MaÅ‚gorzata BaraÅ„ska

List of Publications by Year
in descending order

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175 papers	5,995 citations	94269 37 h-index	91712 69 g-index
187 all docs	187 docs citations	187 times ranked	7419 citing authors

#	Article	IF	Citations
1	Identification and quantification of valuable plant substances by IR and Raman spectroscopy. Vibrational Spectroscopy, 2007, 43, 13-25.	1.2	746
2	Raman and infrared spectroscopy of carbohydrates: A review. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 185, 317-335.	2.0	654
3	Characterisation of essential oil plants from Turkey by IR and Raman spectroscopy. Vibrational Spectroscopy, 2005, 39, 249-256.	1.2	192
4	Changes in carotenoid content and distribution in living plant tissue can be observed and mapped in situ using NIR-FT-Raman spectroscopy. Planta, 2005, 222, 448-457.	1.6	138
5	Tissue-specific accumulation of carotenoids in carrot roots. Planta, 2006, 224, 1028-1037.	1.6	109
6	In Situ Simultaneous Analysis of Polyacetylenes, Carotenoids and Polysaccharides in Carrot Roots. Journal of Agricultural and Food Chemistry, 2005, 53, 6565-6571.	2.4	108
7	Spectropathology for the next generation: Quo vadis?. Analyst, The, 2015, 140, 2066-2073.	1.7	106
8	Characterization of Peppercorn, Pepper Oil, and Pepper Oleoresin by Vibrational Spectroscopy Methods. Journal of Agricultural and Food Chemistry, 2005, 53, 3358-3363.	2.4	98
9	Analytical Techniques in Lipidomics: State of the Art. Critical Reviews in Analytical Chemistry, 2017, 47, 418-437.	1.8	95
10	Identification of secondary metabolites in medicinal and spice plants by NIR-FT-Raman microspectroscopic mapping. Analyst, The, 2004, 129, 926-930.	1.7	94
11	In situ Raman and IR spectroscopic analysis of indigo dye. Analytical Methods, 2010, 2, 1372.	1.3	92
12	Chemotaxonomic characterisation of essential oil plants by vibrational spectroscopy measurements. Vibrational Spectroscopy, 2004, 35, 81-86.	1.2	90
13	In situ Raman imaging of astaxanthin in a single microalgal cell. Analyst, The, 2011, 136, 1109.	1.7	84
14	FT-IR Hyperspectral Imaging and Artificial Neural Network Analysis for Identification of Pathogenic Bacteria. Analytical Chemistry, 2018, 90, 8896-8904.	3.2	78
15	Recent Advances in Raman Analysis of Plants: Alkaloids, Carotenoids, and Polyacetylenes. Current Analytical Chemistry, 2013, 9, 108-127.	0.6	77
16	Structural Changes of Carotenoid Astaxanthin in a Single Algal Cell Monitored in Situ by Raman Spectroscopy. Analytical Chemistry, 2011, 83, 7763-7770.	3.2	76
17	SERS-based monitoring of the intracellular pH in endothelial cells: the influence of the extracellular environment and tumour necrosis factor-Î±. Analyst, The, 2015, 140, 2321-2329.	1.7	72
18	Imaging of lipids in atherosclerotic lesion in aorta from ApoE/LDLRâ^'/â^' mice by FT-IR spectroscopy and Hierarchical Cluster Analysis. Analyst, The, 2011, 136, 5247.	1.7	70

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19	Raman Imaging Providing Insights into Chemical Composition of Lipid Droplets of Different Size and Origin: In Hepatocytes and Endothelium. Analytical Chemistry, 2014, 86, 6666-6674.	3.2	69
20	Rapid approach to analyze biochemical variation in rat organs by ATR FTIR spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 118, 981-986.	2.0	67
21	Determination of alkaloids in capsules, milk and ethanolic extracts of poppy (Papaver somniferum L.) by ATR-FT-IR and FT-Raman spectroscopy. Analyst, The, 2004, 129, 917-920.	1.7	64
22	Spatial tissue distribution of polyacetylenes in carrot root. Analyst, The, 2005, 130, 855.	1.7	64
23	3D confocal Raman imaging of endothelial cells and vascular wall: perspectives in analytical spectroscopy of biomedical research. Analyst, The, 2013, 138, 603-610.	1.7	63
24	Visualization of the biochemical markers of atherosclerotic plaque with the use of Raman, IR and AFM. Journal of Biophotonics, 2014, 7, 744-756.	1.1	57
25	Discrimination of carotenoid and flavonoid content in petals of pansy cultivars (<i>Viola x) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	1.2	52
26	Comparative endothelial profiling of doxorubicin and daunorubicin in cultured endothelial cells. Toxicology in Vitro, 2015, 29, 512-521.	1.1	52
27	In Situ Flavonoid Analysis by FT-Raman Spectroscopy:Â Identification, Distribution, and Quantification of Aspalathin in Green Rooibos (Aspalathuslinearis). Analytical Chemistry, 2006, 78, 7716-7721.	3.2	51
28	Raman spectroscopy analysis of lipid droplets content, distribution and saturation level in Nonâ€Alcoholic Fatty Liver Disease in mice. Journal of Biophotonics, 2015, 8, 597-609.	1.1	51
29	Rhodamine 6G conjugated to gold nanoparticles as labels for both SERS and fluorescenceâ€©studies on live endothelial cells. Mikrochimica Acta, 2015, 182, 119-127.	2.5	49
30	Investigation of eucalyptus essential oil by using vibrational spectroscopy methods. Vibrational Spectroscopy, 2006, 42, 341-345.	1.2	47
31	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. Analytical Chemistry, 2020, 92, 15745-15756.	3.2	46
32	Pathological changes in the biochemical profile of the liver in atherosclerosis and diabetes assessed by Raman spectroscopy. Analyst, The, 2013, 138, 3885.	1.7	45
33	FT-IR and FT-Raman study of selected pyridinephosphonocarboxylic acids. Vibrational Spectroscopy, 2003, 31, 295-311.	1.2	43
34	Aggregation-Induced Resonance Raman Optical Activity (AIRROA): A New Mechanism for Chirality Enhancement. Journal of Physical Chemistry B, 2016, 120, 4028-4033.	1.2	43
35	Nondestructive analysis of single rapeseeds by means of Raman spectroscopy. Journal of Raman Spectroscopy, 2007, 38, 301-308.	1.2	39
36	Raman mapping of caffeine alkaloid. Vibrational Spectroscopy, 2008, 48, 153-157.	1.2	38

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37	Pyridine on Colloidal Silver. Polarization of Surface Studied by Surface-Enhanced Raman Scattering and Density Functional Theory Methods. Journal of Physical Chemistry C, 2010, 114, 3909-3917.	1.5	38
38	Raman spectroscopy as a sensitive probe of soft tissue composition â€“ Imaging of cross-sections of various organs vs. single spectra of tissue homogenates. TrAC - Trends in Analytical Chemistry, 2016, 85, 117-127.	5.8	38
39	Comprehensive review of trends and analytical strategies applied forÂbiological samples preparation and storage in modern medical lipidomics: State of the art. TrAC - Trends in Analytical Chemistry, 2017, 86, 276-289.	5.8	38
40	Carbamazepine polymorphs: Theoretical and experimental vibrational spectroscopy studies. Vibrational Spectroscopy, 2013, 65, 12-23.	1.2	37
41	Highâ€resolution Raman imaging reveals spatial location of heme oxidation sites in single red blood cells of dried smears. Journal of Raman Spectroscopy, 2015, 46, 76-83.	1.2	37
42	Lipid droplets in mammalian eggs are utilized during embryonic diapause. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	37
43	Spectroscopic Studies on Bioactive Polyacetylenes and Other Plant Components in Wild Carrot Root. Journal of Natural Products, 2011, 74, 1757-1763.	1.5	36
44	In situ detection of a single carotenoid crystal in a plant cell using Raman microspectroscopy. Vibrational Spectroscopy, 2011, 56, 166-169.	1.2	35
45	Electric field standing wave effects in FT-IR transflection spectra of biological tissue sections: Simulated models of experimental variability. Vibrational Spectroscopy, 2013, 69, 84-92.	1.2	35
46	Plasma biomarkers of pulmonary hypertension identified by Fourier transform infrared spectroscopy and principal component analysis. Analyst, The, 2015, 140, 2273-2279.	1.7	35
47	The liver-selective NO donor, V-PYRRO/NO, protects against liver steatosis and improves postprandial glucose tolerance in mice fed high fat diet. Biochemical Pharmacology, 2015, 93, 389-400.	2.0	34
48	Aggregation-Induced Resonance Raman Optical Activity (AIRROA) and Time-Dependent Helicity Switching of Astaxanthin Supramolecular Assemblies. Journal of Physical Chemistry B, 2016, 120, 7807-7814.	1.2	34
49	Antiatherosclerotic Effects of 1-Methylnicotinamide in Apolipoprotein E/Low-Density Lipoprotein Receptor-Deficient Mice: A Comparison with Nicotinic Acid. Journal of Pharmacology and Experimental Therapeutics, 2016, 356, 514-524.	1.3	34
50	Comparison of FTIR transmission and transfection substrates for canine liver cancer detection. Analyst, The, 2015, 140, 2402-2411.	1.7	33
51	Endothelium in Spots â€“ High-Content Imaging of Lipid Rafts Clusters in db/db Mice. PLoS ONE, 2014, 9, e106065.	1.1	33
52	Nondestructive Raman Analysis of Polyacetylenes in Apiaceae Vegetables. Journal of Agricultural and Food Chemistry, 2011, 59, 7647-7653.	2.4	32
53	Attenuated total reflection Fourier transform infrared (ATR-FTIR) spectroscopy of a single endothelial cell. Analyst, The, 2012, 137, 4135.	1.7	32
54	Raman Optical Activity and Raman spectroscopy of carbohydrates in solution. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 206, 597-612.	2.0	32

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55	Structural Changes of Polyacetylenes in American Ginseng Root Can Be Observed in Situ by Using Raman Spectroscopy. Journal of Agricultural and Food Chemistry, 2006, 54, 3629-3635.	2.4	31
56	Chiral Amplification in Nature: Studying Cellâ€Extracted Chiral Carotenoid Microcrystals via the Resonance Raman Optical Activity of Model Systems. Angewandte Chemie - International Edition, 2019, 58, 8383-8388.	7.2	31
57	Spectroscopic studies of anthracyclines: Structural characterization and in vitro tracking. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 169, 152-160.	2.0	30
58	Red Blood Cells Polarize Green Laser Light Revealing Hemoglobinâ€²s Enhanced Nonâ€Fundamental Raman Modes. ChemPhysChem, 2014, 15, 3963-3968.	1.0	28
59	Uptake of fatty acids by a single endothelial cell investigated by Raman spectroscopy supported by AFM. Analyst, The, 2018, 143, 970-980.	1.7	28
60	Transmission versus transflection mode in FTIR analysis of blood plasma: is the electric field standing wave effect the only reason for observed spectral distortions?. Analyst, The, 2015, 140, 2412-2421.	1.7	27
61	Chapter 4 Determination of Alkaloids through Infrared and Raman Spectroscopy. The Alkaloids Chemistry and Biology, 2009, 67, 217-255.	0.8	26
62	Lipid droplets formation in human endothelial cells in response to polyunsaturated fatty acids and 1â€methylâ€nicotinamide (MNA); confocal Raman imaging and fluorescence microscopy studies. Journal of Biophotonics, 2016, 9, 396-405.	1.1	26
63	Raman microscopy at the subcellular level: a study on early apoptosis in endothelial cells induced by Fas ligand and cycloheximide. Analyst, The, 2016, 141, 1390-1397.	1.7	25
64	Structure of supramolecular astaxanthin aggregates revealed by molecular dynamics and electronic circular dichroism spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 18038-18046.	1.3	25
65	Raman, AFM and SNOM high resolution imaging of carotene crystals in a model carrot cell system. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 197, 47-55.	2.0	24
66	A possible Fourier transform infraredâ€based plasma fingerprint of angiotensinâ€converting enzyme inhibitorâ€induced reversal of endothelial dysfunction in diabetic mice. Journal of Biophotonics, 2018, 11, e201700044.	1.1	24
67	Raman spectroscopyâ€“based insight into lipid droplets presence and contents in liver sinusoidal endothelial cells and hepatocytes. Journal of Biophotonics, 2019, 12, e201800290.	1.1	24
68	FTâ€Raman spectroscopyâ€”a rapid and reliable quantification protocol for the determination of natural indigo dye in Polygonum tinctorium. Journal of Raman Spectroscopy, 2011, 42, 551-557.	1.2	23
69	Quantification of plaque area and characterization of plaque biochemical composition with atherosclerosis progression in ApoE/LDLRâ^'/â^' mice by FT-IR imaging. Analyst, The, 2013, 138, 6645.	1.7	23
70	Non-destructive Raman analyses â€“ polyacetylenes in plants. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 1395-1401.	2.0	22
71	Theoretical Modeling of Molecular Spectra Parameters of Disubstituted Diacetylenes. Journal of Chemical Information and Modeling, 2011, 51, 283-295.	2.5	22
72	On two alizarin polymorphs. CrystEngComm, 2012, 14, 3667.	1.3	21

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73	Raman microscopy as a novel tool to detect endothelial dysfunction. Pharmacological Reports, 2015, 67, 736-743.	1.5	21
74	3D Raman imaging of systemic endothelial dysfunction in the murine model of metastatic breast cancer. Analytical and Bioanalytical Chemistry, 2016, 408, 3381-3387.	1.9	21
75	Recognition of the True and False Resonance Raman Optical Activity. Angewandte Chemie - International Edition, 2021, 60, 21205-21210.	7.2	21
76	A study on the nickel(II)-famotidine complexes. Journal of Inorganic Biochemistry, 2002, 92, 112-120.	1.5	20
77	Calcification of aortic human valves studied in situ by Raman microimaging: following mineralization from small grains to big deposits. Journal of Raman Spectroscopy, 2013, 44, 1222-1229.	1.2	20
78	Micro-Attenuated Total Reflection Fourier Transform Infrared (Micro ATR FT-IR) Spectroscopic Imaging with Variable Angles of Incidence. Applied Spectroscopy, 2015, 69, 1170-1174.	1.2	20
79	Prediction of ROA and ECD Related to Conformational Changes of Astaxanthin Enantiomers. Journal of Physical Chemistry B, 2015, 119, 12193-12201.	1.2	19
80	Composition and (in)homogeneity of carotenoid crystals in carrot cells revealed by high resolution Raman imaging. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 1395-1400.	2.0	19
81	Toward Raman Subcellular Imaging of Endothelial Dysfunction. Journal of Medicinal Chemistry, 2021, 64, 4396-4409.	2.9	18
82	Experimental and calculated 1H, 13C and 31P NMR spectra of pyridine-2-phosphono-4-carboxylic acid. Journal of Molecular Structure, 2003, 648, 215-224.	1.8	17
83	Application of FT-Raman spectroscopy for in situ detection of microorganisms on the surface of textiles. Journal of Environmental Monitoring, 2011, 13, 2983.	2.1	17
84	A novel approach to investigate vascular wall in 3D: Combined Raman spectroscopy and atomic force microscopy for aorta en face imaging. Vibrational Spectroscopy, 2014, 75, 39-44.	1.2	17
85	Bisignate resonance Raman optical activity: a pseudo breakdown of the single electronic state model of RROA?. Journal of Raman Spectroscopy, 2014, 45, 859-862.	1.2	17
86	Complementary analysis of tissue homogenates composition obtained by Vis and NIR laser excitations and Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 147, 245-256.	2.0	17
87	Raman microspectroscopy of human aortic valves: investigation of the local and global biochemical changes associated with calcification in aortic stenosis. Analyst, The, 2015, 140, 2164-2170.	1.7	17
88	Rapid biochemical profiling of endothelial dysfunction in diabetes, hypertension and cancer metastasis by hierarchical cluster analysis of Raman spectra. Journal of Raman Spectroscopy, 2016, 47, 1310-1317.	1.2	16
89	Chiral Thiophene Sulfonamideâ€"A Challenge for VOA Calculations. Journal of Physical Chemistry A, 2017, 121, 6713-6726.	1.1	16
90	Protein profile in vascular wall of atherosclerotic mice analyzed ex vivo using FT-IR spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 96, 940-945.	2.0	15

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91	Secondary structure of proteins analyzed ex vivo in vascular wall in diabetic animals using FT-IR spectroscopy. Analyst, The, 2013, 138, 7400.	1.7	15
92	Vascular diseases investigated ex vivo by using Raman, FT-IR and complementary methods. Pharmacological Reports, 2015, 67, 744-750.	1.5	15
93	Live endothelial cells imaged by Scanning Nearâ€field Optical Microscopy (SNOM): capabilities and challenges. Journal of Biophotonics, 2017, 10, 928-938.	1.1	15
94	Resonance Raman Optical Activity Shows Unusual Structural Sensitivity for Systems in Resonance with Multiple Excited States: Vitamin B₁₂ Case. Journal of Physical Chemistry Letters, 2020, 11, 5037-5043.	2.1	15
95	Nicotinamide and trigonelline studied with surface-enhanced FT-Raman spectroscopy. Vibrational Spectroscopy, 2012, 63, 469-476.	1.2	14
96	Resonance Raman in Vitro Detection and Differentiation of the Nitrite-Induced Hemoglobin Adducts in Functional Human Red Blood Cells. Journal of Physical Chemistry B, 2016, 120, 12249-12260.	1.2	14
97	Lipid Droplets Formation Represents an Integral Component of Endothelial Inflammation Induced by LPS. Cells, 2021, 10, 1403.	1.8	14
98	The influence of sunflower and mustard leaf extracts on the germination of mustard seeds. Journal of Thermal Analysis and Calorimetry, 2009, 95, 727-730.	2.0	13
99	Eosinophils and Neutrophilsâ€"Molecular Differences Revealed by Spontaneous Raman, CARS and Fluorescence Microscopy. Cells, 2020, 9, 2041.	1.8	13
100	New solid state Ni(II)-famotidine square-planar complex: powder diffraction and spectroscopic studies. Journal of Inorganic Biochemistry, 2004, 98, 995-1001.	1.5	12
101	Vibrational Raman optical activity of bicyclic terpenes: comparison between experimental and calculated vibrational Raman, Raman optical activity, and dimensionless circular intensity difference spectra and their similarity analysis. Journal of Raman Spectroscopy, 2017, 48, 305-313.	1.2	12
102	Changes induced by non-alcoholic fatty liver disease in liver sinusoidal endothelial cells and hepatocytes: spectroscopic imaging of single live cells at the subcellular level. Analyst, The, 2017, 142, 3948-3958.	1.7	12
103	FT-IR Spectroscopic Imaging of Endothelial Cells Response to Tumor Necrosis Factor-Î±: To Follow Markers of Inflammation Using Standard and High-Magnification Resolution. Analytical Chemistry, 2018, 90, 3727-3736.	3.2	12
104	Lipid Droplet Composition Varies Based on Medaka Fish Eggs Development as Revealed by NIR-, MIR-, and Raman Imaging. Molecules, 2020, 25, 817.	1.7	12
105	On Raman optical activity sign-switching between the ground and excited states leading to an unusual resonance ROA induced chirality. Chemical Science, 2021, 12, 911-916.	3.7	12
106	Chloroquine-Induced Accumulation of Autophagosomes and Lipids in the Endothelium. International Journal of Molecular Sciences, 2021, 22, 2401.	1.8	12
107	Multiplex Raman imaging of organelles in endothelial cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 255, 119658.	2.0	12
108	Discrimination between Nongenetically Modified (Non-GM) and GM Plant Tissue Expressing Cysteine-Rich Polypeptide Using FT-Raman Spectroscopy. Journal of Agricultural and Food Chemistry, 2008, 56, 4491-4496.	2.4	11

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109	Spectroscopy-based characterization of Hbâ€“NO adducts in human red blood cells exposed to NO-donor and endothelium-derived NO. Analyst, The, 2018, 143, 4335-4346.	1.7	11
110	Tunicamycin induced endoplasmic reticulum changes in endothelial cells investigated in vitro by confocal Raman imaging. Analyst, The, 2019, 144, 6561-6569.	1.7	11
111	Differential response of liver sinusoidal endothelial cells and hepatocytes to oleic and palmitic acid revealed by Raman and CARS imaging. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165763.	1.8	11
112	Astaxanthin as a new Raman probe for biosensing of specific subcellular lipidic structures: can we detect lipids in cells under resonance conditions?. Cellular and Molecular Life Sciences, 2021, 78, 3477-3484.	2.4	11
113	Experimental and calculated 1H, 13C and 31P NMR spectra of (hydroxypyridin-3-yl-methyl)phosphonic acid. Journal of Molecular Structure, 2003, 651-653, 729-737.	1.8	10
114	Single crystal structure and vibrational study of pyridinephosphonocarboxylic acid. Vibrational Spectroscopy, 2003, 32, 199-206.	1.2	10
115	Impact of sunflower and mustard leave extracts on the growth and dark respiration of mustard seedlings. Journal of Thermal Analysis and Calorimetry, 2011, 104, 187-192.	2.0	10
116	Chiral Amplification in Nature: Studying Cellâ€Extracted Chiral Carotenoid Microcrystals via the Resonance Raman Optical Activity of Model Systems. Angewandte Chemie, 2019, 131, 8471-8476.	1.6	10
117	Estimation of the content of lipids composing endothelial lipid droplets based on Raman imaging. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2020, 1865, 158758.	1.2	10
118	Menadione-induced endothelial inflammation detected by Raman spectroscopy. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 118911.	1.9	10
119	Structural changes of Î²-carotene and some retinoid pharmaceuticals induced by environmental factors. Journal of Molecular Structure, 2013, 1037, 99-108.	1.8	9
120	Lipids, hemoproteins and carotenoids in alive Rhodotorula mucilaginosa cells under pesticide decomposition â€“ Raman imaging study. Chemosphere, 2016, 164, 1-6.	4.2	9
121	Alterations in plasma biochemical composition in NO deficiency induced by L-NAME in mice analysed by Fourier Transform Infrared Spectroscopy. Journal of Biophotonics, 2016, 9, 1098-1108.	1.1	9
122	Polypyridyl substituted BODIPY derivatives; water switchable imaging probes that exhibit halogen substituent dependent localisation in live cells. RSC Advances, 2017, 7, 43743-43754.	1.7	9
123	Raman imaging highlights biochemical heterogeneity of human eosinophilsversushuman eosinophilic leukaemia cell line. British Journal of Haematology, 2019, 186, 685-694.	1.2	9
124	ImmunoSERS microscopy for the detection of smooth muscle cells in atherosclerotic plaques. Biosensors and Bioelectronics, 2019, 133, 79-85.	5.3	9
125	Towards Raman-Based Screening of Acute Lymphoblastic Leukemia-Type B (B-ALL) Subtypes. Cancers, 2021, 13, 5483.	1.7	9
126	Recent Advances in Raman Analysis of Plants: Alkaloids, Carotenoids, and Polyacetylenes. Current Analytical Chemistry, 2012, 9, 108-127.	0.6	8

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127	Vibrational and theoretical study of selected diacetylenes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 115, 493-503.	2.0	8
128	Vibrational analysis of cinchona alkaloids in the solid state and aqueous solutions. Journal of Raman Spectroscopy, 2015, 46, 1041-1052.	1.2	8
129	Anti-atherosclerotic effects of pravastatin in brachiocephalic artery in comparison with en face aorta and aortic roots in ApoE/LDLRâ^'/â^' mice. Pharmacological Reports, 2017, 69, 112-118.	1.5	8
130	Absolute Configurations of Naturally Occurring [5]- and [3]-Ladderanoic Acids: Isolation, Chiroptical Spectroscopy, and Crystallography. Journal of Natural Products, 2018, 81, 2654-2666.	1.5	8
131	Labeled vs. Label-Free Raman Imaging of Lipids in Endothelial Cells of Various Origins. Molecules, 2020, 25, 5752.	1.7	8
132	Multi-methodological insight into the vessel wall cross-section: Raman and AFM imaging combined with immunohistochemical staining. Biomedical Spectroscopy and Imaging, 2013, 2, 191-197.	1.2	7
133	A comprehensive approach to study liver tissue: Spectroscopic imaging and histochemical staining. Biomedical Spectroscopy and Imaging, 2013, 2, 331-337.	1.2	7
134	Impact of cell cycle dynamics on pathology recognition: Raman imaging study. Journal of Biophotonics, 2019, 12, e201800152.	1.1	7
135	Chiral recognition via a stereodynamic vanadium probe using the electronic circular dichroism effect in differential Raman scattering. Physical Chemistry Chemical Physics, 2021, 23, 23336-23340.	1.3	7
136	Resonance Raman Optical Activity Spectroscopy in Probing Structural Changes Invisible to Circular Dichroism Spectroscopy: A Study on Truncated Vitamin B12 Derivatives. Molecules, 2020, 25, 4386.	1.7	7
137	Identification of inflammatory markers in eosinophilic cells of the immune system: fluorescence, Raman and CARS imaging can recognize markers but differently. Cellular and Molecular Life Sciences, 2022, 79, 1.	2.4	7
138	Imaging of macrophages by Surface Enhanced Raman Spectroscopy (SERS). Biomedical Spectroscopy and Imaging, 2013, 2, 349-357.	1.2	6
139	Multimodal detection and analysis of a new type of advanced Heinz body-like aggregate (AHBA) and cytoskeleton deformation in human RBCs. Analyst, The, 2020, 145, 1749-1758.	1.7	6
140	Monitoring excited-state relaxation in a molecular marker in live cellsâ€“a case study on astaxanthin. Chemical Communications, 2021, 57, 6392-6395.	2.2	6
141	FT-Raman study of (hydroxypyridin-3-yl-methyl)phosphonic acid with varying pH. Vibrational Spectroscopy, 2004, 35, 233-237.	1.2	5
142	Fruits and Vegetables. , 2009, , 321-353.		5
143	An effect of anticoagulants on the FTIR spectral profile of mice plasma. Biomedical Spectroscopy and Imaging, 2013, 2, 317-330.	1.2	5
144	The uptake of gold nanoparticles by endothelial cells studied by surface-enhanced Raman spectroscopy. Biomedical Spectroscopy and Imaging, 2013, 2, 183-189.	1.2	5

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145	An impact of the ring substitution in nicorandil on its adsorption on silver nanoparticles. Surface-enhanced Raman spectroscopy studies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 129, 624-631.	2.0	5
146	Vibrational and theoretical study of diacetylenic acids. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 137, 652-660.	2.0	5
147	Raman spectroscopic features of primary cardiac microvascular endothelial cells (CMECs) isolated from the murine heart. Analyst, The, 2018, 143, 6079-6086.	1.7	5
148	Diversity among endothelial cell lines revealed by Raman and Fourier-transform infrared spectroscopic imaging. Analyst, The, 2018, 143, 4323-4334.	1.7	5
149	Electronic Circular Dichroism of the Cas9 Protein and gRNA:Cas9 Ribonucleoprotein Complex. International Journal of Molecular Sciences, 2021, 22, 2937.	1.8	5
150	How can fluorine directly and indirectly affect the hydrogen bonding in molecular systems? â€“ A case study for monofluoroanilines. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 252, 119536.	2.0	5
151	Raman imaging-based phenotyping of murine primary endothelial cells to identify disease-associated biochemical alterations. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2021, 1867, 166180.	1.8	5
152	General Overview on Vibrational Spectroscopy Applied in Biology and Medicine. Challenges and Advances in Computational Chemistry and Physics, 2014, , 3-14.	0.6	5
153	Raman optical activity: a powerful technique to investigate essential oil components. Natural Product Communications, 2010, 5, 1417-20.	0.2	5
154	Vibrational and quantum-chemical study of pH dependent molecular structures of (hydroxypyridin-4-yl-methyl)phosphonic acid. Vibrational Spectroscopy, 2003, 33, 83-92.	1.2	4
155	Relationship between structure and entropy contributions in an anthraquinone mercapto derivative. Journal of Molecular Modeling, 2010, 16, 1549-1557.	0.8	4
156	The potential application of FT-Raman spectroscopy for the quantification and mapping of the steroidal glycoside P57 in Hoodia gordonii. Phytochemistry Letters, 2010, 3, 156-160.	0.6	4
157	(â˜')â€Râ€Mevalonolactone Studied by ROA and SERS Spectroscopy. Chirality, 2014, 26, 453-461.	1.3	4
158	Interplay between carotenoids, hemoproteins and the â€œlife bandâ€•origin studied in live Rhodotorula mucilaginosa cells by means of Raman microimaging. Analyst, The, 2015, 140, 1809-1813.	1.7	4
159	Raman and fluorescence imaging of phospholipidosis induced by cationic amphiphilic drugs in endothelial cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2022, 1869, 119186.	1.9	4
160	Natural monoacetylenes studied by quantum-chemical chemistry. Spectroscopy, 2010, 24, 417-420.	0.8	3
161	Raman Imaging of Biomedical Samples. Springer Series in Surface Sciences, 2018, , 307-346.	0.3	3
162	Influence of fluorine substitution on nonbonding interactions in selected paraâ€'halogeno anilines. ChemPhysChem, 2021, 22, 2115-2127.	1.0	3

#	Article	IF	Citations
163	New chiral ECD-Raman spectroscopy of atropisomeric naphthalenediimides. Chemical Communications, 2022, 58, 4524-4527.	2.2	3
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