Prospects for in vivo Raman spectroscopy

#	Paper	IF	Citations
738	Quantitative myelin imaging with coherent anti-Stokes Raman scattering microscopy: alleviating the excitation polarization dependence with circularly polarized laser beams. **2009**, 17, 18419		
737	Exploration of Biogenic Nano-chemobiotics Fabricated by Silver Nanoparticle and Galactoxyloglucan with an Efficient Biodistribution in Solid Tumor Investigated by SERS Fingerprinting.		
736	Biomedical Applications of Raman Spectroscopy. **2000**, 1-12		1
735	Principles and pitfalls of diagnostic test development: implications for spectroscopic tissue diagnosis. **2000**, 5, 119-30		22
734	In vivo detection of dysplastic tissue by Raman spectroscopy. **2000**, 72, 6010-8		171
733	Potential new endoscopic techniques for the earlier diagnosis of pre-malignancy. **2001**, 15, 227-47		12
732	Endoscopic diagnostics. **2001**, 120, 763-81		38
731	Near-Infrared Raman Spectroscopy for in vivo Detection of Cervical Precancers. **2001**, 55, 955-959		221
730	Effects of crosslinker fraction in polymer gel dosimeters using FT Raman spectroscopy. *Physics in Medicine and Biology*, **2001**, 46, 1949-61	3.8	37
729	Near-infrared Raman spectroscopy to detect anti- Toxoplasma gondii antibodies in blood sera of domestic cats. **2001**,		1
728	Characterization of monomer/crosslinker consumption and polymer formation observed in FT-Raman spectra of irradiated polyacrylamide gels. *Physics in Medicine and Biology*, **2001**, 46, 151-65	3.8	67
727	Excitation wavelength-dependent changes in Raman spectra of whole blood and hemoglobin: comparison of the spectra with 514.5-, 720-, and 1064-nm excitation. **2001**, 6, 366-70		78
726	Relative effectiveness of polyacrylamide gel dosimeters applied to proton beams: Fourier transform Raman observations and track structure calculations. **2002**, 29, 569-77		46
725	Raman spectral classification of atherosclerosis using neural networks and discriminant analysis.		
724	Optical-Fiber Medical Sensors. **2002**, 27, 383-387		10
723	Fiber-optical and microscopic detection of malignant tissue by use of infrared spectrometry. **2002**, 7, 100-8		17
722	In vivo detection of cervical dysplasia with near-infrared Raman spectroscopy. **2002**, 4614, 145		2

721   . **2002**, 9, 255-261   29

720   Identification of high-risk atherosclerotic plaques: a survey of spectroscopic methods. **2002**, 17, 638-47   36

719   Surface-Enhanced Raman Spectroscopy in Single Living Cells Using Gold Nanoparticles. **2002**, 56, 150-154   504

718   Separation of the Raman Spectral Signatures of Bioapatite and Collagen in Compact Mouse Bone Bleached with Hydrogen Peroxide. **2002**, 56, 770-775   21

717   Fluorescence Backgroundless Ti: Sapphire Laser Using Acousto-Optical Tunable Filter for Raman Spectroscopic Measurements. **2002**, 56, 1303-1307   22

716   Identification of Bladder Wall Layers by Raman Spectroscopy. **2002**, 168, 1771-1778   37

715   Real-time tissue characterization on the basis of in vivo Raman spectra. **2002**, 33, 580-585   72

714   In situ investigation of the chemical composition of ceroid in human atherosclerosis by Raman spectroscopy. **2002**, 33, 544-551   27

713   Raman microspectroscopic model of human breast tissue: implications for breast cancer diagnosis in vivo. **2002**, 33, 552-563   231

712   Development of a combined confocal and scanning near-field Raman microscope for deep UV laser excitation. **2002**, 33, 730-739   27

711   Medical applications of Raman spectroscopy: from proof of principle to clinical implementation. **2002**, 67, 1-9   199

710   Vibrational spectroscopy and medicine: an alliance in the making. **2002**, 30, 31-41   59

709   New optical technologies for earlier endoscopic diagnosis of premalignant gastrointestinal lesions. **2002**, 17 Suppl, S85-104   108

708   Discriminating vital tumor from necrotic tissue in human glioblastoma tissue samples by Raman spectroscopy. **2002**, 82, 1265-77   164

707   The prospects for high resolution optical brain imaging: the magnetic resonance perspective. **2003**, 21, 1225-33   8

706   In vivo monitoring of the gastrooesophageal system using optical fibre sensors. **2003**, 375, 732-43   12

705   Raman spectroscopy--a prospective tool in the life sciences. **2003**, 4, 14-30   254

704   Raman spectroscopy for optical diagnosis in normal and cancerous tissue of the nasopharynx-preliminary findings. *Lasers in Surgery and Medicine*, **2003**, 32, 210-4   3.6   139

703 On-line monitoring of Phaffia rhodozyma fed-batch process with in situ dispersive Raman spectroscopy. **2003**, 83, 668-80 — 52

702 New limits in ultrasensitive trace detection by surface enhanced Raman scattering (SERS). **2003**, 375, 84-90 — 104

701 Detection of high-risk atherosclerotic coronary plaques by intravascular spectroscopy. **2003**, 16, 243-52 — 21

700 The use of synchrotron infrared microspectroscopy in biological and biomedical investigations. **2003**, 32, 3-21 — 189

699 Mapping of single cells by near infrared Raman microspectroscopy. **2003**, 32, 75-83 — 149

698 Photodiagnostic techniques for the endoscopic detection of premalignant gastrointestinal lesions. **2003**, 15, 153-173 — 37

697 Molecular imaging in drug discovery and development. **2003**, 2, 123-31 — 616

696 Toward a glucose biosensor based on surface-enhanced Raman scattering. **2003**, 125, 588-93 — 565

695 Diagnostic potential of near-infrared Raman spectroscopy in the colon: differentiating adenomatous from hyperplastic polyps. **2003**, 57, 396-402 — 227

694 Raman spectroscopic study of glutaraldehyde-stabilized collagen and pericardium tissue. **2003**, 14, 185-97 — 58

693 Osteoradionecrosis (ORN) of the mandible: a laser Raman spectroscopic study. **2003**, 57, 1100-16 — 45

692 Fluorescence and Raman spectroscopy. **2003**, 13, 279-96 — 27

691 Fiber optic probes for biomedical optical spectroscopy. **2003**, 8, 121-47 — 345

690 Study of dynamical process of heat denaturation in optically trapped single microorganisms by near-infrared Raman spectroscopy. **2003**, 94, 6138-6142 — 95

689 Optical detection and eradication of dysplastic Barrett's esophagus. **2003**, 2, 289-302 — 8

688 Near infrared Raman spectroscopy to study the composition of human brain tissue and tumors. **2003**, 5141_230 — 1

687 CARS microscopy with dark field excitation. **2003**,

686 Nonmelanoma skin cancer in organ transplant patients. **2003**, 75, 253-7 — 38

667	Principal components analysis of FT-Raman spectra of ex vivo basal cell carcinoma. **2004**,		3
666	Near-infrared Raman spectroscopy to detect the calcification of the annular mitral valve. **2004**,		
665	Classification of ENT tissue using near-infrared Raman spectroscopy and support vector machines. **2005**,		
664	Raman spectroscopy for diagnosis of atherosclerosis: a rapid analysis using neural networks. **2005**, 27, 237-44		21
663	Evaluation of the suitability of ex vivo handled ovarian tissues for optical diagnosis by Raman microspectroscopy. **2005**, 79, 269-76		26
662	Bullous pemphigoid detection by micro-Raman spectroscopy and cluster analysis: structure alterations of proteins. **2005**, 36, 1034-1039		3
661	Investigation of CsCl-induced aggregation of serum albumin depending on pH by Raman spectroscopy method. **2005**, 2, 204-207		11
660	Raman spectroscopy for optical diagnosis in the larynx: preliminary findings. *Lasers in Surgery and Medicine*, **2005**, 37, 192-200	3.6	83
659	Autofluorescence and Raman microspectroscopy of tissue sections of oral lesions. **2005**, 19, 203-9		28
658	Hemoglobin oxygen saturation measurements using resonance Raman intravital microscopy. **2005**, 289, H488-95		35
657	Quantitative concentration measurements of creatinine dissolved in water and urine using Raman spectroscopy and a liquid core optical fiber. **2005**, 10, 031115		16
656	Ex vivo detection and characterization of early dental caries by optical coherence tomography and Raman spectroscopy. **2005**, 10, 031118		87
655	Raman spectroscopy for noninvasive glucose measurements. **2005**, 10, 031114		159
654	Single-cell Raman and fluorescence microscopy reveal the association of lipid bodies with phagosomes in leukocytes. **2005**, 102, 10159-64		255
653	Diagnosing breast cancer by using Raman spectroscopy. **2005**, 102, 12371-6		490
652	Biophotonic and other physical methods for characterizing oral mucosa. **2005**, 38, 215-40, vi		3
651	Fiber-optic probes for in vivo Raman spectroscopy in the high-wavenumber region. **2005**, 77, 6747-52		100
650	Micro-optical fiber probe for use in an intravascular Raman endoscope. **2005**, 44, 4722-32		74

631	Fluorescence-suppressed Raman technique for quantitative analysis of protein solution using a micro-Raman probe, the shifted excitation method, and partial least squares regression analysis. **2006**, 60, 964-70	21
630	Biomedical applications of Raman and infrared spectroscopy to diagnose tissues. **2006**, 20, 195-218	147
629	Pathology by Infrared and Raman Spectroscopy. **2006**,	1
628	Vibrational Spectroscopy Applications in Clinical Chemistry. **2006**,	
627	Cellular Imaging. **2006**,	0
626	In Vivo Near-Infrared Spectrometry. **2006**,	0
625	Ultraviolet Raman Spectrometry. **2006**,	0
624	Resonance Raman spectroscopy: a new technology for tissue oxygenation monitoring. **2006**, 34, 792-9	25
623	Metabolites, NonInvasive Optical Measurements of. **2006**,	1
622	Spectroscopic investigation of the function of aqueous 2-hydroxyethylmethacrylate/glutaraldehyde solution as a dentin desensitizer. **2006**, 114, 354-9	58
621	Review paper: principles and applications of surface analytical techniques at the vascular interface. **2006**, 21, 5-32	23
620	Progress in Raman spectroscopy in the fields of tissue engineering, diagnostics and toxicological testing. **2006**, 17, 1019-23	50
619	Characterization of human breast epithelial cells by confocal Raman microspectroscopy. **2006**, 30, 515-22	84
618	Discrimination of normal, benign, and malignant breast tissues by Raman spectroscopy. **2006**, 83, 556-69	108
617	In vivo cytometry: a spectrum of possibilities. **2006**, 69, 142-6	32
616	Research of protective action of ischemic preconditioning on components of blood serum at a brain ischemia by Raman spectroscopy method. **2006**, 3, 401-405	17
615	In vivo Raman spectral pathology of human atherosclerosis and vulnerable plaque. **2006**, 11, 021003	106
614	Biochemical analysis of human breast tissues using Fourier-transform Raman spectroscopy. **2006**, 11, 054001	39

613	Raman microspectrometry of laser-reshaped rabbit auricular cartilage: preliminary study on laser-induced cartilage mineralization. **2006**, 11, 024003	10
612	Sensitivity map of laser tweezers Raman spectroscopy for single-cell analysis of colorectal cancer. **2007**, 12, 034002	31
611	Current diagnostic modalities for vulnerable plaque detection. **2007**, 13, 995-1001	60
610	Characterisation using Raman micro-spectroscopy. **2007**, 248-266	0
609	Classification of the degenerative grade of lesions of supraspinatus rotator cuff tendons by FT-Raman spectroscopy. **2007**, 6445, 149	1
608	Infrared laser photobiomodulation (lambda 830 nm) on bone tissue around dental implants: a Raman spectroscopy and scanning electronic microscopy study in rabbits. **2007**, 25, 96-101	80
607	Magnetically actuated scanning microlens for NIR Raman spectroscopy. **2007**,	0
606	Identification of calcifications in cardiac valves by near infrared Raman spectroscopy. **2007**, 25, 287-90	10
605	Very efficient fluorescent background suppression in confocal Raman microscopy. **2007**,	
604	Clinical applications of elastic-scattering spectroscopy beyond proof-of-principle: what really matters. **2007**,	1
603	In vivo Raman Confocal Microspectroscopy of Skin. 193-221	
602	Preliminary study on Raman spectra of nasopharyngeal carcinoma in vitro. **2007**,	
601	Raman spectra of pigmented skin conditions. **2007**,	
600	New Tools for Life Science Research Based on Fiber-Optic-Linked Raman and Resonance Raman Spectroscopy. **2007**, 1-13	2
599	Preliminary identification of Beta-carotene in the vitreous asteroid bodies by micro-Raman spectroscopy and HPLC analysis. **2007**, 13, 128-32	13
598	Metabolic fingerprinting as a diagnostic tool. **2007**, 8, 1243-66	313
597	Optical manipulation and microfluidics for studies of single cell dynamics. **2007**, 9, S113-S121	44
596	In vivo Raman study of the living rat esophagus and stomach using a micro-Raman probe under an endoscope. **2007**, 61, 579-84	62

595	Automated autofluorescence background subtraction algorithm for biomedical Raman spectroscopy. **2007**, 61, 1225-32	532
594	Nontoxic and chemically stable hollow optical fiber probe for fourier transform infrared spectroscopy. **2007**, 61, 1334-7	8
593	Non-invasive glucose monitoring: assessment of technologies and devices according to quantitative criteria. **2007**, 77, 16-40	178
592	Raman Spectroscopy of Biological Tissues. **2007**, 42, 493-541	1223
591	Fluorescence suppression within Raman spectroscopy using annular beam excitation. **2007**, 91, 023903	12
590	Raman spectroscopy-based metabolomics for differentiating exposures to triazole fungicides using rat urine. **2007**, 79, 7324-32	21
589	Oxygenation monitoring of tissue vasculature by resonance Raman spectroscopy. **2007**, 79, 1514-8	28
588	Detection of the recombinant proteins in single transgenic microbial cell using laser tweezers and Raman spectroscopy. **2007**, 79, 9269-75	21
587	Classification of glucose concentration in diluted urine using the low-resolution Raman spectroscopy and kernel optimization methods. **2007**, 28, 583-93	16
586	Raman-based detection of bacteria using silver nanoparticles conjugated with antibodies. **2007**, 132, 679-86	100
585	Tumour metabolomics in animal models of human cancer. **2007**, 6, 498-505	99
584	Possible application of Raman microspectroscopy to verify the interstitial cystitis diagnosis after potassium sensitivity test: phenylalanine or tryptophan as a biomarker. **2007**, 23, 147-52	8
583	From Femtosecond Dynamics to Breast Cancer Diagnosis by Raman Spectroscopy. **2007**,	
582	. **2007**,	1
581	Vibrational spectroscopy studies of formalin-fixed cervix tissues. **2007**, 85, 214-21	28
580	Molecular processes and structural alterations in laser reshaping of cartilage. **2007**, 4, 749-753	21
579	Raman spectral signatures of mouse mammary tissue and associated lymph nodes: normal, tumor and mastitis. **2007**, 38, 127-134	23
578	Detection of bacteria aided by immuno-nanoparticles. **2007**, 38, 1383-1389	18

559	Chemical characterization and classification of pollen. **2008**, 80, 9551-6	90
558	Noninvasive Raman spectroscopy in living mice for evaluation of tumor targeting with carbon nanotubes. **2008**, 8, 2800-5	243
557	Development and preliminary results of an endoscopic Raman probe for potential in vivo diagnosis of lung cancers. **2008**, 33, 711-3	149
556	The tendon-to-bone transition of the rotator cuff: a preliminary Raman spectroscopic study documenting the gradual mineralization across the insertion in rat tissue samples. **2008**, 62, 1285-94	105
555	Raman spectroscopy of breast tissues. **2008**, 8, 149-66	34
554	A novel method for human gender classification using Raman spectroscopy of fingernail clippings. **2008**, 133, 493-8	36
553	Noninvasive molecular imaging of small living subjects using Raman spectroscopy. **2008**, 105, 5844-9	525
552	Spectral analysis of multiplex Raman probe signatures. **2008**, 2, 2306-14	142
551	Fluorescence and reflectance spectroscopy for identification of atherosclerosis in human carotid arteries using principal components analysis. **2008**, 26, 329-35	5
550	The role of optical spectroscopy in epilepsy surgery in children. **2008**, 25, E24	9
549	Diagnosis of ovarian cancer by Raman spectroscopy: a pilot study. **2008**, 26, 83-90	30
548	DNA Extraction Systematics for Spectroscopic Studies. *Sensors*, **2008**, 8, 3624-3632	3.8	4
547	Bronchoscopy and Computer Technology. **2008**, 88-118	1
546	Quantitative analysis of skin chemicals using rapid near-infrared Raman spectroscopy. **2008**,	1
545	Evaluation of pancreatic cancer with Raman spectroscopy in a mouse model. **2008**, 36, e1-8	13
544	Noninvasive glycaemia monitoring: background, traditional findings, and novelties in the recent clinical trials. **2008**, 11, 607-12	13
543	Combining Optical Coherence Tomography and Raman Spectroscopy for Investigating Dental and Other Mineralized Tissues. 263-290	1
542	. **2008**,	55

541   High-throughput, multiplex aperture-coded Raman spectrometer for biomedical diagnostics. **2008**,

540   Human breast tissue cancer diagnosis by Raman spectroscopy. **2008**, 22, 113-121   27

539   Analysis of the alteration in the optical configuration of Raman spectrometer: Optimization of signal-to-noise ratio (SNR) in a specific wavelength range of clinical interest. **2008**, 22, 467-474   2

538   Introduction to Spectral Imaging, and Applications to Diagnosis of Lymph Nodes. **2008**,   3

537   Determination of sucrose concentration in lemon-type soft drinks by dispersive Raman spectroscopy. **2009**, 23, 217-226   11

536   Optimizing the Raman signal for characterizing organic samples: The effect of slit aperture and exposure time. **2009**, 23, 71-80   13

535   A miniature confocal Raman probe for endoscopic use. *Physics in Medicine and Biology*, **2009**, 54, 7077-87 3.8   74

534   A multimodal spectroscopy system for real-time disease diagnosis. **2009**, 80, 043103   45

533   Use of dispersive Raman spectroscopy to detect the cytotoxic action of viscum album in adenocarcinoma of colon. **2009**, 21, 163-168   3

532   Recent Developments in Less Invasive Technology to Monitor Blood Glucose Levels in Patients with Diabetes: Table 1. **2009**, 40, 607-610   2

531   Plasmonic engineering of silver films for enhanced fluorescence and Raman scattering. **2009**,

530   Direct Raman imaging spectroscopy of lung cancer cells and apoptotic cells. **2009**,   0

529   Technologies for localization and diagnosis of prostate cancer. **2009**, 33, 585-603   15

528   Parameters defining the potential applicability of Raman spectroscopy as a diagnostic tool for oral disease. **2009**, 14, 014016   41

527   Gold nanorods: from synthesis and properties to biological and biomedical applications. **2009**, 21, 4880-4910   1473

526   Current status of vulnerable plaque detection. **2010**, 75, 135-44   32

525   Direct analysis of clinical relevant single bacterial cells from cerebrospinal fluid during bacterial meningitis by means of micro-Raman spectroscopy. **2009**, 2, 70-80   76

524   Optical coherence tomography and Raman spectroscopy of the ex-vivo retina. **2009**, 2, 398-406   26

523	Multiclass discrimination of cervical precancers using Raman spectroscopy. **2009**, 40, 205-211	45
522	Comparison of connective tissue invaded by Lewis lung carcinoma to healthy connective tissue by means of micro-Raman spectroscopy. **2009**, 40, 1087-1090	5
521	Catheters: instrumental advancements in biomedical applications of optical fibers. **2009**, 24, 621-6	4
520	Broad spectral photonic crystal fiber surface enhanced Raman scattering probe. **2009**, 95, 751-755	15
519	Raman spectroscopy and advanced mathematical modelling in the discrimination of human thyroid cell lines. **2009**, 1, 38	33
518	The hallmarks of breast cancer by Raman spectroscopy. **2009**, 924-926, 175-182	43
517	ProRaman: a program to classify Raman spectra. **2009**, 134, 1203-7	4
516	Investigation of neuroprotective action of drug Semax at ischemic insult by Raman spectroscopy method by estimation of damage of low density lipoprotein of rat blood. **2009**, 19, 2219-2223	14
515	Silver Surfaces with Optimized Surface Enhancement by Self-Assembly of Silver Nanoparticles for Spectroelectrochemical Applications. **2009**, 113, 17698-17704	10
514	Quantitative myelin imaging with coherent anti-Stokes Raman scattering microscopy: alleviating the excitation polarization dependence with circularly polarized laser beams. **2009**, 17, 18419-32	51
513	Differentiation of healthy brain tissue and tumors using surface-enhanced Raman scattering. **2009**, 63, 1095-100	47
512	Vibrational spectroscopy: a clinical tool for cancer diagnostics. **2009**, 134, 1029-45	226
511	Diagnosing breast cancer using Raman spectroscopy: prospective analysis. **2009**, 14, 054023	141
510	A Novel Opto-Mechanical System Coupled to a Spectrophotometer for Measuring Coatings on Small Size Substrates and Optical Fiber Filters. **2009**, 37, 544-556	
509	Dual-Axes Confocal Microlens for Raman Spectroscopy. **2009**,	0
508	High-throughput vibrational cytometry based on nonlinear Raman microspectroscopy. **2010**,	
507	How specific Raman spectroscopic models are: a comparative study between different cancers. **2010**,	
506	Investigation of the influence of high-risk human papillomavirus on the biochemical composition of cervical cancer cells using vibrational spectroscopy. **2010**, 135, 3087-93	47

| 487 | Raman Spectroscopic Study of Muscles Related Disorders using Drosophila Melanogaster as a Model System. **2010**, | |

| 486 | Molecular histopathology by spectrally reconstructed nonlinear interferometric vibrational imaging. **2010**, 70, 9562-9 | 38 |

| 485 | Differentiating normal and basal cell carcinoma human skin tissues in vitro using dispersive Raman spectroscopy: a comparison between principal components analysis and simplified biochemical models. **2010**, 28 Suppl 1, S119-27 | 37 |

| 484 | Nonlinear optical imaging and Raman microspectrometry of the cell nucleus throughout the cell cycle. **2010**, 99, 3483-91 | 76 |

| 483 | Tissue optical immersion clearing. **2010**, 7, 825-42 | 146 |

| 482 | Time-resolved Raman spectroscopy for in situ planetary mineralogy. **2010**, 49, 4951-62 | 32 |

| 481 | In situ monitoring of adipogenesis with human-adipose-derived stem cells using surface-enhanced Raman spectroscopy. **2010**, 64, 1227-33 | 18 |

| 480 | Phase-cycling coherent anti-Stokes Raman scattering using shaped femtosecond laser pulses. **2010**, 18, 25825-32 | 8 |

| 479 | Raman spectroscopy for differential diagnosis of endophthalmitis and uveitis in rabbit iris in vitro. **2010**, 91, 362-8 | 6 |

| 478 | Raman spectroscopy--a new method for the intra-operative assessment of axillary lymph nodes. **2010**, 135, 3042-7 | 51 |

| 477 | Development of robust calibration models using support vector machines for spectroscopic monitoring of blood glucose. **2010**, 82, 9719-26 | 63 |

| 476 | Characterization of bacteria using its O-antigen with surface-enhanced Raman scattering. **2010**, 135, 1997-2001 | 14 |

| 475 | Exploiting the diagnostic potential of biomolecular fingerprinting with vibrational spectroscopy. **2011**, 149, 279-90; discussion 333-56 | 27 |

| 474 | Noninvasive diagnosis of mucopolysaccharidosis via depth-resolved optical spectroscopy of the outer ear. **2011**, 2, 2741-8 | 2 |

| 473 | Full range characterization of the Raman spectra of organs in a murine model. **2011**, 19, 22892-909 | 81 |

| 472 | Gold nanoparticles: a revival in precious metal administration to patients. **2011**, 11, 4029-36 | 358 |

| 471 | Effect of different doses of creatine on the bone in thirty days of supplementation in mice: FT-Raman study. **2011**, 25, 225-233 | 2 |

| 470 | Development of spectral markers for the discrimination of ulcerative colitis and Crohn's disease using Raman spectroscopy. **2011**, 54, 48-53 | 30 |

| 451 | Micro-Raman spectroscopy and univariate analysis for monitoring disease follow-up. *Sensors*, **2011**, 11, 8309-22 | 3.8 | 15 |

| 450 | Tissue refractive index as marker of disease. **2011**, 16, 116017 | | 167 |

| 449 | Raman spectroscopy of oral buccal mucosa: a study on age-related physiological changes and tobacco-related pathological changes. **2012**, 11, 529-41 | | 27 |

| 448 | Optical Spectroscopy of Biological Cells. **2012**, 4, 322 | | 17 |

| 447 | Diagnosing basal cell carcinoma in vivo by near-infrared Raman spectroscopy: a Principal Components Analysis discrimination algorithm. **2012**, | | 2 |

| 446 | Multispectral optical tweezers for molecular diagnostics of single biological cells. **2012**, | | 5 |

| 445 | Discrimination of basal cell carcinoma and melanoma from normal skin biopsies in vitro through Raman spectroscopy and principal component analysis. **2012**, 30, 381-7 | | 49 |

| 444 | Phosphorylation detection and characterization in ribonucleotides using Raman and Raman optical activity (ROA) spectroscopies. **2012**, 66, 289-93 | | 5 |

| 443 | Noise and artifact characterization of in vivo Raman spectroscopy skin measurements. **2012**, 66, 650-5 | | 16 |

| 442 | Non-invasive methods of glucose measurement: current status and future perspectives. **2012**, 8, 48-54 | | 44 |

| 441 | Recent advances in noninvasive glucose monitoring. **2012**, 5, 45-52 | | 47 |

| 440 | Understanding the molecular information contained in principal component analysis of vibrational spectra of biological systems. **2012**, 137, 322-32 | | 141 |

| 439 | Vibrational spectroscopic imaging and multiphoton microscopy of spinal cord injury. **2012**, 84, 8707-14 | | 44 |

| 438 | Monitoring enzymatic degradation of pericellular matrices through SERS stamping. **2012**, 4, 3917-25 | | 10 |

| 437 | Diagnostic applications of Raman spectroscopy. **2012**, 8, 545-58 | | 143 |

| 436 | A review of imaging methods for measuring drug release at nanometre scale: a case for drug delivery systems. **2012**, 9, 203-18 | | 13 |

| 435 | Optical spectroscopy: current advances and future applications in cancer diagnostics and therapy. **2012**, 8, 307-20 | | 65 |

| 434 | Raman spectroscopy--a potential new method for the intra-operative assessment of axillary lymph nodes. **2012**, 10, 123-7 | | 34 |

433	Surface-enhanced Raman scattering of whole human blood, blood plasma, and red blood cells: cellular processes and bioanalytical sensing. **2012**, 116, 9376-86		153
432	Confocal Raman microspectroscopy for skin characterization: a comparative study between human skin and pig skin. **2012**, 137, 3673-82		55
431	Discriminating model for diagnosis of basal cell carcinoma and melanoma in vitro based on the Raman spectra of selected biochemicals. **2012**, 17, 077003		53
430	Raman microspectroscopy for species identification and mapping within bacterial biofilms. **2012**, 2, 35		20
429	Mapping of redox state of mitochondrial cytochromes in live cardiomyocytes using Raman microspectroscopy. *PLoS ONE*, **2012**, 7, e41990	3.7	64
428	Quantitative Evaluation of Acetaminophen in Oral Solutions by Dispersive Raman Spectroscopy for Quality Control. **2012**, 27, 215-228		2
427	Investigation of Preeclampsia Using Raman Spectroscopy. **2012**, 27, 239-252		16
426	Raman Labeled Nanoparticles: Characterization of Variability and Improved Method for Unmixing. **2012**, 43, 895-905		6
425	Detection of polymorphism in the methlyenetetrahydrofolate reductase gene by Raman spectroscopy. **2012**, 43, 1083-1088		2
424	Measurement of diabetic sugar concentration in human blood using Raman spectroscopy. **2012**, 22, 1090-1094		18
423	Metabolomics in the fields of oncology: a review of recent research. **2012**, 39, 7505-11		25
422	Differentiation of HaCaT cell and melanocyte from their malignant counterparts using micro-Raman spectroscopy guided by confocal imaging. **2012**, 28, 147-52		12
421	Differential diagnosis between experimental endophthalmitis and uveitis in vitreous with Raman spectroscopy and principal components analysis. **2012**, 107, 73-8		8
420	Analysis of human skin tissue by Raman microspectroscopy: Dealing with the background. **2012**, 61, 124-132		52
419	Dengue blood analysis by Raman spectroscopy. **2012**, 22, 1085-1089		21
418	Influence of creatine supplementation on bone quality in the ovariectomized rat model: an FT-Raman spectroscopy study. **2012**, 27, 487-95		19
417	Raman micro-spectroscopy: a powerful tool for the monitoring of dynamic supramolecular changes in living cells. **2013**, 182, 58-63		24
416	Histochemical and Microprobe Analysis in Medical Geology. **2013**, 717-726		

415	Fast preparation of nano-hydroxyapatite/superhydrophilic reduced graphene oxide composites for bioactive applications. **2013**, 1, 4947-4955		50
414	Fiber optic probes for linear and nonlinear Raman applications Current trends and future development. **2013**, 7, 698-731		58
413	Detection of Alzheimer's disease by Raman spectra of rat's platelet with a simple feature selection. **2013**, 121, 52-56		11
412	Discriminating neoplastic and normal brain tissues in vitro through Raman spectroscopy: a principal components analysis classification model. **2013**, 31, 595-604		25
411	2(4)128 time-gated CMOS single photon avalanche diode line detector with 100 ps resolution for Raman spectroscopy. **2013**,		4
410	Detection and monitoring of neurotransmitters--a spectroscopic analysis. **2013**, 16, 192-9; discussion 198-9		7
409	Effect of ultrasound irradiation on the production of nHAp/MWCNT nanocomposites. **2013**, 33, 4305-12		37
408	Effects of cations and anions as aggregating agents on SERS detection of cotinine (COT) and trans-3'-hydroxycotinine (3HC). **2013**, 410, 74-80		22
407	Detection and identification of cancerous murine fibroblasts, transformed by murine sarcoma virus in culture, using Raman spectroscopy and advanced statistical methods. **2013**, 1830, 2720-7		21
406	Tuning SERS for living erythrocytes: Focus on nanoparticle size and plasmon resonance position. **2013**, 44, 686-694		33
405	Depth profiling of PLGA copolymer in a novel biomedical bilayer using confocal Raman spectroscopy. **2013**, 29, 5905-10		4
404	Raman imaging in biochemical and biomedical applications. Diagnosis and treatment of breast cancer. **2013**, 113, 5766-81		173
403	Advances in the clinical application of Raman spectroscopy for cancer diagnostics. *Photodiagnosis and Photodynamic Therapy*, **2013**, 10, 207-19	3.5	119
402	Light Scattering Spectroscopy: From Elastic to Inelastic. **2013**, 437-486		2
401	Label-free analysis of cellular biochemistry by Raman spectroscopy and microscopy. **2013**, 3, 941-56		11
400	Inhibition of calcification of bovine pericardium after treatment with biopolymers, E-beam irradiation and in vitro endothelization. **2013**, 33, 85-90		9
399	Resonance Raman and Raman spectroscopy for breast cancer detection. **2013**, 12, 371-82		68
398	Biomolecular component analysis of cultured cell nucleoli by Raman microspectrometry. **2013**, 44, 198-204		20

397   In situ-monitoring of biofilm formation by using surface-enhanced Raman scattering. **2013**, 67, 498-505   24

396   Optical spectroscopy methods to probe key spectral fingerprints of animal bone. **2013**,

395   Fluorescence suppression in Raman spectroscopy using a time-gated CMOS SPAD. **2013**, 21, 31632-45   87

394   Sustainable analytical chemistry—more than just being green. **2013**, 85, 2217-2229   43

393   A time-gated 4 28 SPAD array with a 512 channel flash 80 ps-TDC for pulsed Raman spectroscopy. **2013**,

392   Detection and Monitoring of Microparticles Under Skin by Optical Coherence Tomography as an Approach to Continuous Glucose Sensing Using Implanted Retroreflectors. **2013**, 13, 4534-4541   12

391   Transmittance analysis in coded aperture compressive Raman spectroscopy imaging. **2013**,

390   Sensing Glucose and Other Metabolites in Skin. **2013**, 835

389   A subcutaneous Raman needle probe. **2013**, 67, 349-54   47

388   Assessing variability of in vivo tissue Raman spectra. **2013**, 67, 789-800   13

387   Could near-infrared Raman spectroscopy be correlated with the METAVIR scores in liver lesions induced by hepatitis C virus?. **2013**,   2

386   Study of Cancer Cell Lines with Fourier Transform Infrared (FTIR)/ Vibrational Absorption (VA) Spectroscopy. **2013**, 3, 36-43   4

385   Raman microspectroscopy analysis in the treatment of acanthamoeba keratitis. *PLoS ONE*, **2013**, 8, e72127   3.7   22

384   Surface enhanced Raman spectroscopy in breast cancer cells. **2013**, 22, 37-42   25

383   In situ detection of antibiotic amphotericin B produced in Streptomyces nodosus using Raman microspectroscopy. **2014**, 12, 2827-39   20

382   Molecular Endospectroscopic Approaches. **2014**, 179-214   0

381   Raman Scattering Surface Signal Enhancement: Induced by Au@SiO2 core-shell nanoclusters and nanorods.. **2014**, 8, 29-36

380   A TDC-based 4 28 CMOS SPAD array for time-gated Raman spectroscopy. **2014**,   1

| 379 | Specific capture of target bacteria onto sensor surfaces for infectious disease diagnosis. **2014**, 24, 045009 | 2 |

| 378 | Sensitivity of coded aperture Raman spectroscopy to analytes beneath turbid biological tissue and tissue-simulating phantoms. **2014**, 19, 117001 | 7 |

| 377 | Multidimensional tissue fingerprint. **2014**, | |

| 376 | Double antiresonant hollow core fiber--guidance in the deep ultraviolet by modified tunneling leaky modes. **2014**, 22, 19131-40 | 46 |

| 375 | Raman spectroscopic evidence of tissue restructuring in heat-induced tissue fusion. **2014**, 7, 713-23 | 7 |

| 374 | Vision 20/20: the role of Raman spectroscopy in early stage cancer detection and feasibility for application in radiation therapy response assessment. **2014**, 41, 050901 | 31 |

| 373 | Multimodal diagnosis and visualisation of oncologic pathologies. **2014**, 44, 726-731 | 3 |

| 372 | Surface-enhanced Raman spectral biomarkers correlate with Ankle Brachial Index and characterize leg muscle biochemical composition of patients with peripheral arterial disease. **2014**, 2, e12148 | 7 |

| 371 | Quality of bone healing: perspectives and assessment techniques. **2014**, 22 Suppl 1, 39-49 | 5 |

| 370 | Identification and characterization of colorectal cancer using Raman spectroscopy and feature selection techniques. **2014**, 22, 25895-908 | 50 |

| 369 | Combined fluorescence-Raman spectroscopic setup for the diagnosis of melanocytic lesions. **2014**, 7, 86-95 | 28 |

| 368 | A 256 ⨯ 8 SPAD line sensor for time resolved fluorescence and raman sensing. **2014**, | 2 |

| 367 | Two-step Raman spectroscopy method for tumor diagnosis. **2014**, | 1 |

| 366 | Endoscopy-coupled Raman spectroscopy for in vivo discrimination of inflammatory bowel disease. **2014**, | 5 |

| 365 | Vibrational Spectroscopy: Disease Diagnostics and Beyond. **2014**, 355-399 | 7 |

| 364 | Multimodal Nano-Systems for Cancer Diagnosis, Imaging, and Therapy. **2014**, 351-388 | |

| 363 | Assessment of tumor cells in a mouse model of diffuse infiltrative glioma by Raman spectroscopy. **2014**, 2014, 860241 | 17 |

| 362 | Effects of low-power LED and therapeutic ultrasound in the tissue healing and inflammation in a tendinitis experimental model in rats. **2014**, 29, 301-11 | 14 |

343	A Bchizophotonic All-In-One Nanoparticle Coating for Multiplexed SE(R)RS Biomedical Imaging. **2014**, 126, 11950-11955	4
342	A "schizophotonic" all-in-one nanoparticle coating for multiplexed SE(R)RS biomedical imaging. **2014**, 53, 11756-61	35
341	Spectral Raman unmixing from CASSI system compressive measurements. **2015**,	0
340	Ex vivo peripheral nerve detection of rats by spontaneous Raman spectroscopy. **2015**, 5, 17165	19
339	Experimental infection of king crab hemocytes with a herpes-like virus in culture. **2015**, 41, 401-404	
338	Light Propagation in Highly Scattering Turbid Media: Concepts, Techniques, and Biomedical Applications. **2015**, 367-412	4
337	Implementation of a novel low-noise InGaAs detector enabling rapid near-infrared multichannel Raman spectroscopy of pigmented biological samples. **2015**, 46, 652-660	11
336	Quantitative evaluation of the mineralization level of dental tissues by Raman spectroscopy. **2015**, 1, 045204	11
335	. **2015**,	9
334	Advances in the in Vivo Raman Spectroscopy of Malignant Skin Tumors Using Portable Instrumentation. **2015**, 16, 14554-70	41
333	Endoscopic Raman Spectroscopy for Molecular Fingerprinting of Gastric Cancer: Principle to Implementation. **2015**, 2015, 670121	9
332	Detecting alterations of glucose and lipid components in human serum by near-infrared Raman spectroscopy. **2015**, 31, 160-168	21
331	Raman microspectroscopy of nanodiamond-induced structural changes in albumin. **2015**, 20, 047004	5
330	Vascular diseases investigated ex vivo by using Raman, FT-IR and complementary methods. **2015**, 67, 744-50	9
329	Real-time biochemical sensor based on Raman scattering with CMOS contact imaging. **2015**, 2015, 7950-3	
328	Multiscale Characterization of Biological Systems. **2015**,	1
327	A $2\times (4)\times 128$ Multitime-Gated SPAD Line Detector for Pulsed Raman Spectroscopy. **2015**, 15, 1358-1365	24
326	Characterisation of a fibre optic Raman probe within a hypodermic needle. **2015**, 407, 8311-20	24

325 A wirelessly powered microspectrometer for neural probe-pin device. **2015**,

324 Spectroscopic Experiments: A Review of Raman Spectroscopy of Biological Systems. **2015**, 5-20 | 1

323 Spatially offset Raman microspectroscopy of highly scattering tissue: theory and experiment. **2015**, 62, 97-101 | 16

322 Review of Fluorescence Suppression Techniques in Raman Spectroscopy. **2015**, 50, 387-406 | 117

321 Prospects and limitations of non-invasive blood glucose monitoring using near-infrared spectroscopy. **2015**, 18, 214-227 | 165

320 Characterization of Breast Cancer Tissue From a Rat Model With and Without Cancer: The Use of Raman Spectroscopy. **2015**, 48, 393-402

319 Discrimination of non-melanoma skin lesions from non-tumor human skin tissues in vivo using Raman spectroscopy and multivariate statistics. *Lasers in Surgery and Medicine*, **2015**, 47, 6-16 | 3.6 | 24

318 In vitro effects of hydrogen peroxide combined with different activators for the in-office bleaching technique on enamel. **2015**, 73, 516-21 | 8

317 Constrained regularization for noninvasive glucose sensing using Raman spectroscopy. **2015**, 08, 1550022 | 3

316 In vitro analysis of riboflavin-modified, experimental, two-step etch-and-rinse dentin adhesive: Fourier transform infrared spectroscopy and micro-Raman studies. **2015**, 7, 110-24 | 27

315 Could the bone mineral density (T-score) be correlated with the Raman spectral features of keratin from women's nails and be used to predict osteoporosis?. **2015**, 30, 287-94 | 4

314 Raman spectroscopy for the discrimination of cancerous and normal skin. **2015**, 4, | 6

313 Assessing the biochemical changes of tendons of rats in an experimental model of tenotomy under therapeutic ultrasound and LEDs (625 and 945⊓hm) by near-infrared Raman spectroscopy. **2015**, 30, 1729-38 | 8

312 A 4 ⊓28 SPAD array with a 78-ps 512-channel TDC for time-gated pulsed Raman spectroscopy. **2015**, 84, 353-362 | 14

311 Automation of a Dispersive Raman Spectrometer Using LabVIEW Aiming In Vivo Diagnosis of Skin Cancer. *IFMBE Proceedings*, **2015**, 1305-1308 | 0.2

310 Extracting biomarkers of commitment to cancer development: potential role of vibrational spectroscopy in systems biology. **2015**, 15, 693-713 | 15

309 Point of care optical diagnostic technologies for the detection of oral and oropharyngeal squamous cell carcinoma. **2015**, 13, 321-9 | 16

308 Calcium Pyrophosphate Dihydrate Deposition Disease. **2015**, 373-392

307	A compact Raman converter for UV-VIS spectrometers. **2015**, 86, 055107	2
306	A herpes-like virus in king crabs: Characterization and transmission under laboratory conditions. **2015**, 127, 21-31	11
305	Correlation between METAVIR scores and Raman spectroscopy in liver lesions induced by hepatitis C virus: a preliminary study. **2015**, 30, 1347-55	4
304	Current concepts and future of noninvasive procedures for diagnosing oral squamous cell carcinoma--a systematic review. **2015**, 11, 6	38
303	Effect of low-level laser therapy in an experimental model of osteoarthritis in rats evaluated through Raman spectroscopy. **2015**, 33, 145-53	12
302	Overview about the localization of nanoparticles in tissue and cellular context by different imaging techniques. **2015**, 6, 263-80	65
301	Visible micro-Raman spectroscopy of single human mammary epithelial cells exposed to x-ray radiation. **2015**, 20, 035003	22
300	Gold nanoparticles as a substrate in bio-analytical near-infrared surface-enhanced Raman spectroscopy. **2015**, 140, 3090-7	27
299	Optical properties and surface-enhanced Raman scattering activity of hexagonally arranged gold nanoparticle trimers. **2015**, 638, 253-257	2
298	Tailoring Adjuvant Radiation Therapy by Intraoperative Imaging to Detect Residual Cancer. **2015**, 25, 313-21	4
297	An Analysis and Design of Photonic Crystal-Based Biochip for Detection of Glycosuria. **2015**, 15, 5569-5575	16
296	Fast photoacoustic-guided depth-resolved Raman spectroscopy: a feasibility study. **2015**, 40, 3568-71	17
295	Pilot study: Raman spectroscopy in differentiating premalignant and malignant oral lesions from normal mucosa and benign lesions in humans. **2015**, 37, 511-7	60
294	Raman spectroscopy for a rapid diagnosis of sickle cell disease in human blood samples: a preliminary study. **2015**, 30, 247-53	17
293	Investigating the effects of Pentoxifylline on human breast cancer cells using Raman spectroscopy. **2015**, 08, 1550004	11
292	Raman Spectroscopy of Biological Tissues. **2015**, 50, 46-111	331
291	Real-time in vivo cancer diagnosis using Raman spectroscopy. **2015**, 8, 527-45	88
290	Remote Raman measurements of minerals, organics, and inorganics at 430 m range. **2016**, 55, 10283-10289	24

289   Snapshot depth sensitive Raman spectroscopy in layered tissues. **2016**, 24, 28312-28325   8

288   Estimating the concentration of urea and creatinine in the human serum of normal and dialysis patients through Raman spectroscopy. **2016**, 31, 1415-23   14

287   Visible wavelength surface-enhanced Raman spectroscopy from In-InP nanopillars for biomolecule detection. **2016**, 109, 253105   5

286   Raman Imaging Spectroscopy as a Tool To Investigate the Cell Damage on Aspergillus ochraceus Caused by an Antimicrobial Packaging Containing Benzyl Isothiocyanate. **2016**, 88, 4772-9   15

285   Towards the intra-operative use of Raman spectroscopy in breast cancer-overcoming the effects of theatre lighting. **2016**, 31, 1143-9   7

284   Raman Spectroscopy Analysis of the Biochemical Characteristics of Experimental Keratomycosis. **2016**, 41, 1408-1413   4

283   Properties of ordered titanium templates covered with Au thin films for SERS applications. **2016**, 388, 716-722   14

282   Wavefront shaping enhanced Raman scattering in a turbid medium. **2016**, 41, 1769-72   29

281   Microfluidic device for continuous single cells analysis via Raman spectroscopy enhanced by integrated plasmonic nanodimers. **2016**, 24, A180-90   33

280   In vivo Raman measurement of levofloxacin lactate in blood using a nanoparticle-coated optical fiber probe. **2016**, 7, 810-5   5

279   Novel imaging tools for investigating the role of immune signalling in the brain. **2016**, 58, 40-47   11

278   Bone quality assessment techniques: geometric, compositional, and mechanical characterization from macroscale to nanoscale. **2016**, 14, 133-149   36

277   Fluorescence Spectroscopy. **2016**, 237-252

276   Assessment of conjunctival microvilli abnormality by micro-Raman analysis - by G. Rusciano et al. **2016**, 9, 551-9   5

275   Raman spectroscopy in forensic analysis: identification of cocaine and other illegal drugs of abuse. **2016**, 47, 28-38   95

274   Evaluation of catheter-induced tribological damage to porcine aorta using infra-red spectroscopy. **2016**, 7, 11-21   4

273   Recent advances in optical diagnosis of oral cancers: Review and future perspectives. **2016**, 38 Suppl 1, E2403-11   22

272   Applications of Raman spectroscopy in dentistry part II: Soft tissue analysis. **2016**, 51, 799-821   2

271	Inflammation-related alterations of lipids after spinal cord injury revealed by Raman spectroscopy. **2016**, 21, 61008	8
270	Distinguishing Cancerous Liver Cells Using Surface-Enhanced Raman Spectroscopy. **2016**, 15, 36-43	8
269	Noninvasive Detection of Inflammatory Changes in White Adipose Tissue by Label-Free Raman Spectroscopy. **2016**, 88, 2140-8	12
268	Clinical instrumentation and applications of Raman spectroscopy. **2016**, 45, 1958-79	184
267	Biochemical changes on the repair of surgical bone defects grafted with biphasic synthetic micro-granular HA + Ɓtricalcium phosphate induced by laser and LED phototherapies assessed by Raman spectroscopy. **2016**,	
266	Miniaturized time-resolved Raman spectrometer for planetary science based on a fast single photon avalanche diode detector array. **2016**, 55, 739-48	30
265	Quantifying creatinine and urea in human urine through Raman spectroscopy aiming at diagnosis of kidney disease. **2016**, 21, 37001	48
264	Characterization of an ultraviolet irradiation chamber to monitor molecular photodegradation by Raman spectroscopy. **2016**, 44, 189-198	2
263	Characterization of nutritional parameters in bovine milk by Raman spectroscopy with least squares modeling. **2016**, 44, 85-97	12
262	Combined Raman and autofluorescence ex vivo diagnostics of skin cancer in near-infrared and visible regions. **2017**, 22, 27005	33
261	Differences and Relationships Between Normal and Atypical Ductal Hyperplasia, Ductal Carcinoma In Situ, and Invasive Ductal Carcinoma Tissues in the Breast Based on Raman Spectroscopy. **2017**, 71, 300-307	11
260	Noninvasive monitoring of blood glucose concentration in diabetic patients with optical coherence tomography. **2017**, 14, 035603	16
259	Analysis of disulphide bonds found in human hair by Raman spectroscopy. **2017**,	
258	Direct Measurement of Tissue Oxygenation in Neonates via Resonance Raman Spectroscopy: A Pilot Study. **2017**, 112, 137-142	1
257	Quantifying glucose and lipid components in human serum by Raman spectroscopy and multivariate statistics. **2017**, 32, 787-795	27
256	Characterization of the Timing Homogeneity in a CMOS SPAD Array Designed for Time-Gated Raman Spectroscopy. **2017**, 66, 1837-1844	14
255	Biochemical changes on the repair of surgical bone defects grafted with biphasic synthetic micro-granular HA + Ɓtricalcium phosphate induced by laser and LED phototherapies and assessed by Raman spectroscopy. **2017**, 32, 663-672	13
254	Laser and LED phototherapy on midpalatal suture after rapid maxilla expansion: Raman and histological analysis. **2017**, 32, 263-274	15

235 Quantitative response of OH/CH Raman bands in diseased soft tissue: First results. **2017**,

234 New advances in analytic and diagnostic technologies based on Raman spectroscopy. **2017**,

233 Surface-Enhanced Raman Scattering for Rapid Detection and Characterization of Antibiotic-Resistant Bacteria. **2018**, 7, e1701335 — 52

232 Laser/LED phototherapy on the repair of tibial fracture treated with wire osteosynthesis evaluated by Raman spectroscopy. **2018**, 33, 1657-1666 — 7

231 Simultaneous isolation and detection of single breast cancer cells using surface-enhanced Raman spectroscopy. **2018**, 186, 44-52 — 13

230 Laser stimulating ST36 with optical fiber induce blood component changes in mice: a Raman spectroscopy study. **2018**, 11, e201700262 — 2

229 A new method using Raman spectroscopy for in vivo targeted brain cancer tissue biopsy. **2018**, 8, 1792 — 92

228 Tumor-specific disintegratable nanohybrids containing ultrasmall inorganic nanoparticles: from design and improved properties to cancer applications. **2018**, 5, 184-205 — 53

227 Measurement and Thermal Dependence of Biological Tissue Optical Properties. **2018**, 355-378 — 3

226 In vivo Raman spectroscopy of breast tumors prephotodynamic and postphotodynamic therapy. **2018**, 49, 786-791 — 13

225 A $16times256$ SPAD Line Detector With a 50-ps, 3-bit, 256-Channel Time-to-Digital Converter for Raman Spectroscopy. **2018**, 18, 3789-3798 — 25

224 Gold nanoparticles in cardiovascular imaging. **2018**, 10, e1470 — 23

223 Encapsulation of living bacteria in electrospun cyclodextrin ultrathin fibers for bioremediation of heavy metals and reactive dye from wastewater. **2018**, 161, 169-176 — 57

222 Identification and quantification of caryophyllene in copaiba oil using Raman spectroscopy. **2018**, 46, 265-276 — 2

221 Clinical and radiographic periodontal parameters and release of collagen degradation biomarkers in naswar dippers. **2018**, 53, 123-130 — 14

220 Levenberg Marquardt-Based Non-Invasive Blood Glucose Measurement System. **2018**, 64, 116-123 — 6

219 Combination of Histopathology and FT-Raman Spectroscopy for the Study of Experimental Paracoccidioidomycosis in the Spleen. **2018**, 94, 88-94 — 2

218 Early Lung Cancer Detection. **2018**, 39, 45-55 — 34

217 — Potential Application of Raman Spectroscopy for Real-time Diagnosis and Classification of Colorectal Cancer. **2018**, 30, 381-389 — 1

216 — A Fast Fluorescence Background Suppression Method for Raman Spectroscopy Based on Stepwise Spectral Reconstruction. **2018**, 6, 67709-67717 — 8

215 — . **2018**, 10, 1-12 — 28

214 — Algorithm Expands Capabilities of Raman Microscope for Single Organelles Assessment. **2018**, 8, — 10

213 — Influence of Incident Wavelength and Detector Material Selection on Fluorescence in the Application of Raman Spectroscopy to a Fungal Fermentation Process. **2018**, 5, — 4

212 — Characterization and Differentiation of Adipose Tissue by Spectroscopic and Spectral Imaging Techniques. **2018**, — 3

211 — Multivariate Method Based on Raman Spectroscopy for Quantification of Dipyrone in Oral Solutions. **2018**, 2018, 1-10 — 3

210 — SERS Biomedical Applications: Diagnostics, Forensics, and Metabolomics. **2018**, 327-367 — 11

209 — Detecting urine metabolites related to training performance in swimming athletes by means of Raman spectroscopy and principal component analysis. **2018**, 185, 223-234 — 15

208 — In vivo detection of drug-induced apoptosis in tumors using Raman spectroscopy. **2018**, 143, 4836-4839 — 7

207 — Evaluation of accuracy dependence of Raman spectroscopic models on the ratio of calibration and validation points for non-invasive glucose sensing. **2018**, 410, 6469-6475 — 19

206 — Gaussian probe beam with high spherical aberration for glucose concentration measurement. **2018**, 57, 4153-4157 — 3

205 — Exploration of Raman exfoliated cytology for oral and cervical cancers. **2018**, 98, 35-40 — 9

204 — Raman Enhancement of Blood Constituent Proteins Using Graphene. **2018**, 5, 2978-2982 — 18

203 — Real-time tracking of the autophagy process in living cells using plasmonically enhanced Raman spectroscopy of fucoidan-coated gold nanoparticles. **2018**, 6, 5460-5465 — 12

202 — Current and future functional imaging techniques for post-traumatic stress disorder.. **2019**, 9, 24568-24594 — 9

201 — Ex vivo detection of cadmium-induced renal damage by using confocal Raman spectroscopy. **2019**, 12, e201900157 — 3

200 — Recent advances in the vibrational spectroscopic diagnosis of non-small cell lung cancer. **2019**, 104, 102946 — 2

199	Toward Single-Organelle Lipidomics in Live Cells. **2019**, 91, 11380-11387		11
198	Squeezing-enhanced Raman spectroscopy. **2019**, 5,		15
197	Feature visualization of Raman spectrum analysis with deep convolutional neural network. *Analytica Chimica Acta*, **2019**, 1087, 11-19	6.6	24
196	Advancing cancer diagnostics with artificial intelligence and spectroscopy: identifying chemical changes associated with breast cancer. **2019**, 19, 929-940		10
195	Optimization of laser wavelength, power and pulse duration for eye-safe Raman spectroscopy. **2019**, 15,		6
194	Multivariate Analysis of Difference Raman Spectra of the Irradiated Nucleus and Cytoplasm Region of SH-SY5Y Human Neuroblastoma Cells. *Sensors*, **2019**, 19,	3.8	5
193	A new method for diagnosing biochemical abnormalities of anterior cruciate ligament (ACL) in human knees: A Raman spectroscopic study. **2019**, 99, 284-294		1
192	Chemical imaging of human teeth by a time-resolved Raman spectrometer based on a CMOS single-photon avalanche diode line sensor. **2019**, 144, 6089-6097		12
191	Screening for Alzheimer's Disease Using Saliva: A New Approach Based on Machine Learning and Raman Hyperspectroscopy. **2019**, 71, 1351-1359		22
190	Visible Resonance Raman Spectroscopy in Human Brain Tissues. **2019**, 65-106		1
189	MCR Approach Revealing Protein, Water, and Lipid Depth Profile in Atopic Dermatitis Patients' Stratum Corneum via in Vivo Confocal Raman Spectroscopy. **2019**, 91, 2784-2790		10
188	Principal components analysis of Raman spectral data for screening of Hepatitis C infection. **2019**, 221, 117173		22
187	Detection of glioma by surface-enhanced Raman scattering spectra with optimized mathematical methods. **2019**, 50, 1130-1140		4
186	Raman Signal Enhancement by Quasi-Fractal Geometries of Au Nanoparticles. **2019**, 19, 4740-4746		4
185	Diagnosing Iron Deficiency Anemia by Raman Spectroscopy Analysis. *IFMBE Proceedings*, **2019**, 785-789	0.2	
184	A Noninvasive Accurate Measurement of Blood Glucose Levels with Raman Spectroscopy of Blood in Microvessels. **2019**, 24,		28
183	All-in-one Raman spectroscopy approach to diagnosis of colorectal cancer: analysis of spectra in the fingerprint regions. **2019**, 3, 84-90		5
182	High-Resolution Raman Microscopic Detection of Follicular Thyroid Cancer Cells with Unsupervised Machine Learning. **2019**, 123, 4358-4372		11

181 Label-free diagnosis of lung cancer with tissue-slice surface-enhanced Raman spectroscopy and statistical analysis. **2019**, 34, 1849-1855 — 14

180 Non-invasive functional molecular phenotyping of human smooth muscle cells utilized in cardiovascular tissue engineering. **2019**, 89, 193-205 — 22

179 Elevating toward a new innovation: Carbon nanotubes (CNTs). **2019**, 271-294 — 3

178 Raman ChemLighter: Fiber optic Raman probe imaging in combination with augmented chemical reality. **2019**, 12, e201800447 — 6

177 The Recent Advances in Raman Microscopy and Imaging Techniques for Biosensors. **2019**, 9, — 12

176 Single Burst Depth-Resolving Raman Spectrometer Based on a SPAD Array with an On-Chip TDC to Analyse Heterogenous Liquid Samples. **2019**,

175 In vivo biocompatibility and immunogenicity of metal-phenolic gelation. **2019**, 10, 10179-10194 — 11

174 In vivo Raman spectroscopic characterization of papillary thyroid carcinoma. **2019**, 101, 1-9 — 4

173 Dynamic Spectrum for noninvasive blood component analysis and its advances. **2019**, 54, 736-757 — 13

172 X-Ray powder diffraction - A non-destructive and versatile approach for the identification of new psychoactive substances. **2019**, 195, 414-418 — 7

171 Discrimination of non-melanoma skin cancer and keratosis from normal skin tissue in vivo and ex vivo by Raman spectroscopy. **2019**, 100, 131-141 — 11

170 A Label-Free Platform for Identification of Exosomes from Different Sources. **2019**, 4, 488-497 — 60

169 Translating chemometric analysis into physiological insights from in vivo confocal Raman spectroscopy of the human stratum corneum. **2019**, 1861, 403-409 — 8

168 Biochemical changes in injured sciatic nerve of rats after low-level laser therapy (660⬚m and 808⬚m) evaluated by Raman spectroscopy. **2019**, 34, 525-535 — 4

167 Application of Raman Spectroscopy in Food Forensics: A Review. *IFMBE Proceedings*, **2020**, 257-263 — 0.2 — 4

166 Non-invasive marker-independent high content analysis of a microphysiological human pancreas-on-a-chip model. **2020**, 85-86, 205-220 — 44

165 Raman spectroscopy of breast cancer. **2020**, 55, 439-475 — 13

164 Liver changes induced by cadmium poisoning distinguished by confocal Raman imaging. **2020**, 225, 117483 — 10

163	Bladder tissue characterization using probe-based Raman spectroscopy: Evaluation of tissue heterogeneity and influence on the model prediction. **2020**, 13, e201960025	16
162	Detecting creatine excreted in the urine of swimming athletes by means of Raman spectroscopy. **2020**, 35, 455-464	3
161	Diagnosing sickle cell disease and iron deficiency anemia in human blood by Raman spectroscopy. **2020**, 35, 1065-1074	8
160	Potential of Raman spectroscopy for the analysis of plasma/serum in the liquid state: recent advances. **2020**, 412, 1993-2007	20
159	Normal-subtracted preprocessing of Raman spectra aiming to discriminate skin actinic keratosis and neoplasias from benign lesions and normal skin tissues. **2020**, 35, 1141-1151	2
158	Emerging trends in biomedical imaging and disease diagnosis using Raman spectroscopy. **2020**, 623-652	1
157	Optical imaging techniques for vulnerable plaque detection. **2020**, 2, e201900034	1
156	Temporal Raman Spectroscopy for Monitoring Replication Kinetics of Epstein-Barr Virus Infection in Glial Cells. **2020**, 5, 29547-29560	17
155	Use of Raman spectroscopy to evaluate the biochemical composition of normal and tumoral human brain tissues for diagnosis. **2020**, 1	4
154	Surface Enhanced Raman Spectroscopy of the serum samples for the diagnosis of Hepatitis C and prediction of the viral loads. **2020**, 242, 118729	26
153	End-to-end analysis modeling of vibrational spectroscopy based on deep learning approach. **2020**, 34, e3291	0
152	Composition of Xanthan gum produced by Xanthomonas campestris using produced water from a carbonated oil field through Raman spectroscopy. **2020**, 213, 112052	6
151	Vibrational Spectroscopy for In Vitro Monitoring Stem Cell Differentiation. **2020**, 25,	2
150	Real-time multispectral fluorescence lifetime imaging using Single Photon Avalanche Diode arrays. **2020**, 10, 8116	13
149	Vibrational spectroscopic analysis and quantification of proteins in human blood plasma and serum. **2020**, 269-314	2
148	Medical Applications of Raman Spectroscopy. **2020**, 1-21	1
147	Characteristic of Five Subpopulation Leukocytes in Single-Cell Levels Based on Partial Principal Component Analysis Coupled with Raman Spectroscopy. **2020**, 74, 1463-1472	3
146	Identification of Lesional Tissues and Nonlesional Tissues in Early Gastric Cancer Endoscopic Submucosal Dissection Specimens Using a Fiber Optic Raman System. **2020**, 2020, 8015024	0

145	Raman spectroscopic study of the effect of the use of laser/LED phototherapy on the repair of complete tibial fracture treated with internal rigid fixation. *Photodiagnosis and Photodynamic Therapy*, **2020**, 30, 101773	3.5	0
144	A Review on Advances in Intra-operative Imaging for Surgery and Therapy: Imagining the Operating Room of the Future. **2020**, 48, 2171-2191		15
143	Renal Mass Biopsy. **2020**,		
142	On the Spectral Quality of Time-Resolved CMOS SPAD-Based Raman Spectroscopy With High Fluorescence Backgrounds. **2020**, 20, 4635-4645		5
141	Short-wavelength optoacoustic spectroscopy based on water muting. **2020**, 117, 4007-4014		4
140	Combination of an Artificial Intelligence Approach and Laser Tweezers Raman Spectroscopy for Microbial Identification. **2020**, 92, 6288-6296		32
139	Biochemical characterization of pathogenic bacterial species using Raman spectroscopy and discrimination model based on selected spectral features. **2021**, 36, 289-302		10
138	Detecting Minerals and Organics Relevant to Planetary Exploration Using a Compact Portable Remote Raman System at 122 Meters. **2021**, 75, 299-306		2
137	Applicability of Raman spectroscopy on porcine parvovirus and porcine circovirus type 2 detection. **2021**, 249, 119336		0
136	Authenticating common Australian beef production systems using Raman spectroscopy. **2021**, 121, 107652		5
135	Time-Resolved Raman Spectrometer With High Fluorescence Rejection Based on a CMOS SPAD Line Sensor and a 573-nm Pulsed Laser. **2021**, 70, 1-10		3
134	Nonlinear and vibrational microscopy for label-free characterization of amyloid-β plaques in Alzheimer's disease model. **2021**, 146, 2945-2954		6
133	Integrated photodynamic Raman theranostic system for cancer diagnosis, treatment, and post-treatment molecular monitoring. **2021**, 11, 2006-2019		5
132	Validation of biosignatures confirms the informative nature of fossil organic Raman spectra.		1
131	Analytical performance of Raman spectroscopy in assaying biochemical components in human serum. **2021**, 1		3
130	Laparoscopic Peritoneal Wash Cytology-Derived Primary Human Mesothelial Cells for In Vitro Cell Culture and Simulation of Human Peritoneum. *Biomedicines*, **2021**, 9,	4.8	1
129	Non-Invasive Determination of Glucose Concentration Using a Near-Field Sensor. **2021**, 11,		3
128	Image-guided Raman spectroscopy probe-tracking for tumor margin delineation. **2021**, 26,		6

127	Raman spectroscopy and artificial intelligence to predict the Bayesian probability of breast cancer. **2021**, 11, 6482		6
126	Signature molecular changes in the skeletal muscle of hindlimb unloaded mice. **2021**, 25, 100930		0
125	Non-invasive cell classification using the Paint Raman Express Spectroscopy System (PRESS). **2021**, 11, 8818		0
124	Multivariate analysis of Brillouin imaging data by supervised and unsupervised learning. **2021**, 14, e202000508		0
123	Raman microspectroscopy and Raman imaging reveal biomarkers specific for thoracic aortic aneurysms. **2021**, 2, 100261		1
122	Fiber-dispersive Raman spectrometer with single-photon sensitivity. **2021**, 29, 20941-20951		3
121	Surface-enhanced Raman spectroscopy analysis of serum samples of typhoid patients of different stages. *Photodiagnosis and Photodynamic Therapy*, **2021**, 34, 102329	3.5	1
120	Imaging the small with the small: Prospects for photonics in micro-endomicroscopy for minimally invasive cellular-resolution bioimaging. **2021**, 6, 060901		1
119	The Progress of Label-Free Optical Imaging in Alzheimer's Disease Screening and Diagnosis. **2021**, 13, 699024		1
118	Near-Infrared Optical Spectroscopy In Vivo Distinguishes Subjects with Alzheimer's Disease from Age-Matched Controls. **2021**, 82, 791-802		0
117	Mathematical and computational modeling for the determination of optical parameters of breast cancer cell. **2021**, 40, 447-458		
116	Surface-enhanced Raman spectroscopy for comparison of serum samples of typhoid and tuberculosis patients of different stages. *Photodiagnosis and Photodynamic Therapy*, **2021**, 35, 102426	3.5	4
115	Finding reduced Raman spectroscopy fingerprint of skin samples for melanoma diagnosis through machine learning. **2021**, 120, 102161		0
114	Conformational equilibrium, IR and Raman vibrational spectra of the quercetin molecule in different solvents: A comprehensive quantum-chemical investigation. **2021**, 3, 100033		1
113	Automated non-invasive identification of pelvic autonomic nerves with a handheld Raman spectrometer and potential application to nerve-sparing colorectal surgery: a preliminary study in surgical specimens.. **2021**, 10, 3921-3929		
112	Determination of modifications in rat liver due to phthalate uptake by SAM, RS, and ICP-OES. **2021**, 13, 2926-2935		1
111	Light Scattering Spectroscopy: From Elastic to Inelastic. **2004**, 355-396		0
110	Magnetic resonance and fluorescence based molecular imaging technologies. **2005**, 62, 83-115		29

109	Concepts and Methodology of Interaction of Carbon Nanostructures with Cellular Systems. **2014**, 31-55	3
108	Raman Spectroscopy for Whole Organism and Tissue Profiling. **2003**, 95-110	2
107	Development of in vivo fiber-optic Raman spectroscopy system with a miniaturized endoscope: demonstrations at the rat gastroesophageal epithelia. **2007**, 1300-1303	1
106	Applications of Raman and Surface-Enhanced Raman Scattering to the Analysis of Eukaryotic Samples. **2010**, 71-95	2
105	Raman Microscopy : A Versatile Approach to Bio-Imaging. **2012**, 219-242	1
104	Biophotonics: Harnessing Light for Biology and Medicine. **2011**, 3-17	2
103	Vibrational Microspectroscopy for Analysis of Atherosclerotic Arteries. **2014**, 505-535	2
102	Raman exfoliative cytology for oral precancer diagnosis. **2017**, 22, 1-12	14
101	Imaging of demineralized enamel in intact tooth by epidetected stimulated Raman scattering microscopy. **2018**, 23, 1-9	4
100	Spectral model for diagnosis of acute leukemias in whole blood and plasma through Raman spectroscopy. **2018**, 23, 1-11	3
99	Detecting active ingredients of insect repellents and sunscreens topically in skin by Raman spectroscopy. **2018**, 23, 1-11	9
98	Raman spectroscopy with a 1064-nm wavelength laser as a potential molecular tool for prostate cancer diagnosis: a pilot study. **2018**, 23, 1-6	11
97	Optical biopsy identification and grading of gliomas using label-free visible resonance Raman spectroscopy. **2019**, 24, 1-12	18
96	Single red blood cell analysis reveals elevated hemoglobin in poikilocytes. **2020**, 25, 1-13	3
95	Separating fluorescence from Raman spectra using a CMOS SPAD TCSPC line sensor for biomedical applications. **2019**,	5
94	Development of G-Fresnel lens-based mu-spectrometer. **2019**,	1
93	Super-high enhancement of surface enhanced Raman scattering substrate via resonance coupling. **2020**,	1
92	Measurement of Glucose Diffusion Coefficients in Human Tissues. **2008**, 587-621	3

91	Light scattering methods for tissue diagnosis. **2019**, 6, 479-489		19
90	Low threshold anti-Stokes Raman laser on-chip. **2019**, 7, 926		11
89	Replacement of retinyl esters by polyunsaturated triacylglycerol species in lipid droplets of hepatic stellate cells during activation. *PLoS ONE*, **2012**, 7, e34945	3.7	62
88	Raman Spectroscopic Analysis of Blood, Urine, Saliva and Tissue of Oral Potentially Malignant Disorders and Malignancy-A Diagnostic Study. 011-014		5
87	Atomic Force Microscopy: The Characterisation of Amyloid Protein Structure in Pathology. **2019**, 19, 2958-2973		0
86	Characterization and imaging of surgical specimens of invasive breast cancer and normal breast tissues with the application of Raman spectral mapping: A feasibility study and comparison with randomized single-point detection method. **2020**, 20, 2969-2976		3
85	Raman spectroscopy and its urological applications. **2008**, 24, 444-50		12
84	Role of Raman spectroscopy and surface enhanced Raman spectroscopy in colorectal cancer. **2016**, 8, 427-38		20
83	. **2010**, 30, 343		23
82	Blood Glucose Measurement Principles of Non-invasive Blood Glucose Meter: Focused on the Detection Methods of Blood Glucose. **2012**, 33, 114-127		7
81	Biological Characteristics of Cell Similarity Measure. 2100093		
80	Bibliography and References. **2001**,		
79	Near Infrared Raman Spectroscopy for Cancer Detection in vivo. **2002**,		
78	Light Scattering Spectroscopy Detects Changes in Alzheimer Brain. **2002**,		
77	Development of Optical Fiber Probes for Biological Raman Spectroscopy. **2002**,		
76	Identification of Bladder Wall Layers by Raman Spectroscopy. **2002**, 1771-1778		2
75	Diagnosis of vulnerable plaques in the cardiac catheterization laboratory. **2003**, 220-234		
74	Optical spectroscopy to diagnose Alzheimer's disease in vivo. **2004**,		

73   Diagnosis of Vulnerable Plaques in the Cardiac Catheterization Laboratory. **2004**, 53-66

72   RAMAN SPECTROSCOPY | Near-Infrared. **2005**, 105-110

71   Metabonomics. **2005**, 143-164

70   Raman Spectroscopy of Skin. **2006**, 551-562

69   Optical Imaging and Diagnosis in Bladder Cancer. **2009**, 407-419   1

68   The Pharmacogenomics of Personalized Medicine. 1

67   Introduction to Spectroscopy. **2012**, 1-16

66   Vibrational Spectroscopy and Cancer. **2012**, 55-110

65   Spectroscopy and Molecular Changes in Cancer Cells. **2012**, 17-32

64   A screening of Alzheimer's disease using basis synthesis by singular value decomposition from Raman spectra of platelet. **2013**, 14, 2393-2399   1

63   Review of Nanoscale Spectroscopy in Medicine. **2013**, 439-472   1

62   Comparison of coded aperture and slit-based Raman spectroscopy for measuring analytes beneath turbid biological tissue and tissue-simulating phantoms. **2014**,

61   Tissue classification using a fiber probe for combined Raman, fluorescence and reflectance spectroscopy. **2016**,

60   Photoluminescent Nanosensors. **2016**, 99-118   1

59   Vibrational Spectroscopic Preliminary Study of Blood and Its Components in Mice. **2018**,

58   Time-resolved single photon spectroscopy through a single optical fibre for miniaturised medical probe design. **2018**,

57   Cystoscopy. **2019**, 21-32

56   Raman spectral analyses of amino acids in life processes. **2019**,

55	Single blood cell Raman spectroscopy reveals elevated haemoglobin content in poikilocytosis. **2019** ,		
54	Discrimination of brain tumours and dysplastic tissues through multimodal fibre-probe spectroscopy. **2019**,		
53	Single blood cell Raman spectroscopy reveals elevated haemoglobin content in poikilocytosis. **2019** ,		
52	Renal Mass Biopsy: Future Trends and Developments. **2020**, 195-207		
51	Fast and label-free optical detection of dysplastic and tumour brain tissues. **2020**,		
50	Towards polarization-based excitation tailoring for extended Raman spectroscopy. **2020**, 28, 10239-10252		3
49	Blood glucose analysis by Raman spectrophotometer with ellipsoidal reflector. **2021**,		
48	Dispersion of refractive indices for (Cu1-xAgx)7GeS(Se)51 mixed crystals. **2021**,		
47	Atoms and Light. **2007**, 359-399		
46	Detection of cancerous esophageal tissue by Raman spectroscopy and multivariate analysis of extracellular fluid. **2020**,		
45	Signature molecular changes in the skeletal muscle of hindlimb unloaded mice.		
44	SPECTROSCOPY/MICROSCOPY: Nonlinear Raman microscopy eyes clinical application. **2010**, 3,		
43	Application of Raman spectroscopy in Andrology: non-invasive analysis of tissue and single cell. **2014**, 3, 125-33		9
42	Exploring Fabrication Limits for UV Guiding Hollow Core Anti-Resonant Fiber. **2021**,		
41	Vibrational Imaging Techniques for the Characterization of Hard Dental Tissues: From Bench-Top to Chair-Side. **2021**, 11, 11953		1
40	Raman spectroscopy biochemical characterisation of bladder cancer cisplatin resistance regulated by FDFT1: a review.. **2022**, 27, 9		1
39	Rapid, Label-Free Prediction of Antibiotic Resistance in by Surface-Enhanced Raman Spectroscopy.. **2022**, 23,		1
38	Raman spectroscopy is a powerful tool in molecular paleobiology: An analytical response to Alleon et al. (https://doi.org/10.1002/bies.202000295).. *BioEssays*, **2022**, 44, e2100070	4.1	1

No.	Title	IF	Cites
37	Multi-excitation Raman Spectroscopy Complements Whole Genome Sequencing for Rapid Detection of Bacterial Infection and Resistance in WHO Priority Pathogens.		1
36	Raman Spectroscopy: A Personalized Decision-Making Tool on Clinicians' Hands for In Situ Cancer Diagnosis and Surgery Guidance.. *Cancers*, **2022**, 14,	6.6	1
35	Characterising the biosensing interface. *Analytica Chimica Acta*, **2022**, 339759	6.6	1
34	Photobiomodulation reduces hippocampal apoptotic cell death and produces a Raman spectroscopic "signature".. *PLoS ONE*, **2022**, 17, e0264533	3.7	0
33	Raman Spectroscopy: In Vivo Application for Bone Evaluation in Oral Reconstructive (Regenerative) Surgery.. *Diagnostics*, **2022**, 12,	3.8	2
32	Raman spectroscopy combined with comprehensive gas chromatography for label-free characterization of plasma-derived extracellular vesicle subpopulations.. *Analytical Biochemistry*, **2022**, 114672	3.1	1
31	Raman Spectroscopy as a Neuromonitoring Tool in Traumatic Brain Injury: A Systematic Review and Clinical Perspectives.. *Cells*, **2022**, 11,	7.9	1
30	Detection of the chemical changes in blood, liver, and brain caused by electromagnetic field exposure using Raman spectroscopy, biochemical assays combined with multivariate analyses.. *Photodiagnosis and Photodynamic Therapy*, **2022**, 38, 102779	3.5	2
29	Review: Emerging Oculomics Based Diagnostic Technologies for Traumatic Brain Injury.. *IEEE Reviews in Biomedical Engineering*, **2022**, PP,	6.4	0
28	Differential Diagnosis of Glycosuria Using Raman Spectroscopy. *IFMBE Proceedings*, **2022**, 1129-1134	0.2	
27	A review on material analysis of food safety based on fluorescence spectrum combined with artificial neural network technology. *Food Science and Technology*, 42,	2	2
26	Current Techniques and Future Trends in the Diagnosis of Hepatic Steatosis in Liver Donors: A Review. *Journal of Liver Transplantation*, **2022**, 100091		0
25	Cell Type-Specific Anti-Adhesion Properties of Peritoneal Cell Treatment with Plasma-Activated Media (PAM).. *Biomedicines*, **2022**, 10,	4.8	2
24	Types of Raman Scattering Techniques for Neurodegenerative Diseases. **2022**, 39-57		
23	Optical (Bio)Sensors in Medical Diagnosis. **2022**,		
22	Surface-enhanced Raman spectroscopic analysis of the centrifugally filtered blood serum samples of the hepatitis C patients. *Photodiagnosis and Photodynamic Therapy*, **2022**, 102949	3.5	0
21	In situ identification of environmental microorganisms with Raman spectroscopy. *Environmental Science and Ecotechnology*, **2022**, 11, 100187	7.4	1
20	Single-Molecule Surface-Enhanced Raman Spectroscopy. *Sensors*, **2022**, 22, 4889	3.8	3

19	Diagnosing molecular subtypes of breast cancer by means of Raman spectroscopy. *Lasers in Surgery and Medicine*,	3.6
18	Rapid diagnosis of diabetes based on ResNet and Raman spectroscopy. *Photodiagnosis and Photodynamic Therapy*, **2022**, 103007	3.5
17	Mapping Endocrine Networks by Stable Isotope Tracing. *Current Opinion in Endocrine and Metabolic Research*, **2022**, 100381	1.7
16	Vast scope of raman spectroscopy in oral cancers and head & neck regions: A review. **2022**, 8, 67-72	
15	In vivo spectroscopy: optical fiber probes for clinical applications.	1
14	Silicon Photomultiplier A High Dynamic Range, High Sensitivity Sensor for Bio-Photonics Applications. **2022**, 12, 793	0
13	Deep Learning for Chondrogenic Tumor Classification through Wavelet Transform of Raman Spectra. **2022**, 22, 7492	0
12	Fabricating Thin Membraned Anti-Resonant Hollow-Core Fibre for Broadband UV-visible Light Guidance. **2022**,	0
11	Raman spectroscopy combined with deep learning for rapid detection of melanoma at the single cell level. **2023**, 286, 122029	0
10	An Early Diagnostic Nano Method for Chronic Kidney Disease Using Surface Enhanced Raman Spectroscopy. **2022**,	0
9	Key temperature-dependent characteristics of AlGaN-based UV-C laser diode and demonstration of room-temperature continuous-wave lasing. **2022**, 121, 222103	1
8	Discrimination of leukemias and non-leukemic cancers in blood serum samples of children and adolescents using a Raman spectral model. **2023**, 38,	0
7	Differentiating Follicular Thyroid Carcinoma and Thyroid Adenoma by Using Near-Infrared Surface-Enhanced Raman Spectroscopy.	0
6	Identification of pathogens and detection of antibiotic susceptibility at single-cell resolution by Raman spectroscopy combined with machine learning. 13,	0
5	An application of raman spectroscopy in combination with machine learning to determine gastric cancer spectroscopy marker. **2023**, 234, 107523	0
4	Increased levels of nerve growth factor accompany oxidative load in recurrent pregnancy loss. Machine learning applied to FT-Raman spectra study. **2023**, 46, 599-609	0
3	A methodology to evaluate different histological preparations of soft tissues: Intervertebral disc tissues study. **2023**, 21, 228080002311556	0
2	GlucoScreen. **2022**, 7, 1-20	0

1   A Review on Spectroscopy and its Classification. **2022**, 1, 31-37   0

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