Wolfgang Schrader

List of Publications by Year
in descending order

Version: 2024-02-01

65 papers	2,162 citations	218677 26 h-index	233421 45 g-index
72 all docs	72 docs citations	72 times ranked	1569 citing authors

#	Article	IF	Citations
1	Characterization of High-Molecular-Weight Sulfur-Containing Aromatics in Vacuum Residues Using Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Analytical Chemistry, 2005, 77, 2536-2543.	6.5	155
2	Characterization of Supercomplex Crude Oil Mixtures: What Is Really in There?. Angewandte Chemie - International Edition, 2009, 48, 1788-1791.	13.8	143
3	Monitoring Temporal Evolution of Silicate Species during Hydrolysis and Condensation of Silicates Using Mass Spectrometry. Journal of the American Chemical Society, 2006, 128, 4310-4317.	13.7	126
4	Characterization of Saturates, Aromatics, Resins, and Asphaltenes Heavy Crude Oil Fractions by Atmospheric Pressure Laser Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Energy & Fuels, 2012, 26, 3481-3487.	5.1	116
5	Impact of Different Ionization Methods on the Molecular Assignments of Asphaltenes by FT-ICR Mass Spectrometry. Analytical Chemistry, 2012, 84, 5257-5267.	6.5	91
6	Characterization of Key Intermediates in a Complex Organocatalytic Cascade Reaction Using Mass Spectrometry. Angewandte Chemie - International Edition, 2009, 48, 1463-1466.	13.8	90
7	Distribution of Polycyclic Aromatic Sulfur Heterocycles in Three Saudi Arabian Crude Oils as Determined by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Energy & Fuels, 2007, 21, 1071-1077.	5.1	82
8	Mass-spectrometric analysis of complex volatile and nonvolatile crude oil components: a challenge. Analytical and Bioanalytical Chemistry, 2007, 389, 1329-1339.	3.7	70
9	Investigating organocatalytic reactions: mass spectrometric studies of a conjugate umpolung reaction. Chemical Communications, 2007, , 716-718.	4.1	67
10	Characterization of non-polar aromatic hydrocarbons in crude oil using atmospheric pressure laser ionization and Fourier transform ion cyclotron resonance mass spectrometry (APLI FT-ICR MS). Analyst, The, 2008, 133, 867.	3.5	59
11	Î²-Cyclodextrin as a stationary phase for the group separation of polycyclic aromatic compounds in normal-phase liquid chromatography. Journal of Chromatography A, 2006, 1122, 88-96.	3.7	58
12	Styrene oxide DNA adducts: in vitro reaction and sensitive detection of modified oligonucleotides using capillary zone electrophoresis interfaced to electrospray mass spectrometry. Archives of Toxicology, 1997, 71, 588-595.	4.2	57
13	Atmospheric pressure laser ionization (APLI) coupled with Fourier transform ion cyclotron resonance mass spectrometry applied to petroleum samples analysis: comparison with electrospray ionization and atmospheric pressure photoionization methods. Rapid Communications in Mass Spectrometry, 2011, 25, 2317-2326.	1.5	57
14	Direct Coupling of Normal-Phase High-Performance Liquid Chromatography to Atmospheric Pressure Laser Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry for the Characterization of Crude Oil. Analytical Chemistry, 2013, 85, 9478-9485.	6.5	51
15	Electrospray ionization for determination of non-polar polyaromatic hydrocarbons and polyaromatic heterocycles in heavy crude oil asphaltenes. Journal of Mass Spectrometry, 2015, 50, 549-557.	1.6	45
16	A new mass spectrometric approach to detect modifications in DNA. Rapid Communications in Mass Spectrometry, 1994, 8, 1035-1040.	1.5	44
17	Liquid chromatography/Fourier transform ion cyclotron resonance mass spectrometry (LC-FTICR MS): an early overview. Analytical and Bioanalytical Chemistry, 2004, 379, 1013-24.	3.7	44
18	Expanding the data depth for the analysis of complex crude oil samples by Fourier transform ion cyclotron resonance mass spectrometry using the spectral stitching method. Rapid Communications in Mass Spectrometry, 2012, 26, 1047-1052.	1.5	42

#	Article	IF	Citations
19	Fourier transform ion cyclotron resonance mass spectrometry in the speciation of high molecular weight sulfur heterocycles in vacuum gas oils of different boiling ranges. Analytical and Bioanalytical Chemistry, 2008, 392, 839-848.	3.7	37
20	Online normalâ€phase highâ€performance liquid chromatography/Fourier transform ion cyclotron resonance mass spectrometry: Effects of different ionization methods on the characterization of highly complex crude oil mixtures. Rapid Communications in Mass Spectrometry, 2014, 28, 1345-1352.	1.5	36
21	Highâ€resolution GC/MS studies of a light crude oil fraction. Journal of Mass Spectrometry, 2019, 54, 47-54.	1.6	35
22	Mass Spectrometric Coverage of Complex Mixtures: Exploring the Carbon Space of Crude Oil. ChemistrySelect, 2017, 2, 849-853.	1.5	30
23	Quantitative and Qualitative Analysis of Three Classes of Sulfur Compounds in Crude Oil. Angewandte Chemie - International Edition, 2017, 56, 10933-10937.	13.8	28
24	Detailed Study on the Use of Electrospray Mass Spectrometry To Investigate Speciation in Concentrated Silicate Solutions. Analytical Chemistry, 2007, 79, 6005-6012.	6.5	27
25	High-molecular weight sulfur-containing aromatics refractory to weathering as determined by Fourier transform ion cyclotron resonance mass spectrometry. Chemosphere, 2012, 89, 205-212.	8.2	27
26	Application of gas chromatographyâ€“cryocondensationâ€“Fourier transform infrared spectroscopy and gas chromatographyâ€“mass spectrometry to the identification of gas phase reaction products from the Î±-pinene/ozone reaction. Journal of Chromatography A, 1999, 864, 299-314.	3.7	23
27	Degradation of Î±-Pinene on Tenax during Sample Storage:Â Effects of Daylight Radiation and Temperature. Environmental Science & Technology, 2001, 35, 2717-2720.	10.0	23
28	Comparing Crude Oils with Different API Gravities on a Molecular Level Using Mass Spectrometric Analysis. Part 1: Whole Crude Oil. Energies, 2018, 11, 2766.	3.1	23
29	Comparing Crude Oils with Different API Gravities on a Molecular Level Using Mass Spectrometric Analysis. Part 2: Resins and Asphaltenes. Energies, 2018, 11, 2767.	3.1	22
30	Studying Ultra-Complex Crude Oil Mixtures by Using High-Field Asymmetric Waveform Ion Mobility Spectrometry (FAIMS) Coupled to an Electrospray Ionisation-LTQ-Orbitrap Mass Spectrometer. European Journal of Mass Spectrometry, 2014, 20, 43-49.	1.0	21
31	Modified SARA Method to Unravel the Complexity of Resin Fraction(s) in Crude Oil. Energy & Fuels, 2020, 34, 16006-16013.	5.1	21
32	Selective Analysis of Sulfur-Containing Species in a Heavy Crude Oil by Deuterium Labeling Reactions and Ultrahigh Resolution Mass Spectrometry. International Journal of Molecular Sciences, 2015, 16, 30133-30143.	4.1	20
33	New Separation Approach for Asphaltene Investigation: Argentation Chromatography Coupled with Ultrahigh-Resolution Mass Spectrometry. Energy & Fuels, 2015, 29, 6224-6230.	5.1	20
34	Qualitative and Quantitative Evaluation of Sulfur-Containing Compound Types in Heavy Crude Oil and Its Fractions. Energy & Fuels, 2021, 35, 8723-8732.	5.1	18
35	1- and 2-Photon Ionization for Online FAIMS-FTMS Coupling Allows New Insights into the Constitution of Crude Oils. Analytical Chemistry, 2015, 87, 8874-8879.	6.5	16
36	Characterization of crude oil asphaltenes by coupling sizeâ€exclusion chromatography directly to an ultrahighâ€resolution mass spectrometer. Rapid Communications in Mass Spectrometry, 2017, 31, 495-502.	1.5	16

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37	Studying the fragmentation mechanism of selected components present in crude oil by collisionâ€induced dissociation mass spectrometry. Rapid Communications in Mass Spectrometry, 2018, 32, 2141-2151.	1.5	15
38	Evaluation of the combination of different atmospheric pressure ionization sources for the analysis of extremely complex mixtures. Rapid Communications in Mass Spectrometry, 2020, 34, e8676.	1.5	15
39	Studies of complex reactions using modern hyphenated methods: Î±-Pinene ozonolysis as a model reaction. Journal of Chromatography A, 2005, 1075, 185-196.	3.7	14
40	Electrospray mass spectrometry for detailed mechanistic studies of a complex organocatalyzed triple cascade reaction. Organic and Biomolecular Chemistry, 2011, 9, 1047-1053.	2.8	14
41	Optimized asphaltene separation by online coupling of size exclusion chromatography and ultrahigh resolution mass spectrometry. Fuel, 2018, 215, 631-637.	6.4	14
42	Development of a Non-Targeted Method to Study Petroleum Polyaromatic Hydrocarbons in Soil by Ultrahigh Resolution Mass Spectrometry Using Multiple Ionization Methods. Polycyclic Aromatic Compounds, 2022, 42, 643-658.	2.6	14
43	Deep Well Deposits: Effects of Extraction on Mass Spectrometric Results. Energy & Fuels, 2013, 27, 1236-1245.	5.1	13
44	An Analytical Approach for a Comprehensive Study of Organic Aerosols The financial support by the Bundesministerium fÃ¼r Bildung und Forschung and the Senatsverwaltung fÃ¼r Wissenschaft, Forschung und Kultur des Landes Berlin (ISAS Berlin), and the Ministerium fÃ¼r Schule, Wissenschaft und Forschung NRW (ISAS Dortmund) is gratefully acknowledged. The authors want to thank U.		

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55	Study of Crude Oil Fouling from Sulfur-Containing Compounds Using High-Resolution Mass Spectrometry. Energy & Fuels, 2021, 35, 13022-13029.	5.1	7
56	Atmosphere, a Chemical Reactor?Formation Pathways of Secondary Organic Aerosols. Angewandte Chemie - International Edition, 2005, 44, 1444-1446.	13.8	5
57	Synthesis of Seven Trimethyldibenzothiophenes. Polycyclic Aromatic Compounds, 2001, 18, 351-360.	2.6	4
58	Quantitative und qualitative Analyse dreier Klassen von Schwefelverbindungen in ErdÃ¶l. Angewandte Chemie, 2017, 129, 11073-11077.	2.0	4
59	Studying the Complexity of Biomass Derived Biofuels. Energies, 2021, 14, 2032.	3.1	3
60	Trash-to-fuel: Converting municipal waste into transportation fuels by pyrolysis. IScience, 2022, 25, 104036.	4.1	3
61	Investigating molecular transformation processes of biodiesel components during longâ€term storage via high resolution mass spectrometry. ChemSusChem, 2022, , .	6.8	3
62	Studying Natural Buckyballs and Buckybowls in Fossil Materials. Angewandte Chemie, 2020, 132, 15118-15123.	2.0	1
63	Mass Spectrometric Studies of DNA Adducts from a Reaction with Terpenoids. Angewandte Chemie - International Edition, 2005, 44, 506-506.	13.8	0
64	Atmosphere, a Chemical Reactor â€" Formation Pathways of Secondary Organic Aerosols. ChemInform, 2005, 36, no.	0.0	0
65	Development of Fourier Transform-Ion Cyclotron Resonance Mass Spectrometry Protocol for the Analysis of Asphaltene Field Samples and Solubility Fractions. , 2009, , .		0