Dmitry Kurouski

List of Publications by Year
in descending order

113	4,657	94381 37	114418 63
papers	citations	h-index	g-index

116	116	116	4356
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Raman-based identification of tick species (Ixodidae) by spectroscopic analysis of their feces. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 271, 120966.	2.0	2
2	Characterization of Substrates and Surface-Enhancement in Atomic Force Microscopy Infrared Analysis of Amyloid Aggregates. Journal of Physical Chemistry C, 2022, 126, 4157-4162.	1.5	18
3	High-Resolution Raman Nano-Imaging with an Imperfect Probe. Journal of Physical Chemistry C, 2022, 126, 4089-4094.	1.5	6
4	Raman spectroscopy enables highly accurate differentiation between young male and female hemp plants. Planta, 2022, 255, 85.	1.6	4
5	Nanoscale Structural Analysis of a Lipid-Driven Aggregation of Insulin. Journal of Physical Chemistry Letters, 2022, 13, 2467-2473.	2.1	30
6	Raman Spectroscopy and Machine Learning for Agricultural Applications: Chemometric Assessment of Spectroscopic Signatures of Plants as the Essential Step Toward Digital Farming. Frontiers in Plant Science, 2022, 13, 887511.	1.7	7
7	The degree of unsaturation of fatty acids in phosphatidylserine alters the rate of insulin aggregation and the structure and toxicity of amyloid aggregates. FEBS Letters, 2022, 596, 1424-1433.	1.3	27
8	Unsaturation in the Fatty Acids of Phospholipids Drastically Alters the Structure and Toxicity of Insulin Aggregates Grown in Their Presence. Journal of Physical Chemistry Letters, 2022, 13, 4563-4569.	2.1	29
9	Raman Spectroscopy Enables Non-invasive and Confirmatory Diagnostics of Aluminum and Iron Toxicities in Rice. Frontiers in Plant Science, 2022, 13, .	1.7	5
10	Lipids reverse supramolecular chirality and reduce toxicity of amyloid fibrils. FEBS Journal, 2022, 289, 7537-7544.	2.2	10
11	Amyloid aggregates exert cell toxicity causing irreversible damages in the endoplasmic reticulum. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2022, 1868, 166485.	1.8	23
12	Underlying Mechanisms of Hot Carrier-Driven Reactivity on Bimetallic Nanostructures. Journal of Physical Chemistry C, 2021, 125, 2492-2501.	1.5	17
13	Exploring a possibility of using Raman spectroscopy for detection of Lyme disease. Journal of Biophotonics, 2021, 14, e202000477.	1.1	5
14	Nanoscale structural characterization of plasmon-driven reactions. Nanophotonics, 2021, 10, 1657-1673.	2.9	20
15	Potential of Spatially Offset Raman Spectroscopy for Detection of Zebra Chip and Potato Virus Y Diseases of Potatoes (<i>Solanum tuberosum</i>). ACS Agricultural Science and Technology, 2021, 1, 211-221.	1.0	10
16	Plasmon-Driven Chemistry on Mono- and Bimetallic Nanostructures. Accounts of Chemical Research, 2021, 54, 2477-2487.	7.6	44
17	Non-Invasive Identification of Nutrient Components in Grain. Molecules, 2021, 26, 3124.	1.7	6
18	Unravelling the Structural Organization of Individual Î±-Synuclein Oligomers Grown in the Presence of Phospholipids. Journal of Physical Chemistry Letters, 2021, 12, 4407-4414.	2.1	36

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19	Raman Spectroscopy Can Distinguish Glyphosate-Susceptible and -Resistant Palmer Amaranth (Amaranthus palmeri). Frontiers in Plant Science, 2021, 12, 657963.	1.7	7
20	Probing the Redox Selectivity on Au@Pd and Au@Pt Bimetallic Nanoplates by Tip-Enhanced Raman Spectroscopy. ACS Photonics, 2021, 8, 2112-2119.	3.2	19
21	Raman spectroscopy enables phenotyping and assessment of nutrition values of plants: a review. Plant Methods, 2021, 17, 78.	1.9	25
22	Raman-Based Diagnostics of Stalk Rot Disease of Maize Caused by Colletotrichum graminicola. Frontiers in Plant Science, 2021, 12, 722898.	1.7	10
23	Tip-Enhanced Raman Analysis of Plasmonic and Photocatalytic Properties of Copper Nanomaterials. Journal of Physical Chemistry Letters, 2021, 12, 8335-8340.	2.1	12
24	Biochemical Origin of Raman-Based Diagnostics of Huanglongbing in Grapefruit Trees. Frontiers in Plant Science, 2021, 12, 680991.	1.7	20
25	Raman spectroscopyâ€based diagnostics of water deficit and salinity stresses in two accessions of peanut. Plant Direct, 2021, 5, e342.	0.8	9
26	Tip-enhanced Raman imaging of photocatalytic reactions on thermally-reshaped gold and goldâ€"palladium microplates. Chemical Communications, 2021, 57, 891-894.	2.2	17
27	Probing the plasmon-driven Suzukiâ€"Miyaura coupling reactions with cargo-TERS towards tailored catalysis. Nanoscale, 2021, 13, 11793-11799.	2.8	11
28	A Proof-of-Principle Study of Non-invasive Identification of Peanut Genotypes and Nematode Resistance Using Raman Spectroscopy. Frontiers in Plant Science, 2021, 12, 664243.	1.7	4
29	Complementarity of Raman and Infrared spectroscopy for rapid characterization of fucoidan extracts. Plant Methods, 2021, 17, 130.	1.9	14
30	Nanoscale Structural Organization of Insulin Fibril Polymorphs Revealed by Atomic Force Microscopyâ€"Infrared Spectroscopy (AFMâ€IR). ChemBioChem, 2020, 21, 481-485.	1.3	39
31	Direct Experimental Evidence of Hot Carrier-Driven Chemical Processes in Tip-Enhanced Raman Spectroscopy (TERS). Journal of Physical Chemistry C, 2020, 124, 2238-2244.	1.5	44
32	Nanoscale Structural Characterization of Individual Viral Particles Using Atomic Force Microscopy Infrared Spectroscopy (AFM-IR) and Tip-Enhanced Raman Spectroscopy (TERS). Analytical Chemistry, 2020, 92, 11297-11304.	3.2	60
33	Infrared analysis of hair dyeing and bleaching history. Analytical Methods, 2020, 12, 3741-3747.	1.3	9
34	Raman Spectroscopy Enables Non-invasive and Confirmatory Diagnostics of Salinity Stresses, Nitrogen, Phosphorus, and Potassium Deficiencies in Rice. Frontiers in Plant Science, 2020, 11, 573321.	1.7	25
35	Confirmatory non-invasive and non-destructive identification of poison ivy using a hand-held Raman spectrometer. RSC Advances, 2020, 10, 21530-21534.	1.7	14
36	A rapid and convenient screening method for detection of restricted monensin, decoquinate, and lasalocid in animal feed by applying SERS and chemometrics. Food and Chemical Toxicology, 2020, 144, 111633.	1.8	11

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37	Non-invasive post-mortem interval diagnostics using a hand-held Raman spectrometer. Forensic Chemistry, 2020, 20, 100270.	1.7	6
38	Non-Invasive Characterization of Single-, Double- and Triple-Viral Diseases of Wheat With a Hand-Held Raman Spectrometer. Frontiers in Plant Science, 2020, 11, 01300.	1.7	22
39	Gap-Mode Tip-Enhanced Raman Scattering on Au Nanoplates of Varied Thickness. Journal of Physical Chemistry Letters, 2020, 11, 3815-3820.	2.1	17
40	Infrared and Raman chemical imaging and spectroscopy at the nanoscale. Chemical Society Reviews, 2020, 49, 3315-3347.	18.7	178
41	Raman-Based Differentiation of Hemp, Cannabidiol-Rich Hemp, and Cannabis. Analytical Chemistry, 2020, 92, 7733-7737.	3.2	36
42	Raman Spectroscopy Enables Non-Invasive Identification of Peanut Genotypes and Value-Added Traits. Scientific Reports, 2020, 10, 7730.	1.6	38
43	Use of Raman spectroscopy and size-exclusion chromatography coupled with HDX-MS spectroscopy for studying conformational changes of small proteins in solution. Journal of Pharmaceutical and Biomedical Analysis, 2020, 189, 113399.	1.4	8
44	Raman Spectroscopy vs Quantitative Polymerase Chain Reaction In Early Stage Huanglongbing Diagnostics. Scientific Reports, 2020, 10, 10101.	1.6	30
45	Nanoscale Photocatalytic Activity of Gold and Goldâ€“Palladium Nanostructures Revealed by Tip-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2020, 11, 5531-5537.	2.1	31
46	Suppressing Molecular Charging, Nanochemistry, and Optical Rectification in the Tip-Enhanced Raman Geometry. Journal of Physical Chemistry Letters, 2020, 11, 5890-5895.	2.1	27
47	Non-invasive diagnostics of Liberibacter disease on tomatoes using a hand-held Raman spectrometer. Planta, 2020, 251, 64.	1.6	43
48	Confirmatory non-invasive and non-destructive differentiation between hemp and cannabis using a hand-held Raman spectrometer. RSC Advances, 2020, 10, 3212-3216.	1.7	33
49	Structural Characterization of Individual Î±-Synuclein Oligomers Formed at Different Stages of Protein Aggregation by Atomic Force Microscopy-Infrared Spectroscopy. Analytical Chemistry, 2020, 92, 6806-6810.	3.2	77
50	The Prevalence of Anions at Plasmonic Nanojunctions: A Closer Look at <i>p</i>-Nitrothiophenol. Journal of Physical Chemistry Letters, 2020, 11, 3809-3814.	2.1	30
51	Raman-Based Diagnostics of Biotic and Abiotic Stresses in Plants. A Review. Frontiers in Plant Science, 2020, 11, 616672.	1.7	29
52	Non-invasive identification of potato varieties and prediction of the origin of tuber cultivation using spatially offset Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2020, 412, 4585-4594.	1.9	25
53	Rapid detection and prediction of chlortetracycline and oxytetracycline in animal feed using surface-enhanced Raman spectroscopy (SERS). Food Control, 2020, 114, 107243.	2.8	39
54	Elucidation of Photocatalytic Properties of Goldâ€“Platinum Bimetallic Nanoplates Using Tip-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 12850-12854.	1.5	23

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55	Raman spectroscopy as an early detection tool for rose rosette infection. Planta, 2019, 250, 1247-1254.	1.6	46
56	Detection and identification of canker and blight on orange trees using a handâ€held Raman spectrometer. Journal of Raman Spectroscopy, 2019, 50, 1875-1880.	1.2	34
57	Thermal Reshaping of Gold Microplates: Three Possible Routes and Their Transformation Mechanisms. ACS Applied Materials & Interfaces, 2019, 11, 41813-41820.	4.0	9
58	Rapid and Noninvasive Typing and Assessment of Nutrient Content of Maize Kernels Using a Handheld Raman Spectrometer. ACS Omega, 2019, 4, 16330-16335.	1.6	39
59	Advanced spectroscopic techniques for plant disease diagnostics. A review. TrAC - Trends in Analytical Chemistry, 2019, 118, 43-49.	5.8	101
60	Surface-Enhanced Raman Analysis of Underlaying Colorants on Redyed Hair. Analytical Chemistry, 2019, 91, 7313-7318.	3.2	15
61	Rapid and noninvasive diagnostics of Huanglongbing and nutrient deficits on citrus trees with a handheld Raman spectrometer. Analytical and Bioanalytical Chemistry, 2019, 411, 3125-3133.	1.9	88
62	Complementarity of Raman and Infrared Spectroscopy for Structural Characterization of Plant Epicuticular Waxes. ACS Omega, 2019, 4, 3700-3707.	1.6	76
63	Inhibition of Protein Fibrillation by Hydrogen Sulfide1. , 2019, , .		0
64	Noninvasive and Nondestructive Detection of Cowpea Bruchid within Cowpea Seeds with a Hand-Held Raman Spectrometer. Analytical Chemistry, 2019, 91, 1733-1737.	3.2	39
65	Nanoscale Structural Organization of Plant Epicuticular Wax Probed by Atomic Force Microscope Infrared Spectroscopy. Analytical Chemistry, 2019, 91, 2472-2479.	3.2	53
66	Enantioselective Synthesis of Î±-(Hetero)aryl Piperidines through Asymmetric Hydrogenation of Pyridinium Salts and Its Mechanistic Insights. Organic Letters, 2018, 20, 1333-1337.	2.4	48
67	Detection and Identification of Plant Pathogens on Maize Kernels with a Hand-Held Raman Spectrometer. Analytical Chemistry, 2018, 90, 3009-3012.	3.2	132
68	Development of a Scalable, Chromatography-Free Synthesis of <i>t</i>-Bu-SMS-Phos and Application to the Synthesis of an Important Chiral CF₃-Alcohol Derivative with High Enantioselectivity Using Rh-Catalyzed Asymmetric Hydrogenation. Journal of Organic Chemistry, 2018, 83, 1448-1461.	1.7	18
69	Elucidation of Tip-Broadening Effect in Tip-Enhanced Raman Spectroscopy (TERS): A Cause of Artifacts or Potential for 3D TERS. Journal of Physical Chemistry C, 2018, 122, 24334-24340.	1.5	26
70	Forensic identification of urine on cotton and polyester fabric with a hand-held Raman spectrometer. Forensic Chemistry, 2018, 9, 44-49.	1.7	26
71	Detection and Identification of Fungal Infections in Intact Wheat and Sorghum Grain Using a Hand-Held Raman Spectrometer. Analytical Chemistry, 2018, 90, 8616-8621.	3.2	94
72	Metal-Free Cycloetherification by in Situ Generated <i>P</i>-Stereogenic Î±-Diazanium Intermediates: A Convergent Synthesis of Enantiomerically Pure Dihydrobenzooxaphospholes. Organic Letters, 2017, 19, 894-897.	2.4	4

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73	Unraveling the Near- and Far-Field Relationship of 2D Surface-Enhanced Raman Spectroscopy Substrates Using Wavelength-Scan Surface-Enhanced Raman Excitation Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 14737-14744.	1.5	21
74	Enantioselective Nickel-Catalyzed Mizorokiâ€“Heck Cyclizations To Generate Quaternary Stereocenters. Organic Letters, 2017, 19, 3338-3341.	2.4	54
75	Advances of Vibrational Circular Dichroism (VCD) in bioanalytical chemistry. A review. Analytica Chimica Acta, 2017, 990, 54-66.	2.6	47
76	Advances of tip-enhanced Raman spectroscopy (TERS) in electrochemistry, biochemistry, and surface science. Vibrational Spectroscopy, 2017, 91, 3-15.	1.2	50
77	Supramolecular Organization of Amyloid Fibrils. , 2016, , .		1
78	Spatially resolved spectroscopic differentiation of hydrophilic and hydrophobic domains on individual insulin amyloid fibrils. Scientific Reports, 2016, 6, 33575.	1.6	56
79	Reengineered BIâ€DIME Ligand Core Based on Computer Modeling to Increase Selectivity in Asymmetric Suzukiâ€“Miyaura Coupling for the Challenging Axially Chiral HIV Integrase Inhibitor. Advanced Synthesis and Catalysis, 2016, 358, 3522-3527.	2.1	18
80	Synthesis of Enantioenriched 2-Alkyl Piperidine Derivatives through Asymmetric Reduction of Pyridinium Salts. Organic Letters, 2016, 18, 4920-4923.	2.4	46
81	Surface-Enhanced Raman Spectroscopy Biosensing: <i>In Vivo</i> Diagnostics and Multimodal Imaging. Analytical Chemistry, 2016, 88, 6638-6647.	3.2	190
82	Tip-enhanced Raman spectroscopy: From concepts to practical applications. Chemical Physics Letters, 2016, 659, 16-24.	1.2	56
83	Structural differences between amyloid beta oligomers. Biochemical and Biophysical Research Communications, 2016, 477, 700-705.	1.0	65
84	Unraveling near-field and far-field relationships for 3D SERS substrates â€“ a combined experimental and theoretical analysis. Analyst, The, 2016, 141, 1779-1788.	1.7	41
85	Exploring the structure and formation mechanism of amyloid fibrils by Raman spectroscopy: a review. Analyst, The, 2015, 140, 4967-4980.	1.7	206
86	Probing Redox Reactions at the Nanoscale with Electrochemical Tip-Enhanced Raman Spectroscopy. Nano Letters, 2015, 15, 7956-7962.	4.5	193
87	Hydrogen Sulfide Inhibits Amyloid Formation. Journal of Physical Chemistry B, 2015, 119, 1265-1274.	1.2	37
88	<i>In Situ</i> Detection and Identification of Hair Dyes Using Surface-Enhanced Raman Spectroscopy (SERS). Analytical Chemistry, 2015, 87, 2901-2906.	3.2	107
89	Rapid Filament Supramolecular Chirality Reversal of HET-s (218â€“289) Prion Fibrils Driven by pH Elevation. Journal of Physical Chemistry B, 2015, 119, 8521-8525.	1.2	24
90	Supramolecular chirality in peptide microcrystals. Chemical Communications, 2015, 51, 89-92.	2.2	36

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91	Detection and structural characterization of insulin prefibrilar oligomers using surface enhanced Raman spectroscopy. Biotechnology Progress, 2014, 30, 488-495.	1.3	23
92	Is Supramolecular Filament Chirality the Underlying Cause of Major Morphology Differences in Amyloid Fibrils?. Journal of the American Chemical Society, 2014, 136, 2302-2312.	6.6	143
93	Surface Characterization of Insulin Protofilaments and Fibril Polymorphs Using Tip-Enhanced Raman Spectroscopy (TERS). Biophysical Journal, 2014, 106, 263-271.	0.2	82
94	Tip-Enhanced Raman Spectroscopy (TERS) for <i>in Situ</i> Identification of Indigo and Iron Gall Ink on Paper. Journal of the American Chemical Society, 2014, 136, 8677-8684.	6.6	81
95	Structural landscape of the proline-rich domain of Sos1 nucleotide exchange factor. Biophysical Chemistry, 2013, 175-176, 54-62.	1.5	7
96	Structural Characterization of Insulin Fibril Surfaces using Tip Enhanced Raman Spectroscopy (TERS). Biophysical Journal, 2013, 104, 49a.	0.2	6
97	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, 2744-2755.	1.6	45
98	Heat-induced fibrillation of BclXL apoptotic repressor. Biophysical Chemistry, 2013, 179, 12-25.	1.5	6
99	Levels of supramolecular chirality of polyglutamine aggregates revealed by vibrational circular dichroism. FEBS Letters, 2013, 587, 1638-1643.	1.3	31
100	Amide I vibrational mode suppression in surface (SERS) and tip (TERS) enhanced Raman spectra of protein specimens. Analyst, The, 2013, 138, 1665.	1.7	146
101	Deconstruction of Stable Cross-Beta Fibrillar Structures into Toxic and Nontoxic Products Using a Mutated Archaeal Chaperonin. ACS Chemical Biology, 2013, 8, 2095-2101.	1.6	9
102	Structure and Composition of Insulin Fibril Surfaces Probed by TERS. Journal of the American Chemical Society, 2012, 134, 13323-13329.	6.6	153
103	Rapid degradation kinetics of amyloid fibrils under mild conditions by an archaeal chaperonin. Biochemical and Biophysical Research Communications, 2012, 422, 97-102.	1.0	20
104	Acidic pH promotes oligomerization and membrane insertion of the BclXL apoptotic repressor. Archives of Biochemistry and Biophysics, 2012, 528, 32-44.	1.4	12
105	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.	0.2	93
106	Spontaneous inter-conversion of insulin fibril chirality. Chemical Communications, 2012, 48, 2837.	2.2	81
107	Disulfide Bridges Remain Intact while Native Insulin Converts into Amyloid Fibrils. PLoS ONE, 2012, 7, e36989.	1.1	75
108	Isolating Toxic Insulin Amyloid Reactive Species that Lack Î²-Sheets and Have Wide pH Stability. Biophysical Journal, 2011, 100, 2792-2800.	0.2	21

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109	The impact of protein disulfide bonds on the amyloid fibril morphology. International Journal of Biomedical Nanoscience and Nanotechnology, 2011, 2, 167.	0.1	18
110	Amyloid fibrils are â€œaliveâ€: spontaneous refolding from one polymorph to another. Chemical Communications, 2010, 46, 4249.	2.2	31
111	Amyloid Fibrils are â€œAliveâ€•as Evident from Deep UV Raman Spectroscopic Examination: an Instrumentation Driven Discovery. , 2010, , .		1
112	Direct observation and pH control of reversed supramolecular chirality in insulin fibrils by vibrational circular dichroism. Chemical Communications, 2010, 46, 7154.	2.2	136
113	Raman Spectroscopy Enables Confirmatory Diagnostics of Fusarium Wilt in Asymptomatic Banana. Frontiers in Plant Science, 0, 13, .	1.7	0