

# Barbara H Stuart

## List of Publications by Year in descending order

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112  
papers

4,354  
citations

218677

26  
h-index

123424

61  
g-index

130  
all docs

130  
docs citations

130  
times ranked

5165  
citing authors

#	ARTICLE	IF	CITATIONS
1	Anatomical location dependence of human decomposition products in clothing. Australian Journal of Forensic Sciences, 2023, 55, 363-375.	1.2	2
2	Safe Storage? An Assessment of Polyethylene for the Storage of Heritage Objects. Studies in Conservation, 2023, 68, 669-678.	1.1	1
3	A preliminary investigation to determine the suitability of pigs as human analogues for post-mortem lipid analysis. Talanta Open, 2022, 5, 100100.	3.7	4
4	An overview of risk investment in the transnational illegal wildlife trade from stakeholder perspectives. Wiley Interdisciplinary Reviews Forensic Science, 2021, 3, .	2.1	5
5	Reptile volatilome profiling optimisation: A pathway towards forensic applications. Forensic Science International Animals and Environments, 2021, 1, 100024.	0.8	3
6	Monitoring human decomposition products collected in clothing: an infrared spectroscopy study. Australian Journal of Forensic Sciences, 2020, 52, 428-438.	1.2	8
7	Profiling the seasonal variability of decomposition odour from human remains in a temperate Australian environment. Australian Journal of Forensic Sciences, 2020, 52, 654-664.	1.2	15
8	Potential of neutron powder diffraction for the study of solid triacylglycerols. Food Structure, 2019, 22, 100124.	4.5	1
9	Neutron diffraction of deuterated tripalmitin and the influence of shear on its crystallisation. Chemistry and Physics of Lipids, 2019, 221, 108-113.	3.2	2
10	Non-invasive identification of polymers in cultural heritage collections: evaluation, optimisation and application of portable FTIR (ATR and external reflectance) spectroscopy to three-dimensional polymer-based objects. Heritage Science, 2019, 7, .	2.3	44
11	Understanding clothed buried remains: the analysis of decomposition fluids and their influence on clothing in model burial environments. Forensic Science, Medicine, and Pathology, 2019, 15, 3-12.	1.4	4
12	An atomic force microscopy investigation of plastic wrapping materials of forensic relevance buried in soil environments. Australian Journal of Forensic Sciences, 2019, 51, 596-605.	1.2	12
13	Modelling clay materials used in artworks: an infrared spectroscopic investigation. Heritage Science, 2019, 7, .	2.3	6
14	Seasonal variation of fatty acid profiles from textiles associated with decomposing pig remains in a temperate Australian environment. Forensic Chemistry, 2018, 11, 120-127.	2.8	7
15	A multi-analytical approach using FTIR, GC/MS and Py-GC/MS revealed early evidence of embalming practices in Roman catacombs. Microchemical Journal, 2017, 133, 49-59.	4.5	19
16	Degradation patterns of natural and synthetic textiles on a soil surface during summer and winter seasons studied using ATR-FTIR spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 185, 69-76.	3.9	21
17	Effect of drug precursors and chemicals relevant to clandestine laboratory investigation on plastic bags used for collection and storage. Forensic Science International, 2017, 273, 106-112.	2.2	5
18	The analysis of textiles associated with decomposing remains as a natural training aid for cadaver-detection dogs. Forensic Chemistry, 2017, 5, 33-45.	2.8	25

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19	FTIR and Raman microscopy of organic binders and extraneous organic materials on painted ceremonial objects from the Highlands of Papua New Guinea. <i>Microchemical Journal</i> , 2017, 134, 246-256.	4.5	8
20	Pigment characterisation in Australian rock art: a review of modern instrumental methods of analysis. <i>Heritage Science</i> , 2017, 5, .	2.3	18
21	The mechanical properties of plastic evidence bags used for collection and storage of drug chemicals relevant to clandestine laboratory investigations. <i>Forensic Sciences Research</i> , 2017, 2, 198-202.	1.6	5
22	Three impossible things before lunch – the task of a sample environment specialist. <i>Journal of Neutron Research</i> , 2017, 19, 49-56.	1.1	2
23	An Investigation of the Degradation of Polymeric Grave Goods in Soil Environments. <i>Soil Forensics</i> , 2016, , 331-341.	0.2	0
24	Characterisation of blue pigments from ceremonial objects of the Southern Highlands in Papua New Guinea using vibrational spectroscopy and X-ray diffraction. <i>Vibrational Spectroscopy</i> , 2016, 85, 43-47.	2.2	4
25	Capillary-driven microfluidic paper-based analytical devices for lab on a chip screening of explosive residues in soil. <i>Journal of Chromatography A</i> , 2016, 1436, 28-33.	3.7	55
26	A study to model the post-mortem stability of 4-MMC, MDMA and BZP in putrefying remains. <i>Forensic Science International</i> , 2016, 265, 54-60.	2.2	6
27	The characterisation of pigments used in X-ray rock art at Dalakngalarr 1, central-western Arnhem Land. <i>Microchemical Journal</i> , 2016, 126, 524-529.	4.5	24
28	Micro-characterisation of the colour palette of ceremonial objects from the Papua New Guinea Highlands: Transition from natural to synthetic pigments. <i>Microchemical Journal</i> , 2016, 124, 547-558.	4.5	3
29	The formation of adipocere in model aquatic environments. <i>International Journal of Legal Medicine</i> , 2016, 130, 281-286.	2.2	6
30	Reducing variation in decomposition odour profiling using comprehensive two-dimensional gas chromatography. <i>Journal of Separation Science</i> , 2015, 38, 73-80.	2.5	42
31	Raman, FTIR and XRD study of Icelandic tephra minerals: implications for Mars. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 846-855.	2.5	7
32	Seasonal comparison of carrion volatiles in decomposition soil using comprehensive two-dimensional gas chromatography – time of flight mass spectrometry. <i>Analytical Methods</i> , 2015, 7, 690-698.	2.7	35
33	Exploring new dimensions in cadaveric decomposition odour analysis. <i>Analytical Methods</i> , 2015, 7, 2287-2294.	2.7	52
34	The interactive effect of the degradation of cotton clothing and decomposition fluid production associated with decaying remains. <i>Forensic Science International</i> , 2015, 255, 56-63.	2.2	18
35	Detection of decomposition volatile organic compounds in soil following removal of remains from a surface deposition site. <i>Forensic Science, Medicine, and Pathology</i> , 2015, 11, 376-387.	1.4	31
36	A Longitudinal Study of Decomposition Odour in Soil Using Sorbent Tubes and Solid Phase Microextraction. <i>Chromatography (Basel)</i> , 2014, 1, 120-140.	1.2	36

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37	Taxon-specific responses of Southern Ocean diatoms to Fe enrichment revealed by synchrotron radiation FTIR microspectroscopy. Biogeosciences, 2014, 11, 5795-5808.	3.3	24
38	Estimation of the curing rate of acrylamide used as a consolidant in heritage sandstone conservation. Journal of Thermal Analysis and Calorimetry, 2014, 116, 619-624.	3.6	4
39	The effect of soil texture on the degradation of textiles associated with buried bodies. Forensic Science International, 2013, 231, 331-339.	2.2	23
40	Thermal Analysis. Analytical Techniques in the Sciences, 2013, , 167-179.	0.0	0
41	Decomposition Chemistry: Overview, Analysis, and Interpretation. , 2013, , 11-15.		13
42	An investigation of Model Forensic Bone in Soil Environments Studied Using Infrared Spectroscopy. Journal of Forensic Sciences, 2012, 57, 1161-1167.	1.6	29
43	The Effect of Body Coverings on the Formation of Adipocere in an Aqueous Environment. Journal of Forensic Sciences, 2012, 57, 120-125.	1.6	13
44	Estimation of the storage life of dimethylol urea using non-isothermal accelerated testing. Journal of Thermal Analysis and Calorimetry, 2012, 108, 439-443.	3.6	4
45	Discrimination of thermally treated low density polyethylenes using DSC and principal component analysis. Journal of Thermal Analysis and Calorimetry, 2012, 108, 445-448.	3.6	9
46	ESEM-EDS Investigation of the Weathering of a Heritage Sydney Sandstone. Microscopy and Microanalysis, 2011, 17, 292-295.	0.4	3
47	Characterisation of poly(vinyl alcohol)montmorillonite composites with higher clay contents. Polymer Testing, 2011, 30, 732-736.	4.8	13
48	A study of ochres from an Australian aboriginal bark painting using thermal methods. Journal of Thermal Analysis and Calorimetry, 2011, 104, 507-513.	3.6	2
49	Examination of adipocere formation in a cold water environment. International Journal of Legal Medicine, 2011, 125, 643-650.	2.2	27
50	A study of adipocere in soil collected from a field leaching study. Australian Journal of Forensic Sciences, 2011, 43, 3-11.	1.2	7
51	TCMS analysis of archaeological bone from burials of the late Roman period. Journal of Thermal Analysis and Calorimetry, 2010, 99, 811-813.	3.6	16
52	A study of storage conditions and treatments for forensic bone specimens using thermogravimetric analysis. Journal of Thermal Analysis and Calorimetry, 2010, 99, 869-872.	3.6	2
53	The development of analytical techniques for the determination of forensic bone age. Science and Justice - Journal of the Forensic Science Society, 2010, 50, 36-37.	2.1	0
54	The estimation of pig bone age for forensic application using thermogravimetric analysis. Journal of Thermal Analysis and Calorimetry, 2009, 98, 173-176.	3.6	18

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55	The Initial Changes of Fat Deposits During the Decomposition of Human and Pig Remains. <i>Journal of Forensic Sciences</i> , 2009, 54, 195-201.	1.6	74
56	TG-MS analysis of the thermal decomposition of pig bone for forensic applications. <i>Journal of Thermal Analysis and Calorimetry</i> , 2008, 92, 87-90.	3.6	20
57	Thermal characterization of the clay binder of heritage Sydney sandstones. <i>Journal of Thermal Analysis and Calorimetry</i> , 2008, 92, 97-100.	3.6	17
58	Solid-phase extraction in combination with GC/MS for the quantification of free fatty acids in adipocere. <i>European Journal of Lipid Science and Technology</i> , 2008, 110, 73-80.	1.5	36
59	Characterization of aminated poly(ethylene terephthalate) surfaces for biomedical applications. <i>Journal of Applied Polymer Science</i> , 2008, 107, 2394-2403.	2.6	13
60	A spectroscopic investigation of the weathering of a heritage Sydney sandstone. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 71, 1032-1035.	3.9	7
61	The Tensile and Tear Properties of a Biodegradable Polyester Film. <i>International Journal of Polymer Analysis and Characterization</i> , 2008, 13, 190-199.	1.9	6
62	Characterization of the Triacylglycerol Crystal Formation in Adipose Tissue During a Vehicle Collision. <i>Journal of Forensic Sciences</i> , 2007, 52, 938-942.	1.6	5
63	TG-MS characterisation of pig bone in an inert atmosphere. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 405-409.	3.6	25
64	The effect of the burial environment on adipocere formation. <i>Forensic Science International</i> , 2005, 154, 24-34.	2.2	123
65	The effect of soil type on adipocere formation. <i>Forensic Science International</i> , 2005, 154, 35-43.	2.2	108
66	The effect of the method of burial on adipocere formation. <i>Forensic Science International</i> , 2005, 154, 44-52.	2.2	86
67	Studies of Adipocere Using Attenuated Total Reflectance Infrared Spectroscopy. <i>Forensic Science, Medicine, and Pathology</i> , 2005, 1, 197-202.	1.4	21
68	Characterization of Adipocere Formation in Animal Species. <i>Journal of Forensic Sciences</i> , 2005, 50, 1-8.	1.6	18
69	A Preliminary Investigation of the Stages of Adipocere Formation. <i>Journal of Forensic Sciences</i> , 2004, 49, 1-9.	1.6	69
70	A preliminary investigation of the stages of adipocere formation. <i>Journal of Forensic Sciences</i> , 2004, 49, 566-74.	1.6	11
71	A gas chromatography-mass spectrometry method for the detection of adipocere in grave soils. <i>European Journal of Lipid Science and Technology</i> , 2003, 105, 761-768.	1.5	39
72	Characterisation of weathering of Sydney sandstones in heritage buildings. <i>Journal of Cultural Heritage</i> , 2003, 4, 211-220.	3.3	27

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73	The identification of adipocere in grave soils. Forensic Science International, 2002, 127, 225-230.	2.2	67
74	Phase Transition Properties of Poly(Ethylene Oxide) in Aqueous Solutions of Sodium Chloride. Langmuir, 2001, 17, 4482-4485.	3.5	32
75	Characterization of PET films modified by tetraethylenepentamine (TTEPA). Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 623-633.	2.1	19
76	Changes in the Physical and Chemical Properties of Weathered Maroubra Sandstone in Sydney. AICCM Bulletin, 2001, 26, 20-25.	0.1	4
77	The characterisation of plastic used in a Gabo sculpture. Polymer Testing, 2000, 19, 953-957.	4.8	6
78	Studies of adipocere using diffuse reflectance infrared spectroscopy. Vibrational Spectroscopy, 2000, 24, 233-242.	2.2	43
79	The application of Raman spectroscopy to the tribology of polymers. Tribology International, 1998, 31, 687-693.	5.9	25
80	Tribological studies of poly(ether ether ketone) blends. Tribology International, 1998, 31, 647-651.	5.9	74
81	A Fourier transform Raman spectroscopy study of water sorption by poly(vinyl alcohol). Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1997, 53, 2275-2278.	3.9	32
82	A Fourier transform Raman spectroscopy study of the crystallisation behaviour of a poly(ether ether) Tj ETQqO O O rgBT /Overlock 10 Tf 5 Spectroscopy, 1997, 53, 107-110.	3.9	8
83	The application of Fourier transform Raman spectroscopy to polymer tribology. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1997, 53, 111-118.	3.9	3
84	Surface plasticisation of poly(ether ether ketone) by chloroform. Polymer Testing, 1997, 16, 49-57.	4.8	26
85	Scratch friction studies of polycarbonate. Polymer Testing, 1997, 16, 517-522.	4.8	17
86	Conformation of an Antigenic Determinant for Experimental Autoimmune Neuritis. Biochemical and Biophysical Research Communications, 1996, 224, 5-9.	2.1	5
87	The surface plasticisation and lubrication of poly(ether ether ketone) by third body formation. Tribology Series, 1996, , 69-78.	0.1	4
88	Polymer crystallinity studied using Raman spectroscopy. Vibrational Spectroscopy, 1996, 10, 79-87.	2.2	84
89	Scratch hardness studies of poly(ether ether ketone). Polymer, 1996, 37, 3819-3824.	3.8	29
90	Temperature studies of polycarbonate using Fourier transform Raman spectroscopy. Polymer Bulletin, 1996, 36, 341-346.	3.3	53

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91	Sliding Friction Studies of a Poly(Ether Ether Ketone)/Poly(Ether Imide) Blend. High Performance Polymers, 1996, 8, 275-280.	1.8	6
92	Xylene swelling of polycarbonate studied using Fourier transform Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1995, 51, 2133-2137.	3.9	20
93	A Fourier transform Raman study of water sorption by Kevlar-49. Polymer Bulletin, 1995, 35, 727-733.	3.3	18
94	Surface plasticisation of nylon 6,6 by water. Polymer International, 1995, 38, 95-99.	3.1	22
95	A study of the absorption of chlorinated organic solvents by poly(ether ether ketone) using vibrational spectroscopy. Polymer, 1995, 36, 4209-4213.	3.8	18
96	A Fourier transform Raman study of water sorption by Nylon 6. Polymer Bulletin, 1994, 33, 681-686.	3.3	32
97	A Fourier transform Raman spectroscopy study of poly (ether ether ketone)/polytetrafluoroethylene (PEEK/PTFE) blends. Spectrochimica Acta Part A: Molecular Spectroscopy, 1994, 50, 2005-2009.	0.1	22
98	The solvent-induced swelling of poly(ether ether ketone) by 1,1,2,2-tetrachloroethane. Polymer, 1994, 35, 1326-1328.	3.8	26
99	Study of the CN1 peptide of P2 protein using Fourier transform infra-red spectroscopy. International Journal of Biological Macromolecules, 1994, 16, 163-165.	7.5	5
100	The failure of poly (ether ether ketone) in high speed contacts. Wear, 1993, 162-164, 407-417.	3.1	48
101	A Fourier transform Raman spectroscopy study of the crystallization behaviour of poly (ether ether) Tj ETQq1 1 0.784314 rgBT /Overlaid 753-758.	0.1	14
102	Solvent Induced Morphological Changes to Polycarbonate. Materials Research Society Symposia Proceedings, 1993, 304, 185.	0.1	4
103	Fourier-Transform Infrared Spectroscopic Investigation of the Secondary Structure of P2 Protein in Deuterium Oxide Solution. Australian Journal of Chemistry, 1991, 44, 1523.	0.9	5
104	A comparison of thermal- and solvent-induced relaxation of poly(ether ether ketone) using Fourier transform Raman spectroscopy. Spectrochimica Acta Part A: Molecular Spectroscopy, 1991, 47, 1299-1303.	0.1	34
105	Degradation. Analytical Techniques in the Sciences, 0, , 191-208.	0.0	1
106	X-Ray Techniques. , 0, , 229-268.		0
107	Thermal and Mechanical Analysis. , 0, , 341-377.		1
108	Appendix Infrared Spectra of Polymers Absorbance. , 0, , 396-403.		1

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109	Basic Identification Techniques. , 0, , 43-71.		0
110	Light Examination and Microscopy. , 0, , 72-108.		1
111	Atomic Spectroscopy. , 0, , 209-228.		0
112	Chromatography and Electrophoresis. , 0, , 296-340.		0