Ioan Notingher

List of Publications by Year
in descending order

83	4,069	136885 32	118793 62
papers	citations	h-index	g-index

83	83	83	4586
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Raman spectroscopy for medical diagnostics â€" From in-vitro biofluid assays to in-vivo cancer detection. Advanced Drug Delivery Reviews, 2015, 89, 121-134.	6.6	494
2	Raman Spectroscopy Cell-based Biosensors. Sensors, 2007, 7, 1343-1358.	2.1	277
3	Discrimination between ricin and sulphur mustard toxicity in vitro using Raman spectroscopy. Journal of the Royal Society Interface, 2004, 1, 79-90.	1.5	226
4	Raman microspectroscopy: a noninvasive tool for studies of individual living cellsin vitro. Expert Review of Medical Devices, 2006, 3, 215-234.	1.4	207
5	Diagnosis of tumors during tissue-conserving surgery with integrated autofluorescence and Raman scattering microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15189-15194.	3.3	205
6	Raman spectroscopy: techniques and applications in the life sciences. Advances in Optics and Photonics, 2017, 9, 315.	12.1	204
7	In Situ Spectral Monitoring of mRNA Translation in Embryonic Stem Cells during Differentiation in Vitro. Analytical Chemistry, 2004, 76, 3185-3193.	3.2	203
8	Effect of Sample and Substrate Electric Properties on the Electric Field Enhancement at the Apex of SPM Nanotips. Journal of Physical Chemistry B, 2005, 109, 15699-15706.	1.2	103
9	Multivariate analysis of Raman spectra for in vitro non-invasive studies of living cells. Journal of Molecular Structure, 2005, 744-747, 179-185.	1.8	95
10	In situ non-invasive spectral discrimination between bone cell phenotypes used in tissue engineering. Journal of Cellular Biochemistry, 2004, 92, 1180-1192.	1.2	92
11	Nonâ€invasive timeâ€course imaging of apoptotic cells by confocal Raman microâ€spectroscopy. Journal of Raman Spectroscopy, 2011, 42, 251-258.	1.2	89
12	Cytoplasmic RNA in Undifferentiated Neural Stem Cells: A Potential Label-Free Raman Spectral Marker for Assessing the Undifferentiated Status. Analytical Chemistry, 2012, 84, 3155-3162.	3.2	80
13	New detection system for toxic agents based on continuous spectroscopic monitoring of living cells. Biosensors and Bioelectronics, 2004, 20, 780-789.	5.3	79
14	Rapid production of human liver scaffolds for functional tissue engineering by high shear stress oscillation-decellularization. Scientific Reports, 2017, 7, 5534.	1.6	79
15	In vitro toxicology evaluation of pharmaceuticals using Raman micro-spectroscopy. Journal of Cellular Biochemistry, 2006, 99, 178-186.	1.2	78
16	Towards intra-operative diagnosis of tumours during breast conserving surgery by selective-sampling Raman micro-spectroscopy. Physics in Medicine and Biology, 2014, 59, 6141-6152.	1.6	77
17	Intra-operative spectroscopic assessment of surgical margins during breast conserving surgery. Breast Cancer Research, 2018, 20, 69.	2.2	77
18	Development of Raman microspectroscopy for automated detection and imaging of basal cell carcinoma. Journal of Biomedical Optics, 2009, 14, 054031.	1.4	75

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19	In situ spectroscopic study of nucleic acids in differentiating embryonic stem cells. Vibrational Spectroscopy, 2004, 35, 199-203.	1.2	74
20	Non-invasive label-free monitoring the cardiac differentiation of human embryonic stem cells in-vitro by Raman spectroscopy. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 3517-3524.	1.1	63
21	SERS-based differential diagnosis between multiple solid malignancies: breast, colorectal, lung, ovarian and oral cancer . International Journal of Nanomedicine, 2019, Volume 14, 6165-6178.	3.3	62
22	Noninvasive Detection and Imaging of Molecular Markers in Live Cardiomyocytes Derived from Human Embryonic Stem Cells. Biophysical Journal, 2011, 100, 251-259.	0.2	60
23	Bioactive evaluation of 45S5 bioactive glass fibres and preliminary study of human osteoblast attachment. Journal of Materials Science: Materials in Medicine, 2004, 15, 803-808.	1.7	58
24	Progress in Raman spectroscopy in the fields of tissue engineering, diagnostics and toxicological testing. Journal of Materials Science: Materials in Medicine, 2006, 17, 1019-1023.	1.7	56
25	Rapid acquisition of Raman spectral maps through minimal sampling: applications in tissue imaging. Journal of Biophotonics, 2012, 5, 220-229.	1.1	48
26	Tracing amino acid exchange during host-pathogen interaction by combined stable-isotope time-resolved Raman spectral imaging. Scientific Reports, 2016, 6, 20811.	1.6	47
27	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. Analytical Chemistry, 2020, 92, 15745-15756.	3.2	46
28	Toward label-free Raman-activated cell sorting of cardiomyocytes derived from human embryonic stem cells. Journal of Biomedical Optics, 2011, 16, 045002.	1.4	44
29	Tissue diagnosis using power-sharing multifocal Raman micro-spectroscopy and auto-fluorescence imaging. Biomedical Optics Express, 2016, 7, 2993.	1.5	42
30	Optimization of multimodal spectral imaging for assessment of resection margins during Mohs micrographic surgery for basal cell carcinoma. Biomedical Optics Express, 2015, 6, 98.	1.5	39
31	Investigations of the Supramolecular Structure of Individual Diphenylalanine Nano- and Microtubes by Polarized Raman Microspectroscopy. Biomacromolecules, 2012, 13, 2181-2187.	2.6	38
32	Recent developments in spontaneous Raman imaging of living biological cells. Current Opinion in Chemical Biology, 2019, 51, 138-145.	2.8	36
33	Mid-infrared in vivo depth-profiling of topical chemicals on skin. Skin Research and Technology, 2004, 10, 113-121.	0.8	35
34	Label-free molecular imaging of immunological synapses between dendritic and T cells by Raman micro-spectroscopy. Analyst, The, 2010, 135, 3205.	1.7	32
35	DMD-based software-configurable spatially-offset Raman spectroscopy for spectral depth-profiling of optically turbid samples. Optics Express, 2016, 24, 12701.	1.7	30
36	Feasibility of Spatially Offset Raman Spectroscopy for in Vitro and in Vivo Monitoring Mineralization of Bone Tissue Engineering Scaffolds. Analytical Chemistry, 2017, 89, 847-853.	3.2	28

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37	Applications of Raman micro-spectroscopy to stem cell technology: label-free molecular discrimination and monitoring cell differentiation. EPJ Techniques and Instrumentation, 2015, 2, 6.	0.5	27
38	Automated multimodal spectral histopathology for quantitative diagnosis of residual tumour during basal cell carcinoma surgery. Biomedical Optics Express, 2017, 8, 5749.	1.5	27
39	Holographic optical trapping Raman micro-spectroscopy for non-invasive measurement and manipulation of live cells. Optics Express, 2018, 26, 25211.	1.7	27
40	Monitoring the mineralisation of bone nodules in vitro by space- and time-resolved Raman micro-spectroscopy. Analyst, The, 2014, 139, 55-58.	1.7	24
41	Label-free molecular analysis of live Neospora caninum tachyzoites in host cells by selective scanning Raman micro-spectroscopy. Analyst, The, 2012, 137, 4119.	1.7	21
42	Towards quantitative molecular mapping of cells by Raman microscopy: using AFM for decoupling molecular concentration and cell topography. Faraday Discussions, 2016, 187, 199-212.	1.6	20
43	Analysis of interaction between the apicomplexan protozoan Toxoplasma gondii and host cells using label-free Raman spectroscopy. Analyst, The, 2015, 140, 756-764.	1.7	18
44	Feasibility of integrated highâ€wavenumber Raman imaging and fingerprint Raman spectroscopy for fast margin assessment in breast cancer surgery. Journal of Raman Spectroscopy, 2020, 51, 1986-1995.	1.2	18
45	Simultaneous Surface-Enhanced Raman Spectroscopy (SERS) and Atomic Force Microscopy (AFM) for Label-Free Physicochemical Analysis of Lipid Bilayers. Applied Spectroscopy, 2011, 65, 1387-1392.	1.2	17
46	Nondestructive Raman and atomic force microscopy measurement of molecular structure for individual diphenylalanine nanotubes. Optics Letters, 2010, 35, 4193.	1.7	16
47	Increasing the speed of tumour diagnosis during surgery with selective scanning Raman microscopy. Journal of Molecular Structure, 2014, 1073, 58-65.	1.8	15
48	Near-field Raman spectroscopy of biological nanomaterials by in situ laser-induced synthesis of tip-enhanced Raman spectroscopy tips. Optics Letters, 2012, 37, 2256.	1.7	14
49	Optical sectioning in multifoci Raman hyperspectral imaging. Journal of Raman Spectroscopy, 2018, 49, 1660-1667.	1.2	14
50	Spatially-offset Raman spectroscopy for monitoring mineralization of bone tissue engineering scaffolds: feasibility study based on phantom samples. Biomedical Optics Express, 2019, 10, 1678.	1.5	14
51	Fast Raman spectral mapping of highly fluorescing samples by time-gated spectral multiplexed detection. Optics Letters, 2018, 43, 5733.	1.7	14
52	Raman Spectroscopy Study of Curvature-Mediated Lipid Packing and Sorting in Single Lipid Vesicles. Biophysical Journal, 2019, 117, 1589-1598.	0.2	13
53	Applications of Spatial Light Modulators in Raman Spectroscopy. Applied Spectroscopy, 2019, 73, 727-746.	1.2	13
54	Investigating the feasibility of spatially offset Raman spectroscopy for inâ€vivo monitoring of bone healing in rat calvarial defect models. Journal of Biophotonics, 2020, 13, e202000190.	1.1	13

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55	Label-Free Raman Hyperspectral Imaging of Single Cells Cultured on Polymer Substrates. Applied Spectroscopy, 2017, 71, 2595-2607.	1.2	12
56	Clinical integration of fast Raman spectroscopy for Mohs micrographic surgery of basal cell carcinoma. Biomedical Optics Express, 2021, 12, 2015.	1.5	12
57	Raman Micro-Spectroscopy as a Non-invasive Cell Viability Test. Methods in Molecular Biology, 2011, 740, 179-189.	0.4	12
58	Spectral Depth Profiling of Arbitrary Surfaces by Thermal Emission Decayâ€"Fourier Transform Infrared Spectroscopy. Applied Spectroscopy, 2003, 57, 1494-1501.	1.2	11
59	Selective-sampling Raman imaging techniques for ex vivo assessment of surgical margins in cancer surgery. Analyst, The, 2021, 146, 3799-3809.	1.7	11
60	Raman spectroscopy methods for detecting and imaging supported lipid bilayers. Spectroscopy, 2010, 24, 113-117.	0.8	11
61	Sub-Surface Molecular Analysis and Imaging in Turbid Media Using Time-Gated Raman Spectral Multiplexing. Applied Spectroscopy, 2021, 75, 156-167.	1.2	10
62	In Situ Monitoring of Chondrocyte Response to Bioactive Scaffolds Using Raman Spectroscopy. Key Engineering Materials, 2005, 284-286, 623-626.	0.4	8
63	Combined total internal reflection AF spectral-imaging and Raman spectroscopy for fast assessment of surgical margins during breast cancer surgery. Biomedical Optics Express, 2021, 12, 940.	1.5	8
64	Time-gated Raman spectroscopy for biomedical application under ambient or strong background light conditions. Journal Physics D: Applied Physics, 2021, 54, 504003.	1.3	8
65	Ex vivo Raman spectroscopy mapping of lung tissue: label-free molecular characterization of nontumorous and cancerous tissues. Journal of Medical Imaging, 2019, 6, 1.	0.8	8
66	In-situfabrication of gold nanoparticle functionalized probes for tip-enhanced Raman spectroscopy by dielectrophoresis. Journal of Nanophotonics, 2016, 10, 030502.	0.4	7
67	Visualizing the interaction of <scp>Acanthamoeba castellanii</scp> with human retinal epithelial cells by spontaneous Raman and CARS imaging. Journal of Raman Spectroscopy, 2018, 49, 412-423.	1.2	7
68	Induction and measurement of the early stage of a hostâ€parasite interaction using a combined optical trapping and Raman microspectroscopy system. Journal of Biophotonics, 2020, 13, e201960065.	1.1	7
69	Clinical Spectroscopy: general discussion. Faraday Discussions, 2016, 187, 429-460.	1.6	6
70	Spectral Pathology: general discussion. Faraday Discussions, 2016, 187, 155-186.	1.6	5
71	Raman Spectroscopy: Potential Tool for In-Situ Characterization of Bone Cell Differentiation. Key Engineering Materials, 2005, 284-286, 545-548.	0.4	4
72	Co-localised Raman and force spectroscopy reveal the roles of hydrogen bonds and Ï€-Ï€ interactions in defining the mechanical properties of diphenylalanine nano- and micro-tubes. Applied Physics Letters, 2014, 104, 251905.	1.5	4

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73	Single cell analysis/data handling: general discussion. Faraday Discussions, 2016, 187, 299-327.	1.6	4
74	Intra-operative assessment of sentinel lymph nodes for breast cancer surgery: An update. Surgical Oncology, 2022, 40, 101678.	0.8	4
75	A Bio-Photonics System for Rapid In Vitro Testing of Cells and Ceramics. Key Engineering Materials, 2005, 284-286, 531-536.	0.4	2
76	Integrated Raman microscopy and auto-fluorescence imaging for fast tumour diagnosis during cancer surgery. , 2016, , .		2
77	Model-Based Optimization of Laser Excitation and Detection Improves Spectral Contrast in Non-Invasive Diffuse Raman Spectroscopy. Applied Spectroscopy, 2022, , 000370282110729.	1.2	2
78	Raman spectroscopy using spatial light modulators. , 2019, , .		1
79	Raman spectroscopy and rotating orthogonal polarization imaging for non-destructive tracking of collagen deposition in tissue engineered skin and tendon. Proceedings of SPIE, 2009, , .	0.8	0
80	Raman Spectroscopy Techniques: Developments and Applications in Translational Medicine. Progress in Optical Science and Photonics, 2016, , 111-133.	0.3	0
81	Characterisation of Tissue Engineering Constructs by Raman Spectroscopy and X-ray Micro-Computed Tomography (Î¼CT). , 2008, , 421-441.		0
82	Clinical translation of Raman-based multimodal spectral histopathology for margin assessment during surgery of basal cell carcinoma. , 2019, , .		0
83	Achieve Early Complete Sections in Mohs Surgery or Beware of False Positives. Dermatologic Surgery, 2021, 47, 832-832.	0.4	0