Alex Henderson

List of Publications by Year
in descending order

41 papers	1,629 citations	331538 21 h-index	289141 40 g-index
41 all docs	41 docs citations	41 times ranked	1860 citing authors

#	Article	IF	Citations
1	A New Dynamic in Mass Spectral Imaging of Single Biological Cells. Analytical Chemistry, 2008, 80, 9058-9064.	3.2	254
2	Clinical applications of infrared and Raman spectroscopy: state of play and future challenges. Analyst, The, 2018, 143, 1735-1757.	1.7	163
3	The inherent problem of transflection-mode infrared spectroscopic microscopy and the ramifications for biomedical single point and imaging applications. Analyst, The, 2013, 138, 144-157.	1.7	119
4	FTIR microscopy of biological cells and tissue: data analysis using resonant Mie scattering (RMieS) EMSC algorithm. Analyst, The, 2012, 137, 1370.	1.7	117
5	Three-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.	0.7	112
6	Spectral discrimination of live prostate and bladder cancer cell lines using Raman optical tweezers. Journal of Biomedical Optics, 2008, 13, 064004.	1.4	71
7	Factors influencing the discrimination and classification of prostate cancer cell lines by FTIR microspectroscopy. Analyst, The, 2009, 134, 1083.	1.7	71
8	Classification of fixed urological cells using Raman tweezers. Journal of Biophotonics, 2009, 2, 47-69.	1.1	58
9	Assessing the challenges of Fourier transform infrared spectroscopic analysis of blood serum. Journal of Biophotonics, 2014, 7, 180-188.	1.1	57
10	A comparison of PCA and MAF for ToFâ€SIMS image interpretation. Surface and Interface Analysis, 2009, 41, 666-674.	0.8	56
11	Quantum Cascade Laser Spectral Histopathology: Breast Cancer Diagnostics Using High Throughput Chemical Imaging. Analytical Chemistry, 2017, 89, 7348-7355.	3.2	54
12	High-throughput quantum cascade laser (QCL) spectral histopathology: a practical approach towards clinical translation. Faraday Discussions, 2016, 187, 135-154.	1.6	46
13	Discrimination of prostate cancer cells by reflection mode FTIR photoacoustic spectroscopy. Analyst, The, 2007, 132, 292.	1.7	45
14	Infrared spectral histopathology using haematoxylin and eosin (H&E) stained glass slides: a major step forward towards clinical translation. Analyst, The, 2017, 142, 1258-1268.	1.7	38
15	Spatiotemporal lipid profiling during early embryo development of Xenopus laevis using dynamic ToF-SIMS imaging. Journal of Lipid Research, 2014, 55, 1970-1980.	2.0	35
16	Uncovering new challenges in bio-analysis with ToF-SIMS. Applied Surface Science, 2008, 255, 1264-1270.	3.1	30
17	Enhanced FTIR bench-top imaging of single biological cells. Analyst, The, 2015, 140, 2080-2085.	1.7	29
18	Rapid discrimination of the causal agents of urinary tract infection using ToF-SIMS with chemometric cluster analysis. Applied Surface Science, 2006, 252, 6869-6874.	3.1	26

#	Article	IF	Citations
19	Peptide structural analysis using continuous Ar cluster and C60 ion beams. Analytical and Bioanalytical Chemistry, 2013, 405, 6621-6628.	1.9	25
20	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.	0.7	23
21	ToFâ€SIMS as a tool for metabolic profiling small biomolecules in cancer systems. Surface and Interface Analysis, 2013, 45, 277-281.	0.8	22
22	ToF-SIMS studies of Bacillus using multivariate analysis with possible identification and taxonomic applications. Applied Surface Science, 2006, 252, 6719-6722.	3.1	20
23	Exploring AdaBoost and Random Forests machine learning approaches for infrared pathology on unbalanced data sets. Analyst, The, 2021, 146, 5880-5891.	1.7	20
24	Polyethylene terephthalate (PET) bulk film analysis using C60+, Au3+, and Au+ primary ion beams. Applied Surface Science, 2006, 252, 6562-6565.	3.1	19
25	FTIR imaging of the molecular burden around AÎ² deposits in an early-stage 3-Tg-APP-PSP1-TAU mouse model of Alzheimer's disease. Analyst, The, 2017, 142, 156-168.	1.7	19
26	Phenotypic profiling of keloid scars using FT-IR microspectroscopy reveals a unique spectral signature. Archives of Dermatological Research, 2010, 302, 705-715.	1.1	18
27	Explanatory multivariate analysis of ToF-SIMS spectra for the discrimination of bacterial isolates. Analyst, The, 2009, 134, 2352.	1.7	10
28	Timeâ€ofâ€flight SIMS as a novel approach to unlocking the hypoxic properties of cancer. Surface and Interface Analysis, 2013, 45, 282-285.	0.8	9
29	Exploratory analysis of TOF-SIMS data from biological surfaces. Applied Surface Science, 2008, 255, 1599-1602.	3.1	8
30	The effect of corona treatments on the hygral expansion of wool worsted fabrics. Coloration Technology, 1994, 110, 383-386.	0.1	8
31	Summary of ISO/TC 201 standard: XXII. ISO 22048:2004?Surface chemical analysis?Information format for static secondary ion mass spectrometry. Surface and Interface Analysis, 2004, 36, 1642-1644.	0.8	7
32	ToF-SIMS Studies of Sulfuric Acid Hydrate Films. Journal of Physical Chemistry B, 2004, 108, 5960-5966.	1.2	7
33	Identification of Surface Molecular Hydrates on Solid Sulfuric Acid Films. Journal of the American Chemical Society, 2003, 125, 13038-13039.	6.6	6
34	Efficient encoding and rapid decoding for interactive visualization of large three-dimensional hyperspectral chemical images. Rapid Communications in Mass Spectrometry, 2009, 23, 1229-1233.	0.7	6
35	Interactive spatio-spectral analysis of three-dimensional mass-spectral (3DxMS) chemical images. Surface and Interface Analysis, 2011, 43, 529-534.	0.8	5
36	Evaluation of biomolecular distributions in rat brain tissues by means of ToF-SIMS using a continuous beam of Ar clusters. Biointerphases, 2016, 11, 02A307.	0.6	5

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37	Comparing C 60 + and (H 2 O) n + clusters for mouse brain tissue analysis. Surface and Interface Analysis, 2014, 46, 136-139.	0.8	4
38	The role of surface molecular hydrates in the heterogeneous interaction of NH3 with sulfuric acid monohydrate. Physical Chemistry Chemical Physics, 2003, 5, 5101.	1.3	3
39	Peak picking as a preâ€processing technique for imaging time of flight secondary ion mass spectrometry. Surface and Interface Analysis, 2013, 45, 461-465.	0.8	2
40	SIMS informatics. Surface and Interface Analysis, 2013, 45, 471-474.	0.8	2
41	Visualization and analysis of large three-dimensional hyperspectral images. Proceedings of SPIE, 2009, , .	0.8	0