Igor K Lednev

List of Publications by Year in Descending Order

212 papers	8,747 citations	52 h-index	83 g-index
226 ext. papers	9,970 ext. citations	6.2 avg, IF	6.59 L-index

#	Paper	IF	Citations
212	Raman Spectroscopy for Forensic Identification of Body Fluid Traces: Method Validation for Potential False Negatives Caused by Blood-Affecting Diseases. *American Journal of Analytical Chemistry*, **2022**, 13, 1-8	0.7	0
211	Detection and identification of drug traces in latent fingermarks using Raman spectroscopy.. *Scientific Reports*, **2022**, 12, 3136	4.9	2
210	Infrared and Raman Spectroscopy Assisted Diagnosis of Diabetics. *Springer Series on Bio- and Neurosystems*, **2022**, 133-164	0.5	
209	Improved folding of recombinant protein via co-expression of exogenous chaperones. *Methods in Enzymology*, **2021**, 659, 145-170	1.7	1
208	Determining the stages of cellular differentiation using deep ultraviolet resonance Raman spectroscopy. *Talanta*, **2021**, 227, 122164	6.2	1
207	Vibrational Spectroscopy for Detection of Diabetes: A Review. *Applied Spectroscopy*, **2021**, 75, 929-946	3.1	4
206	Towards development of a novel screening method for identifying Alzheimer's disease risk: Raman spectroscopy of blood serum and machine learning. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2021**, 254, 119603	4.4	4
205	Raman spectroscopy and machine learning for biomedical applications: Alzheimer's disease diagnosis based on the analysis of cerebrospinal fluid. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2021**, 248, 119188	4.4	12
204	Probing menstrual bloodstain aging with fluorescence spectroscopy. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2021**, 248, 119172	4.4	3
203	Analysis of individual red blood cells for Celiac disease diagnosis. *Talanta*, **2021**, 221, 121642	6.2	12
202	Age Estimation of Bloodstained Fingermarks **2021**, 323-357		
201	Discrimination of menstrual and peripheral blood traces using attenuated total reflection Fourier transform-infrared (ATR FT-IR) spectroscopy and chemometrics for forensic purposes. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 2513-2522	4.4	6
200	Post deposition aging of bloodstains probed by steady-state fluorescence spectroscopy. *Journal of Photochemistry and Photobiology B: Biology*, **2021**, 221, 112251	6.7	1
199	Trends in vibrational spectroscopy of fingermarks for forensic purposes. *TrAC - Trends in Analytical Chemistry*, **2021**, 143, 116341	14.6	5
198	Discrimination between human and animal blood by attenuated total reflection Fourier transform-infrared spectroscopy. *Communications Chemistry*, **2020**, 3,	6.3	11
197	Ultraviolet Raman spectroscopy for understanding structure and formation mechanism of amyloid fibrils **2020**, 415-434		
196	Raman Spectroscopy and Advanced Statistics for Cancer Diagnostics **2020**, 273-323		

195	A universal test for the forensic identification of all main body fluids including urine. *Forensic Chemistry*, **2020**, 20, 100247	2.8	10
194	Crime clock – Analytical studies for approximating time since deposition of bloodstains. *Forensic Chemistry*, **2020**, 19, 100248	2.8	10
193	Raman spectroscopy for forensic semen identification: Method validation vs. environmental interferences. *Vibrational Spectroscopy*, **2020**, 109, 103065	2.1	8
192	Differentiating smokers and nonsmokers based on Raman spectroscopy of oral fluid and advanced statistics for forensic applications. *Journal of Biophotonics*, **2020**, 13, e201960123	3.1	7
191	Clarifying Glass Luminescence at Near-Infrared Excitation. *Applied Spectroscopy*, **2020**, 74, 187-192	3.1	2
190	Towards development of a novel universal medical diagnostic method: Raman spectroscopy and machine learning. *Chemical Society Reviews*, **2020**, 49, 7428-7453	58.5	51
189	Forensic Phenotype Profiling Based on the Attenuated Total Reflection Fourier Transform-Infrared Spectroscopy of Blood: Chronological Age of the Donor. *ACS Omega*, **2020**, 5, 27026-27031	3.9	7
188	Diagnosis of a model of Duchenne muscular dystrophy in blood serum of mdx mice using Raman hyperspectroscopy. *Scientific Reports*, **2020**, 10, 11734	4.9	6
187	A Novel Two-Step Method for the Detection of Organic Gunshot Residue for Forensic Purposes: Fast Fluorescence Imaging Followed by Raman Microspectroscopic Identification. *Analytical Chemistry*, **2019**, 91, 11731-11737	7.8	7
186	Surface Enhanced Raman Spectroscopy for Single Molecule Protein Detection. *Scientific Reports*, **2019**, 9, 12356	4.9	49
185	Rapid and accurate automatic temperature calibration of disposable screen-printed heated gold electrodes. *Journal of Electroanalytical Chemistry*, **2019**, 851, 113414	4.1	
184	Screening for Alzheimer's Disease Using Saliva: A New Approach Based on Machine Learning and Raman Hyperspectroscopy. *Journal of Alzheimer's Disease*, **2019**, 71, 1351-1359	4.3	22
183	Phenotype profiling for forensic purposes: Nondestructive potentially on scene attenuated total reflection Fourier transform-infrared (ATR FT-IR) spectroscopy of bloodstains. *Forensic Chemistry*, **2019**, 16, 100176	2.8	15
182	Universal detection of body fluid traces in situ with Raman hyperspectroscopy for forensic purposes: Evaluation of a new detection algorithm (HAMAND) using semen samples. *Journal of Raman Spectroscopy*, **2019**, 50, 1147-1153	2.3	11
181	Raman spectroscopy and chemometrics: A potential universal method for diagnosing cancer. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2019**, 219, 463-487	4.4	36
180	Phenotype Profiling for Forensic Purposes: Determining Donor Sex Based on Fourier Transform Infrared Spectroscopy of Urine Traces. *Analytical Chemistry*, **2019**, 91, 6288-6295	7.8	20
179	Letter to the Editors regarding Rodriguez-Cruz, S.E., and R.S. Montreuil. "Assessing the quality and reliability of the DEA drug identification process." Forensic Chemistry 6 (2017): 36–43. *Forensic Chemistry*, **2019**, 13, 100147	2.8	
178	Multivariate Statistical Analysis of Surface Enhanced Raman Spectra of Human Serum for Alzheimer's Disease Diagnosis. *Applied Sciences (Switzerland)*, **2019**, 9, 3256	2.6	20

177	Raman spectroscopy for forensic bloodstain identification: Method validation vs. environmental interferences. *Forensic Chemistry*, **2019**, 16, 100175	2.8	13
176	Deep-Ultraviolet Raman Spectroscopy for Cancer Diagnostics: A Feasibility Study with Cell Lines and Tissues. *Cancer Studies and Molecular Medicine: Open Journal*, **2019**, 5, 1-10	2.5	5
175	Hydrogen Sulfide (H2S) Limits Amyloid Development in Hen Egg White Lysozyme (HEWL) as a Function of Concentration. *FASEB Journal*, **2019**, 33, 464.4	0.9	
174	Toward Locard's Exchange Principle: Recent Developments in Forensic Trace Evidence Analysis. *Analytical Chemistry*, **2019**, 91, 637-654	7.8	26
173	A poly(butyl methacrylate)/graphene oxide/TiO2 nanocomposite coating with superior corrosion protection for AZ31 alloy in chloride solution. *Chemical Engineering Journal*, **2019**, 361, 485-498	14.7	32
172	Raman spectroscopic method for semen identification: Azoospermia. *Talanta*, **2019**, 194, 385-389	6.2	10
171	A Multipronged Method for Unveiling Subtle Structural-Functional Defects of Mutant Chaperone Molecules Causing Human Chaperonopathies. *Methods in Molecular Biology*, **2019**, 1873, 69-92	1.4	1
170	Surface enhanced Raman spectroscopy: A review of recent applications in forensic science. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2018**, 197, 255-260	4.4	51
169	Bloodstains, paintings, and drugs: Raman spectroscopy applications in forensic science. *Forensic Chemistry*, **2018**, 8, 111-133	2.8	49
168	Reply to the comment by Osipov et al. to "Carbon structure in nanodiamonds elucidated from Raman Spectroscopy" *Carbon*, **2018**, 135, 236-237	10.4	1
167	Ultraviolet Resonance Raman Spectroscopic Markers for Protein Structure and Dynamics. *TrAC - Trends in Analytical Chemistry*, **2018**, 103, 223-229	14.6	29
166	Ultraviolet resonance Raman spectroscopy for the detection of cocaine in oral fluid. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2018**, 188, 338-340	4.4	21
165	Differentiating Donor Age Groups Based on Raman Spectroscopy of Bloodstains for Forensic Purposes. *ACS Central Science*, **2018**, 4, 862-867	16.8	29
164	Differentiation of human blood from animal blood using Raman spectroscopy: A survey of forensically relevant species. *Forensic Science International*, **2018**, 282, 204-210	2.6	32
163	Raman spectroscopy for forensic purposes: Recent applications for serology and gunshot residue analysis. *TrAC - Trends in Analytical Chemistry*, **2018**, 103, 215-222	14.6	37
162	Raman microspectroscopic mapping as a tool for detection of gunshot residue on adhesive tape. *Analytical and Bioanalytical Chemistry*, **2018**, 410, 7295-7303	4.4	9
161	Quantitative Spectrometry of Complex Molecular Systems by Hypothetical Addition Multivariate Analysis With Numerical Differentiation (HAMAND) **2018**, 369-378		7
160	Carbon structure in nanodiamonds elucidated from Raman spectroscopy. *Carbon*, **2017**, 121, 322-329	10.4	65

159	Predicting the time of the crime: Bloodstain aging estimation for up to two years. *Forensic Chemistry*, **2017**, 5, 1-7	2.8	39
158	Race Differentiation Based on Raman Spectroscopy of Semen Traces for Forensic Purposes. *Analytical Chemistry*, **2017**, 89, 4344-4348	7.8	23
157	Determining Gender by Raman Spectroscopy of a Bloodstain. *Analytical Chemistry*, **2017**, 89, 1486-1492	7.8	31
156	Quantification of cocaine in ternary mixtures using partial least squares regression applied to Raman and Fourier transform infrared spectroscopy. *Journal of Raman Spectroscopy*, **2017**, 48, 1732-1743	2.3	27
155	Origin of enhanced VCD in amyloid fibril spectra: Effect of deuteriation and pH. *Chirality*, **2017**, 29, 469-475	2.5	16
154	Differentiation of hair using ATR FT-IR spectroscopy: A statistical classification of dyed and non-dyed hairs. *Forensic Chemistry*, **2017**, 6, 1-9	2.8	22
153	Thermal Stabilization of Enzymes with Molecular Brushes. *ACS Catalysis*, **2017**, 7, 8675-8684	13.1	16
152	Purple Fibrils: A New Type of Protein Chromophore. *Journal of the American Chemical Society*, **2017**, 139, 9755-9758	16.4	7
151	Identification of individual red blood cells by Raman microspectroscopy for forensic purposes: in search of a limit of detection. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 287-293	4.4	17
150	Two Mechanisms of Tip Enhancement of Raman Scattering by Protein Aggregates. *Applied Spectroscopy*, **2017**, 71, 118-128	3.1	6
149	Forensic Applications of Vibrational Spectroscopy **2016**, 5-54		4
148	Sex Determination Based on Raman Spectroscopy of Saliva Traces for Forensic Purposes. *Analytical Chemistry*, **2016**, 88, 12489-12493	7.8	39
147	Forensic Hair Differentiation Using Attenuated Total Reflection Fourier Transform Infrared (ATR FT-IR) Spectroscopy. *Applied Spectroscopy*, **2016**, 70, 1109-17	3.1	42
146	Race Differentiation by Raman Spectroscopy of a Bloodstain for Forensic Purposes. *Analytical Chemistry*, **2016**, 88, 7453-6	7.8	39
145	Structural differences between amyloid beta oligomers. *Biochemical and Biophysical Research Communications*, **2016**, 477, 700-705	3.4	47
144	Structural effects of simvastatin on liver rat [corrected] tissue: Fourier transform infrared and Raman microspectroscopic studies. *Journal of Biomedical Optics*, **2016**, 21, 25008	3.5	8
143	Deep UV Resonance Raman Spectroscopy for Characterizing Amyloid Aggregation. *Methods in Molecular Biology*, **2016**, 1345, 89-100	1.4	3
142	Polarized Raman Spectroscopy for Determining the Orientation of di-D-phenylalanine Molecules in a Nanotube. *Journal of Raman Spectroscopy*, **2016**, 47, 1056-1062	2.3	16

141	Structural and Mechanical Properties of Amyloid Beta Fibrils: A Combined Experimental and Theoretical Approach. *Journal of Physical Chemistry Letters*, **2016**, 7, 2758-64	6.4	22
140	Spatially resolved spectroscopic differentiation of hydrophilic and hydrophobic domains on individual insulin amyloid fibrils. *Scientific Reports*, **2016**, 6, 33575	4.9	44
139	A Raman "spectroscopic clock" for bloodstain age determination: the first week after deposition. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 3993-4001	4.4	58
138	Forensic body fluid identification and differentiation by Raman spectroscopy. *Forensic Chemistry*, **2016**, 1, 31-38	2.8	68
137	What can Raman spectroscopy do for criminalistics?. *Journal of Raman Spectroscopy*, **2016**, 47, 39-50	2.3	49
136	Raman spectroscopy in forensic analysis: identification of cocaine and other illegal drugs of abuse. *Journal of Raman Spectroscopy*, **2016**, 47, 28-38	2.3	95
135	In Situ Identification of Semen Stains on Common Substrates via Raman Spectroscopy,. *Journal of Forensic Sciences*, **2015**, 60, 595-604	1.8	24
134	Rapid Filament Supramolecular Chirality Reversal of HET-s (218-289) Prion Fibrils Driven by pH Elevation. *Journal of Physical Chemistry B*, **2015**, 119, 8521-5	3.4	18
133	The role of proline-containing peptide triads in ß-sheet formation: A kinetic study. *Biopolymers*, **2015**, 103, 339-50	2.2	2
132	Identification of species' blood by attenuated total reflection (ATR) Fourier transform infrared (FT-IR) spectroscopy. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 7435-42	4.4	52
131	Structural Organization of Insulin Fibrils Based on Polarized Raman Spectroscopy: Evaluation of Existing Models. *Journal of the American Chemical Society*, **2015**, 137, 11312-20	16.4	22
130	Raman spectroscopy of blood serum for Alzheimer's disease diagnostics: specificity relative to other types of dementia. *Journal of Biophotonics*, **2015**, 8, 584-96	3.1	86
129	Vibrational spectroscopy: recent developments to revolutionize forensic science. *Analytical Chemistry*, **2015**, 87, 306-27	7.8	78
128	Supramolecular chirality in peptide microcrystals. *Chemical Communications*, **2015**, 51, 89-92	5.8	28
127	RuvbL1 and RuvbL2 enhance aggresome formation and disaggregate amyloid fibrils. *EMBO Journal*, **2015**, 34, 2363-82	13	37
126	Exploring the structure and formation mechanism of amyloid fibrils by Raman spectroscopy: a review. *Analyst, The*, **2015**, 140, 4967-80	5	137
125	Hydrogen sulfide inhibits amyloid formation. *Journal of Physical Chemistry B*, **2015**, 119, 1265-74	3.4	27
124	Detection and structural characterization of insulin prefibrilar oligomers using surface enhanced Raman spectroscopy. *Biotechnology Progress*, **2014**, 30, 488-95	2.8	18

123	Amyloid fibrils: the eighth wonder of the world in protein folding and aggregation. *Biophysical Journal*, **2014**, 106, 1433-5	2.9	17
122	A modified Raman multidimensional spectroscopic signature of blood to account for the effect of laser power. *Forensic Science International*, **2014**, 240, 88-94	2.6	20
121	Is supramolecular filament chirality the underlying cause of major morphology differences in amyloid fibrils?. *Journal of the American Chemical Society*, **2014**, 136, 2302-12	16.4	103
120	Surface characterization of insulin protofilaments and fibril polymorphs using tip-enhanced Raman spectroscopy (TERS). *Biophysical Journal*, **2014**, 106, 263-71	2.9	60
119	Polarized Raman Spectroscopy of Aligned Insulin Fibrils. *Journal of Raman Spectroscopy*, **2014**, 45, 665-671	2.3	13
118	Raman spectroscopy of blood for species identification. *Analytical Chemistry*, **2014**, 86, 11628-33	7.8	63
117	Attenuated total reflectance-FT-IR imaging for rapid and automated detection of gunshot residue. *Analytical Chemistry*, **2014**, 86, 3389-96	7.8	37
116	Raman microspectroscopic chemical mapping and chemometric classification for the identification of gunshot residue on adhesive tape. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 4595-9	4.4	37
115	A human CCT5 gene mutation causing distal neuropathy impairs hexadecamer assembly in an archaeal model. *Scientific Reports*, **2014**, 4, 6688	4.9	16
114	Raman spectroscopy coupled with advanced statistics for differentiating menstrual and peripheral blood. *Journal of Biophotonics*, **2014**, 7, 59-67	3.1	46
113	Discrimination of human and animal blood traces via Raman spectroscopy. *Forensic Science International*, **2014**, 238, 91-5	2.6	66
112	Forensic identification of blood in the presence of contaminations using Raman microspectroscopy coupled with advanced statistics: effect of sand, dust, and soil. *Journal of Forensic Sciences*, **2013**, 58, 1141-8	1.8	45
111	Advanced statistical analysis and discrimination of gunshot residue implementing combined Raman and FT-IR data. *Analytical Methods*, **2013**, 5, 6292	3.2	34
110	Structural landscape of the proline-rich domain of Sos1 nucleotide exchange factor. *Biophysical Chemistry*, **2013**, 175-176, 54-62	3.5	6
109	Structural Characterization of Insulin Fibril Surfaces using Tip Enhanced Raman Spectroscopy (TERS). *Biophysical Journal*, **2013**, 104, 49a	2.9	6
108	Ionic and tautomeric composition of cytosine in aqueous solution: resonance and non-resonance Raman spectroscopy study. *Journal of Physical Chemistry A*, **2013**, 117, 12734-48	2.8	9
107	Circumventing substrate interference in the Raman spectroscopic identification of blood stains. *Forensic Science International*, **2013**, 231, 157-66	2.6	48
106	Pathogenic serum amyloid A 1.1 shows a long oligomer-rich fibrillation lag phase contrary to the highly amyloidogenic non-pathogenic SAA2.2. *Journal of Biological Chemistry*, **2013**, 288, 2744-55	5.4	36

105	Heat-induced fibrillation of BclXL apoptotic repressor. *Biophysical Chemistry*, **2013**, 179, 12-25	3.5	6
104	Levels of supramolecular chirality of polyglutamine aggregates revealed by vibrational circular dichroism. *FEBS Letters*, **2013**, 587, 1638-43	3.8	27
103	Amide I vibrational mode suppression in surface (SERS) and tip (TERS) enhanced Raman spectra of protein specimens. *Analyst, The*, **2013**, 138, 1665-73	5	109
102	Attenuated total reflectance-FT-IR spectroscopy for gunshot residue analysis: potential for ammunition determination. *Analytical Chemistry*, **2013**, 85, 7287-94	7.8	46
101	Deconstruction of stable cross-Beta fibrillar structures into toxic and nontoxic products using a mutated archaeal chaperonin. *ACS Chemical Biology*, **2013**, 8, 2095-101	4.9	6
100	Insight into resolution enhancement in generalized two-dimensional correlation spectroscopy. *Applied Spectroscopy*, **2013**, 67, 283-90	3.1	9
99	Advanced statistical analysis of Raman spectroscopic data for the identification of body fluid traces: semen and blood mixtures. *Forensic Science International*, **2012**, 222, 259-65	2.6	48
98	Dissecting structure of prion amyloid fibrils by hydrogen-deuterium exchange ultraviolet Raman spectroscopy. *Journal of Physical Chemistry B*, **2012**, 116, 7926-30	3.4	17
97	Fibrillation mechanism of a model intrinsically disordered protein revealed by 2D correlation deep UV resonance Raman spectroscopy. *Biomacromolecules*, **2012**, 13, 1503-9	6.9	18
96	Structure and composition of insulin fibril surfaces probed by TERS. *Journal of the American Chemical Society*, **2012**, 134, 13323-9	16.4	127
95	Multidimensional Raman spectroscopic signature of sweat and its potential application to forensic body fluid identification. *Analytica Chimica Acta*, **2012**, 718, 78-83	6.6	55
94	Current research on smoking pipe residues. *Journal of Archaeological Science*, **2012**, 39, 1951-1959	2.9	21
93	Rapid degradation kinetics of amyloid fibrils under mild conditions by an archaeal chaperonin. *Biochemical and Biophysical Research Communications*, **2012**, 422, 97-102	3.4	17
92	Acidic pH promotes oligomerization and membrane insertion of the BclXL apoptotic repressor. *Archives of Biochemistry and Biophysics*, **2012**, 528, 32-44	4.1	11
91	Normal and reversed supramolecular chirality of insulin fibrils probed by vibrational circular dichroism at the protofilament level of fibril structure. *Biophysical Journal*, **2012**, 103, 522-531	2.9	72
90	Spontaneous inter-conversion of insulin fibril chirality. *Chemical Communications*, **2012**, 48, 2837-9	5.8	69
89	Disulfide bridges remain intact while native insulin converts into amyloid fibrils. *PLoS ONE*, **2012**, 7, e36989	3.7	56
88	UV resonance Raman investigations of peptide and protein structure and dynamics. *Chemical Reviews*, **2012**, 112, 2604-28	68.1	144

87	Raman spectroscopic analysis of gunshot residue offering great potential for caliber differentiation. *Analytical Chemistry*, **2012**, 84, 4334-9	7.8	59
86	Raman spectroscopic signature of vaginal fluid and its potential application in forensic body fluid identification. *Forensic Science International*, **2012**, 216, 44-8	2.6	54
85	Spectroscopic Discrimination of Bone Samples from Various Species. *American Journal of Analytical Chemistry*, **2012**, 03, 161-167	0.7	24
84	Raman spectroscopic study of the tautomeric composition of adenine in water. *Journal of Physical Chemistry A*, **2011**, 115, 10600-9	2.8	24
83	Multidimensional Raman spectroscopic signatures as a tool for forensic identification of body fluid traces: a review. *Applied Spectroscopy*, **2011**, 65, 1223-32	3.1	69
82	Isolating toxic insulin amyloid reactive species that lack β-sheets and have wide pH stability. *Biophysical Journal*, **2011**, 100, 2792-800	2.9	20
81	The impact of protein disulfide bonds on the amyloid fibril morphology. *International Journal of Biomedical Nanoscience and Nanotechnology*, **2011**, 2, 167-176	0.2	12
80	Potential application of Raman spectroscopy for determining burial duration of skeletal remains. *Analytical and Bioanalytical Chemistry*, **2011**, 401, 2511-8	4.4	50
79	Determination of the tautomeric composition of adenine in the gas phase by vibrational spectroscopy methods: II. Analysis of resonance Raman spectra. *Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)*, **2010**, 109, 853-860	0.7	5
78	Amyloid Fibrils are "Alive" as Evident from Deep UV Raman Spectroscopic Examination: an Instrumentation Driven Discovery **2010**,		1
77	Discriminant analysis of Raman spectra for body fluid identification for forensic purposes. *Sensors*, **2010**, 10, 2869-84	3.8	97
76	Structural variations in the cross-beta core of amyloid beta fibrils revealed by deep UV resonance Raman spectroscopy. *Journal of the American Chemical Society*, **2010**, 132, 6324-8	16.4	58
75	Charge distribution and amyloid fibril formation: insights from genetically engineered model systems. *Biomacromolecules*, **2010**, 11, 1721-6	6.9	11
74	Quantitative methods for structural characterization of proteins based on deep UV resonance Raman spectroscopy. *Methods*, **2010**, 52, 23-37	4.6	52
73	Forensic body fluid identification: the Raman spectroscopic signature of saliva. *Analyst, The*, **2010**, 135, 512-7	5	91
72	Direct observation and pH control of reversed supramolecular chirality in insulin fibrils by vibrational circular dichroism. *Chemical Communications*, **2010**, 46, 7154-6	5.8	109
71	Advanced statistical and numerical methods for spectroscopic characterization of protein structural evolution. *Chemical Reviews*, **2010**, 110, 5692-713	68.1	52
70	Amyloid fibrils are "alive": spontaneous refolding from one polymorph to another. *Chemical Communications*, **2010**, 46, 4249-51	5.8	25

69	Raman spectroscopic signature of blood and its potential application to forensic body fluid identification. *Analytical and Bioanalytical Chemistry*, **2010**, 396, 525-34	4.4	113
68	Genetically Engineered Polypeptides as a Model of Intrinsically Disordered Fibrillogenic Proteins: Deep UV Resonance Raman Spectroscopic Study **2010**, 253-302		2
67	A de novo designed 11 kDa polypeptide: model for amyloidogenic intrinsically disordered proteins. *Biopolymers*, **2010**, 93, 607-18	2.2	8
66	Two-dimensional correlation Raman spectroscopy for characterizing protein structure and dynamics. *Journal of Raman Spectroscopy*, **2009**, 40, 1749-1758	2.3	43
65	Both Ca2+ and Zn2+ are essential for S100A12 protein oligomerization and function. *BMC Biochemistry*, **2009**, 10, 11	4.8	88
64	Analysis of body fluids for forensic purposes: from laboratory testing to non-destructive rapid confirmatory identification at a crime scene. *Forensic Science International*, **2009**, 188, 1-17	2.6	428
63	Raman spectroscopic signature of semen and its potential application to forensic body fluid identification. *Forensic Science International*, **2009**, 193, 56-62	2.6	87
62	Blood species identification for forensic purposes using Raman spectroscopy combined with advanced statistical analysis. *Analytical Chemistry*, **2009**, 81, 7773-7	7.8	101
61	Mechanism of fibril formation by a 39-residue peptide (PAPf39) from human prostatic acidic phosphatase. *Biochemistry*, **2009**, 48, 11582-91	3.2	30
60	Genetic engineering combined with deep UV resonance Raman spectroscopy for structural characterization of amyloid-like fibrils. *Journal of the American Chemical Society*, **2008**, 130, 5852-3	16.4	29
59	Hen egg white lysozyme fibrillation: a deep-UV resonance Raman spectroscopic study. *Journal of Biophotonics*, **2008**, 1, 215-29	3.1	58
58	Raman spectroscopy offers great potential for the nondestructive confirmatory identification of body fluids. *Forensic Science International*, **2008**, 181, e1-5	2.6	149
57	2D correlation deep UV resonance raman spectroscopy of early events of lysozyme fibrillation: kinetic mechanism and potential interpretation pitfalls. *Journal of the American Chemical Society*, **2008**, 130, 309-17	16.4	76
56	Probing the cross-beta core structure of amyloid fibrils by hydrogen-deuterium exchange deep ultraviolet resonance Raman spectroscopy. *Journal of the American Chemical Society*, **2007**, 129, 11002-3	16.4	63
55	Vibrational circular dichroism shows unusual sensitivity to protein fibril formation and development in solution. *Journal of the American Chemical Society*, **2007**, 129, 12364-5	16.4	126
54	Probing a fibrillation nucleus directly by deep ultraviolet Raman spectroscopy. *Journal of the American Chemical Society*, **2007**, 129, 6972-3	16.4	58
53	Beta-sheet folding of 11-kDa fibrillogenic polypeptide is completely aggregation driven. *Biopolymers*, **2007**, 86, 261-4	2.2	16
52	The first step of hen egg white lysozyme fibrillation, irreversible partial unfolding, is a two-state transition. *Protein Science*, **2007**, 16, 815-32	6.3	55

51	Hexameric calgranulin C (S100A12) binds to the receptor for advanced glycated end products (RAGE) using symmetric hydrophobic target-binding patches. *Journal of Biological Chemistry*, **2007**, 282, 4218-31	5.4	128
50	Reversible thermal denaturation of a 60-kDa genetically engineered beta-sheet polypeptide. *Biophysical Journal*, **2006**, 91, 3805-18	2.9	33
49	Multiple bicyclic diamide-lutetium complexes in solution: chemometric analysis of deep-UV Raman spectroscopic data. *Inorganic Chemistry*, **2006**, 45, 3606-12	5.1	10
48	Bilayer fibril formation by genetically engineered polypeptides: preparation and characterization. *Biomacromolecules*, **2006**, 7, 1104-11	6.9	42
47	Latent variable analysis of Raman spectra for structural characterization of proteins. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2006**, 102, 46-61	2.1	29
46	Metal ion binding by a bicyclic diamide: deep UV Raman spectroscopic characterization. *Journal of Physical Chemistry A*, **2005**, 109, 7094-8	2.8	5
45	Steady-state and transient ultraviolet resonance Raman spectrometer for the 193-270 nm spectral region. *Applied Spectroscopy*, **2005**, 59, 1541-52	3.1	77
44	UVRR spectroscopic studies of valinomycin complex formation in different solvents. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2005**, 61, 19-26	4.4	10
43	Lysozyme fibrillation: deep UV Raman spectroscopic characterization of protein structural transformation. *Biopolymers*, **2005**, 79, 58-61	2.2	44
42	Photoswitchable Spirobenzopyran- Based Photochemically Controlled Photonic Crystals. *Advanced Functional Materials*, **2005**, 15, 1401-1406	15.6	95
41	Deep-UV Raman spectrometer tunable between 193 and 205 nm for structural characterization of proteins. *Analytical and Bioanalytical Chemistry*, **2005**, 381, 431-7	4.4	73
40	Photoresponsive Azobenzene Photonic Crystals. *Journal of Physical Chemistry B*, **2004**, 108, 12637-12639	3.4	58
39	Photochemically Controlled Photonic Crystals. *Advanced Functional Materials*, **2003**, 13, 774-780	15.6	78
38	Photonic crystal carbohydrate sensors: low ionic strength sugar sensing. *Journal of the American Chemical Society*, **2003**, 125, 3322-9	16.4	424
37	High ionic strength glucose-sensing photonic crystal. *Analytical Chemistry*, **2003**, 75, 2316-23	7.8	339
36	Comparison between UV Raman and circular dichroism detection of short alpha helices in bombolitin III. *Biochemistry*, **2002**, 41, 1893-6	3.2	43
35	UV Resonance Raman Study of the Spatial Dependence of □Helix Unfolding□ *Journal of Physical Chemistry A*, **2002**, 106, 3621-3624	2.8	39
34	Crown-Annelated 9,10-Bis(1,3-dithiol-2-ylidene)-9,10-dihydroanthracene Derivatives as Cation Sensors: Synthesis, X-ray Crystal Structures, Voltammetric and Spectroscopic Monitoring of Metal Complexation. *European Journal of Organic Chemistry*, **2001**, 2001, 933-940	3.2	30

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