Surface-Enhanced Raman Spectroscopy of Bacteria and

Applied Spectroscopy
59, 1016-1023
DOI: 10.1366/0003702054615124

Citation Report

#	Article	IF	Citations
1	Comparison of Psychro-Active Arctic Marine Bacteria and Common Mesophillic Bacteria Using Surface-Enhanced Raman Spectroscopy. Applied Spectroscopy, 2005, 59, 1222-1228.	2.2	99
2	Vibrational Imaging of a Single Pollen Grain by Ultrabroadband Multiplex Coherent Anti-Stokes Raman Scattering Microspectroscopy. Chemistry Letters, 2006, 35, 1124-1125.	1.3	29
3	Detection of bacteria by surface-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2006, 386, 1379-1386.	3.7	174
4	Experimental parameters influencing surface-enhanced Raman scattering of bacteria. Journal of Biomedical Optics, 2007, 12, 054015.	2.6	45
5	SERS as analytical tool for detection of bacteria. Proceedings of SPIE, 2007, , .	0.8	0
6	Characterization of a commercialized SERS-active substrate and its application to the identification of intact Bacillus endospores. Applied Optics, 2007, 46, 3878.	2.1	63
7	Reproducible Surface-Enhanced Raman Scattering Spectra of Bacteria on Aggregated Silver Nanoparticles. Applied Spectroscopy, 2007, 61, 479-485.	2.2	101
8	Potential of Surface-Enhanced Raman Spectroscopy for the Rapid Identification of Escherichia Coli and Listeria Monocytogenes Cultures on Silver Colloidal Nanoparticles. Applied Spectroscopy, 2007, 61, 824-831.	2.2	70
9	Towards single-microorganism detection using surface-enhanced Raman spectroscopy. International Journal of Environmental Analytical Chemistry, 2007, 87, 763-770.	3.3	18
10	Carbon Assisted Electroless Gold for Surface Enhanced Raman Scattering Studies. Journal of Physical Chemistry C, 2007, 111, 6700-6705.	3.1	25
11	Bioaerosol detection and characterization by surface-enhanced Raman spectroscopy. Journal of Colloid and Interface Science, 2007, 309, 36-43.	9.4	57
12	Use of Fourier transform infrared (FT-IR) spectroscopy as a tool for pollen identification. Aerobiologia, 2007, 23, 211-219.	1.7	62
13	Novel nanostructures for SERS biosensing. Nano Today, 2008, 3, 31-37.	11.9	396
14	Barcoding bacterial cells: a SERSâ€based methodology for pathogen identification. Journal of Raman Spectroscopy, 2008, 39, 1660-1672.	2.5	179
15	A PORTABLE RAMAN SYSTEM FOR THE IDENTIFICATION OF FOODBORNE PATHOGENIC BACTERIA. Journal of Rapid Methods and Automation in Microbiology, 2008, 16, 238-255.	0.4	37
16	Infectious Agent Detection With SERS-Active Silver Nanorod Arrays Prepared by Oblique Angle Deposition. IEEE Sensors Journal, 2008, 8, 863-870.	4.7	52
17	In Situ Surface-Enhanced Raman Scattering Analysis of Biofilm. Analytical Chemistry, 2008, 80, 8538-8544.	6.5	97
18	Chemical Characterization and Classification of Pollen. Analytical Chemistry, 2008, 80, 9551-9556.	6.5	109

#	Article	IF	Citations
19	Silver Nanorod Arrays as a Surface-Enhanced Raman Scattering Substrate for Foodborne Pathogenic Bacteria Detection. Applied Spectroscopy, 2008, 62, 922-931.	2.2	142
20	Characterization of Thermophilic Bacteria Using Surface-Enhanced Raman Scattering. Applied Spectroscopy, 2008, 62, 1226-1232.	2.2	62
21	Label-Free Fingerprinting of Pathogens by Raman Spectroscopy Techniques. , 2008, , 525-564.		2
22	A Genetic Approach for Controlling the Binding and Orientation of Proteins on Nanoparticles. Langmuir, 2008, 24, 2000-2008.	3.5	48
23	A High Speed Detection Platform Based on Surface-Enhanced Raman Scattering for Monitoring Antibiotic-Induced Chemical Changes in Bacteria Cell Wall. PLoS ONE, 2009, 4, e5470.	2.5	144
24	Surface-enhanced Raman scattering: realization of localized surface plasmon resonance using unique substrates and methods. Analytical and Bioanalytical Chemistry, 2009, 394, 1747-1760.	3.7	107
25	Rapid delivery of silver nanoparticles into living cells by electroporation for surface-enhanced Raman spectroscopy. Biosensors and Bioelectronics, 2009, 25, 388-394.	10.1	91
26	Tuning the Surface-Enhanced Raman Scattering Effect to Different Molecular Groups by Switching the Silver Colloid Solution pH. Applied Spectroscopy, 2009, 63, 214-223.	2.2	19
27	Characterization of Yeast Species Using Surface-Enhanced Raman Scattering. Applied Spectroscopy, 2009, 63, 1276-1282.	2.2	39
28	Living Fungi Cells Encapsulated in Polyelectrolyte Shells Doped with Metal Nanoparticles. Langmuir, 2009, 25, 4628-4634.	3.5	86
29	Characterization of Pollen Carotenoids with in situ and High-Performance Thin-Layer Chromatography Supported Resonant Raman Spectroscopy. Analytical Chemistry, 2009, 81, 8426-8433.	6.5	85
30	Molecular Spectroscopic Imaging Using a White-Light Laser Source. Bulletin of the Chemical Society of Japan, 2010, 83, 735-743.	3.2	6
31	Rapid and Sensitive Detection of Rotavirus Molecular Signatures Using Surface Enhanced Raman Spectroscopy. PLoS ONE, 2010, 5, e10222.	2.5	92
32	Label-Free in Situ SERS Imaging of Biofilms. Journal of Physical Chemistry B, 2010, 114, 10184-10194.	2.6	93
33	Silver Nanosphere SERS Probes for Sensitive Identification of Pathogens. Journal of Physical Chemistry C, 2010, 114, 16122-16128.	3.1	133
34	Surface-Enhanced Raman Scattering of Bacterial Cell Culture Growth Media. Applied Spectroscopy, 2010, 64, 601-606.	2.2	35
35	Characterization of Pollen by Vibrational Spectroscopy. Applied Spectroscopy, 2010, 64, 1364-1373.	2.2	65
36	Towards a fast, high specific and reliable discrimination of bacteria on strain level by means of SERS in a microfluidic device. Lab on A Chip, 2011, 11, 1013.	6.0	266

#	Article	IF	Citations
37	On the Difference Between Surface-Enhanced Raman Scattering (SERS) Spectra of Cell Growth Media and Whole Bacterial Cells. Applied Spectroscopy, 2011, 65, 493-499.	2.2	60
38	Optimizing electroporation assisted silver nanoparticle delivery into living C666 cells for surface-enhanced Raman spectroscopy. Spectroscopy, 2011, 25, 13-21.	0.8	12
39	Rapid detection of salmonella using SERS with silver nano-substrate. , 2011, , .		0
40	Separation and detection of multiple pathogens in a food matrix by magnetic SERS nanoprobes. Analytical and Bioanalytical Chemistry, 2011, 399, 1271-1278.	3.7	153
41	Tailoring Plasmonic Nanostructures for Optimal SERS Sensing of Small Molecules and Large Microorganisms. Small, 2011, 7, 371-376.	10.0	46
42	Raman Spectroscopy of Xylitol Uptake and Metabolism in Gram-Positive and Gram-Negative Bacteria. Applied and Environmental Microbiology, 2011, 77, 131-137.	3.1	23
43	Improving SERS Detection of Bacillus thuringiensis Using Silver Nanoparticles Reduced with Hydroxylamine and with Citrate Capped Borohydride. International Journal of Spectroscopy, 2011, 2011, 1-9.	1.6	21
44	Biological Applications of SERS Using Functional Nanoparticles. ACS Symposium Series, 2012, , 181-234.	0.5	7
45	Surface-Enhanced Raman Scattering as an Emerging Characterization and Detection Technique. Journal of Nanotechnology, 2012, 2012, 1-15.	3.4	20
46	Surface-Enhanced Raman Scattering of Bacteria in Microwells Constructed from Silver Nanoparticles. Journal of Nanotechnology, 2012, 2012, 1-7.	3.4	185
47	Rapid analysis of foodborne pathogens by surface-enhanced Raman spectroscopy. , 2012, , .		0
48	Reproducible discrimination between Gram-positive and Gram-negative bacteria using surface enhanced Raman spectroscopy with infrared excitation. Analyst, The, 2012, 137, 2866.	3.5	45
49	Raman Spectroscopy Techniques for the Detection of Biological Samples in Suspensions and as Aerosol Particles: A Review. Sensing and Imaging, 2012, 13, 1-25.	1.5	17
50	Surface-Enhanced Raman Scattering: A Technique of Choice for Molecular Detection. Materials Science Forum, 0, 754, 143-169.	0.3	15
51	Nanocolloid Substrates for Surface-Enhanced Raman Scattering (SERS) Sensor for Biological Applications. ACS Symposium Series, 2013, , 21-41.	0.5	0
52	The Use of Silver Nanorod Array-Based Surface-Enhanced Raman Scattering Sensor for Food Safety Applications. ACS Symposium Series, 2013, , 85-108.	0.5	9
53	Limitations of Surface Enhanced Raman Scattering in Sensing DNA Hybridization Demonstrated by Label-Free DNA Oligos as Molecular Rulers of Distance-Dependent Enhancement. Analytical Chemistry, 2013, 85, 1440-1446.	6.5	52
54	Surface enhanced Raman scattering (SERS) with biopolymer encapsulated silver nanosubstrates for rapid detection of foodborne pathogens. International Journal of Food Microbiology, 2013, 167, 67-73.	4.7	61

#	Article	IF	Citations
55	Characterization of pollen by MALDI-TOF lipid profiling. International Journal of Mass Spectrometry, 2013, 334, 13-18.	1.5	17
56	Surface enhanced Raman spectroscopy and structural characterization of Ag/Cu chiral nano-flower sculptured thin films. Applied Surface Science, 2013, 280, 439-445.	6.1	17
57	Detection and differentiation of Salmonella serotypes using surface enhanced Raman scattering (SERS) technique. Journal of Food Measurement and Characterization, 2013, 7, 1-12.	3.2	31
58	USE OF QUATERNARY PROXIES IN FORENSIC SCIENCE | Analytical Techniques in Forensic Palynology. , 2013, , 556-566.		6
59	Label-free detection of serum proteins using surface-enhanced Raman spectroscopy for colorectal cancer screening. Journal of Biomedical Optics, 2014, 19, 087003.	2.6	75
60	Detection of pathogens in food using a SERS-based assay in just a few hours. , 2014, , .		0
61	Pollen Raman spectra database: Application to the identification of airborne pollen. Talanta, 2014, 119, 473-478.	5.5	28
62	Detection of E. coli using SERS active filters with silver nanorod array. Sensors and Actuators B: Chemical, 2014, 191, 485-490.	7.8	42
63	Morphological and Molecular Analysis Calls for a Reappraisal of the Red Rain Cells of Kerala. Current Microbiology, 2014, 68, 192-198.	2.2	1
65	A gold nanopopcorn attached single-walled carbon nanotube hybrid for rapid detection and killing of bacteria. Journal of Materials Chemistry B, 2014, 2, 7534-7543.	5.8	40
66	Bioaerosol Detection Technologies. Integrated Analytical Systems, 2014, , .	0.4	12
67	Black silicon as a platform for bacterial detection. Biomicrofluidics, 2015, 9, 061101.	2.4	15
68	Label-free NIR-SERS discrimination and detection of foodborne bacteria by in situ synthesis of Ag colloids. Journal of Nanobiotechnology, 2015, 13, 45.	9.1	65
69	A rapid detection method of Escherichia coli by surface enhanced Raman scattering. , 2015, , .		0
70	Determination of physical and chemical stability in pressurised metered dose inhalers: potential new techniques. Expert Opinion on Drug Delivery, 2015, 12, 1661-1675.	5.0	7
71	Differentiation and classification of bacteria using vancomycin functionalized silver nanorods array based surface-enhanced Raman spectroscopy and chemometric analysis. Talanta, 2015, 139, 96-103.	5.5	67
72	Atmospheric solids analysis probe mass spectrometry for the rapid identification of pollens and semiâ€quantification of flavonoid fingerprints. Rapid Communications in Mass Spectrometry, 2016, 30, 1639-1646.	1.5	14
73	Optoelectronic methods in potential application in monitoring of environmental conditions. Proceedings of SPIE, 2016, , .	0.8	0

#	Article	IF	Citations
74	The biochemical origins of the surface-enhanced Raman spectra of bacteria: a metabolomics profiling by SERS. Analytical and Bioanalytical Chemistry, 2016, 408, 4631-4647.	3.7	194
75	Rapid Detection of Bacteria from Blood with Surface-Enhanced Raman Spectroscopy. Analytical Chemistry, 2016, 88, 8026-8035.	6.5	89
76	SERS study of bacteria using biosynthesized silver nanoparticles as the SERS substrate. Analytical Methods, 2016, 8, 2335-2340.	2.7	46
77	Towards optical fibre based Raman spectroscopy for the detection of surgical site infection. , 2016, , .		0
78	Microbiological identification by surface-enhanced Raman spectroscopy. Applied Spectroscopy Reviews, 2017, 52, 123-144.	6.7	17
80	Exploring Morphological and Biochemical Linkages in Fungal Growth with Labelâ€Free Light Sheet Microscopy and Raman Spectroscopy. ChemPhysChem, 2017, 18, 72-78.	2.1	26
81	Review on SERS of Bacteria. Biosensors, 2017, 7, 51.	4.7	93
82	The Intricate Nature of SERS: Realâ€Life Applications and Challenges. , 2017, , .		2
83	Tethered and Implantable Optical Sensors. , 2018, , 439-505.		3
84	Bacterial detection using bacteriophages and gold nanorods by following time-dependent changes in Raman spectral signals. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 122-130.	2.8	11
85	In vitro antimicrobial susceptibility testing methods: agar dilution to 3D tissue-engineered models. European Journal of Clinical Microbiology and Infectious Diseases, 2018, 37, 187-208.	2.9	87
86	SERS Biomedical Applications: Diagnostics, Forensics, and Metabolomics. , 2018, , 327-367.		19
87	In situ molecular vibration insights into the antibacterial behavior of silicon nitride bioceramic versus gram-negative Escherichia coli. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 223, 117299.	3.9	13
88	Linking the conventional and emerging detection techniques for ambient bioaerosols: a review. Reviews in Environmental Science and Biotechnology, 2019, 18, 495-523.	8.1	29
89	Silicon Nitride: A Bioceramic with a Gift. ACS Applied Materials & Interfaces, 2019, 11, 26619-26636.	8.0	66
90	Application of High-Throughput Screening Raman Spectroscopy (HTS-RS) for Label-Free Identification and Molecular Characterization of Pollen. Sensors, 2019, 19, 4428.	3.8	19
91	Detection of overtone and combined peaks using Mn/Cu helical star-shaped (pine-tree-like) sculptured thin films in surface-enhanced Raman spectroscopy. Journal of Theoretical and Applied Physics, 2019, 13, 305-314.	1.4	4
92	Fast discrimination of bacteria using a filter paperâ€"based SERS platform and PLS-DA with uncertainty estimation. Analytical and Bioanalytical Chemistry, 2019, 411, 705-713.	3.7	43

#	Article	IF	Citations
93	Combining Chemical Information From Grass Pollen in Multimodal Characterization. Frontiers in Plant Science, 2019, 10, 1788.	3.6	18
94	Understanding Escherichia coli damages after chlorophyllinâ€based photosensitization. Journal of Biophotonics, 2020, 13, e202000144.	2.3	3
95	Surface enhanced Raman scattering of bacteria using capped and uncapped silver nanoparticles. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 242, 118742.	3.9	8
96	Quantum Leap from Gold and Silver to Aluminum Nanoplasmonics for Enhanced Biomedical Applications. Applied Sciences (Switzerland), 2020, 10, 4210.	2.5	14
97	New methodology to process shifted excitation Raman difference spectroscopy data: a case study of pollen classification. Scientific Reports, 2020, 10, 11215.	3.3	16
98	Determination of nutritional parameters of bee pollen by Raman and infrared spectroscopy. Talanta, 2020, 212, 120790.	5.5	22
99	Detection of Bioaerosols Using Raman Spectroscopy. Integrated Analytical Systems, 2014, , 203-240.	0.4	2
100	Applications of Raman and Surface-Enhanced Raman Scattering to the Analysis of Eukaryotic Samples. Biological and Medical Physics Series, 2010, , 71-95.	0.4	2
101	Coherent Raman Spectroscopy Using a Supercontinuum Light Source. Molecular Science, 2007, 1, A0005.	0.2	1
103	ELASTIC AND INELASTIC LIGHT SCATTERING FROM LEVITATED MICROPARTICLES. Advanced Series in Applied Physics, 2010, , 83-106.	0.0	0
104	Infectious Diseases, Vibrational Spectroscopic Approaches to Rapid Diagnostics. , 2012, , 5382-5398.		0
105	Infectious Diseases, Vibrational Spectroscopic Approaches to Rapid Diagnostics. , 2013, , 147-169.		0
106	Rapid Detection of Salmonella Typhimurium and Escherichia coli using Surface-Enhanced Raman Spectroscopy. Journal of Agriculture & Life Science, 2014, 48, 133-138.	0.2	0
107	Lectin-Modified Bacterial Cellulose Nanocrystals Decorated with Au Nanoparticles for Selective Detection of Bacteria Using Surface-Enhanced Raman Scattering Coupled with Machine Learning. ACS Applied Nano Materials, 2022, 5, 259-268.	5.0	36
109	Revealing the Chemical Composition of Birch Pollen Grains by Raman Spectroscopic Imaging. International Journal of Molecular Sciences, 2022, 23, 5112.	4.1	5
110	Assessing the effect of different pH maintenance situations on bacterial SERS spectra. Analytical and Bioanalytical Chemistry, 2022, 414, 4977-4985.	3.7	4
111	Characterization of Bacteria Using Surface-Enhanced Raman Spectroscopy (SERS): Influence of Microbiological Factors on the SERS Spectra. Analytical Chemistry, 2022, 94, 9327-9335.	6.5	19
112	Alternative fouling analysis of PVDF UF membrane for surface water treatment: The credibility of silver nanoparticles. Journal of Membrane Science, 2022, 661, 120865.	8.2	3

#	Article	IF	Citations
113	Infectious Diseases, Vibrational Spectroscopic Approaches to Rapid Diagnostics. , 2012, , 57-73.		0
114	Investigation of the Influence of Stress on Label-Free Bacterial Surface-Enhanced Raman Spectra. Analytical Chemistry, 2023, 95, 3675-3683.	6.5	6
115	Rapid Prediction of Multidrug-Resistant Klebsiella pneumoniae through Deep Learning Analysis of SERS Spectra. Microbiology Spectrum, 2023, 11, .	3.0	5
116	Antimicrobial susceptibility testing using infrared attenuated total reflection (IR-ATR) spectroscopy to monitor metabolic activity. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2024, 304, 123384.	3.9	0
117	Surface-Enhanced Raman Spectroscopy for Evaluation of Antibacterial Activity of the N-Heterocyclic Carbene Selenium Complex and Its Ligand Against Pathogenic Bacterial Strains Using Multivariate Data Analysis Techniques. Analytical Letters, 0, , 1-18.	1.8	0
118	Raman spectrum combined with deep learning for precise recognition of Carbapenem-resistant Enterobacteriaceae. Analytical and Bioanalytical Chemistry, 2024, 416, 2465-2478.	3.7	0