Steven J Rehse

List of Publications by Year
in descending order

39	973	430874	434195
papers	citations	18 h-index	31 g-index

39	39	39	902
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laser-induced breakdown spectroscopy (LIBS): an overview of recent progress and future potential for biomedical applications. Journal of Medical Engineering and Technology, 2012, 36, 77-89.	1.4	154
2	Identification and discrimination of Pseudomonas aeruginosa bacteria grown in blood and bile by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1169-1176.	2.9	72
3	Escherichia coliidentification and strain discrimination using nanosecond laser-induced breakdown spectroscopy. Applied Physics Letters, 2007, 90, 163901.	3.3	60
4	A review of the use of laser-induced breakdown spectroscopy for bacterial classification, quantification, and identification. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 154, 50-69.	2.9	53
5	Pathogenic Escherichia coli strain discrimination using laser-induced breakdown spectroscopy. Journal of Applied Physics, 2007, 102, .	2.5	51
6	Sensitive and specific discrimination of pathogenic and nonpathogenic Escherichia coli using Raman spectroscopyâ€"a comparison of two multivariate analysis techniques. Biomedical Optics Express, 2013, 4, 481.	2.9	51
7	Towards the clinical application of laser-induced breakdown spectroscopy for rapid pathogen diagnosis: the effect of mixed cultures and sample dilution on bacterial identification. Applied Optics, 2010, 49, C27.	2.1	48
8	A membrane basis for bacterial identification and discrimination using laser-induced breakdown spectroscopy. Journal of Applied Physics, 2009, 105, .	2.5	46
9	Laser-induced breakdown spectroscopy at a water/gas interface: A study of bath gas-dependent molecular species. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1348-1360.	2.9	45
10	A comparison of multivariate analysis techniques and variable selection strategies in a laser-induced breakdown spectroscopy bacterial classification. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 87, 161-167.	2.9	39
11	The Effect of Bacterial Environmental and Metabolic Stresses on a Laser-Induced Breakdown Spectroscopy (LIBS) Based Identification of <I>Escherichia coli</I> and <I>Streptococcus viridans</I>. Applied Spectroscopy, 2011, 65, 386-392.	2.2	31
12	Oscillator strength measurements in Pr II with the fast-ion-beam laser-induced-fluorescence technique. Physica Scripta, 2007, 76, 577-592.	2.5	29
13	Pathogen identification with laser-induced breakdown spectroscopy: the effect of bacterial and biofluid specimen contamination. Applied Optics, 2012, 51, B99.	1.8	26
14	Broadband precision wavelength meter based on a stepping Fabryâ€"PÃ©rot interferometer. Review of Scientific Instruments, 2004, 75, 3318-3326.	1.3	25
15	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
16	The effect of sequential dual-gas testing on laser-induced breakdown spectroscopy-based discrimination: Application to brass samples and bacterial strains. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 1020-1027.	2.9	22
17	Laser collimation of an atomic gallium beam. Physical Review A, 2004, 69, .	2.5	21
18	Bacterial Suspensions Deposited on Microbiological Filter Material for Rapid Laser-Induced Breakdown Spectroscopy Identification. Applied Spectroscopy, 2016, 70, 485-493.	2.2	20

#	Article	IF	Citations
19	Detection of trace Al in model biological tissue with laser-induced breakdown spectroscopy. Applied Optics, 2007, 46, 5844.	2.1	17
20	The effect of Wag31 phosphorylation on the cells and the cell envelope fraction of wild-type and conditional mutants of Mycobacterium smegmatis studied by visible-wavelength Raman spectroscopy. Biochemical and Biophysical Research Communications, 2010, 391, 664-668.	2.1	17
21	Laser-induced breakdown spectroscopy for branching ratio and atomic lifetime measurements in singly-ionized neodymium and gallium. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 974-980.	2.9	16
22	Generation of 125 mW frequency stabilized continuous-wave tunable laser light at 295 nm by frequency doubling in a BBO crystal. Optics Communications, 2002, 213, 347-350.	2.1	15
23	Determination of the Zinc Concentration in Human Fingernails Using Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 2017, 71, 567-582.	2.2	14
24	Critical comparison of diffuse reflectance spectroscopy and colorimetry as dermatological diagnostic tools for acanthosis nigricans: a chemometric approach. Biomedical Optics Express, 2011, 2, 1664.	2.9	11
25	Fast-ion-beam laser-induced-fluorescence measurements of spontaneous-emission branching ratios and oscillator strengths in Sm II. Canadian Journal of Physics, 2006, 84, 723-771.	1.1	10
26	Quantitative skin color measurements in acanthosis nigricans patients: colorimetry and diffuse reflectance spectroscopy. Photodermatology Photoimmunology and Photomedicine, 2012, 28, 213-215.	1.5	10
27	Measurement of the hyperfine structure of the 4d^2D_3/2, 5/2 levels and isotope shifts of the 4p^2P_3/2 â†' 4d^2D_3/2 and 4p^2P_3/2 â†' 4d^2D_5/2 transitions in gallium 69 and 71. Journal of the Optical Society of America B: Optical Physics, 2001, 18, 855.	2.1	8
28	Fast-ion-beam laser-induced-fluorescence measurements of branching fractions and oscillator strengths in Nd II. Canadian Journal of Physics, 2007, 85, 1343-1379.	1.1	6
29	Laser-induced breakdown spectroscopy of Î³-Fe2O3 nanoparticles in a biocompatible alginate matrix. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1475-1483.	2.9	6
30	Laser-Based Identification of Pathogenic Bacteria. Physics Teacher, 2009, 47, 152-156.	0.3	6
31	Concentration of bacterial specimens during centrifugation prior to laser-induced breakdown spectroscopy analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 157, 68-75.	2.9	6
32	Biomedical Applications of LIBS. Springer Series in Optical Sciences, 2014, , 457-488.	0.7	6
33	A simple and efficient centrifugation filtration method for bacterial concentration and isolation prior to testing liquid specimens with laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 158, 105629.	2.9	4
34	Detection and Classification of Bacterial Cells After Centrifugation and Filtration of Liquid Specimens Using Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 2022, 76, 894-904.	2.2	3
35	North American Symposium on Laser-Induced Breakdown Spectroscopy: introduction to the feature issue. Applied Optics, 2010, 49, LIBS1.	2.1	1
36	Recent advances in the use of laser-induced breakdown spectroscopy (LIBS) as a rapid point-of-care pathogen diagnostic. Proceedings of SPIE, 2012, , .	0.8	1

#	Article	IF	Citations
37	Laser-Induced Breakdown Spectroscopy (LIBS) for the Rapid Field Identification and Classification of Pathogenic Bacteria. , 2010, , .		0
38	The Use of Laser-Induced Breakdown Spectroscopy for Bacterial Detection, Quantification, and Identification *. , 2021, , .		0
39	Silver Microparticle-Enhanced Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 0, , 000370282210964.	2.2	0