photoionization. Energy & Fuels, 2020, 34, 16158-16172.	5.1	25
31	Probing Aggregation Tendencies in Asphaltenes by Gel Permeation Chromatography. Part 1: Online Inductively Coupled Plasma Mass Spectrometry and Offline Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Energy & Fuels, 2020, 34, 8308-8315.	5.1	26
32	Mass Spectrometry-Based Analytical Strategy for Comprehensive Molecular Characterization of Biodegradable Poly(lactic-<i>co</i>-glycolic Acid) Copolymers. Journal of the American Society for Mass Spectrometry, 2020, 31, 1554-1562.	2.8	9
33	Structural Analysis of Neutral Nitrogen Compounds Refractory to the Hydrodenitrogenation Process of Heavy Oil Fractions by High-Resolution Tandem Mass Spectrometry and Ion Mobilityâ€“Mass Spectrometry. Energy & Fuels, 2020, 34, 9328-9338.	5.1	10
34	Quantitative multiplexed elemental (C, H, N and S) detection in complex mixtures using gas chromatography. Chemical Communications, 2020, 56, 2905-2908.	4.1	3
35	Dealing with complexity: general discussion. Faraday Discussions, 2019, 218, 138-156.	3.2	1
36	Data mining and visualisation: general discussion. Faraday Discussions, 2019, 218, 354-371.	3.2	2

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37	Future challenges and new approaches: general discussion. Faraday Discussions, 2019, 218, 505-523.	3.2	1
38	Structural analysis of heavy oil fractions after hydrodenitrogenation by high-resolution tandem mass spectrometry andÂion mobility spectrometry. Faraday Discussions, 2019, 218, 417-430.	3.2	43
39	Speciation of Metals in Asphaltenes by High-Performance Thin-Layer Chromatography and Laser Ablation Inductively Coupled Plasma-Mass Spectrometry. Energy & Fuels, 2019, 33, 6060-6068.	5.1	8
40	Structural Study of Analogues of Titanâ€™s Haze by Trapped Ion Mobility Coupled with a Fourier Transform Ion Cyclotron Mass Spectrometer. Journal of the American Society for Mass Spectrometry, 2019, 30, 1169-1173.	2.8	12
41	Comprehensive Petroporphyrin Identification in Crude Oils Using Highly Selective Electron Transfer Reactions in MALDI-FTICR-MS. Energy & Fuels, 2019, 33, 3899-3907.	5.1	38
42	Molecular Fingerprints and Speciation of Crude Oils and Heavy Fractions Revealed by Molecular and Elemental Mass Spectrometry: Keystone between Petroleomics, Metallopetroleomics, and Petrointeractomics. Energy & Fuels, 2018, 32, 4593-4605.	5.1	36
43	18th International Conference on Petroleum Phase Behavior and Fouling. Energy & Fuels, 2018, 32, 2641-2641.	5.1	6
44	Recent trends in element speciation analysis of crude oils and heavy petroleum fractions. TrAC - Trends in Analytical Chemistry, 2018, 104, 69-76.	11.4	33
45	Synthesis, APPI Mass-Spectrometric Characterization, and Polymerization Studies of Group 4 Dinuclear Bis(ansa-metallocene) Complexes. Catalysts, 2018, 8, 558.	3.5	5
46	Analysis of Petroleum Products by Gel Permeation Chromatography Coupled Online with Inductively Coupled Plasma Mass Spectrometry and Offline with Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Energy & Fuels, 2018, 32, 12198-12204.	5.1	24
47	Characterization of Crude Oil Interfacial Material Isolated by the Wet Silica Method. Part 2: Dilatational and Shear Interfacial Properties. Energy & Fuels, 2017, 31, 1072-1081.	5.1	17
48	Size Distributions of Sulfur, Vanadium, and Nickel Compounds in Crude Oils, Residues, and Their Saturate, Aromatic, Resin, and Asphaltene Fractions Determined by Gel Permeation Chromatography Inductively Coupled Plasma High-Resolution Mass Spectrometry. Energy & Fuels, 2017, 31, 7783-7788.	5.1	37
49	Characterization of Polyolefin Pyrolysis Species Produced Under Ambient Conditions by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry and Ion Mobility-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 507-514.	2.8	16
50	Characterization of Crude Oil Interfacial Material Isolated by the Wet Silica Method. Part 1: Gel Permeation Chromatography Inductively Coupled Plasma High-Resolution Mass Spectrometry Analysis. Energy & Fuels, 2017, 31, 1065-1071.	5.1	21
51	Effective Ion Mobility Peak Width as a New Isomeric Descriptor for the Untargeted Analysis of Complex Mixtures Using Ion Mobility-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 2476-2482.	2.8	29
52	The role of metalloporphyrins on the physical-chemical properties of petroleum fluids. Fuel, 2017, 188, 374-381.	6.4	46
53	Study of the Aggregation of Metal Complexes with Asphaltenes Using Gel Permeation Chromatography Inductively Coupled Plasma High-Resolution Mass Spectrometry. Energy & Fuels, 2016, 30, 6907-6912.	5.1	27
54	Comparison of Atmospheric Pressure Ionization for the Analysis of Heavy Petroleum Fractions with Ion Mobility-Mass Spectrometry. Energy & Fuels, 2016, 30, 8896-8903.	5.1	56

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55	Petroleomics by Direct Analysis in Real Time-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 182-185.	2.8	25
56	Atmospheric solid analysis probe mass spectrometry vs electrospray tandem mass spectrometry of polydimethylsiloxanes in positive and negative ionization modes. Rapid Communications in Mass Spectrometry, 2015, 29, 982-986.	1.5	12
57	Comparison of cryogenic and differential flow (forward and reverse fill/flush) modulators and applications to the analysis of heavy petroleum cuts by high-temperature comprehensive gas chromatography. Journal of Chromatography A, 2015, 1387, 95-103.	3.7	45
58	Rapid analysis of polyester and polyethylene blends by ion mobility-mass spectrometry. Polymer Chemistry, 2014, 5, 3576-3582.	3.9	28
59	Study of the Size Distribution of Sulfur, Vanadium, and Nickel Compounds in Four Crude Oils and Their Distillation Cuts by Gel Permeation Chromatography Inductively Coupled Plasma High-Resolution Mass Spectrometry. Energy & Fuels, 2014, 28, 3730-3737.	5.1	43
60	Identification of Ion Series Using Ion Mobility Mass Spectrometry: The Example of Alkyl-Benzothiophene and Alkyl-Dibenzothiophene Ions in Diesel Fuels. Analytical Chemistry, 2013, 85, 5530-5534.	6.5	20
61	Atmospheric Solid Analysis Probeâ€“Ion Mobility Mass Spectrometry of Polypropylene. Analytical Chemistry, 2012, 84, 9349-9354.	6.5	57
62	High-Performance Thin-Layer Chromatography Using Automated Multiple Development for the Separation of Heavy Petroleum Products According to Their Number of Aromatic Rings. Energy & Fuels, 2011, 25, 4586-4594.	5.1	23
63	ICP-MS-assisted nanoHPLC-electrospray Q/time-of-flight MS/MS selenopeptide mapping in Brazil nuts. Journal of Analytical Atomic Spectrometry, 2007, 22, 41-50.	3.0	50
64	Î¼Flow-injectionâ€“ICP collision cell MS determination of molybdenum, nickel and vanadium in petroleum samples using a modified total consumption micronebulizer. Journal of Analytical Atomic Spectrometry, 2007, 22, 88-92.	3.0	50
65	Precolumn Isotope Dilution Analysis in nanoHPLCâ^'ICPMS for Absolute Quantification of Sulfur-Containing Peptides. Analytical Chemistry, 2007, 79, 2859-2868.	6.5	69
66	Selenopeptide mapping in a seleniumâ€“yeast protein digest by parallel nanoHPLC-ICP-MS and nanoHPLC-electrospray-MS/MS after on-line preconcentration. Journal of Analytical Atomic Spectrometry, 2006, 21, 26-32.	3.0	50
67	Detection and characterization of artefact compounds during selenium speciation analysis in yeast by ICP-MS-assisted MALDI MS, oMALDI MS/MS and LC-ES-MS/MS. Journal of Analytical Atomic Spectrometry, 2006, 21, 703-707.	3.0	18
68	Identification of new selenium non-peptide species in selenised yeast by nanoHPLC electrospray Q/time-of-flight-MS/MS. Journal of Analytical Atomic Spectrometry, 2006, 21, 655-665.	3.0	24
69	Development of a Nebulizer for a Sheathless Interfacing of NanoHPLC and ICPMS. Analytical Chemistry, 2006, 78, 965-971.	6.5	76
70	BIOACCUMULATION OF DDT PESTICIDE IN CULTURED ASIAN SEABASS FOLLOWING DIETARY EXPOSURE. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2005, 68, 51-65.	2.3	17
71	Interfacing reversed-phase nanoHPLC with ICP-MS and on-line isotope dilution analysis for the accurate quantification of selenium-containing peptides in protein tryptic digests. Journal of Analytical Atomic Spectrometry, 2005, 20, 1101.	3.0	79
72	Ultratrace determination of uranium and plutonium by nano-volume flow injection double-focusing sector field inductively coupled plasma mass spectrometry (nFIâ€“ICP-SFMS). Journal of Analytical Atomic Spectrometry, 2005, 20, 17-21.	3.0	88

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73	Extraction of Crude Oil Endogenous Surfactants by an Optimum Three-Phase Microemulsion System: Relation between Interfacial Behavior and a Molecular Fingerprint Obtained by Ultrahigh-Resolution Mass Spectrometry. Energy & Fuels, 0, , .	5.1	4
74	Tracking Changes in Asphaltene Nanoaggregate Size Distributions as a Function of Silver Complexation via Gel Permeation Chromatography Inductively Coupled Plasma Mass Spectrometry. Energy & Fuels, 0, , .	5.1	3