

Neil Lewis

List of Publications by Year in descending order

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43
papers

2,804
citations

186265

28
h-index

233421

45
g-index

46
all docs

46
docs citations

46
times ranked

2162
citing authors

#	ARTICLE	IF	CITATIONS
1	Fourier Transform Spectroscopic Imaging Using an Infrared Focal-Plane Array Detector. <i>Analytical Chemistry</i> , 1995, 67, 3377-3381.	6.5	425
2	Visible Reflectance Hyperspectral Imaging:Â Characterization of a Noninvasive, in Vivo System for Determining Tissue Perfusion. <i>Analytical Chemistry</i> , 2002, 74, 2021-2028.	6.5	191
3	Infrared Spectroscopic Imaging: From Planetary to Cellular Systems. <i>Applied Spectroscopy</i> , 1998, 52, 106A-120A.	2.2	158
4	Imaging of collagen and proteoglycan in cartilage sections using Fourier transform infrared spectral imaging. <i>Arthritis and Rheumatism</i> , 2001, 44, 846-855.	6.7	142
5	Visualization of silicone gel in human breast tissue using new infrared imaging spectroscopy. <i>Nature Medicine</i> , 1997, 3, 235-237.	30.7	127
6	Indium Antimonide (InSb) Focal Plane Array (FPA) Detection for Near-Infrared Imaging Microscopy. <i>Applied Spectroscopy</i> , 1994, 48, 607-615.	2.2	111
7	High-Fidelity Fourier Transform Infrared Spectroscopic Imaging of Primate Brain Tissue. <i>Applied Spectroscopy</i> , 1996, 50, 263-269.	2.2	106
8	High-Fidelity Raman Imaging Spectrometry: A Rapid Method Using an Acousto-Optic Tunable Filter. <i>Applied Spectroscopy</i> , 1992, 46, 1211-1216.	2.2	101
9	Characterization of Colorectal Adenocarcinoma Sections by Spatially Resolved FT-IR Microspectroscopy. <i>Applied Spectroscopy</i> , 2002, 56, 1-9.	2.2	97
10	Infrared and Raman imaging of biological and biomimetic samples. <i>Fresenius' Journal of Analytical Chemistry</i> , 2000, 366, 712-726.	1.5	91
11	Concomitant Raman spectroscopy and dynamic light scattering for characterization of therapeutic proteins at high concentrations. <i>Analytical Biochemistry</i> , 2015, 472, 7-20.	2.4	85
12	Mercury cadmium telluride focal-plane array detection for mid-infrared Fourier-transform spectroscopic imaging. <i>Optics Letters</i> , 1997, 22, 742.	3.3	82
13	Raman Chemical Imaging:Â Histopathology of Inclusions in Human Breast Tissue. <i>Analytical Chemistry</i> , 1996, 68, 1829-1833.	6.5	81
14	Near-Infrared Acousto-Optic Filtered Spectroscopic Microscopy: A Solid-State Approach to Chemical Imaging. <i>Applied Spectroscopy</i> , 1992, 46, 553-559.	2.2	80
15	Fourier transform Raman spectroscopy of biological materials. <i>Analytical Chemistry</i> , 1990, 62, 1101A-1111A.	6.5	72
16	Real-Time, Mid-Infrared Spectroscopic Imaging Microscopy Using Indium Antimonide Focal-Plane Array Detection. <i>Applied Spectroscopy</i> , 1995, 49, 672-678.	2.2	67
17	Near-infrared Fourier-transform Raman spectroscopy using fiber-optic assemblies. <i>Analytical Chemistry</i> , 1988, 60, 2658-2661.	6.5	64
18	Assessment of the critical factors affecting the porosity of roller compacted ribbons and the feasibility of using NIR chemical imaging to evaluate the porosity distribution. <i>International Journal of Pharmaceutics</i> , 2011, 410, 1-8.	5.2	58

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19	A Miniaturized, No-Moving-Parts Raman Spectrometer. <i>Applied Spectroscopy</i> , 1993, 47, 539-543.	2.2	56
20	Bacterial identification by near-infrared chemical imaging of food-specific cards. <i>Food Microbiology</i> , 2005, 22, 577-583.	4.2	54
21	Classification of Fourier Transform Infrared Microscopic Imaging Data of Human Breast Cells by Cluster Analysis and Artificial Neural Networks. <i>Applied Spectroscopy</i> , 2003, 57, 14-22.	2.2	53
22	FT-IR imaging of polymers: an industrial appraisal. <i>Vibrational Spectroscopy</i> , 2002, 30, 43-52.	2.2	47
23	Magnesium-Induced Lipid Bilayer Microdomain Reorganizations: Implications for Membrane Fusion. <i>Journal of Physical Chemistry B</i> , 2009, 113, 9932-9941.	2.6	38
24	The design and implementation of a high-fidelity Raman imaging microscope. <i>Journal of Microscopy</i> , 1996, 184, 35-45.	1.8	35
25	Combined Dynamic Light Scattering and Raman Spectroscopy Approach for Characterizing the Aggregation of Therapeutic Proteins. <i>Molecules</i> , 2014, 19, 20888-20905.	3.8	34
26	Aggregate structure, morphology and the effect of aggregation mechanisms on viscosity at elevated protein concentrations. <i>Biophysical Chemistry</i> , 2015, 207, 21-29.	2.8	34
27	Infrared Spectroscopic Imaging of the Biochemical Modifications Induced in the Cerebellum of the Niemann-Pick type C Mouse. <i>Journal of Biomedical Optics</i> , 1999, 4, 7.	2.6	33
28	Si: As Focal-Plane Array Detection for Fourier Transform Spectroscopic Imaging in the Infrared Fingerprint Region. <i>Applied Spectroscopy</i> , 1997, 51, 563-567.	2.2	30
29	Characterization of Sizes of Aggregates of Insulin Analogs and the Conformations of the Constituent Protein Molecules: A Concomitant Dynamic Light Scattering and Raman Spectroscopy Study. <i>Journal of Pharmaceutical Sciences</i> , 2016, 105, 551-558.	3.3	29
30	Development of Near-Infrared Fourier Transform Raman Spectroscopy for the Study of Biologically Active Macromolecules. <i>Applied Spectroscopy</i> , 1988, 42, 1188-1193.	2.2	25
31	Revealing New Structural Insights from Surfactant Micelles through DLS, Microrheology and Raman Spectroscopy. <i>Materials</i> , 2015, 8, 3754-3766.	2.9	25
32	Structural Changes and Aggregation Mechanisms for Anti-Streptavidin IgG1 at Elevated Concentration. <i>Journal of Physical Chemistry B</i> , 2015, 119, 15150-15163.	2.6	22
33	Quantitative determination of impurities in polyene antibiotics: fourier transform Raman spectra of nystatin, amphotericin A, and amphotericin B. <i>Analytical Chemistry</i> , 1988, 60, 2306-2309.	6.5	19
34	Aggregation and association of polar molecules in low temperature matrices and in the gaseous phase. <i>Journal of Molecular Structure</i> , 1986, 141, 227-236.	3.6	16
35	Applications of Fourier Transform Infrared Imaging Microscopy in Neurotoxicity. <i>Annals of the New York Academy of Sciences</i> , 1997, 820, 234-247.	3.8	16
36	Insight into Drug Quality: Comparison of Simvastatin Tablets from the US and Canada Obtained via the Internet. <i>Annals of Pharmacotherapy</i> , 2007, 41, 1111-1115.	1.9	16

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37	Reduced Subvisible Particle Formation in Lyophilized Intravenous Immunoglobulin Formulations Containing Polysorbate 20. <i>Journal of Pharmaceutical Sciences</i> , 2016, 105, 2302-2309.	3.3	14
38	Extending the Vibrational Limits in Near-Infrared Fourier Transform Raman Spectroscopy. <i>Applied Spectroscopy</i> , 1989, 43, 156-159.	2.2	12
39	A novel combination of DLS-optical microrheology and low frequency Raman spectroscopy to reveal underlying biopolymer self-assembly and gelation mechanisms. <i>Journal of Chemical Physics</i> , 2014, 141, 234201.	3.0	12
40	Colloidal Stability & Conformational Changes in $\hat{\imath}^2$ -Lactoglobulin: Unfolding to Self-Assembly. <i>International Journal of Molecular Sciences</i> , 2015, 16, 17719-17733.	4.1	11
41	Full Characterization of Colloidal Dynamics at Low Péclet Numbers. <i>Langmuir</i> , 2015, 31, 10351-10357.	3.5	8
42	Near-infrared fiber-optic sample cell: Applications to fourier transform Raman and near-infrared absorption and reflectance spectroscopies. <i>Journal of Raman Spectroscopy</i> , 1991, 22, 509-512.	2.5	5
43	Raman Spectroscopy Using dc Signal Detection and a Microcomputer: An Alternative Approach. <i>Applied Spectroscopy</i> , 1987, 41, 1145-1147.	2.2	2