David Perez-Guaita

List of Publications by Year
in descending order

74 papers	1,781 citations	270111 25 h-index	355658 38 g-index
78 all docs	78 docs citations	78 times ranked	2478 citing authors

#	Article	IF	Citations
1	Trends in biomedical analysis of red blood cells â€“ Raman spectroscopy against other spectroscopic, microscopic and classical techniques. TrAC - Trends in Analytical Chemistry, 2022, 146, 116481.	5.8	15
2	Combining Pharmacokinetics and Vibrational Spectroscopy: MCR-ALS Hard-and-Soft Modelling of Drug Uptake In Vitro Using Tailored Kinetic Constraints. Cells, 2022, 11, 1555.	1.8	1
3	Infrared Spectroscopy of Blood. Applied Spectroscopy, 2021, 75, 611-646.	1.2	32
4	Infrared Based Saliva Screening Test for COVIDâ€19. Angewandte Chemie - International Edition, 2021, 60, 17102-17107.	7.2	42
5	Infrared Based Saliva Screening Test for COVIDâ€19. Angewandte Chemie, 2021, 133, 17239-17244.	1.6	15
6	Detection and Identification of Wolbachia pipientis Strains in Mosquito Eggs Using Attenuated Total Reflection Fourier Transform Infrared (ATR FT-IR) Spectroscopy. Applied Spectroscopy, 2021, 75, 1003-1011.	1.2	1
7	Addressing Delicate and Variable Cancer Morphology in Spectral Histopathology Using Canine Visceral Hemangiosarcoma. Analytical Chemistry, 2021, 93, 12187-12194.	3.2	4
8	Towards the Point of Care and noninvasive classification of bladder cancer from urine sediment infrared spectroscopy. Spectral differentiation of normal, abnormal and cancer patients. Microchemical Journal, 2021, 168, 106460.	2.3	7
9	ATR-FTIR spectroscopy for the routine quality control of exosome isolations. Chemometrics and Intelligent Laboratory Systems, 2021, 217, 104401.	1.8	11
10	From bench to worktop: Rapid evaluation of nutritional parameters in liquid foodstuffs by IR spectroscopy. Food Chemistry, 2021, 365, 130442.	4.2	3
11	Multiplexed Fourier Transform Infrared and Raman Imaging. Methods in Molecular Biology, 2021, 2350, 299-312.	0.4	0
12	ATR-FTIR spectroscopy as a quality control system for monitoring the storage of blood products. Analytical Methods, 2021, 13, 5756-5763.	1.3	2
13	ATR-Spin: an open-source 3D printed device for direct cytocentrifugation onto attenuated total reflectance crystals. Lab on A Chip, 2021, 21, 4743-4748.	3.1	0
14	Data mining Raman microspectroscopic responses of cells to drugs in vitro using multivariate curve resolution-alternating least squares. Talanta, 2020, 208, 120386.	2.9	10
15	Discriminant analysis and feature selection in mass spectrometry imaging using constrained repeated random sampling - Cross validation (CORRS-CV). Analytica Chimica Acta, 2020, 1097, 30-36.	2.6	13
16	Quantification and Identification of Microproteinuria Using Ultrafiltration and ATR-FTIR Spectroscopy. Analytical Chemistry, 2020, 92, 2409-2416.	3.2	28
17	Toward Rapid Screening of Liver Grafts at the Operating Room Using Mid-infrared Spectroscopy. Analytical Chemistry, 2020, 92, 14542-14549.	3.2	8
18	Multimodal vibrational studies of drug uptake in vitro: Is the whole greater than the sum of their parts?. Journal of Biophotonics, 2020, 13, e202000264.	1.1	5

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19	Empirical study on the effects of acquisition parameters for FTIR hyperspectral imaging of brain tissue. Analytical Methods, 2020, 12, 4334-4342.	1.3	5
20	Vibrational Spectroscopic Based Approach for Diagnosing Babesia bovis Infection. Analytical Chemistry, 2020, 92, 8784-8792.	3.2	2
21	Infrared spectroscopy coupled to cloud-based data management as a tool to diagnose malaria: a pilot study in a malaria-endemic country. Malaria Journal, 2019, 18, 348.	0.8	41
22	Determining the Age of Spoiled Milk from Dried Films Using Attenuated Reflection Fourier Transform Infrared (ATR FT-IR) Spectroscopy. Applied Spectroscopy, 2019, 73, 1041-1050.	1.2	6
23	Whole-Organism Analysis by Vibrational Spectroscopy. Annual Review of Analytical Chemistry, 2019, 12, 89-108.	2.8	8
24	Synchrotron macro ATR-FTIR microspectroscopy for high-resolution chemical mapping of single cells. Analyst, The, 2019, 144, 3226-3238.	1.7	74
25	Spectroscopy goes viral: Diagnosis of hepatitis B and C virus infection from human sera using ATR-FTIR spectroscopy. Clinical Spectroscopy, 2019, 1, 100001.	0.6	73
26	Detection of Antimicrobial Resistance-Related Changes in Biochemical Composition of Staphylococcus aureus by Means of Atomic Force Microscopy-Infrared Spectroscopy. Analytical Chemistry, 2019, 91, 15397-15403.	3.2	20
27	Parasites under the Spotlight: Applications of Vibrational Spectroscopy to Malaria Research. Chemical Reviews, 2018, 118, 5330-5358.	23.0	40
28	Model selection for within-batch effect correction in UPLC-MS metabolomics using quality control - Support vector regression. Analytica Chimica Acta, 2018, 1026, 62-68.	2.6	32
29	Multispectral Atomic Force Microscopy-Infrared Nano-Imaging of Malaria Infected Red Blood Cells. Analytical Chemistry, 2018, 90, 3140-3148.	3.2	79
30	In vivo atomic force microscopyâ€“infrared spectroscopy of bacteria. Journal of the Royal Society Interface, 2018, 15, 20180115.	1.5	60
31	Detection and Quantification of Plasmodium falciparum in Aqueous Red Blood Cells by Attenuated Total Reflection Infrared Spectroscopy and Multivariate Data Analysis. Journal of Visualized Experiments, 2018, , .	0.2	1
32	Application of Vibrational Spectroscopy and Imaging to Point-of-Care Medicine: A Review. Applied Spectroscopy, 2018, 72, 52-84.	1.2	75
33	Recent Advances in Macro ATR-FTIR Microspectroscopic Technique for High Resolution Surface Characterisation at Australian Synchrotron IR Beamline. , 2018, , .		0
34	Focal plane array IR imaging at the Australian Synchrotron. Infrared Physics and Technology, 2018, 94, 85-90.	1.3	11
35	Direct Nanospectroscopic Verification of the Amyloid Aggregation Pathway. Angewandte Chemie, 2018, 130, 8655-8660.	1.6	11
36	Assessment of discriminant models in infrared imaging using constrained repeated random sampling â€“ Cross validation. Analytica Chimica Acta, 2018, 1033, 156-164.	2.6	17

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37	Direct Nanospectroscopic Verification of the Amyloid Aggregation Pathway. Angewandte Chemie - International Edition, 2018, 57, 8519-8524.	7.2	43
38	Monitoring the biochemical alterations in hypertension affected salivary gland tissues using Fourier transform infrared hyperspectral imaging. Analyst, The, 2017, 142, 1269-1275.	1.7	6
39	Resonance Raman and UVâ€Visible Microscopy Reveals that Conditioning Red Blood Cells with Repeated Doses of Sodium Dithionite Increases Haemoglobin Oxygen Uptake. ChemistrySelect, 2017, 2, 3342-3346.	0.7	9
40	Simultaneous ATR-FTIR Based Determination of Malaria Parasitemia, Glucose and Urea in Whole Blood Dried onto a Glass Slide. Analytical Chemistry, 2017, 89, 5238-5245.	3.2	87
41	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.	1.6	28
42	Screening of Wolbachia Endosymbiont Infection in Aedes aegypti Mosquitoes Using Attenuated Total Reflection Mid-Infrared Spectroscopy. Analytical Chemistry, 2017, 89, 5285-5293.	3.2	25
43	The effect of common anticoagulants in detection and quantification of malaria parasitemia in human red blood cells by ATR-FTIR spectroscopy. Analyst, The, 2017, 142, 1192-1199.	1.7	38
44	Light Scattering By Optically-Trapped Vesicles Affords Unprecedented Temporal Resolution Of Lipid-Raft Dynamics. Scientific Reports, 2017, 7, 8589.	1.6	7
45	Materials and methods of signal enhancement for spectroscopic whole blood analysis: Novel research overview. TrAC - Trends in Analytical Chemistry, 2017, 86, 122-142.	5.8	34
46	Multimodal vibrational imaging of cells. Vibrational Spectroscopy, 2017, 91, 46-58.	1.2	44
47	High resolution FTIR imaging provides automated discrimination and detection of single malaria parasite infected erythrocytes on glass. Faraday Discussions, 2016, 187, 341-352.	1.6	45
48	Single cell analysis/data handling: general discussion. Faraday Discussions, 2016, 187, 299-327.	1.6	4
49	Clinical Spectroscopy: general discussion. Faraday Discussions, 2016, 187, 429-460.	1.6	6
50	Application of Discriminant Analysis and Cross-Validation on Proteomics Data. Methods in Molecular Biology, 2016, 1362, 175-184.	0.4	14
51	Analysis of multi-source metabolomic data using joint and individual variation explained (JIVE). Analyst, The, 2015, 140, 4521-4529.	1.7	21
52	Determination of lidocaine in urine at low ppm levels using dispersive microextraction and attenuated total reflectanceâ€“Fourier transform infrared measurements of dry films. Microchemical Journal, 2015, 121, 178-183.	2.3	11
53	Comparison of transflection and transmission FTIR imaging measurements performed on differentially fixed tissue sections. Analyst, The, 2015, 140, 2376-2382.	1.7	24
54	Assessment of the statistical significance of classifications in infrared spectroscopy based diagnostic models. Analyst, The, 2015, 140, 2422-2427.	1.7	19

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55	Red Blood Cells Polarize Green Laser Light Revealing Hemoglobinâ€²s Enhanced Nonâ€Fundamental Raman Modes. ChemPhysChem, 2014, 15, 3963-3968.	1.0	28
56	Chemometric determination of lipidic parameters in serum using ATR measurements of dry films of solvent extracts. Analyst, The, 2014, 139, 170-178.	1.7	18
57	Determination of biochemical parameters in human serum by near-infrared spectroscopy. Analytical Methods, 2014, 6, 3982.	1.3	14
58	Towards the determination of isoprene in human breath using substrate-integrated hollow waveguide mid-infrared sensors. Journal of Breath Research, 2014, 8, 026003.	1.5	43
59	Detection of batch effects in liquid chromatography-mass spectrometry metabolomic data using guided principal component analysis. Talanta, 2014, 130, 442-448.	2.9	27
60	Infrared-based quantification of clinical parameters. TrAC - Trends in Analytical Chemistry, 2014, 62, 93-105.	5.8	48
61	Infrared biospectroscopy for a fast qualitative evaluation of sample preparation in metabolomics. Talanta, 2014, 127, 181-190.	2.9	9
62	Cytotoxic, immunomodulatory, antimycotic, and antiviral activities of semisynthetic 14-hydroxyabietane derivatives and triptoquinone C-4 epimers. MedChemComm, 2013, 4, 1239.	3.5	26
63	Evaluation of infrared spectroscopy as a screening tool for serum analysis. Microchemical Journal, 2013, 106, 202-211.	2.3	34
64	Evaluation of the effect of chance correlations on variable selection using Partial Least Squares-Discriminant Analysis. Talanta, 2013, 116, 835-840.	2.9	21
65	Modified locally weightedâ€"Partial least squares regression improving clinical predictions from infrared spectra of human serum samples. Talanta, 2013, 107, 368-375.	2.9	30
66	Improving the performance of hollow waveguide-based infrared gas sensors via tailored chemometrics. Analytical and Bioanalytical Chemistry, 2013, 405, 8223-8232.	1.9	10
67	Atmospheric Compensation in Fourier Transform Infrared (FT-IR) Spectra of Clinical Samples. Applied Spectroscopy, 2013, 67, 1339-1342.	1.2	11
68	Short syntheses of (+)-ferruginol from (+)-dehydroabietylamine. Tetrahedron, 2012, 68, 9612-9615.	1.0	26
69	Protein determination in serum and whole blood by attenuated total reflectance infrared spectroscopy. Analytical and Bioanalytical Chemistry, 2012, 404, 649-656.	1.9	50
70	Synthesis and Biological Evaluation of Combretastatin A-4 and Three Combretastatin-Based Hybrids. Natural Product Communications, 2012, 7, 1934578X1200700.	0.2	2
71	Copper(II) influence on flumequine retention in soils: Macroscopic and molecular investigations. Journal of Colloid and Interface Science, 2011, 357, 453-459.	5.0	23
72	Cu(II) and Zn(II) complexes with a fluoroquinolone antibiotic: Spectroscopic and X-ray absorption characterization. Polyhedron, 2011, 30, 438-443.	1.0	19

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73	Vapor Pressure Measurements of Hydroxyacetaldehyde and Hydroxyacetone in the Temperature Range (273 to 356) K. Journal of Chemical & Engineering Data, 2010, 55, 852-855.	1.0	24
74	Synthesis and biological evaluation of dehydroabietic acid derivatives. European Journal of Medicinal Chemistry, 2010, 45, 811-816.	2.6	99