Franck Bonnier

List of Publications by Year
in descending order

61 papers	2,444 citations	186265 28 h-index	206112 48 g-index
61 all docs	61 docs citations	61 times ranked	2873 citing authors

#	Article	IF	Citations
1	Resonant Mie scattering in infrared spectroscopy of biological materials â€“ understanding the â€˜dispersion artefactâ€™. Analyst, The, 2009, 134, 1586.	3.5	276
2	Surface enhanced Raman scattering with gold nanoparticles: effect of particle shape. Analytical Methods, 2014, 6, 9116-9123.	2.7	236
3	Spectral pre and post processing for infrared and Raman spectroscopy of biological tissues and cells. Chemical Society Reviews, 2016, 45, 1865-1878.	38.1	143
4	Reflection contributions to the dispersion artefact in FTIR spectra of single biological cells. Analyst, The, 2009, 134, 1171.	3.5	118
5	Evaluation of the potential of Raman microspectroscopy for prediction of chemotherapeutic response to cisplatin in lung adenocarcinoma. Analyst, The, 2010, 135, 3070.	3.5	117
6	Improved protocols for vibrational spectroscopic analysis of body fluids. Journal of Biophotonics, 2014, 7, 167-179.	2.3	87
7	Comparison of subcellular responses for the evaluation and prediction of the chemotherapeutic response to cisplatin in lung adenocarcinoma using Raman spectroscopy. Analyst, The, 2011, 136, 2450.	3.5	77
8	Identifying and localizing intracellular nanoparticles using Raman spectroscopy. Analyst, The, 2012, 137, 1111.	3.5	76
9	Raman spectroscopy for screening and diagnosis of cervical cancer. Analytical and Bioanalytical Chemistry, 2015, 407, 8279-8289.	3.7	73
10	Raman spectroscopic analysis of human skin tissue sectionsex-vivo: evaluation of the effects of tissue processing and dewaxing. Journal of Biomedical Optics, 2012, 18, 061202.	2.6	66
11	Monitoring doxorubicin cellular uptake and trafficking using in vitro Raman microspectroscopy: short and long time exposure effects on lung cancer cell lines. Analytical and Bioanalytical Chemistry, 2017, 409, 1333-1346.	3.7	57
12	Ultra-filtration of human serum for improved quantitative analysis of low molecular weight biomarkers using ATR-IR spectroscopy. Analyst, The, 2017, 142, 1285-1298.	3.5	56
13	Raman micro-spectroscopy for rapid screening of oral squamous cell carcinoma. Experimental and Molecular Pathology, 2015, 98, 502-509.	2.1	52
14	Screening the low molecular weight fraction of human serum using ATR-IR spectroscopy. Journal of Biophotonics, 2016, 9, 1085-1097.	2.3	51
15	Vibrational spectroscopic analysis of body fluids: avoiding molecular contamination using centrifugal filtration. Analytical Methods, 2014, 6, 5155.	2.7	49
16	FTIR protein secondary structure analysis of human ascending aortic tissues. Journal of Biophotonics, 2008, 1, 204-214.	2.3	46
17	Effect of substrate choice and tissue type on tissue preparation for spectral histopathology by Raman microspectroscopy. Analyst, The, 2014, 139, 446-454.	3.5	44
18	Raman microspectroscopy for the early detection of pre-malignant changes in cervical tissue. Experimental and Molecular Pathology, 2014, 97, 554-564.	2.1	43

#	Article	IF	Citations
19	Differentiating responses of lung cancer cell lines to Doxorubicin exposure: in vitro Raman micro spectroscopy, oxidative stress and bclâ€2 protein expression. Journal of Biophotonics, 2017, 10, 151-165.	2.3	42
20	Assessment of an osteoblast-like cell line as a model for human primary osteoblasts using Raman spectroscopy. Analyst, The, 2012, 137, 1559.	3.5	40
21	Enabling quantification of protein concentration in human serum biopsies using attenuated total reflectance â€“ Fourier transform infrared (ATR-FTIR) spectroscopy. Vibrational Spectroscopy, 2018, 99, 50-58.	2.2	37
22	Processing ThinPrep cervical cytological samples for Raman spectroscopic analysis. Analytical Methods, 2014, 6, 7831-7841.	2.7	36
23	Multivariate statistical methodologies applied in biomedical Raman spectroscopy: assessing the validity of partial least squares regression using simulated model datasets. Analyst, The, 2015, 140, 2482-2492.	3.5	36
24	Raman spectroscopic screening of high and low molecular weight fractions of human serum. Analyst, The, 2019, 144, 4295-4311.	3.5	35
25	Qualitative and quantitative analysis of therapeutic solutions using Raman and infrared spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 218, 97-108.	3.9	31
26	Analysis of bodily fluids using vibrational spectroscopy: a direct comparison of Raman scattering and infrared absorption techniques for the case of glucose in blood serum. Analyst, The, 2019, 144, 3334-3346.	3.5	31
27	Raman spectroscopy for the qualitative and quantitative analysis of solid dosage forms of Sitagliptin. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 245, 118900.	3.9	31
28	Comparison of structure and organization of cutaneous lipids in a reconstructed skin model and human skin: spectroscopic imaging and chromatographic profiling. Experimental Dermatology, 2014, 23, 441-443.	2.9	29
29	Doxorubicin kinetics and effects on lung cancer cell lines using in vitro Raman microâ€spectroscopy: binding signatures, drug resistance and DNA repair. Journal of Biophotonics, 2018, 11, e201700060.	2.3	29
30	ATR-IR spectroscopy for rapid quantification of water content in deep eutectic solvents. Journal of Molecular Liquids, 2020, 311, 113361.	4.9	28
31	Spectral cross-correlation as a supervised approach for the analysis of complex Raman datasets: the case of nanoparticles in biological cells. Analyst, The, 2012, 137, 5792.	3.5	27
32	Investigating the use of Raman and immersion Raman spectroscopy for spectral histopathology of metastatic brain cancer and primary sites of origin. Analytical Methods, 2014, 6, 3948-3961.	2.7	25
33	Advancing Raman microspectroscopy for cellular and subcellular analysis: towards in vitro high-content spectralomic analysis. Applied Optics, 2018, 57, E11.	1.8	22
34	Raman spectroscopy as a potential tool for label free therapeutic drug monitoring in human serum: the case of busulfan and methotrexate. Analyst, The, 2019, 144, 5207-5214.	3.5	22
35	In vitro labelâ€free screening of chemotherapeutic drugs using Raman microspectroscopy: Towards a new paradigm of spectralomics. Journal of Biophotonics, 2018, 11, e201700258.	2.3	21
36	Raman spectroscopic analysis of oral cells in the high wavenumber region. Experimental and Molecular Pathology, 2017, 103, 255-262.	2.1	19

#	Article	IF	Citations
37	A Natural, Calcium-Rich Marine Multi-mineral Complex Preserves Bone Structure, Composition and Strength in an Ovariectomised Rat Model of Osteoporosis. Calcified Tissue International, 2017, 101, 445-455.	3.1	19
38	An in vitro study of the interaction of the chemotherapeutic drug Actinomycin D with lung cancer cell lines using Raman microâ€spectroscopy. Journal of Biophotonics, 2018, 11, e201700112.	2.3	19
39	Quantitative analysis of curcumin-loaded alginate nanocarriers in hydrogels using Raman and attenuated total reflection infrared spectroscopy. Analytical and Bioanalytical Chemistry, 2017, 409, 4593-4605.	3.7	19
40	Confocal Raman spectroscopic imaging for in vitro monitoring of active ingredient penetration and distribution in reconstructed human epidermis model. Journal of Biophotonics, 2018, 11, e201700221.	2.3	18
41	Raman spectral signatures of cervical exfoliated cells from liquid-based cytology samples. Journal of Biomedical Optics, 2017, 22, 1.	2.6	13
42	Twoâ€dimensional correlation analysis of Raman microspectroscopy of subcellular interactions of drugs in vitro. Journal of Biophotonics, 2019, 12, e201800328.	2.3	12
43	Comparison of Raman and attenuated total reflectance (ATR) infrared spectroscopy for water quantification in natural deep eutectic solvent. Analytical and Bioanalytical Chemistry, 2021, 413, 4785-4799.	3.7	12
44	Raman mapping coupled to selfâ€modelling <scp>MCRâ€ALS</scp> analysis to estimate active cosmetic ingredient penetration profile in skin. Journal of Biophotonics, 2020, 13, e202000136.	2.3	11
45	Vibrational Spectroscopy: Disease Diagnostics and Beyond. Challenges and Advances in Computational Chemistry and Physics, 2014, , 355-399.	0.6	10
46	In vitro Label Free Raman Microspectroscopic Analysis to Monitor the Uptake, Fate and Impacts of Nanoparticle Based Materials. Frontiers in Bioengineering and Biotechnology, 2020, 8, 544311.	4.1	10
47	Vibrational spectroscopy for discrimination and quantification of clinical chemotherapeutic preparations. Vibrational Spectroscopy, 2021, 113, 103200.	2.2	10
48	In situ Analytical Quality Control of chemotherapeutic solutions in infusion bags by Raman spectroscopy. Talanta, 2021, 228, 122137.	5.5	10
49	One-step synthesis of gold nanoflowers of tunable size and absorption wavelength in the red & deep red range for SERS spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 225, 117502.	3.9	9
50	Understanding the discrimination and quantification of monoclonal antibodies preparations using Raman spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2021, 194, 113734.	2.8	9
51	Estimating the Analytical Performance of Raman Spectroscopy for Quantification of Active Ingredients in Human Stratum Corneum. Molecules, 2022, 27, 2843.	3.8	9
52	Homogeneous distribution of fatty esterâ€based active cosmetic ingredients in hydrophilic thin films by means of nanodispersion. International Journal of Cosmetic Science, 2020, 42, 512-519.	2.6	8
53	Evaluation of inflammatory processes by FTIR spectroscopy. Journal of Medical Engineering and Technology, 2018, 42, 228-235.	1.4	7
54	ATR-IR coupled to partial least squares regression (PLSR) for monitoring an encapsulated active molecule in complex semi-solid formulations. Analyst, The, 2018, 143, 2377-2389.	3.5	6

#	Article	IF	Citations
55	Quantification of low-content encapsulated active cosmetic ingredients in complex semi-solid formulations by means of attenuated total reflectance-infrared spectroscopy. Analytical and Bioanalytical Chemistry, 2020, 412, 159-169.	3.7	5
56	In Situ Water Quantification in Natural Deep Eutectic Solvents Using Portable Raman Spectroscopy. Molecules, 2021, 26, 5488.	3.8	5
57	Confocal Raman Spectroscopic Imaging for Evaluation of Distribution of Nano-Formulated Hydrophobic Active Cosmetic Ingredients in Hydrophilic Films. Molecules, 2021, 26, 7440.	3.8	5
58	Can ethanol affect the cell structure? A dynamic molecular and Raman spectroscopy study. Photodiagnosis and Photodynamic Therapy, 2020, 30, 101675.	2.6	4
59	Quantification of clinical mAb solutions using Raman spectroscopy: Macroscopic vs microscopic analysis. Talanta, 2022, 250, 123692.	5.5	3
60	Raman spectroscopic analysis of oral squamous cell carcinoma and oral dysplasia in the high-wavenumber region. Proceedings of SPIE, 2015, , .	0.8	2
61	Monitoring water content in NADES extracts from Spirulina biomass by means of ATR-IR spectroscopy. Analytical Methods, 2022, , .	2.7	1