Giovanni Birarda

List of Publications by Year
in descending order

53	1,646	331538 21	315616 38
papers	citations	h-index	g-index

55	55	55	2685
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Diverse uncultivated ultra-small bacterial cells in groundwater. Nature Communications, 2015, 6, 6372.	5.8	342
2	FTIR investigation of the secondary structure of type I collagen: New insight into the amide III band. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 229, 118006.	2.0	128
3	Infrared Orange: Connecting Hyperspectral Data with Machine Learning. Synchrotron Radiation News, 2017, 30, 40-45.	0.2	99
4	Human age and skin physiology shape diversity and abundance of Archaea on skin. Scientific Reports, 2017, 7, 4039.	1.6	78
5	Plastics everywhere: first evidence of polystyrene fragments inside the common Antarctic collembolan Cryptopygus antarcticus. Biology Letters, 2020, 16, 20200093.	1.0	61
6	The earliest evidence for mechanically delivered projectile weapons in Europe. Nature Ecology and Evolution, 2019, 3, 1409-1414.	3.4	58
7	Tackling the minority: sulfate-reducing bacteria in an archaea-dominated subsurface biofilm. ISME Journal, 2013, 7, 635-651.	4.4	57
8	Infrared microspectroscopy of biochemical response of living cells in microfabricated devices. Vibrational Spectroscopy, 2010, 53, 6-11.	1.2	54
9	SU-8 bonding protocol for the fabrication of microfluidic devices dedicated to FTIR microspectroscopy of live cells. Lab on A Chip, 2014, 14, 210-218.	3.1	48
10	Tracking InfraRed signatures of drugs in cancer cells by Fourier Transform microspectroscopy. Analyst, The, 2010, 135, 3077.	1.7	43
11	Fabrication of a microfluidic platform for investigating dynamic biochemical processes in living samples by FTIR microspectroscopy. Microelectronic Engineering, 2010, 87, 806-809.	1.1	41
12	Understanding the Polymerization of Polyfurfuryl Alcohol: Ring Opening and Diels-Alder Reactions. Polymers, 2019, 11, 2126.	2.0	39
13	Microfluidic approaches to synchrotron radiation-based Fourier transform infrared (SR-FTIR) spectral microscopy of living biosystems. Protein and Peptide Letters, 2016, 23, 273-282.	0.4	35
14	Impact of Zn excess on biomineralization processes in Juncus acutus grown in mine polluted sites. Journal of Hazardous Materials, 2019, 370, 98-107.	6.5	35
15	Apoptotic pathways of U937 leukemic monocytes investigated by infrared microspectroscopy and flow cytometry. Analyst, The, 2014, 139, 3097-3106.	1.7	29
16	Lipid analysis of CO2-rich subsurface aquifers suggests an autotrophy-based deep biosphere with lysolipids enriched in CPR bacteria. ISME Journal, 2020, 14, 1547-1560.	4.4	29
17	Coupling Genetic and Chemical Microbiome Profiling Reveals Heterogeneity of Archaeome and Bacteriome in Subsurface Biofilms That Are Dominated by the Same Archaeal Species. PLoS ONE, 2014, 9, e99801.	1.1	28
18	Half-sandwich RuII-[9]aneS3 complexes with dicarboxylate ligands: synthesis, characterization and chemical behavior. Dalton Transactions, 2007, , 4048.	1.6	25

#	Article	IF	Citations
19	IR-Live: fabrication of a low-cost plastic microfluidic device for infrared spectromicroscopy of living cells. Lab on A Chip, 2016, 16, 1644-1651.	3.1	25
20	Cigarette butts, a threat for marine environments: Lessons from benthic foraminifera (Protista). Marine Environmental Research, 2020, 162, 105150.	1.1	24
21	Cadmiumâ€“halide and mixed cadmiumâ€“halideâ€“dicyanamide polymers mediated by ancillary 2-aminoalkyl-pyridine ligands: Synthesis, X-ray single crystal structures and luminescence property. Polyhedron, 2008, 27, 2452-2458.	1.0	23
22	Optimization of microfluidic systems for IRMS long term measurement of living cells. Microelectronic Engineering, 2012, 98, 698-702.	1.1	23
23	Differential protein folding and chemical changes in lung tissues exposed to asbestos or particulates. Scientific Reports, 2015, 5, 12129.	1.6	22
24	Graphene liquid cells for multi-technique analysis of biological cells in water environment. Journal of Instrumentation, 2018, 13, C05016-C05016.	0.5	22
25	Synchrotron infrared imaging of advanced glycation endproducts (AGEs) in cardiac tissue from mice fed high glycemic diets. Biomedical Spectroscopy and Imaging, 2013, 2, 301-315.	1.2	18
26	Multi-technique microscopy investigation on bacterial biofilm matrices: a study on Klebsiella pneumoniae clinical strains. Analytical and Bioanalytical Chemistry, 2019, 411, 7315-7325.	1.9	18
27	Chemical constitution of polyfurfuryl alcohol investigated by FTIR and Resonant Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 262, 120090.	2.0	18
28	Mineralogy and Zn Chemical Speciation in a Soil-Plant System from a Metal-Extreme Environment: A Study on Helichrysum microphyllum subsp. tyrrhenicum (Campo Pisano Mine, SW Sardinia, Italy). Minerals (Basel, Switzerland), 2020, 10, 259.	0.8	17
29	Plastics, (bio)polymers and their apparent biogeochemical cycle: An infrared spectroscopy study on foraminifera. Environmental Pollution, 2021, 279, 116912.	3.7	16
30	Infrared Nanospectroscopy Reveals DNA Structural Modifications upon Immobilization onto Clay Nanotubes. Nanomaterials, 2021, 11, 1103.	1.9	14
31	A Multi-Dimensional Approach to Investigate Use-Related Biogenic Residues on Palaeolithic Ground Stone Tools. Environmental Archaeology, 0, , 1-29.	0.6	14
32	The in vivo effects of silver nanoparticles on terrestrial isopods, Porcellio scaber, depend on a dynamic interplay between shape, size and nanoparticle dissolution properties. Analyst, The, 2019, 144, 488-497.	1.7	13
33	Effects of soft X-ray radiation damage on paraffin-embedded rat tissues supported on ultralene: aÂchemical perspective. Journal of Synchrotron Radiation, 2018, 25, 848-856.	1.0	11
34	Fourier transform infrared microspectroscopy reveals biochemical changes associated with glioma stem cell differentiation. Biophysical Chemistry, 2015, 207, 90-96.	1.5	10
35	Antiproliferative activity of the combination of doxorubicin/quercetin on MCF7 breast cancer cell line: A combined study using colorimetric assay and synchrotron infrared microspectroscopy. Infrared Physics and Technology, 2018, 95, 141-147.	1.3	10
36	RBS, PIXE, Ion-Microbeam and SR-FTIR Analyses of Pottery Fragments from Azerbaijan. Heritage, 2019, 2, 1852-1873.	0.9	10

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37	Soft X-ray induced radiation damage in thin freeze-dried brain samples studied by FTIR microscopy. Journal of Synchrotron Radiation, 2020, 27, 1218-1226.	1.0	10
38	Live-Cell Synchrotron-Based FTIR Evaluation of Metabolic Compounds in Brain Glioblastoma Cell Lines after Riluzole Treatment. Analytical Chemistry, 2022, 94, 1932-1940.	3.2	10
39	Model-based correction algorithm for Fourier Transform infrared microscopy measurements of complex tissue-substrate systems. Analytica Chimica Acta, 2020, 1103, 143-155.	2.6	9
40	Protein Mixture Segregation at Coffee-Ring: Real-Time Imaging of Protein Ring Precipitation by FTIR Spectromicroscopy. Journal of Physical Chemistry B, 2017, 121, 7359-7365.	1.2	8
41	Chemical analyses at micro and nano scale at SISSI-Bio beamline at Elettra-Sincrotrone Trieste. , 2022, , .		8
42	Evaluation of a novolak based positive tone photoresist as NanoImprint Lithography resist. Microelectronic Engineering, 2011, 88, 2096-2099.	1.1	7
43	Effect of Ingested Tungsten Oxide (WO_x) Nanofibers on Digestive Gland Tissue of Porcellio scaber (Isopoda, Crustacea): Fourier Transform Infrared (FTIR) Imaging. Environmental Science & Technology, 2013, 47, 11284-11292.	4.6	7
44	The quality is in the eye of the beholder: The perspective of FTIR and UV resonant Raman spectroscopies on extracted nucleic acids. Journal of Raman Spectroscopy, 2018, 49, 1056-1065.	1.2	7
45	Binding of tyrosine kinase inhibitor to epidermal growth factor receptor: surface-enhanced infrared absorption microscopy reveals subtle protein secondary structure variations. Nanoscale, 2021, 13, 7667-7677.	2.8	7
46	Study of the Spatio-Chemical Heterogeneity of Tannin-Furanic Foams: From 1D FTIR Spectroscopy to 3D FTIR Micro-Computed Tomography. International Journal of Molecular Sciences, 2021, 22, 12869.	1.8	7
47	Oleic Acid Protects Endothelial Cells from Silica-Coated Superparamagnetic Iron Oxide Nanoparticles (SPIONs)-Induced Oxidative Stress and Cell Death. International Journal of Molecular Sciences, 2022, 23, 6972.	1.8	6
48	Addressable Graphene Encapsulation of Wet Specimens on a Chip for Optical, Electron, Infrared, and X-ray based Spectromicroscopy Studies. Lab on A Chip, 2021, 21, 4618-4628.	3.1	5
49	Effects of Ionizing Radiation and Long-Term Storage on Hydrated vs. Dried Cell Samples of Extremophilic Microorganisms. Microorganisms, 2022, 10, 190.	1.6	5
50	Bimodal effect of hydrogen peroxide and oxidative events in nitrite-induced rapid root abscission by the water fern Azolla pinnata. Frontiers in Plant Science, 2015, 6, 518.	1.7	3
51	Oxidation of ultralene and paraffin due to radiation damage after exposure to soft X-rays probed by FTIR microspectroscopy and X-ray fluorescence. Journal of Synchrotron Radiation, 2021, 28, 231-239.	1.0	3
52	Infrared Spectral Imaging with Synchrotron Radiation. Synchrotron Radiation News, 2017, 30, 3-4.	0.2	0
53	Biodeterioration Assessment of a Unique Old Pharaonic Kingdom Wooden Statue Using Advanced Diagnostic Techniques. Applied Sciences (Switzerland), 2022, 12, 7020.	1.3	0