Nicholas P Lockyer

List of Publications by Year
in descending order

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47 papers	2,139 citations	257450 24 h-index	233421 45 g-index
47 all docs	47 docs citations	47 times ranked	1514 citing authors

#	Article	IF	Citations
1	Mass Spectrometry Imaging for Spatial Chemical Profiling of Vegetative Parts of Plants. Plants, 2022, 11, 1234.	3.5	4
2	Metabolism in action: stable isotope probing using vibrational spectroscopy and SIMS reveals kinetic and metabolic flux of key substrates. Analyst, The, 2021, 146, 1734-1746.	3.5	9
3	Microdistribution and quantification of the boron neutron capture therapy drug BPA in primary cell cultures of human glioblastoma tumour by NanoSIMS. Analyst, The, 2019, 144, 6214-6224.	3.5	11
4	The influence of polyatomic primary ion chemistry on matrix effects in secondary ion mass spectrometry analysis. Rapid Communications in Mass Spectrometry, 2018, 32, 1962-1970.	1.5	8
5	Probing the action of a novel anti-leukaemic drug therapy at the single cell level using modern vibrational spectroscopy techniques. Scientific Reports, 2017, 7, 2649.	3.3	28
6	Quartz Crystal Microbalance Assay of Clinical Calcinosis Samples and Their Synthetic Models Differentiates the Efficacy of Chelation-Based Treatments. ACS Applied Materials & Interfaces, 2017, 9, 27544-27552.	8.0	5
7	Evaluation of biomolecular distributions in rat brain tissues by means of ToF-SIMS using a continuous beam of Ar clusters. Biointerphases, 2016, 11, 02A307.	1.6	5
8	Fossilization of melanosomes via sulfurization. Palaeontology, 2016, 59, 337-350.	2.2	52
9	Matrix effects in biological SIMS using cluster ion beams of different chemical composition. Biointerphases, 2016, 11, 02A317.	1.6	15
10	Peptide Fragmentation and Surface Structural Analysis by Means of ToF-SIMS Using Large Cluster Ion Sources. Analytical Chemistry, 2016, 88, 3592-3597.	6.5	59
11	Mass spectrometric imaging of brain tissue by time-of-flight secondary ion mass spectrometry - How do polyatomic primary beams C₆₀⁺, Ar₂₀₀₀⁺, water-doped Ar₂₀₀₀⁺and (H₂O)₆₀₀₀⁺compare?. Rapid Communications in Mass Spectrometry, 2015, 29, 1851-1862.	1.5	23
12	Enhancing Ion Yields in Time-of-Flight-Secondary Ion Mass Spectrometry: A Comparative Study of Argon and Water Cluster Primary Beams. Analytical Chemistry, 2015, 87, 2367-2374.	6.5	80
13	Comparing C 60 + and (H 2 O) n + clusters for mouse brain tissue analysis. Surface and Interface Analysis, 2014, 46, 136-139.	1.8	4
14	Spatiotemporal lipid profiling during early embryo development of Xenopus laevis using dynamic ToF-SIMS imaging. Journal of Lipid Research, 2014, 55, 1970-1980.	4.2	35
15	Quantitative Surface Analysis of a Binary Drug Mixtureâ€"Suppression Effects in the Detection of Sputtered Ions and Post-Ionized Neutrals. Journal of the American Society for Mass Spectrometry, 2014, 25, 832-840.	2.8	9
16	Examination of fragment ions of polystyrene in TOFâ€SIMS spectra using MS/MS. Surface and Interface Analysis, 2014, 46, 92-95.	1.8	7
17	Secondary Ion Mass Spectrometry Imaging of Biological Cells and Tissues. Methods in Molecular Biology, 2014, 1117, 707-732.	0.9	16
18	Comparison of C₆₀ and GCIB primary ion beams for the analysis of cancer cells and tumour sections. Surface and Interface Analysis, 2013, 45, 273-276.	1.8	20

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19	New prospects for molecular postâ€ionisation using femtosecond IR lasers. Surface and Interface Analysis, 2013, 45, 525-528.	1.8	7
20	Timeâ€ofâ€flight SIMS as a novel approach to unlocking the hypoxic properties of cancer. Surface and Interface Analysis, 2013, 45, 282-285.	1.8	9
21	ToFâ€SIMS as a tool for metabolic profiling small biomolecules in cancer systems. Surface and Interface Analysis, 2013, 45, 277-281.	1.8	22
22	Peak picking as a preâ€processing technique for imaging time of flight secondary ion mass spectrometry. Surface and Interface Analysis, 2013, 45, 461-465.	1.8	2
23	Peptide structural analysis using continuous Ar cluster and C60 ion beams. Analytical and Bioanalytical Chemistry, 2013, 405, 6621-6628.	3.7	25
24	Evaluating the challenges associated with time-of-fight secondary ion mass spectrometry for metabolomics using pure and mixed metabolites. Metabolomics, 2013, 9, 535-544.	3.0	26
25	Imaging of metabolites using secondary ion mass spectrometry. Metabolomics, 2013, 9, 102-109.	3.0	13
26	Enhancing Secondary Ion Yields in Time of Flight-Secondary Ion Mass Spectrometry Using Water Cluster Primary Beams. Analytical Chemistry, 2013, 85, 5654-5658.	6.5	92
27	TOF-SIMS with Argon Gas Cluster Ion Beams: A Comparison with C₆₀⁺. Analytical Chemistry, 2011, 83, 3793-3800.	6.5	188
28	Threeâ€dimensional mass spectral imaging of <scp>HeLa</scp>â€M cells â€“ sample preparation, data interpretation and visualisation. Rapid Communications in Mass Spectrometry, 2011, 25, 925-932.	1.5	112
29	Molecular SIMS imaging; spatial resolution and molecular sensitivity: have we reached the end of the road? Is there light at the end of the tunnel?. Surface and Interface Analysis, 2011, 43, 253-256.	1.8	24
30	Insight into the swelling mechanism involved in the recovery of serial numbers erased from polymer surfaces. Surface and Interface Analysis, 2011, 43, 625-627.	1.8	8
31	Developments in molecular SIMS depth profiling and 3D imaging of biological systems using polyatomic primary ions. Mass Spectrometry Reviews, 2011, 30, 142-174.	5.4	133
32	A Comparative Study of Secondary Ion Emission from Water Ice under Ion Bombardment by Au⁺, Au₃⁺, and C₆₀⁺. Journal of Physical Chemistry C, 2010, 114, 5468-5479.	3.1	14
33	Uncovering new challenges in bio-analysis with ToF-SIMS. Applied Surface Science, 2008, 255, 1264-1270.	6.1	30
34	A New Dynamic in Mass Spectral Imaging of Single Biological Cells. Analytical Chemistry, 2008, 80, 9058-9064.	6.5	254
35	Discrimination of prostate cancer cells and non-malignant cells using secondary ion mass spectrometry. Analyst, The, 2008, 133, 175-179.	3.5	27
36	Mass Spectral Imaging of Glycophospholipids, Cholesterol, and Glycophorin A in Model Cell Membranes. Langmuir, 2008, 24, 11803-11810.	3.5	33

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37	TOF-SIMS 3D Biomolecular Imaging ofXenopuslaevisOocytes Using Buckminsterfullerene (C60) Primary Ions. Analytical Chemistry, 2007, 79, 2199-2206.	6.5	284
38	Properties of C84and C24H12Molecular Ion Sources for Routine TOF-SIMS Analysis. Analytical Chemistry, 2007, 79, 7259-7266.	6.5	35
39	Mass spectral analysis and imaging of tissue by ToF-SIMSâ€"The role of buckminsterfullerene, C60+, primary ions. International Journal of Mass Spectrometry, 2007, 260, 146-157.	1.5	123
40	Suppression and enhancement of secondary ion formation due to the chemical environment in static-secondary ion mass spectrometry. Journal of the American Society for Mass Spectrometry, 2007, 18, 1559-1567.	2.8	69
41	Is proton cationization promoted by polyatomic primary ion bombardment during time-of-flight secondary ion mass spectrometry analysis of frozen aqueous solutions?. Rapid Communications in Mass Spectrometry, 2006, 20, 1327-1334.	1.5	72
42	C60, Buckminsterfullerene: its impact on biological ToF-SIMS analysis. Surface and Interface Analysis, 2006, 38, 1393-1400.	1.8	42
43	Rapid discrimination of the causal agents of urinary tract infection using ToF-SIMS with chemometric cluster analysis. Applied Surface Science, 2006, 252, 6869-6874.	6.1	26
44	Molecular depth profiling of organic and biological materials. Applied Surface Science, 2006, 252, 6513-6516.	6.1	46
45	Mechanisms of secondary ion emission from self-assembled monolayers and multilayers. Surface and Interface Analysis, 2005, 37, 721-730.	1.8	27
46	Sodium Diffusion from P1 Lines Passivates Perovskite Solar Modules. , 0, , .		1
47	Sensitivity enhancement using chemically reactive gas cluster ion beams in secondary ion mass spectrometry (SIMS). Surface and Interface Analysis, 0, , .	1.8	5