Alan George Ryder

List of Publications by Year
in descending order

105 papers	2,688 citations	172386 29 h-index	223716 46 g-index
110 all docs	110 docs citations	110 times ranked	2846 citing authors

#	Article	IF	Citations
1	Applications of Raman Spectroscopy in Biopharmaceutical Manufacturing: A Short Review. Applied Spectroscopy, 2017, 71, 1085-1116.	1.2	122
2	Quantitative analysis of cocaine in solid mixtures using Raman spectroscopy and chemometric methods. Journal of Raman Spectroscopy, 2000, 31, 221-227.	1.2	100
3	Surface enhanced Raman scattering for narcotic detection and applications to chemical biology. Current Opinion in Chemical Biology, 2005, 9, 489-493.	2.8	100
4	The effect of principal component analysis on machine learning accuracy with high-dimensional spectral data. Knowledge-Based Systems, 2006, 19, 363-370.	4.0	96
5	A Fluorescence Analysis of ANS Bound to Bovine Serum Albumin: Binding Properties Revisited by Using Energy Transfer. Journal of Fluorescence, 2008, 18, 519-526.	1.3	95
6	Comparison of Derivative Preprocessing and Automated Polynomial Baseline Correction Method for Classification and Quantification of Narcotics in Solid Mixtures. Applied Spectroscopy, 2006, 60, 182-193.	1.2	88
7	Rapid characterization and quality control of complex cell culture media solutions using raman spectroscopy and chemometrics. Biotechnology and Bioengineering, 2010, 107, 290-301.	1.7	80
8	Identifications and Quantitative Measurements of Narcotics in Solid Mixtures Using Near-IR Raman Spectroscopy and Multivariate Analysis. Journal of Forensic Sciences, 1999, 44, 1013-1019.	0.9	79
9	Quantitative analysis of sulfathiazole polymorphs in ternary mixtures by attenuated total reflectance infrared, near-infrared and Raman spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2010, 53, 412-420.	1.4	71
10	Prediction of Cell Culture Media Performance Using Fluorescence Spectroscopy. Analytical Chemistry, 2010, 82, 1311-1317.	3.2	69
11	Classification of Narcotics in Solid Mixtures Using Principal Component Analysis and Raman Spectroscopy. Journal of Forensic Sciences, 2002, 47, 275-284.	0.9	66
12	Quantitative polymorph contaminant analysis in tablets using Raman and near infra-red spectroscopies. Journal of Pharmaceutical and Biomedical Analysis, 2013, 72, 163-171.	1.4	63
13	A comparative study of the use of powder X-ray diffraction, Raman and near infrared spectroscopy for quantification of binary polymorphic mixtures of piracetam. Journal of Pharmaceutical and Biomedical Analysis, 2012, 63, 80-86.	1.4	62
14	Performance monitoring of a mammalian cell based bioprocess using Raman spectroscopy. Analytica Chimica Acta, 2013, 796, 84-91.	2.6	59
15	Investigating Tryptophan Quenching of Fluorescein Fluorescence under Protolytic Equilibrium. Journal of Physical Chemistry A, 2009, 113, 2757-2767.	1.1	48
16	Characterization of crude oils using fluorescence lifetime data. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 1025-1037.	2.0	47
17	Quantitative Analysis of Crude Oils by Fluorescence Lifetime and Steady State Measurements Using 380-nm Excitation. Applied Spectroscopy, 2002, 56, 107-116.	1.2	45
18	Monitoring Local Unfolding of Bovine Serum Albumin During Denaturation Using Steady-State and Time-Resolved Fluorescence Spectroscopy. Journal of Fluorescence, 2010, 20, 441-452.	1.3	45

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19	Solid-State Transformations of Sulfathiazole Polymorphs: The Effects of Milling and Humidity. Crystal Growth and Design, 2013, 13, 3404-3413.	1.4	45
20	Assessing the Maturity of Crude Petroleum Oils Using Total Synchronous Fluorescence Scan Spectra. Journal of Fluorescence, 2004, 14, 99-104.	1.3	44
21	Time-Resolved Fluorescence Studies on Bovine Serum Albumin Denaturation Process. Journal of Fluorescence, 2006, 16, 153-160.	1.3	40
22	Analysis of Crude Petroleum Oils Using Fluorescence Spectroscopy. , 2005, , 169-198.		37
23	Fluorescence Excitationâ€“Emission Matrix (EEM) Spectroscopy for Rapid Identification and Quality Evaluation of Cell Culture Media Components. Applied Spectroscopy, 2011, 65, 1240-1249.	1.2	37
24	Monitoring cell culture media degradation using surface enhanced Raman scattering (SERS) spectroscopy. Analytica Chimica Acta, 2014, 840, 58-67.	2.6	36
25	Low-Content Quantification in Powders Using Raman Spectroscopy: A Facile Chemometric Approach to Sub 0.1% Limits of Detection. Analytical Chemistry, 2015, 87, 3419-3428.	3.2	36
26	Time-Resolved Fluorescence Spectroscopic Study of Crude Petroleum Oils: Influence of Chemical Composition. Applied Spectroscopy, 2004, 58, 613-623.	1.2	34
27	Comprehensive, quantitative bioprocess productivity monitoring using fluorescence EEM spectroscopy and chemometrics. Analyst, The, 2014, 139, 1661-1671.	1.7	32
28	Evaluation of Acridine in Nafion as a Fluorescence-Lifetime-Based pH Sensor. Applied Spectroscopy, 2003, 57, 73-79.	1.2	31
29	The Effect of Principal Component Analysis on Machine Learning Accuracy with High Dimensional Spectral Data. , 2005, , 209-222.		31
30	Rapid quantification of tryptophan and tyrosine in chemically defined cell culture media using fluorescence spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2012, 71, 89-98.	1.4	31
31	A rapid fluorescence based method for the quantitative analysis of cell culture media photo-degradation. Analytica Chimica Acta, 2014, 807, 111-119.	2.6	31
32	<title>Time-domain measurement of fluorescence lifetime variation with pH</title>. , 2001, 4259, 102.		30
33	Time-Resolved Fluorescence Microspectroscopy for Characterizing Crude Oils in Bulk and Hydrocarbon-Bearing Fluid Inclusions. Applied Spectroscopy, 2004, 58, 1106-1115.	1.2	30
34	Using surfaceâ€enhanced Raman scattering (SERS) and fluorescence spectroscopy for screening yeast extracts, a complex component of cell culture media. Journal of Raman Spectroscopy, 2012, 43, 1074-1082.	1.2	29
35	High pressure diamond and diamond-like carbon deposition using a microwave CAP reactor. Diamond and Related Materials, 2002, 11, 1036-1040.	1.8	28
36	A stainless steel multiâ€well plate (SSâ€MWP) for highâ€throughput Raman analysis of dilute solutions. Journal of Raman Spectroscopy, 2010, 41, 1266-1275.	1.2	24

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37	Qualitative Analysis Using Raman Spectroscopy and Chemometrics: A Comprehensive Model System for Narcotics Analysis. Applied Spectroscopy, 2010, 64, 1109-1121.	1.2	24
38	Bench- and pilot-scale continuous-flow hydrothermal production of barium strontium titanate nanopowders. Chemical Engineering Journal, 2016, 289, 433-441.	6.6	24
39	Trigger Factor from the Psychrophilic Bacterium Psychrobacter frigidicola Is a Monomeric Chaperone. Journal of Bacteriology, 2009, 191, 1162-1168.	1.0	23
40	Polarity Assessment of Thermoresponsive Poly(NIPAM-co-NtBA) Copolymer Films Using Fluorescence Methods. Journal of Fluorescence, 2010, 20, 719-731.	1.3	23
41	Confined optical modes in small photonic molecules with semiconductor nanocrystals. Journal of Applied Physics, 2004, 96, 6761-6765.	1.1	22
42	Comparison of the Fluorescence Behavior of a Biocrude Oil and Crude Petroleum Oils. Energy & Fuels, 2006, 20, 783-785.	2.5	21
43	Study of Water Adsorption in Poly(N-isopropylacrylamide) Thin Films Using Fluorescence Emission of 3-Hydroxyflavone Probes. Macromolecules, 2010, 43, 9488-9494.	2.2	21
44	Cell culture media analysis using rapid spectroscopic methods. Current Opinion in Chemical Engineering, 2018, 22, 11-17.	3.8	21
45	A Compact Violet Diode Laser-Based Fluorescence Lifetime Microscope. Journal of Fluorescence, 2002, 12, 177-180.	1.3	20
46	Frequency Domain Fluorescence Lifetime Study of Crude Petroleum Oils. Journal of Fluorescence, 2008, 18, 997-1006.	1.3	20
47	Quantifying adsorbed protein on surfaces using confocal fluorescence microscopy. Colloids and Surfaces B: Biointerfaces, 2009, 72, 219-229.	2.5	20
48	A fluorescence anisotropy method for measuring protein concentration in complex cell culture media. Analytica Chimica Acta, 2014, 821, 54-61.	2.6	20
49	Determination of the Polymorphic Forms of Bicifadine Hydrochloride by Differential Scanning Calorimetryâ€"Thermogravimetric Analysis, X-Ray Powder Diffraction, Attenuated Total Reflectanceâ€"Infrared Spectroscopy, and Attenuated Total Reflectanceâ€"Near-Infrared Spectroscopy. Applied Spectroscopy, 2005, 59, 1365-1371.	1.2	19
50	A F-bridged Mn(ii) molecular square. Chemical Communications, 2009, , 7024.	2.2	18
51	Hydrocarbon migration in the Porcupine Basin, offshore Ireland: evidence from fluid inclusion studies. Petroleum Geoscience, 2010, 16, 67-76.	0.9	18
52	Calibration, standardization, and quantitative analysis of multidimensional fluorescence (MDF) measurements on complex mixtures (IUPAC Technical Report). Pure and Applied Chemistry, 2017, 89, 1849-1870.	0.9	18
53	An improved genetic programming technique for the classification of Raman spectra. Knowledge-Based Systems, 2005, 18, 217-224.	4.0	17
54	Anisotropy resolved multidimensional emission spectroscopy (ARMES): A new tool for protein analysis. Analytica Chimica Acta, 2015, 886, 133-142.	2.6	17

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55	Classification of a target analyte in solid mixtures using principal component analysis, support vector machines, and Raman spectroscopy. Proceedings of SPIE, 2005, 5826, 340.	0.8	16
56	Mobility and distribution of replication protein A in living cells using fluorescence correlation spectroscopy. Experimental and Molecular Pathology, 2007, 82, 156-162.	0.9	16
57	Kernel principal component analysis residual diagnosis (KPCARD): An automated method for cosmic ray artifact removal in Raman spectra. Analytica Chimica Acta, 2016, 913, 111-120.	2.6	16
58	Extended wavelength anisotropy resolved multidimensional emission spectroscopy (ARMES) measurements: better filters, validation standards, and Rayleigh scatter removal methods. Methods and Applications in Fluorescence, 2017, 5, 037001.	1.1	16
59	Fluorescence-lifetime-based pH sensing using resorufin. , 2003, 4876, 827.		15
60	Application of fluorescence lifetime measurements on single petroleumâ€bearing fluid inclusions to demonstrate multicharge history in petroleum reservoirs. Geofluids, 2009, 9, 330-337.	0.3	15
61	Modelling FÃ¶rster resonance energy transfer (FRET) using anisotropy resolved multi-dimensional emission spectroscopy (ARMES). Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129770.	1.1	15
62	Cell Cycle-Dependent Mobility of Cdc45 Determined in vivo by Fluorescence Correlation Spectroscopy. PLoS ONE, 2012, 7, e35537.	1.1	14
63	Machine learning methods for quantitative analysis of Raman spectroscopy data. , 2003, 4876, 1130.		13
64	Qualitative and quantitative analysis of chlorinated solvents using Raman spectroscopy and machine learning. Proceedings of SPIE, 2005, 5826, 131.	0.8	13
65	Using polarized Total Synchronous Fluorescence Spectroscopy (pTSFS) with PARAFAC analysis for characterizing intrinsic protein emission. Chemometrics and Intelligent Laboratory Systems, 2019, 194, 103871.	1.8	13
66	New reactive fluorophores in the 1,2,3-triazine series. Tetrahedron Letters, 2006, 47, 1721-1724.	0.7	12
67	One-Pot Synthesis of Fluorescent 2,5-Dihydro-1,2,3-triazine Derivatives from a Cascade Rearrangement Sequence in the Reactions of 1,2,3-Triazolium-1-aminide 1,3-Dipoles with Propiolate Esters. Journal of Organic Chemistry, 2006, 71, 5679-5687.	1.7	11
68	Fluorescence lifetime imaging study of a thin protein layer on solid surfaces. Experimental and Molecular Pathology, 2007, 82, 135-141.	0.9	11
69	Assessing proteinâ€“surface interactions with a series of multi-labeled BSA using fluorescence lifetime microscopy and FÃ¶rster Energy Resonance Transfer. Biophysical Chemistry, 2010, 152, 55-64.	1.5	11
70	Low Temperature Fluorescence Studies of Crude Petroleum Oils. Energy & Fuels, 2011, 25, 5022-5032.	2.5	11
71	Accurate anisotropy recovery from fluorophore mixtures using Multivariate Curve Resolution (MCR). Analytica Chimica Acta, 2018, 1000, 132-143.	2.6	11
72	Ferromagnetic exchange in a twisted, oxime-bridged [MnIII2] dimer. Dalton Transactions, 2012, 41, 8340.	1.6	10

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73	Investigating native state fluorescence emission of Immunoglobulin G using polarized Excitation Emission Matrix (pEEM) spectroscopy and PARAFAC. Chemometrics and Intelligent Laboratory Systems, 2019, 185, 1-11.	1.8	10
74	Synthesis of Novel Chiral Cyclopentadienes:Â Synthesis of Chiral Iron Complexes and the Crystal Structures of [(Î·5-(1S)-1-(6-methoxynaphthalenyl)-1-(tetramethyl-) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (cyclopentadienyl)etha (Î·4-diphenylbutadiene)]+[BF4]-. Organometallics, 1997, 16, 2638-2645.	1.1	9
75	Influence of chemical composition on the fluorescence lifetimes of crude petroleum oils. , 2003, , .		9
76	Chemometric approaches to low-content quantification (LCQ) in solid-state mixtures using Raman mapping spectroscopy. Analytical Methods, 2017, 9, 6293-6301.	1.3	9
77	Multi-attribute quality screening of immunoglobulin G using polarized Excitation Emission Matrix spectroscopy. Analytica Chimica Acta, 2020, 1101, 99-110.	2.6	9
78	Measuring the Micro-Polarity and Hydrogen-Bond Donor/Acceptor Ability of Thermoresponsive N-Isopropylacrylamide/N-tert-Butylacrylamide Copolymer Films Using Solvatochromic Indicators. Applied Spectroscopy, 2009, 63, 442-449.	1.2	8
79	Quantitative analysis of weakly bound insulin oligomers in solution using polarized multidimensional fluorescence spectroscopy. Analytica Chimica Acta, 2020, 1138, 18-29.	2.6	7
80	<title>Time-resolved fluorescence studies of porphycene and tetrasulfonated phthalocyanine dyes in varying solvents</title>. , 2001, 4432, 299.		6
81	The use of chloroaluminium phthalocyanine tetrasulfonate (AlPcTS) for time-delayed fluorescence imaging. Physics in Medicine and Biology, 2004, 49, 359-369.	1.6	6
82	Analysis of hydrocarbon-bearing fluid inclusions (HCFI) using time-resolved fluorescence spectroscopy. Proceedings of SPIE, 2005, , .	0.8	6
83	Fluorescence study of bovine serum albumin and Ti and Sn oxide nanoparticles interactions. Proceedings of SPIE, 2007, , .	0.8	6
84	The application of structured-light illumination microscopy to hydrocarbon-bearing fluid inclusions. Geofluids, 2008, 8, 102-112.	0.3	6
85	Hydrocarbon Fluid Inclusion Fluorescence: A Review. Reviews in Fluorescence, 2009, , 299-334.	0.5	6
86	A family of [Ni₈] cages templated by Î¼₆-peroxide from dioxygen activation. Inorganic Chemistry Frontiers, 2014, 1, 487-494.	3.0	6
87	Spontaneous emission from semiconductor nanocrystals in coupled spherical microcavities. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 858-861.	0.8	5
88	Classification of narcotics in solid mixtures using principal component analysis and Raman spectroscopy. Journal of Forensic Sciences, 2002, 47, 275-84.	0.9	5
89	Development of a rapid polarized total synchronous fluorescence spectroscopy (pTSFS) method for protein quantification in a model bioreactor broth. Biotechnology and Bioengineering, 2021, 118, 1805-1817.	1.7	4
90	A Facile Synthetic Route to a Family of MnIIIMonomers and Their Structural, Magnetic and Spectroscopic Studies. European Journal of Inorganic Chemistry, 2016, 2016, 5123-5131.	1.0	3

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91	An excitation emission fluorescence lifetime spectrometer using a frequency doubled supercontinuum laser source. Methods and Applications in Fluorescence, 2018, 6, 045007.	1.1	3
92	Characterization of lysozyme PEGylation products using polarized excitationâ€emission matrix spectroscopy. Biotechnology and Bioengineering, 2020, 117, 2969-2984.	1.7	3
93	Solvent effects on the luminescent properties of conjugated molecules. Synthetic Metals, 2001, 119, 555-556.	2.1	2
94	Time-gated fluorescence imaging of chloroaluminum phthalocyanine tetrasulfonate in a tissue phantom. , 2003, 4876, 109.		2
95	Determination of the modulation transfer function for a time-gated fluorescence imaging system. Journal of Biomedical Optics, 2004, 9, 1206.	1.4	2
96	Solvothermal synthesis of discrete cages and extended networks comprising {Cr(iii)3O(O2CR)3(oxime)3}2â^' (R = H, CH3, C(CH3)3, C14H9) building blocks. RSC Advances, 2016, 6, 73668-73676.	1.7	2
97	Effects of Viscosity and Refractive Index on the Emission and Diffusion Properties of Alexa Fluor 405 Using Fluorescence Correlation and Lifetime Spectroscopies. Journal of Fluorescence, 2021, 31, 835-845.	1.3	2
98	Evaluating the interaction of human serum albumin (HSA) and 1,2-dimyristoyl-sn-glycero-3-phosphocholine (DMPC) liposomes in different aqueous environments using anisotropy resolved multi-dimensional emission spectroscopy (ARMES). Colloids and Surfaces B: Biointerfaces, 2022, 211, 112310.	2.5	2
99	An Improved Genetic Programming Technique for the Classification of Raman Spectra. , 2004, , 181-192.		1
100	Fluorescence Analysis of Thermoresponsive Polymers. Reviews in Fluorescence, 2016, , 97-126.	0.5	1
101	Super Stable Fluorescein Isothiocyanate Isomer I Monolayer for Total Internal Reflection Fluorescence Microscopy. Langmuir, 2018, 34, 10913-10923.	1.6	1
102	Time-delayed fluorescence imaging of a porphycene derivative. , 2003, 4952, 152.		0
103	A fluorescence methodology for assessing the polarity and composition of novel thermoresponsive hydrophylic/hydrophobic copolymer system (Invited Paper). , 2005, , .		0
104	Advanced Spectroscopy and APBS Modeling for Determination of the Role of His190 and Trp103 in Mouse Thymidylate Synthase Interaction with Selected dUMP Analogues. International Journal of Molecular Sciences, 2021, 22, 2661.	1.8	0
105	Quantitative Analysis of Complex Liquids using Multidimensional Fluorescence Spectroscopy: from Oil to Vegemite. , 2013, , .		0