

# Howell Edwards

## List of Publications by Year in descending order

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314  
papers

10,892  
citations

28274

55  
h-index

56724

83  
g-index

369  
all docs

369  
docs citations

369  
times ranked

7678  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Decade of Raman Spectroscopy in Art and Archaeology. <i>Chemical Reviews</i> , 2007, 107, 675-686.	47.7	321
2	FT Raman microscopy of untreated natural plant fibres. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 2383-2392.	3.9	279
3	Raman spectra of carotenoids in natural products. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2207-2212.	3.9	247
4	Carotenes and carotenoids in natural biological samples: a Raman spectroscopic analysis. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 642-650.	2.5	204
5	FT Raman spectroscopic study of calcium-rich and magnesium-rich carbonate minerals. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2273-2280.	3.9	192
6	Understanding the Application of Raman Spectroscopy to the Detection of Traces of Life. <i>Astrobiology</i> , 2010, 10, 229-243.	3.0	167
7	Antarctic ecosystems as models for extraterrestrial surface habitats. <i>Planetary and Space Science</i> , 2000, 48, 1065-1075.	1.7	157
8	Raman spectroscopy in astrobiology. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 384, 100-113.	3.7	144
9	Raman Spectroscopy of Microbial Pigments. <i>Applied and Environmental Microbiology</i> , 2014, 80, 3286-3295.	3.1	140
10	Analysis of seized drugs using portable Raman spectroscopy in an airport environment—a proof of principle study. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 873-880.	2.5	139
11	Comparative study of mobile Raman instrumentation for art analysis. <i>Analytica Chimica Acta</i> , 2007, 588, 108-116.	5.4	138
12	The detection of drugs of abuse in fingerprints using Raman spectroscopy I: latent fingerprints. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 563-568.	3.9	132
13	Raman spectroscopic detection of key biomarkers of cyanobacteria and lichen symbiosis in extreme Antarctic habitats: Evaluation for Mars Lander missions. <i>Icarus</i> , 2005, 174, 560-571.	2.5	131
14	The detection of drugs of abuse in fingerprints using Raman spectroscopy II: cyanoacrylate-fumed fingerprints. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 1725-1730.	3.9	122
15	Raman spectroscopic analysis of pigments and substrata in prehistoric rock art. <i>Journal of Molecular Structure</i> , 2000, 550-551, 245-256.	3.6	115
16	A novel miniature confocal microscope/Raman spectrometer system for biomolecular analysis on future Mars missions after Antarctic trials. <i>Journal of Raman Spectroscopy</i> , 2000, 31, 633-635.	2.5	114
17	In-process vibrational spectroscopy and ultrasound measurements in polymer melt extrusion. <i>Polymer</i> , 2003, 44, 5937-5949.	3.8	113
18	Limits of Life and the Habitability of Mars: The ESA Space Experiment BIOMEX on the ISS. <i>Astrobiology</i> , 2019, 19, 145-157.	3.0	111

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19	Application of portable Raman instruments for fast and non-destructive detection of minerals on outcrops. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 73, 410-419.	3.9	99
20	Pigmentation as a survival strategy for ancient and modern photosynthetic microbes under high ultraviolet stress on planetary surfaces. <i>International Journal of Astrobiology</i> , 2002, 1, 39-49.	1.6	98
21	Evaluation of portable Raman spectrometer with 1064 nm excitation for geological and forensic applications. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 86, 320-327.	3.9	94
22	Fourier-transform Raman spectroscopic study of natural waxes and resins. I. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1996, 52, 1639-1648.	3.9	92
23	Bacterioruberin and salinixanthin carotenoids of extremely halophilic Archaea and Bacteria: A Raman spectroscopic study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 106, 99-103.	3.9	87
24	Raman and FTIR microspectroscopic study of the alteration of Chinese tung oil and related drying oils during ageing. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 400, 1173-1180.	3.7	86
25	Vibrational Raman spectroscopic study of scytonemin, the UV-protective cyanobacterial pigment. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2000, 56, 193-200.	3.9	85
26	Raman spectroscopic analysis of cyanobacterial gypsum halotrophs and relevance for sulfate deposits on Mars. <i>Analyst</i> , 2005, 130, 917.	3.5	84
27	A comprehensive micro-Raman spectroscopic study of prehistoric rock paintings from the Sierra de las Cuerdas, Cuenca, Spain. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 972-984.	2.5	81
28	Fourier-transform Raman spectroscopy of ivory: II. Spectroscopic analysis and assignments. <i>Journal of Molecular Structure</i> , 1997, 435, 49-58.	3.6	78
29	FT-Raman spectrum of cotton: a polymeric biomolecular analysis. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1994, 50, 807-811.	0.1	76
30	Fast detection of sulphate minerals (gypsum, anglesite, baryte) by a portable Raman spectrometer. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 1082-1086.	2.5	74
31	The Miniaturized Raman System and Detection of Traces of Life in Halite from the Atacama Desert: Some Considerations for the Search for Life Signatures on Mars. <i>Astrobiology</i> , 2012, 12, 1095-1099.	3.0	74
32	Potential applications of FT-Raman spectroscopy for dermatological diagnostics. <i>Journal of Molecular Structure</i> , 1995, 347, 379-387.	3.6	73
33	Fourier-transform Raman spectroscopic study of unsaturated and saturated waxes. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 2685-2694.	3.9	73
34	The ExoMars Raman spectrometer and the identification of biogeological spectroscopic signatures using a flight-like prototype. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 1723-1731.	3.7	73
35	Fourier-transform Raman spectroscopic study of human hair. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 1021-1031.	3.9	71
36	Raman spectroscopy of sulfonated polystyrene resins. <i>Vibrational Spectroscopy</i> , 2000, 24, 213-224.	2.2	67

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37	Interplanetary Transfer of Photosynthesis: An Experimental Demonstration of A Selective Dispersal Filter in Planetary Island Biogeography. <i>Astrobiology</i> , 2007, 7, 1-9.	3.0	66
38	Diffuse reflection FTIR spectral database of dyes and pigments. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 386, 2183-2191.	3.7	65
39	Phototrophic Community in Gypsum Crust from the Atacama Desert Studied by Raman Spectroscopy and Microscopic Imaging. <i>Geomicrobiology Journal</i> , 2013, 30, 399-410.	2.0	65
40	Fourier transform-Raman spectroscopy of amber. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1996, 52, 1119-1125.	3.9	64
41	Fourier-transform Raman spectroscopy of mammalian and avian keratotic biopolymers. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 81-90.	3.9	64
42	Minium; FT-Raman non-destructive analysis applied to an historical controversy. <i>Analyst, The</i> , 1999, 124, 1323-1326.	3.5	64
43	Raman spectroscopy as a tool for the non-destructive identification of organic minerals in the geological record. <i>Organic Geochemistry</i> , 2008, 39, 371-386.	1.8	64
44	Identification of Î²-carotene in an evaporitic matrixâ€”evaluation of Raman spectroscopic analysis for astrobiological research on Mars. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 1967-1975.	3.7	64
45	Raman spectra of oxalates in lichen encrustations on Renaissance frescoes. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1991, 47, 1531-1539.	0.1	63
46	Critical evaluation of a handheld Raman spectrometer with near infrared (785 nm) excitation for field identification of minerals. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 80, 36-40.	3.9	63
47	Raman spectroscopic analysis of pigments from dynastic Egyptian funerary artefacts. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 786-795.	2.5	62
48	Identification of Morphological Biosignatures in Martian Analogue Field Specimens Using <i>In Situ</i> Planetary Instrumentation. <i>Astrobiology</i> , 2008, 8, 119-156.	3.0	62
49	Raman spectroscopic studies of a 13th century polychrome statue: identification of a 'forgotten' pigment. <i>Journal of Raman Spectroscopy</i> , 2000, 31, 407-413.	2.5	61
50	Potential and limits of Raman spectroscopy for carotenoid detection in microorganisms: implications for astrobiology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140199.	3.4	61
51	FT-Raman spectroscopic analysis of endolithic microbial communities from Beacon sandstone in Victoria Land, Antarctica. <i>Antarctic Science</i> , 1998, 10, 63-74.	0.9	60
52	FT-Raman spectroscopy of gums of technological significance. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1998, 54, 903-920.	3.9	59
53	Fourier transform-Raman spectroscopic study of natural resins of archaeological interest. <i>Biopolymers</i> , 2002, 67, 129-141.	2.4	59
54	FT-Raman and infrared spectroscopic study of aragonite-strontianite (Ca <sub>x</sub> Sr <sub>1-x</sub> CO <sub>3</sub> ) solid solution. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 2347-2362.	3.9	57

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55	Raman spectroscopy of endoliths from Antarctic cold desert environments. <i>Analyst, The</i> , 2005, 130, 156.	3.5	57
56	The conservational heritage of wall paintings and buildings : an FT-Raman spectroscopic study of prehistoric, Roman, mediaeval and Renaissance lime substrates and mortars. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 985-992.	2.5	57
57	Raman Spectroscopic Analysis of Geological and Biogeological Specimens of Relevance to the ExoMars Mission. <i>Astrobiology</i> , 2013, 13, 543-549.	3.0	57
58	Destruction of Raman biosignatures by ionising radiation and the implications for life detection on Mars. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 131-144.	3.7	56
59	A critical comparison of some Raman spectroscopic techniques for studies of human stratum corneum. <i>Pharmaceutical Research</i> , 1993, 10, 1642-1647.	3.5	55
60	Comparative FT-Raman spectroscopy of Xanthoria lichen-substratum systems from temperate and antarctic habitats. <i>Soil Biology and Biochemistry</i> , 1998, 30, 1947-1953.	8.8	55
61	Preliminary Raman microscopic analyses of a lichen encrustation involved in the biodeterioration of renaissance frescoes in Central Italy. <i>International Biodeterioration</i> , 1991, 27, 1-9.	0.2	54
62	The role of Raman spectroscopy as an astrobiological tool in the exploration of Mars. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 441-457.	2.5	54
63	Assessment of Raman spectroscopy as a tool for the non-destructive identification of organic minerals and biomolecules for Mars studies. <i>Planetary and Space Science</i> , 2009, 57, 606-613.	1.7	54
64	On the definition of Raman spectroscopic detection limits for the analysis of biomarkers in solid matrices. <i>Planetary and Space Science</i> , 2012, 62, 48-54.	1.7	54
65	Ivory and simulated ivory artefacts: Fourier transform Raman diagnostic study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1995, 51, 2073-2081.	3.9	53
66	Acquisition of Raman spectra of amino acids using portable instruments: Outdoor measurements and comparison. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2010, 77, 978-983.	3.9	53
67	Comparative Raman microscopy of a Martian meteorite and Antarctic lithic analogues. <i>Planetary and Space Science</i> , 1999, 47, 353-362.	1.7	52
68	Raman spectroscopy of different types of Mexican copal resins. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2221-2229.	3.9	52
69	Probing history with Raman spectroscopy. <i>Analyst, The</i> , 2004, 129, 870.	3.5	52
70	The Rio Tinto Mars Analogue site: An extremophilic Raman spectroscopic study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 1133-1137.	3.9	52
71	Biomarkers and their Raman spectroscopic signatures: a spectral challenge for analytical astrobiology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140193.	3.4	52
72	Analytical Raman spectroscopic study of cacao seeds and their chemical extracts. <i>Analytica Chimica Acta</i> , 2005, 538, 175-180.	5.4	51

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73	Anataseâ€”a pigment in ancient artwork or a modern usurper?. Analytical and Bioanalytical Chemistry, 2006, 384, 1356-1365.	3.7	51
74	Fourier transform Raman spectroscopy: evaluation as a non-destructive technique for studying the degradation of human hair from archaeological and forensic environments. Journal of Raman Spectroscopy, 1999, 30, 367-373.	2.5	50
75	Raman spectroscopy of the Dukhan sabkha: identification of geological and biogeological molecules in an extreme environment. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 3099-3107.	3.4	50
76	Environmental UV Radiation: Biological Strategies for Protection and Avoidance. , 2002, , 245-260.		50
77	Lichen biodeterioration under different microclimates: an FT Raman spectroscopic study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1995, 51, 2091-2100.	3.9	49
78	Raman Spectroscopic Protocol for the Molecular Recognition of Key Biomarkers in Astrobiological Exploration. Origins of Life and Evolution of Biospheres, 2004, 34, 3-11.	1.9	49
79	Diagnostic Raman spectroscopy for the forensic detection of biomaterials and the preservation of cultural heritage. Analytical and Bioanalytical Chemistry, 2005, 382, 1398-1406.	3.7	49
80	NIR-FT-Raman spectroscopic analytical characterization of the fruits, seeds, and phytotherapeutic oils from rosehips. Analytical and Bioanalytical Chemistry, 2008, 392, 1489-1496.	3.7	49
81	Raman spectroscopy and security applications: the detection of explosives and precursors on clothing. Journal of Raman Spectroscopy, 2009, 40, 2009-2014.	2.5	49
82	FT-Raman spectroscopic investigation of a pseudopolymorphic transition in caffeine hydrate. Journal of Molecular Structure, 1998, 440, 97-104.	3.6	48
83	FT-Raman spectroscopy of lichens on dolomitic rocks: an assessment of metal oxalate formation. Analyst, The, 2003, 128, 1218.	3.5	48
84	The Nature of a Whewellite-Rich Rock Crust Associated with Pictographs in Southwestern Texas. Studies in Conservation, 1999, 44, 91.	1.1	46
85	Fourier-transform Raman characterization of brazilwood trees and substitutes. Analyst, The, 2003, 128, 82-87.	3.5	46
86	Raman spectroscopic analysis of dragon's blood resinsâ€”basis for distinguishing between Dracaena (Convallariaceae), Daemonorops (Palmae) and Croton (Euphorbiaceae). Analyst, The, 2004, 129, 134-138.	3.5	46
87	Morphological biosignatures from relict fossilised sedimentary geological specimens: a Raman spectroscopic study. Journal of Raman Spectroscopy, 2007, 38, 1352-1361.	2.5	45
88	A Raman spectroscopic study of a fulgurite. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 3087-3097.	3.4	45
89	Analysis of the rock accretions in the lower pecos region of southwest texas. Geoarchaeology - an International Journal, 1995, 10, 43-63.	1.5	44
90	The effect of laser wavelength on the Raman Spectra of phenanthrene, chrysene, and tetracene: Implications for extra-terrestrial detection of polyaromatic hydrocarbons. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 76, 1-5.	3.9	44

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91	Comparison of Fourier transform Raman spectra of mammalian and reptilian skin. <i>Analyst, The</i> , 1994, 119, 563.	3.5	43
92	Caput mortuum: spectroscopic and structural studies of an ancient pigment. <i>Analyst, The</i> , 2002, 127, 536-541.	3.5	43
93	Raman spectroscopic analysis of an English soft-paste porcelain plaque-mounted table. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 656-661.	2.5	43
94	Raman spectroscopy of hot desert, high altitude epilithic lichens. <i>Analyst, The</i> , 2005, 130, 730.	3.5	43
95	Ab initio calculations of scytonemin derivatives of relevance to extremophile characterization by Raman spectroscopy. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 3193-3203.	3.4	43
96	Raman spectroscopic approach to analytical astrobiology: the detection of key geological and biomolecular markers in the search for life. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 3059-3065.	3.4	43
97	Raman spectra of pure biomolecules obtained using a handheld instrument under cold high-altitude conditions. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 397, 2753-2760.	3.7	43
98	On the interpretation of the Raman spectra of Maya Blue: a review on the literature data. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 86-96.	2.5	42
99	A spectroscopy and isotope study of sediments from the Antarctic Dry Valleys as analogues for potential paleolakes on Mars. <i>International Journal of Astrobiology</i> , 2003, 2, 273-287.	1.6	41
100	Raman spectroscopic investigation of cocaine hydrochloride on human nail in a forensic context. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 1159-1166.	3.7	41
101	Fourier-transform Raman spectra of ivory III: identification of mammalian specimens. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 2403-2409.	3.9	40
102	Romano-British wall-paintings II: Raman spectroscopic analysis of two villa sites at Nether Heyford, Northants. <i>Analytica Chimica Acta</i> , 2003, 484, 211-221.	5.4	40
103	Raman spectroscopic characterisations and analytical discrimination between caffeine and demethylated analogues of pharmaceutical relevance. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 1453-1459.	3.9	40
104	Application of FT-Raman spectroscopy to the characterisation of parchment and vellum, I; novel information for paleographic and historiated manuscript studies. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2001, 57, 1223-1234.	3.9	39
105	Romano-British wall-painting fragments: a spectroscopic analysis. <i>Analyst, The</i> , 2002, 127, 277-281.	3.5	39
106	Detection of explosives on human nail using confocal Raman microscopy. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 144-149.	2.5	39
107	Analytical Raman spectroscopic discrimination between yellow pigments of the Renaissance. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 80, 14-20.	3.9	39
108	Raman spectroscopic detection of biomolecular markers from Antarctic materials: evaluation for putative Martian habitats. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2277-2290.	3.9	38



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109	Biological modification of haematite in Antarctic cryptoendolithic communities. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 470-474.	2.5	38
110	Non-destructive analysis of pigments and other organic compounds in lichens using Fourier-transform Raman spectroscopy: a study of Antarctic epilithic lichens. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2301-2309.	3.9	37
111	Novel spectroscopic deconvolution procedure for complex biological systems: vibrational components in the FT-Raman spectra of ice-man and contemporary skin. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995, 91, 3883.	1.7	36
112	Raman spectroscopic analysis of a unique linen artefact: the HMS Victory Trafalgar sail. <i>Journal of Raman Spectroscopy</i> , 2006, 37, 1193-1200.	2.5	36
113	Raman spectroscopic studies of acid dissociation in sulfonated polystyrene resins. <i>Journal of Molecular Structure</i> , 2001, 595, 111-125.	3.6	35
114	Ancient biodeterioration: an FT-Raman spectroscopic study of mammoth and elephant ivory. <i>Analytical and Bioanalytical Chemistry</i> , 2005, 383, 713-720.	3.7	34
115	Raman microspectroscopic studies of amber resins with insect inclusions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 1089-1095.	3.9	34
116	Lichen colonization of an active volcanic environment: a Raman spectroscopic study of extremophile biomolecular protective strategies. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 63-67.	2.5	34
117	In situ detection of cocaine hydrochloride in clothing impregnated with the drug using benchtop and portable Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 938-943.	2.5	34
118	The rotational and rotation-vibrational Raman spectra of HCN and DCN. <i>Journal of Raman Spectroscopy</i> , 1974, 2, 407-421.	2.5	32
119	Protective pigmentation in UVB-screened Antarctic lichens studied by Fourier transform Raman spectroscopy: an extremophile bioresponse to radiation stress. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 463-469.	2.5	32
120	Comparison of near infrared laser excitation wavelengths and its influence on the interrogation of seized drugs of abuse by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 1974-1983.	2.5	32
121	Raman spectroscopy of volcanic lavas and inclusions of relevance to astrobiological exploration. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 3127-3135.	3.4	32
122	FT-Raman spectroscopic study of organic residues from 2300-year-old Vietnamese burial jars. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 2373-2382.	3.9	31
123	Application of Fourier transform Raman spectroscopy to the characterization of parchment and vellum. II - Effect of biodeterioration and chemical deterioration on spectral interpretation. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 754-760.	2.5	31
124	Nondestructive analysis of ancient Egyptian funerary relics by Raman spectroscopic techniques. <i>Analytica Chimica Acta</i> , 2004, 503, 223-233.	5.4	31
125	Practical Considerations for the Field Application of Miniaturized Portable Raman Instrumentation for the Identification of Minerals. <i>Applied Spectroscopy</i> , 2013, 67, 767-778.	2.2	31
126	Study of carotenoids in cyanobacteria by Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 150, 373-380.	3.9	31



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127	Impact shocked rocks as protective habitats on an anoxic early Earth. <i>International Journal of Astrobiology</i> , 2015, 14, 115-122.	1.6	31
128	FT-Raman spectroscopy of avian mummified tissue of archaeological relevance. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1999, 55, 2691-2703.	3.9	30
129	Lichen biodeterioration of ecclesiastical monuments in northern Spain. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 1229-1237.	3.9	30
130	Raman microprobe analysis of stucco samples from the buildings of Maya Classic Copan. <i>Journal of Archaeological Science</i> , 2007, 34, 666-673.	2.4	30
131	FT-Raman spectroscopic studies of metal oxalates and their mixtures. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1994, 50, 1891-1898.	0.1	29
132	Near-infrared Fourier transform Raman spectroscopy of skin samples from the 'Tomb of the Two Brothers,' Khnum-Nakht and Nekht-Ankh, XIIth dynasty Egyptian mummies (ca 2000BC). <i>Journal of Raman Spectroscopy</i> , 2003, 34, 375-379.	2.5	29
133	Identification of reddish pigments in octocorals by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 653-658.	2.5	29
134	Raman spectroscopy on Mars: identification of geological and bio-geological signatures in Martian analogues using miniaturized Raman spectrometers. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140204.	3.4	29
135	Raman spectroscopy as tool for the characterization of thio-polyaromatic hydrocarbons in organic minerals. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 1065-1069.	3.9	28
136	Raman spectroscopic analysis of a ternet: a resin archaeological artefact in need of conservation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 1505-1513.	3.9	27
137	Raman spectroscopy of natron: shedding light on ancient Egyptian mummification. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 388, 683-689.	3.7	27
138	A Raman spectroscopic and combined analytical approach to the restoration of severely damaged frescoes: the Palomino project. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 444-452.	2.5	27
139	Application of portable Raman spectroscopy and benchtop spatially offset Raman spectroscopy to interrogate concealed biomaterials. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 1875-1880.	2.5	27
140	Raman spectroscopic study of amorphous and crystalline hydrocarbons from soils, peats and lignite. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2390-2398.	3.9	26
141	Life in the sabkha: Raman spectroscopy of halotrophic extremophiles of relevance to planetary exploration. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 385, 46-56.	3.7	26
142	Raman and SEM analysis of a biocolonised hot spring travertine terrace in Svalbard, Norway. <i>Geochemical Transactions</i> , 2007, 8, 8.	0.7	26
143	Fourier-transform Raman spectroscopic study of frankincense and myrrh. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 2393-2401.	3.9	25
144	Raman spectroscopic and SEM study of cinnabar from Herod's palace and its likely origin. <i>Analyst, The</i> , 2002, 127, 293-296.	3.5	25

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145	Raman spectroscopy of desert varnishes and their rock substrata. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 475-479.	2.5	24
146	Raman spectra of organic compounds kladnoite (C <sub>6</sub> H <sub>4</sub> (CO) <sub>2</sub> NH) and hoelite (C <sub>14</sub> H <sub>8</sub> O <sub>2</sub> )—Rare sublimation products crystallising on self-ignited coal heaps. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 1053-1057.	3.9	24
147	Identification of the date rape drug GHB and its precursor GBL by Raman spectroscopy. <i>Drug Testing and Analysis</i> , 2009, 1, 25-31.	2.6	24
148	The detection of biomarkers in evaporite matrices using a portable Raman instrument under Alpine conditions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 80, 8-13.	3.9	24
149	Colour diversification in octocorals based on conjugated polyenes: A Raman spectroscopic view. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 560-566.	2.5	24
150	Raman spectroscopy meets extremophiles on Earth and Mars: studies for successful search of life. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140207.	3.4	24
151	Raman spectroscopy of benzenesulfonic and 4-toluenesulfonic acids dissolved in dimethylsulfoxide. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 1533-1542.	3.9	23
152	Raman spectroscopic analyses of preserved historical specimens of human hair attributed to Robert Stephenson and Sir Isaac Newton. <i>Analyst, The</i> , 2004, 129, 956.	3.5	23
153	Raman spectroscopic study of mellite—A naturally occurring aluminium benzenehexacarboxylate from lignite—Claystone series of the tertiary age. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2006, 65, 229-234.	3.9	23
154	Romano-British wall paintings: Raman spectroscopic analysis of fragments from two urban sites of early military colonisation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 73, 553-560.	3.9	23
155	Characterization of paint and varnish on a medieval Coptic-Byzantine icon: Novel usage of dammar resin. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 73, 566-575.	3.9	23
156	Reduced and oxidised scytonemin: Theoretical protocol for Raman spectroscopic identification of potential key biomolecules for astrobiology. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 117, 72-77.	3.9	23
157	The vibrational spectrum of trifluoromethanesulphonic acid, CF <sub>3</sub> SO <sub>3</sub> H, and the determination of its degrees of dissociation in aqueous solution by Raman spectroscopy. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1989, 45, 715-719.	0.1	22
158	Raman spectrometric discrimination of flexirubin pigments from two genera of <i>Bacteroidetes</i> . <i>FEMS Microbiology Letters</i> , 2013, 348, 97-102.	1.8	22
159	Raman spectroscopy and electronic microscopy structural studies of Caucasian and Afro human hair. <i>Heliyon</i> , 2019, 5, e01582.	3.2	22
160	Raman spectroscopic analysis of human remains from a seventh century cist burial on Anglesey, UK. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 821-828.	3.7	21
161	Raman spectroscopic study of a post-medieval wall painting in need of conservation. <i>Analytical and Bioanalytical Chemistry</i> , 2005, 383, 312-321.	3.7	20
162	The de BrÃ©cy Madonna and Child tondo painting: a Raman spectroscopic analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 837-846.	3.7	20

#	ARTICLE	IF	CITATIONS
163	Vibrational spectroscopic characterisation of salmeterol xinafoate polymorphs and a preliminary investigation of their transformation using simultaneous in situ portable Raman spectroscopy and differential scanning calorimetry. <i>Analytica Chimica Acta</i> , 2008, 620, 103-112.	5.4	20
164	Selection of Portable Spectrometers for Planetary Exploration: A Comparison of 532nm and 785nm Raman Spectroscopy of Reduced Carbon in Archean Cherts. <i>Astrobiology</i> , 2015, 15, 420-429.	3.0	20
165	Raman spectroscopy of sediments from the Antarctic Dry Valleys; an analogue study for exploration of potential paleolakes on Mars. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 458-462.	2.5	19
166	Insight into thermally induced solid-state polymorphic transformation of sulfathiazole using simultaneous in situ Raman spectroscopy and differential scanning calorimetry. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 887-892.	2.5	19
167	A study of 18th century Coptic icons of Ibrahim Al-Nasekh using Raman microscopy and gas chromatography-mass spectrometry: Indigo as an organic pigment in Egyptian panel paintings. <i>Vibrational Spectroscopy</i> , 2012, 62, 98-109.	2.2	19
168	Microorganism Response to Stressed Terrestrial Environments: A Raman Spectroscopic Perspective of Extremophilic Life Strategies. <i>Life</i> , 2013, 3, 276-294.	2.4	19
169	A definitive analytical spectroscopic study of Indian yellow, an ancient pigment used for dating purposes. <i>Forensic Science International</i> , 2017, 271, 1-7.	2.2	19
170	Near-infrared Raman spectra of terrestrial minerals: relevance for the remote analysis of Martian spectral signatures. <i>Vibrational Spectroscopy</i> , 2005, 39, 88-94.	2.2	18
171	A novel extremophile strategy studied by Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 1126-1132.	3.9	18
172	Biogeological Analysis of Desert Varnish Using Portable Raman Spectrometers. <i>Astrobiology</i> , 2015, 15, 442-452.	3.0	18
173	FT Raman spectroscopic study of the wavenumber region 2800-2630 cm <sup>-1</sup> of selected organic compounds. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1995, 51, 2057-2066.	3.9	17
174	Analytical Raman spectroscopy in a forensic art context: The non-destructive discrimination of genuine and fake lapis lazuli. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 121, 415-419.	3.9	17
175	Raman spectroscopic study of the <i>Chromobacterium violaceum</i> pigment violacein using multiwavelength excitation and DFT calculations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 151, 459-467.	3.9	17
176	18th and 19th Century Porcelain Analysis. , 2020, , .		17
177	The Diversity of Linear Conjugated Polyenes and Colours in Nature: Raman Spectroscopy as a Diagnostic Tool. <i>ChemPhysChem</i> , 2021, 22, 231-249.	2.1	17
178	Applications of Raman spectroscopy to skin research.. <i>Skin Research and Technology</i> , 1997, 3, 147-153.	1.6	16
179	Raman spectroscopic study of lichen-assisted weathering of sandstone outcrops in the High Atlas Mountains, Morocco. <i>Journal of Raman Spectroscopy</i> , 2002, 33, 449-454.	2.5	16
180	Combined FT-Raman spectroscopic and mass spectrometric study of ancient Egyptian sarcophagal fragments. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 829-836.	3.7	16

#	ARTICLE	IF	CITATIONS
181	Raman spectroscopic analysis of the enigmatic Comper pigments. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 2255-2262.	3.7	16
182	A Raman microscopic and gas chromatographic-mass spectrometric study of two 19th century overlapping Coptic icons of Anastasy Al-Romi. <i>Vibrational Spectroscopy</i> , 2008, 48, 69-75.	2.2	16
183	Iron-Scytonemin Complexes: DFT Calculations on New UV Protectants for Terrestrial Cyanobacteria and Astrobiological Implications. <i>Astrobiology</i> , 2010, 10, 711-716.	3.0	16
184	Raman Spectroscopic Investigation of Carotenoids in Oils from Amazonian Products. <i>Spectroscopy Letters</i> , 2013, 46, 122-127.	1.0	16
185	Detection of pigments of halophilic endoliths from gypsum: Raman portable instrument and European Space Agency's prototype analysis. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140203.	3.4	16
186	Raman spectroscopy in art and archaeology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20160052.	3.4	16
187	Porcelain shards from Portuguese wrecks: Raman spectroscopic analysis of marine archaeological ceramics. <i>Heritage Science</i> , 2017, 5, .	2.3	16
188	The enamels of the first (soft-paste) European blue-and-white porcelains: Rouen, Saint-Cloud and Paris factories: Complementarity of Raman and X-ray fluorescence analyses with mobile instruments to identify the cobalt ore. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 2246-2261.	2.5	16
189	FT-Raman spectroscopic analysis of an Antarctic endolith. <i>International Journal of Astrobiology</i> , 2002, 1, 349-355.	1.6	15
190	Raman spectroscopy of natural accumulated paraffins from rocks: Evenkite, ozokerite and hatchetine. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 68, 1143-1148.	3.9	15
191	Discrimination of zeolites and beryllium containing silicates using portable Raman spectroscopic equipment with near-infrared excitation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 86, 341-346.	3.9	15
192	Raman spectroscopy as a non-destructive screening technique for studying white substances from archaeological and forensic burial contexts. <i>Journal of Raman Spectroscopy</i> , 2014, 45, 1301-1308.	2.5	15
193	Illumination of a mediaeval mystery: the FT-Raman spectroscopic analysis of red pigment from a mediaeval corbel in the church St Clement of Rome, Fiskerton. <i>Journal of Molecular Structure</i> , 2003, 661-662, 271-277.	3.6	14
194	Raman spectroscopic study of the photoprotection of extremophilic microbes against ultraviolet radiation. <i>International Journal of Astrobiology</i> , 2006, 5, 313-318.	1.6	14
195	Vibrational dynamics of hydrogen-bonded HCN complexes with OH and NH acids: Computational DFT systematic study. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 1170-1180.	2.0	14
196	Raman spectra of biomarkers of relevance to analytical astrobiological exploration: Hopanoids, sterols and steranes. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 78, 191-195.	3.9	14
197	Evaluation of portable Raman instrumentation for identification of $\beta$ -carotene and mellitic acid in two-component mixtures with halite. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 80, 32-35.	3.9	14
198	Green and blue pigments in Roman wall paintings: A challenge for Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 2190-2203.	2.5	14

#	ARTICLE	IF	CITATIONS
199	Raman spectroscopic studies of nomex and kevlar fibres under stress. <i>British Polymer Journal</i> , 1989, 21, 505-512.	0.7	13
200	Fourierâ€transform Raman spectroscopy of archaeological resins. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 966-971.	2.5	13
201	In situ monitoring of pH titration by Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2010, 75, 1403-1410.	3.9	13
202	Theoretical Study of Novel Complexed Structures for Methoxy Derivatives of Scytonemin: Potential Biomarkers in Iron-Rich Stressed Environments. <i>Astrobiology</i> , 2013, 13, 861-869.	3.0	13
203	Vibrational spectroscopic study of terbutaline hemisulphate. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 72, 715-719.	3.9	12
204	Raman spectra of osmotic solutes of halophiles. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 1134-1140.	2.5	12
205	An analytical Raman spectroscopic study of an important english oil painting of the 18th Century. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 118, 598-602.	3.9	12
206	Avoiding misidentification of bands in planetary Raman spectra. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 863-872.	2.5	12
207	Raman spectra of natural carbonaceous materials from a black shale formation. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 959-963.	2.5	12
208	Raman spectroscopic analysis of an important Visigothic historiated manuscript. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20160041.	3.4	12
209	The Raman spectrum of ethanesulphonic acid, C <sub>2</sub> H <sub>5</sub> SO <sub>3</sub> H, and the ethanesulphonate ion. <i>Journal of Molecular Structure</i> , 1990, 238, 27-41.	3.6	11
210	Interaction of Salicylic Acid with Verrucae Assessed by FT-Raman Spectroscopy. <i>Journal of Drug Targeting</i> , 1998, 5, 343-351.	4.4	11
211	Stratified response to environmental stress in a polar lichen characterized with FT-Raman microscopic analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 2029-2033.	3.9	11
212	Raman spectroscopy of archaeological and ancient resins: Problems with database construction for applications in conservation and historical provenancing. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 80, 49-54.	3.9	11
213	Forensic and security applications of a longâ€wavelength dispersive Raman system. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 322-326.	2.5	11
214	Accurate Differentiation of Carotenoid Pigments Using Flight Representative Raman Spectrometers. <i>Astrobiology</i> , 2017, 17, 351-362.	3.0	11
215	FT-Raman spectra of n-propanol and selected partially 2H-labelled analogues. <i>Journal of Molecular Structure</i> , 2007, 832, 184-190.	3.6	10
216	Question 2: Raman Spectroscopic Approach to Analytical Astrobiology: The Detection of Key Biomolecular Markers in the Search for Life. <i>Origins of Life and Evolution of Biospheres</i> , 2007, 37, 335-339.	1.9	10

#	ARTICLE	IF	CITATIONS
217	Raman spectroscopic analysis of arctic nodules: relevance to the astrobiological exploration of Mars. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 2927-2933.	3.7	10
218	The Heslington brain: a challenge for analytical Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 1658-1662.	2.5	10
219	Raman spectra of a graphite–nontronite association in marbles from Oltrek Island (Lake Baikal, Tj ETQq1 1 0.784314 rgBT/Overloc	2.5	10
220	Detection of carbonate, phosphate minerals and cyanobacteria in rock from the Tomtor deposit, Russia, by Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 250, 119372.	3.9	10
221	Dorures des cÃ©ramiques et tesselles anciennes: technologies et accrochage. <i>ArcheoSciences</i> , 2005, , 7-20.	0.1	10
222	Lead–tin mirror formation from mixtures of red lead and tin sulphide. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2291-2299.	3.9	9
223	Vanguard–a European robotic astrobiology-focussed Mars sub-surface mission proposal. <i>Acta Astronautica</i> , 2005, 56, 397-407.	3.2	9
224	Raman spectroscopic characterization of cinnabarin produced by the fungus <i>Pycnoporus sanguineus</i> (Fr.) Murr.. <i>Journal of Raman Spectroscopy</i> , 2007, 38, 1628-1632.	2.5	9
225	Analysis of yellow fat deposits on Inuit boots. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 73, 561-565.	3.9	9
226	Raman spectroscopic study of ‘The Malatesta’: A Renaissance painting?. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 137, 45-49.	3.9	9
227	Raman spectroscopic search for scytonemin and gloeocapsin in endolithic colonizations in large gypsum crystals. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 2633-2647.	2.5	9
228	Evolution of crystallinity in photodegraded polyethylene films studied by FT-Raman spectroscopy. <i>Macromolecular Symposia</i> , 1995, 94, 189-200.	0.7	8
229	Vibrational spectroscopy of silver perchlorate and silver trifluoromethanesulfonate solutions in acrylonitrile. <i>Journal of Solution Chemistry</i> , 1997, 26, 497-526.	1.2	8
230	Vibrational spectroscopic study of the contents of a chest excavated from the wreck of the HMS Pandora. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2311-2319.	3.9	8
231	FT-Raman spectroscopy of the Christmas wreath lichen, <i>Cryptothecia rubrocincta</i> (Ehreb.:Fr.) Thor. <i>Lichenologist</i> , 2005, 37, 181-189.	0.8	8
232	FT-Raman spectroscopic analysis of pigments from an Augustinian friary. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 397, 2685-2691.	3.7	8
233	Gristhorpe Man: a Raman spectroscopic study of ‘mistletoe berries’™ in a Bronze Age log coffin burial. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 1533-1536.	2.5	8
234	Raman spectroscopic identification of scytonemin and its derivatives as key biomarkers in stressed environments. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140197.	3.4	8



#	ARTICLE	IF	CITATIONS
235	Raman spectroscopic vibrational analysis of the complex iron sulfates clairite, metavoltine, and voltaite from the burning coal dump Anna I, Alsdorf, Germany. <i>Journal of Raman Spectroscopy</i> , 2020, 51, 1454-1461.	2.5	8
236	Fourier Transform-Raman Spectroscopy of Ivory: A Non-Destructive Diagnostic Technique. <i>Studies in Conservation</i> , 1998, 43, 9.	1.1	7
237	Vanguard – a proposed European astrobiology experiment on Mars. <i>International Journal of Astrobiology</i> , 2002, 1, 191-199.	1.6	7
238	Spectroscopic requirements for Raman instrumentation on a planetary lander: potential for the remote detection of biosignatures on Mars. <i>International Journal of Astrobiology</i> , 2004, 3, 165-174.	1.6	7
239	Raman spectroscopy of <i>n</i> -pentyl methyl ether and deuterium labelled analogues. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 1725-1734.	2.5	7
240	Scytonin, a novel cyanobacterial photoprotective pigment: calculations of Raman spectroscopic biosignatures. <i>Journal of Molecular Modeling</i> , 2014, 20, 2157.	1.8	7
241	Raman spectroscopic analysis of a “noli me tangere”™ painting. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20160044.	3.4	7
242	Analyzing and Interpreting Lime Burials from the Spanish Civil War (1936–1939): A Case Study from La Carcavilla Cemetery. <i>Journal of Forensic Sciences</i> , 2017, 62, 498-510.	1.6	7
243	Raman spectroscopic analysis of the effect of the lichenicolous fungus <i>Xanthoriicola physciae</i> on its lichen host. <i>Symbiosis</i> , 2017, 71, 57-63.	2.3	7
244	Analysis of brown, violet and blue pigments of microorganisms by Raman spectroscopy. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 146, 116501.	11.4	7
245	Welsh Armorial Porcelain. , 2022, , .		7
246	Raman spectroscopic study of allyl methyl ether (3-methoxy-1-propene), CH <sub>2</sub> =CHCH <sub>2</sub> OCH <sub>3</sub> , and some isotopically labelled analogues. <i>Journal of Molecular Structure</i> , 1995, 351, 77-86.	3.6	6
247	Forensic applications of Raman spectroscopy to the non-destructive analysis of biomaterials and their degradation. <i>Geological Society Special Publication</i> , 2004, 232, 159-170.	1.3	6
248	Raman spectroscopic study of hydrogen bonding in benzenesulfonic acid/acrylonitrile solutions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2939-2945.	3.9	6
249	Vibrational spectroscopic analysis of an amber necklace – a forensic historical study. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 397, 2677-2683.	3.7	6
250	Histology and Raman spectroscopy of limed human remains from the Rwandan Genocide. <i>Journal of Clinical Forensic and Legal Medicine</i> , 2020, 70, 101895.	1.0	6
251	New insights on plasters, pigments and binder in mural paintings of the Setka tomb (QH 110), Elephantine, Aswan, Upper Egypt. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 263, 120153.	3.9	6
252	Biogeological Raman spectroscopic studies of Antarctic lacustrine sediments. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2413-2417.	3.9	5



#	ARTICLE	IF	CITATIONS
253	Raman spectroscopic and structural investigation of 1,4-diphenylbuta-1,3-diene and selected monomethyl and dimethyl substituted homologues. <i>Analytica Chimica Acta</i> , 2006, 580, 47-54.	5.4	5
254	Differentiation of isomeric allylic alkenyl methyl ethers by Raman spectroscopy. <i>Analytica Chimica Acta</i> , 2007, 598, 268-279.	5.4	5
255	Will-o'-the-Wisp : an ancient mystery with extremophile origins?. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140206.	3.4	5
256	Raman Spectral Signatures in the Biogeological Record: An Astrobiological Challenge. <i>Cellular Origin and Life in Extreme Habitats</i> , 2013, , 311-330.	0.3	5
257	A Raman spectroscopic study of the dissociation of chloromethyl mercuric nitrate in a queous solutions. <i>Journal of Raman Spectroscopy</i> , 1974, 2, 423-429.	2.5	4
258	Fourier-transform Raman spectroscopic studies of chronological change in stromatolitic cores from Antarctic lake sediments. <i>International Journal of Astrobiology</i> , 2002, 1, 325-331.	1.6	4
259	Metazoan adaptation to deep-sea hydrothermal vents. , 2020, , 42-67.		4
260	Raman Spectroscopic Analysis of an Early 20th Century English Painted Organ Case by Temple Moore. <i>Heritage</i> , 2020, 3, 1148-1161.	1.9	4
261	The use of Raman and infrared spectroscopy in determining the space symmetry group among the groups with the same rules of systematic absence in the diffraction patterns: Some basic principles and applications. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 2058-2067.	2.5	4
262	Raman spectroscopic and elemental analysis of bone from a prehistoric ancestor: <i>Mrs Ples</i> from the Sterkfontein cave. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 2272-2281.	2.5	4
263	Ancient Inks: A Forensic Art Historical Perspective. <i>Encyclopedia of Earth Sciences Series</i> , 2015, , 48-52.	0.1	4
264	Non-invasive and non-destructive Raman spectroscopic characterization of some Brazilian ethnographic resins. <i>Journal of Raman Spectroscopy</i> , 0, , .	2.5	4
265	Fourier transform vibrational spectroscopic studies of p-toluenesulphonyl hydrazide, CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> SO <sub>2</sub> NHNH <sub>2</sub> . <i>Journal of Molecular Structure</i> , 1993, 301, 37-45.	3.6	3
266	Raman spectroscopy of 3-(pent-1-enyl) methyl ether and selected deuterium-labelled analogues. <i>Journal of Raman Spectroscopy</i> , 2007, 38, 1586-1594.	2.5	3
267	Raman Spectroscopic Characterization of the Alkaloid Dihydrochelerytrine Extracted from Roots of <i>Zanthoxylum stelligerum</i> (Turcz). <i>Spectroscopy Letters</i> , 2009, 42, 194-198.	1.0	3
268	Raman Spectroscopy for the Analysis of Counterfeit Tablets. , 2012, , 561-572.		3
269	Raman spectroscopic analysis of archaeological specimens from the wreck of HMS Swift , 1770. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20160053.	3.4	3
270	Chapter 20. The Application of Analytical Archaeometry in Underwater Cultural Heritage – A Case Study from Patagonia, Argentina. , 2012, , 532-549.		2

#	ARTICLE	IF	CITATIONS
271	Raman spectroscopic fingerprints of scytonemin-imine: density functional theory calculations of a novel potential biomarker. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140201.	3.4	2
272	Metabolic and taxonomic diversity in antarctic subglacial environments. , 2020, , 279-296.		2
273	Coloration patterns of marine sponges assessed by vibrational spectroscopy. Journal of Raman Spectroscopy, 2021, 52, 2581-2596.	2.5	2
274	Raman Spectroscopy of Rock Biodeterioration by the Lichen Lecidea Tessellata Flörke in a Desert Environment, Utah, USA. , 2004, , 229-240.		1
275	In Situ Crime Scene Analysis. , 2012, , 171-184.		1
276	Ancient Inks: A Forensic Art Historical Perspective. , 2014, , 1-7.		1
277	How to survive winter?. , 2020, , 101-125.		1
278	Chemical ecology in the Southern Ocean. , 2020, , 251-278.		1
279	Extremophiles populating high-level natural radiation areas (HLNRAs) in Iran. , 2020, , 68-86.		1
280	The Southern Ocean: an extreme environment or just home of unique ecosystems?. , 2020, , 218-233.		1
281	Analytical astrobiology: the search for life signatures and the remote detection of biomarkers through their Raman spectral interrogation. , 2020, , 301-318.		1
282	Firing temperature determination of some 18th century Transylvanian stove tiles using spectroscopic techniques. Vibrational Spectroscopy, 2021, 113, 103227.	2.2	1
283	A spectroscopic analysis of late 16th century domestic wall paintings in the Saracens Head Inn, Nottinghamshire, UK. Journal of Raman Spectroscopy, 2021, 52, 2218-2227.	2.5	1
284	Development of a Surface-Enhanced Raman Spectroscopic Methodology to Detect Immobilized Organic Materials in Biogeological Contexts. Astrobiology, 2021, 21, 1089-1098.	3.0	1
285	Derek A. Long: An appreciation by H. G. M. Edwards. Journal of Raman Spectroscopy, 2021, 52, 1983-1988.	2.5	1
286	High-fired early English porcelains of the 'marked' group, east London (c. 1744): A Raman spectroscopy and electron microscopy compositional study. Journal of Raman Spectroscopy, 0, , .	2.5	1
287	Stratified response to environmental stress in a polar lichen characterized with FT-Raman microscopic analysis. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 2029-2029.	3.9	0
288	Raman Spectroscopy of Extremophiles from Hot and Cold Deserts: An Astrobiological Journey from Terrestrial Extreme Environments to Planetary Exploration. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
289	Chapter 12. Pigments and dyes. , 2012, , 345-360.		0
290	Chapter 2. Vibrational Spectroscopy: Theoretical Basis Relevant to Archaeometry and Archaeological Applications. , 2012, , 49-58.		0
291	Non-Invasive Detection of Concealed Liquid and Powder Explosives Using Spatially Offset Raman spectroscopy. , 2012, , 289-294.		0
292	Examination of Counterfeit Pharmaceutical Labels. , 2012, , 573-582.		0
293	The preservation of archaeological brain remains in a human skeleton. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160208.	3.4	0
294	IR and Raman Spectroscopies, The Study of Art Works. , 2017, , 378-393.		0
295	Raman Spectroscopic Studies of Swansea and Nantgarw Porcelains. , 2018, , 113-163.		0
296	The Nantgarw China Works Site and Excavated Porcelain Shards. , 2019, , 121-161.		0
297	Vertebrate viruses in polar ecosystems. , 2020, , 126-148.		0
298	Life in the extreme environments of our planet under pressure. , 2020, , 151-183.		0
299	Physiological traits of the Greenland shark <i>Somniosus microcephalus</i> obtained during the TUNU-Expeditions to Northeast Greenland. , 2020, , 11-41.		0
300	Metazoan life in anoxic marine sediments. , 2020, , 89-100.		0
301	The ecophysiology of responding to change in polar marine benthos. , 2020, , 184-217.		0
302	Adaptation/acclimatisation mechanisms of oxyphototrophic microorganisms and their relevance to astrobiology. , 2020, , 319-342.		0
303	Life at the extremes. , 2020, , 343-354.		0
304	Microorganisms in cryoturbated organic matter of Arctic permafrost soils. , 2020, , 234-250.		0
305	Tribute to Derek Long: An instant snapshot of the development of Raman spectroscopy and its application in the fields of instrumentation and methodology, solid-state materials, cultural heritage, DFT modeling and applications in biology, microbiology, and medicine. Journal of Raman Spectroscopy, 2021, 52, 1966-1979.	2.5	0
306	The Scientific Analysis of Porcelain. , 2017, , 97-126.		0

#	ARTICLE	IF	CITATIONS
307	Analytical Results and Correlation with Recipes and Formulations. , 2018, , 39-74.		0
308	Porcelain and Its Composition. , 2020, , 1-35.		0
309	The Earliest Porcelain in Europe   Meissen?. , 2020, , 207-214.		0
310	The Molecular Spectroscopic Analysis of Porcelains. , 2020, , 179-206.		0
311	Analytical Studies of Porcelains: Correlation with the Holistic Information About the Eighteenth and Nineteenth Century Factories. , 2020, , 101-155.		0
312	Case Studies I. Analytical Data Which Have Materially Contributed Towards the Factory Attribution of Porcelain Specimens. Cultural Heritage Science, 2022, , 207-249.	0.4	0
313	Case Studies II: Analytical Data Which Have Revealed that Significant Revision Is Required to the Perceived Historical Knowledge of Porcelain Factories (Part A). Cultural Heritage Science, 2022, , 251-281.	0.4	0
314	The Answer Lies in the Glaze!. Cultural Heritage Science, 2022, , 381-398.	0.4	0