Malgorzata Baranska

List of Publications by Citations

177 papers	4,545 citations	34 h-index	61 g-index
187 ext. papers	5,259 ext. citations	4.5 avg, IF	5.74 L-index

#	Paper	IF	Citations
177	Identification and quantification of valuable plant substances by IR and Raman spectroscopy. *Vibrational Spectroscopy*, **2007**, 43, 13-25	2.1	596
176	Raman and infrared spectroscopy of carbohydrates: A review. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2017**, 185, 317-335	4.4	351
175	Characterisation of essential oil plants from Turkey by IR and Raman spectroscopy. *Vibrational Spectroscopy*, **2005**, 39, 249-256	2.1	166
174	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, 448-57	4.7	99
173	Tissue-specific accumulation of carotenoids in carrot roots. *Planta*, **2006**, 224, 1028-37	4.7	92
172	In situ simultaneous analysis of polyacetylenes, carotenoids and polysaccharides in carrot roots. *Journal of Agricultural and Food Chemistry*, **2005**, 53, 6565-71	5.7	89
171	Characterization of peppercorn, pepper oil, and pepper oleoresin by vibrational spectroscopy methods. *Journal of Agricultural and Food Chemistry*, **2005**, 53, 3358-63	5.7	80
170	Chemotaxonomic characterisation of essential oil plants by vibrational spectroscopy measurements. *Vibrational Spectroscopy*, **2004**, 35, 81-86	2.1	79
169	Identification of secondary metabolites in medicinal and spice plants by NIR-FT-Raman microspectroscopic mapping. *Analyst, The*, **2004**, 129, 926-30	5	77
168	In situ Raman imaging of astaxanthin in a single microalgal cell. *Analyst, The*, **2011**, 136, 1109-12	5	76
167	In situ Raman and IR spectroscopic analysis of indigo dye. *Analytical Methods*, **2010**, 2, 1372	3.2	69
166	Analytical Techniques in Lipidomics: State of the Art. *Critical Reviews in Analytical Chemistry*, **2017**, 47, 418-437	5.2	68
165	SERS-based monitoring of the intracellular pH in endothelial cells: the influence of the extracellular environment and tumour necrosis factor-□*Analyst, The*, **2015**, 140, 2321-9	5	67
164	Structural changes of carotenoid astaxanthin in a single algal cell monitored in situ by Raman spectroscopy. *Analytical Chemistry*, **2011**, 83, 7763-70	7.8	63
163	3D confocal Raman imaging of endothelial cells and vascular wall: perspectives in analytical spectroscopy of biomedical research. *Analyst, The*, **2013**, 138, 603-10	5	60
162	Recent Advances in Raman Analysis of Plants: Alkaloids, Carotenoids, and Polyacetylenes. *Current Analytical Chemistry*, **2013**, 9, 108-127	1.7	60
161	Spatial tissue distribution of polyacetylenes in carrot root. *Analyst, The*, **2005**, 130, 855-9	5	59

160	Imaging of lipids in atherosclerotic lesion in aorta from ApoE/LDLR-/- mice by FT-IR spectroscopy and Hierarchical Cluster Analysis. *Analyst, The*, **2011**, 136, 5247-55	5	58
159	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, 917-20	5	56
158	Raman imaging providing insights into chemical composition of lipid droplets of different size and origin: in hepatocytes and endothelium. *Analytical Chemistry*, **2014**, 86, 6666-74	7.8	55
157	Rapid approach to analyze biochemical variation in rat organs by ATR FTIR spectroscopy. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2014**, 118, 981-6	4.4	51
156	Visualization of the biochemical markers of atherosclerotic plaque with the use of Raman, IR and AFM. *Journal of Biophotonics*, **2014**, 7, 744-56	3.1	51
155	FT-IR Hyperspectral Imaging and Artificial Neural Network Analysis for Identification of Pathogenic Bacteria. *Analytical Chemistry*, **2018**, 90, 8896-8904	7.8	47
154	In situ flavonoid analysis by FT-Raman spectroscopy: identification, distribution, and quantification of aspalathin in green rooibos (Aspalathus linearis). *Analytical Chemistry*, **2006**, 78, 7716-21	7.8	45
153	Discrimination of carotenoid and flavonoid content in petals of pansy cultivars (Viola x wittrockiana) by FT-Raman spectroscopy. *Journal of Raman Spectroscopy*, **2011**, 42, 1240-1247	2.3	41
152	Raman spectroscopy analysis of lipid droplets content, distribution and saturation level in Non-Alcoholic Fatty Liver Disease in mice. *Journal of Biophotonics*, **2015**, 8, 597-609	3.1	39
151	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	3.8	38
150	Investigation of eucalyptus essential oil by using vibrational spectroscopy methods. *Vibrational Spectroscopy*, **2006**, 42, 341-345	2.1	38
149	FT-IR and FT-Raman study of selected pyridinephosphonocarboxylic acids. *Vibrational Spectroscopy*, **2003**, 31, 295-311	2.1	38
148	Rhodamine 6G conjugated to gold nanoparticles as labels for both SERS and fluorescence?studies on live endothelial cells. *Mikrochimica Acta*, **2015**, 182, 119-127	5.8	37
147	Pathological changes in the biochemical profile of the liver in atherosclerosis and diabetes assessed by Raman spectroscopy. *Analyst, The*, **2013**, 138, 3885-90	5	37
146	Comparative endothelial profiling of doxorubicin and daunorubicin in cultured endothelial cells. *Toxicology in Vitro*, **2015**, 29, 512-21	3.6	37
145	Nondestructive analysis of single rapeseeds by means of Raman spectroscopy. *Journal of Raman Spectroscopy*, **2007**, 38, 301-308	2.3	34
144	Spectroscopic studies on bioactive polyacetylenes and other plant components in wild carrot root. *Journal of Natural Products*, **2011**, 74, 1757-63	4.9	33
143	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	2.1	32

142	Carbamazepine polymorphs: Theoretical and experimental vibrational spectroscopy studies. *Vibrational Spectroscopy*, **2013**, 65, 12-23	2.1	32
141	High-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	2.3	32
140	Comparison of FTIR transmission and transfection substrates for canine liver cancer detection. *Analyst, The*, **2015**, 140, 2402-11	5	31
139	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	6	31
138	In situ detection of a single carotenoid crystal in a plant cell using Raman microspectroscopy. *Vibrational Spectroscopy*, **2011**, 56, 166-169	2.1	31
137	Raman mapping of caffeine alkaloid. *Vibrational Spectroscopy*, **2008**, 48, 153-157	2.1	31
136	Raman spectroscopy as a sensitive probe of soft tissue composition Imaging of cross-sections of various organs vs. single spectra of tissue homogenates. *TrAC - Trends in Analytical Chemistry*, **2016**, 85, 117-127	14.6	30
135	Attenuated total reflection Fourier transform infrared (ATR-FTIR) spectroscopy of a single endothelial cell. *Analyst, The*, **2012**, 137, 4135-9	5	29
134	Aggregation-Induced Resonance Raman Optical Activity (AIRROA): A New Mechanism for Chirality Enhancement. *Journal of Physical Chemistry B*, **2016**, 120, 4028-33	3.4	29
133	Endothelium in spots--high-content imaging of lipid rafts clusters in db/db mice. *PLoS ONE*, **2014**, 9, e106065	3.7	28
132	Comprehensive review of trends and analytical strategies applied for biological samples preparation and storage in modern medical lipidomics: State of the art. *TrAC - Trends in Analytical Chemistry*, **2017**, 86, 276-289	14.6	27
131	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, 3629-35	5.7	27
130	Aggregation-Induced Resonance Raman Optical Activity (AIRROA) and Time-Dependent Helicity Switching of Astaxanthin Supramolecular Assemblies. *Journal of Physical Chemistry B*, **2016**, 120, 7807-14	3.4	27
129	Plasma biomarkers of pulmonary hypertension identified by Fourier transform infrared spectroscopy and principal component analysis. *Analyst, The*, **2015**, 140, 2273-9	5	26
128	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, 514-24	4.7	26
127	Nondestructive Raman analysis of polyacetylenes in apiaceae vegetables. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 7647-53	5.7	26
126	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, 2412-21	5	25
125	Red blood cells polarize green laser light revealing hemoglobin's enhanced non-fundamental Raman modes. *ChemPhysChem*, **2014**, 15, 3963-8	3.2	25

124	Quantification of plaque area and characterization of plaque biochemical composition with atherosclerosis progression in ApoE/LDLR(-/-) mice by FT-IR imaging. *Analyst, The*, **2013**, 138, 6645-52	5	23
123	Lipid droplets formation in human endothelial cells in response to polyunsaturated fatty acids and 1-methyl-nicotinamide (MNA); confocal Raman imaging and fluorescence microscopy studies. *Journal of Biophotonics*, **2016**, 9, 396-405	3.1	23
122	Spectroscopic studies of anthracyclines: Structural characterization and in vitro tracking. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2016**, 169, 152-60	4.4	22
121	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. *Analytical Chemistry*, **2020**, 92, 15745-15756	7.8	22
120	Theoretical modeling of molecular spectra parameters of disubstituted diacetylenes. *Journal of Chemical Information and Modeling*, **2011**, 51, 283-95	6.1	21
119	3D Raman imaging of systemic endothelial dysfunction in the murine model of metastatic breast cancer. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 3381-7	4.4	20
118	Chiral Amplification in Nature: Studying Cell-Extracted Chiral Carotenoid Microcrystals via the Resonance Raman Optical Activity of Model Systems. *Angewandte Chemie - International Edition*, **2019**, 58, 8383-8388	16.4	19
117	Uptake of fatty acids by a single endothelial cell investigated by Raman spectroscopy supported by AFM. *Analyst, The*, **2018**, 143, 970-980	5	19
116	Raman Optical Activity and Raman spectroscopy of carbohydrates in solution. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2019**, 206, 597-612	4.4	19
115	A study on the nickel II-famotidine complexes. *Journal of Inorganic Biochemistry*, **2002**, 92, 112-20	4.2	19
114	A possible Fourier transform infrared-based plasma fingerprint of angiotensin-converting enzyme inhibitor-induced reversal of endothelial dysfunction in diabetic mice. *Journal of Biophotonics*, **2018**, 11, e201700044	3.1	18
113	Raman microscopy at the subcellular level: a study on early apoptosis in endothelial cells induced by Fas ligand and cycloheximide. *Analyst, The*, **2016**, 141, 1390-7	5	18
112	Micro-Attenuated Total Reflection Fourier Transform Infrared (Micro ATR FT-IR) Spectroscopic Imaging with Variable Angles of Incidence. *Applied Spectroscopy*, **2015**, 69, 1170-4	3.1	18
111	Non-destructive Raman analyses--polyacetylenes in plants. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2005**, 61, 1395-401	4.4	18
110	Prediction of ROA and ECD Related to Conformational Changes of Astaxanthin Enantiomers. *Journal of Physical Chemistry B*, **2015**, 119, 12193-201	3.4	17
109	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	2.3	17
108	FT-Raman spectroscopy□ rapid and reliable quantification protocol for the determination of natural indigo dye in Polygonum tinctorium. *Journal of Raman Spectroscopy*, **2011**, 42, 551-557	2.3	17
107	Raman spectroscopy-based insight into lipid droplets presence and contents in liver sinusoidal endothelial cells and hepatocytes. *Journal of Biophotonics*, **2019**, 12, e201800290	3.1	17

106	Raman microscopy as a novel tool to detect endothelial dysfunction. *Pharmacological Reports*, **2015**, 67, 736-43	3.9	16
105	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 Pt C, 1395-400	4.4	16
104	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	4.4	16
103	Experimental and calculated 1H, 13C and 31P NMR spectra of pyridine-2-phosphono-4-carboxylic acid. *Journal of Molecular Structure*, **2003**, 648, 215-224	3.4	16
102	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	2.1	15
101	Bisignate resonance Raman optical activity: a pseudo breakdown of the single electronic state model of RROA?. *Journal of Raman Spectroscopy*, **2014**, 45, 859-862	2.3	15
100	Secondary structure of proteins analyzed ex vivo in vascular wall in diabetic animals using FT-IR spectroscopy. *Analyst, The*, **2013**, 138, 7400-10	5	15
99	Application of FT-Raman spectroscopy for in situ detection of microorganisms on the surface of textiles. *Journal of Environmental Monitoring*, **2011**, 13, 2983-7		15
98	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, 245-56	4.4	14
97	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	2.3	14
96	Live endothelial cells imaged by Scanning Near-field Optical Microscopy (SNOM): capabilities and challenges. *Journal of Biophotonics*, **2017**, 10, 928-938	3.1	14
95	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, 940-5	4.4	14
94	On two alizarin polymorphs. *CrystEngComm*, **2012**, 14, 3667	3.3	14
93	Determination of alkaloids through infrared and Raman spectroscopy. *The Alkaloids Chemistry and Biology*, **2009**, 67, 217-55	4.8	14
92	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	3.4	13
91	Structure of supramolecular astaxanthin aggregates revealed by molecular dynamics and electronic circular dichroism spectroscopy. *Physical Chemistry Chemical Physics*, **2018**, 20, 18038-18046	3.6	13
90	Raman microspectroscopy of human aortic valves: investigation of the local and global biochemical changes associated with calcification in aortic stenosis. *Analyst, The*, **2015**, 140, 2164-70	5	12
89	The influence of sunflower and mustard leaf extracts on the germination of mustard seeds. *Journal of Thermal Analysis and Calorimetry*, **2009**, 95, 727-730	4.1	12

88	New solid state Ni(II)-famotidine square-planar complex: powder diffraction and spectroscopic studies. *Journal of Inorganic Biochemistry*, **2004**, 98, 995-1001	4.2	12
87	FT-IR Spectroscopic Imaging of Endothelial Cells Response to Tumor Necrosis Factor-□To Follow Markers of Inflammation Using Standard and High-Magnification Resolution. *Analytical Chemistry*, **2018**, 90, 3727-3736	7.8	11
86	Chiral Thiophene Sulfonamide-A Challenge for VOA Calculations. *Journal of Physical Chemistry A*, **2017**, 121, 6713-6726	2.8	11
85	Nicotinamide and trigonelline studied with surface-enhanced FT-Raman spectroscopy. *Vibrational Spectroscopy*, **2012**, 63, 469-476	2.1	11
84	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	2.3	10
83	Tunicamycin induced endoplasmic reticulum changes in endothelial cells investigated in vitro by confocal Raman imaging. *Analyst, The*, **2019**, 144, 6561-6569	5	10
82	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	5	10
81	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, 4491-6	5.7	10
80	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	3.4	10
79	Single crystal structure and vibrational study of pyridinephosphonocarboxylic acid. *Vibrational Spectroscopy*, **2003**, 32, 199-206	2.1	10
78	Recognition of the True and False Resonance Raman Optical Activity. *Angewandte Chemie - International Edition*, **2021**, 60, 21205-21210	16.4	10
77	Structural changes of □carotene and some retinoid pharmaceuticals induced by environmental factors. *Journal of Molecular Structure*, **2013**, 1037, 99-108	3.4	9
76	Vascular diseases investigated ex vivo by using Raman, FT-IR and complementary methods. *Pharmacological Reports*, **2015**, 67, 744-50	3.9	9
75	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	4.1	9
74	Resonance Raman Optical Activity Shows Unusual Structural Sensitivity for Systems in Resonance with Multiple Excited States: Vitamin B Case. *Journal of Physical Chemistry Letters*, **2020**, 11, 5037-5043	6.4	8
73	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	3.1	8
72	Spectroscopy-based characterization of Hb-NO adducts in human red blood cells exposed to NO-donor and endothelium-derived NO. *Analyst, The*, **2018**, 143, 4335-4346	5	8
71	Anti-atherosclerotic effects of pravastatin in brachiocephalic artery in comparison with en face aorta and aortic roots in ApoE/LDLR mice. *Pharmacological Reports*, **2017**, 69, 112-118	3.9	8

70	Vibrational analysis of cinchona alkaloids in the solid state and aqueous solutions. *Journal of Raman Spectroscopy*, **2015**, 46, 1041-1052	2.3	8
69	Lipid Droplet Composition Varies Based on Medaka Fish Eggs Development as Revealed by NIR-, MIR-, and Raman Imaging. *Molecules*, **2020**, 25,	4.8	7
68	Lipids, hemoproteins and carotenoids in alive Rhodotorula mucilaginosa cells under pesticide decomposition - Raman imaging study. *Chemosphere*, **2016**, 164, 1-6	8.4	7
67	Vibrational and theoretical study of selected diacetylenes. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2013**, 115, 493-503	4.4	7
66	Polypyridyl substituted BODIPY derivatives; water switchable imaging probes that exhibit halogen substituent dependent localisation in live cells. *RSC Advances*, **2017**, 7, 43743-43754	3.7	7
65	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	1.3	7
64	Toward Raman Subcellular Imaging of Endothelial Dysfunction. *Journal of Medicinal Chemistry*, **2021**, 64, 4396-4409	8.3	7
63	Raman imaging highlights biochemical heterogeneity of human eosinophils versus human eosinophilic leukaemia cell line. *British Journal of Haematology*, **2019**, 186, 685-694	4.5	6
62	ImmunoSERS microscopy for the detection of smooth muscle cells in atherosclerotic plaques. *Biosensors and Bioelectronics*, **2019**, 133, 79-85	11.8	6
61	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,	11.5	6
60	Impact of cell cycle dynamics on pathology recognition: Raman imaging study. *Journal of Biophotonics*, **2019**, 12, e201800152	3.1	6
59	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	10.3	6
58	Vibrational and theoretical study of diacetylenic acids. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2015**, 137, 652-60	4.4	5
57	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	6.9	5
56	Vibrational Spectroscopy as a Tool to Investigate Carotenoids **2016**, 75-102		5
55	A comprehensive approach to study liver tissue: Spectroscopic imaging and histochemical staining. *Biomedical Spectroscopy and Imaging*, **2013**, 2, 331-337	1.3	5
54	The uptake of gold nanoparticles by endothelial cells studied by surface-enhanced Raman spectroscopy. *Biomedical Spectroscopy and Imaging*, **2013**, 2, 183-189	1.3	5
53	FT-Raman study of (hydroxypyridin-3-yl-methyl)phosphonic acid with varying pH: 2D correlation method. *Vibrational Spectroscopy*, **2004**, 35, 233-237	2.1	5

52	General Overview on Vibrational Spectroscopy Applied in Biology and Medicine. *Challenges and Advances in Computational Chemistry and Physics*, **2014**, 3-14	0.7	5
51	Eosinophils and Neutrophils-Molecular Differences Revealed by Spontaneous Raman, CARS and Fluorescence Microscopy. *Cells*, **2020**, 9,	7.9	5
50	On Raman optical activity sign-switching between the ground and excited states leading to an unusual resonance ROA induced chirality. *Chemical Science*, **2020**, 12, 911-916	9.4	5
49	Absolute Configurations of Naturally Occurring [5]- and [3]-Ladderanoic Acids: Isolation, Chiroptical Spectroscopy, and Crystallography. *Journal of Natural Products*, **2018**, 81, 2654-2666	4.9	5
48	Raman optical activity: a powerful technique to investigate essential oil components. *Natural Product Communications*, **2010**, 5, 1417-20	0.9	5
47	Interplay between carotenoids, hemoproteins and the "life band" origin studied in live Rhodotorula mucilaginosa cells by means of Raman microimaging. *Analyst, The*, **2015**, 140, 1809-13	5	4
46	Carotenoids **2016**, 1-13		4
45	Diversity among endothelial cell lines revealed by Raman and Fourier-transform infrared spectroscopic imaging. *Analyst, The*, **2018**, 143, 4323-4334	5	4
44	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, 624-31	4.4	4
43	Recent Advances in Raman Analysis of Plants: Alkaloids, Carotenoids, and Polyacetylenes. *Current Analytical Chemistry*, **2012**, 9, 108-127	1.7	4
42	Imaging of macrophages by Surface Enhanced Raman Spectroscopy (SERS). *Biomedical Spectroscopy and Imaging*, **2013**, 2, 349-357	1.3	4
41	An effect of anticoagulants on the FTIR spectral profile of mice plasma. *Biomedical Spectroscopy and Imaging*, **2013**, 2, 317-330	1.3	4
40	Relationship between structure and entropy contributions in an anthraquinone mercapto derivative. *Journal of Molecular Modeling*, **2010**, 16, 1549-57	2	4
39	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	1.9	4
38	Vibrational and quantum-chemical study of pH dependent molecular structures of (hydroxypyridin-4-yl-methyl)phosphonic acid. *Vibrational Spectroscopy*, **2003**, 33, 83-92	2.1	4
37	Menadione-induced endothelial inflammation detected by Raman spectroscopy. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2021**, 1868, 118911	4.9	4
36	Raman spectroscopic features of primary cardiac microvascular endothelial cells (CMECs) isolated from the murine heart. *Analyst, The*, **2018**, 143, 6079-6086	5	4
35	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	5	3

34	(-)-R-mevalonolactone studied by ROA and SERS spectroscopy. *Chirality*, **2014**, 26, 453-61	2.1	3
33	Natural monoacetylenes studied by quantum-chemical chemistry. *Spectroscopy*, **2010**, 24, 417-420		3
32	Resonance Raman Optical Activity Spectroscopy in Probing Structural Changes Invisible to Circular Dichroism Spectroscopy: A Study on Truncated Vitamin B Derivatives. *Molecules*, **2020**, 25,	4.8	3
31	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	5	3
30	Chloroquine-Induced Accumulation of Autophagosomes and Lipids in the Endothelium. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	3
29	Vibrational Raman optical activity of camphor: The importance of electric-dipole–electric-quadrupole polarizability contribution. *Journal of Raman Spectroscopy*, **2020**, 51, 669-679	2.3	2
28	Raman Imaging of Biomedical Samples. *Springer Series in Surface Sciences*, **2018**, 307-346	0.4	2
27	Fruits and Vegetables **2009**, 321-353		2
26	How can fluorine directly and indirectly affect the hydrogen bonding in molecular systems? - A case study for monofluoroanilines. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy* , **2021**, 252, 119536	4.4	2
25	Lipid Droplets Formation Represents an Integral Component of Endothelial Inflammation Induced by LPS. *Cells*, **2021**, 10,	7.9	2
24	Monitoring excited-state relaxation in a molecular marker in live cells-a case study on astaxanthin. *Chemical Communications*, **2021**, 57, 6392-6395	5.8	2
23	Influence of Fluorine Substitution on Nonbonding Interactions in Selected Para-Halogeno Anilines. *ChemPhysChem*, **2021**, 22, 2115-2127	3.2	2
22	Chiral recognition a stereodynamic vanadium probe using the electronic circular dichroism effect in differential Raman scattering. *Physical Chemistry Chemical Physics*, **2021**, 23, 23336-23340	3.6	2
21	Raman optical activity of cinchona alkaloids. *Biomedical Spectroscopy and Imaging*, **2013**, 2, 359-365	1.3	1
20	Applications of Vibrational Spectroscopy to Oilseeds Analysis **2010**,		1
19	The sequence of deprotonation of pyridine-6-phospho-4-carboxylic acid. *Computational and Theoretical Chemistry*, **2009**, 905, 81-85		1
18	1H and 13C NMR spectroscopy of structural isomers of pyridinephosphonic acids. *Journal of Molecular Structure*, **2008**, 876, 278-287	3.4	1
17	Vibrational and structural analysis of (hydroxypyridin-3-yl-methyl)phosphonic acid. *Journal of Molecular Structure*, **2003**, 658, 229-239	3.4	1

16	Towards Raman-Based Screening of Acute Lymphoblastic Leukemia-Type B (B-ALL) Subtypes. *Cancers*, **2021**, 13,	6.6	1
15	Labeled vs. Label-Free Raman Imaging of Lipids in Endothelial Cells of Various Origins. *Molecules*, **2020**, 25,	4.8	1
14	Electronic Circular Dichroism of the Cas9 Protein and gRNA:Cas9 Ribonucleoprotein Complex. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
13	In Situ Studies of Carotenoids in Plants and Animals **2016**, 131-146		1
12	Small and Large Molecules Investigated by Raman Spectroscopy. *Challenges and Advances in Computational Chemistry and Physics*, **2019**, 161-198	0.7	1
11	Primary murine hepatocytes exposed to fatty acids analyzed by Raman and infrared microscopy. *Clinical Spectroscopy*, **2021**, 3, 100007	16	1
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