Madhavi Z Martin

List of Publications by Year
in descending order

50 papers	1,688 citations	279798 23 h-index	276875 41 g-index
50 all docs	50 docs citations	50 times ranked	2111 citing authors

#	Article	IF	Citations
1	Quantification of Rare Earth Elements in the Parts Per Million Range: A Novel Approach in the Application of Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 2022, 76, 937-945.	2.2	4
2	Inorganic characterization of switchgrass biomass using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 186, 106323.	2.9	6
3	Finding New Cell Wall Regulatory Genes in Populus trichocarpa Using Multiple Lines of Evidence. Frontiers in Plant Science, 2019, 10, 1249.	3.6	13
4	Multi-Phenotype Association Decomposition: Unraveling Complex Gene-Phenotype Relationships. Frontiers in Genetics, 2019, 10, 417.	2.3	20
5	Micro-Laser-Induced Breakdown Spectroscopy: A Novel Approach Used in the Detection of Six Rare Earths and One Transition Metal. Minerals (Basel, Switzerland), 2019, 9, 103.	2.0	7
6	The nature of the progression of drought stress drives differential metabolomic responses in Populus deltoides. Annals of Botany, 2019, 124, 617-626.	2.9	45
7	Ectopic Defense Gene Expression Is Associated with Growth Defects in Medicago truncatula Lignin Pathway Mutants. Plant Physiology, 2019, 181, 63-84.	4.8	27
8	Laser Induced Breakdown Spectroscopy analysis of europium and samarium in aluminum oxide. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 149, 30-34.	2.9	15
9	Pleiotropic and Epistatic Network-Based Discovery: Integrated Networks for Target Gene Discovery. Frontiers in Energy Research, 2018, 6, .	2.3	32
10	Integrated omics analyses reveal the details of metabolic adaptation of Clostridium thermocellum to lignocellulose-derived growth inhibitors released during the deconstruction of switchgrass. Biotechnology for Biofuels, 2017, 10, 14.	6.2	30
11	Correlating laser-induced breakdown spectroscopy with neutron activation analysis to determine the elemental concentration in the ionome of the Populus trichocarpa leaf. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 138, 46-53.	2.9	11
12	Quantification of rare earth elements using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 114, 65-73.	2.9	49
13	Spectral analysis of rare earth elements using laser-induced breakdown spectroscopy. , 2015, , .		4
14	Pinoresinol reductase 1 impacts lignin distribution during secondary cell wall biosynthesis in Arabidopsis. Phytochemistry, 2015, 112, 170-178.	2.9	31
15	Applications of High Resolution Laser: Induced Breakdown Spectroscopy for Environmental and Biological Samples. Springer Series in Optical Sciences, 2014, , 439-456.	0.7	2
16	Preliminary design of laser-induced breakdown spectroscopy for proto-Material Plasma Exposure eXperiment. Review of Scientific Instruments, 2014, 85, 11D806.	1.3	2
17	Populus trichocarpa and Populus deltoides Exhibit Different Metabolomic Responses to Colonization by the Symbiotic Fungus Laccaria bicolor. Molecular Plant-Microbe Interactions, 2014, 27, 546-556.	2.6	69
18	Investigation of laser-induced breakdown spectroscopy and multivariate analysis for differentiating inorganic and organic C in a variety of soils. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 87, 100-107.	2.9	32

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19	Characterization of Clostridium thermocellum strains with disrupted fermentation end-product pathways. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 725-734.	3.0	50
20	Genetic Improvement, Sustainable Production and Scalable Small Microenterprise of Jatropha as a Biodiesel Feedstock. Journal of Bioremediation & Biodegradation, 2013, s4, .	0.5	1
21	Tree-Ring Growth and Wood Chemistry Response to Manipulated Precipitation Variation for Two Temperate Quercus Species. Tree-Ring Research, 2012, 68, 17-29.	0.6	8
22	Pseudomonas fluorescens Induces Strain-Dependent and Strain-Independent Host Plant Responses in Defense Networks, Primary Metabolism, Photosynthesis, and Fitness. Molecular Plant-Microbe Interactions, 2012, 25, 765-778.	2.6	100
23	Down-regulation of the caffeic acid O-methyltransferase gene in switchgrass reveals a novel monolignol analog. Biotechnology for Biofuels, 2012, 5, 71.	6.2	96
24	Evaluation of the bioconversion of genetically modified switchgrass using simultaneous saccharification and fermentation and a consolidated bioprocessing approach. Biotechnology for Biofuels, 2012, 5, 81.	6.2	46
25	Trace elemental analysis by laser-induced breakdown spectroscopyâ€"Biological applications. Surface Science Reports, 2012, 67, 233-243.	7.2	149
26	Exploring laser-induced breakdown spectroscopy for nuclear materials analysis and in-situ applications. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 74-75, 177-183.	2.9	70
27	Multivariate Analysis of Laser-Induced Breakdown Spectroscopy Spectra of Soil Samples. Soil Science, 2010, 175, 447-452.	0.9	25
28	Novel Multivariate Analysis for Soil Carbon Measurements Using Laserâ€Induced Breakdown Spectroscopy. Soil Science Society of America Journal, 2010, 74, 87-93.	2.2	67
29	Laser-induced breakdown spectroscopy used to detect endophyte-mediated accumulation of metals by tall fescue. Applied Optics, 2010, 49, C161.	2.1	15
30	Extraction of information from laser-induced breakdown spectroscopy spectral data by multivariate analysis. Applied Optics, 2008, 47, G158.	2.1	53
31	North American Symposium on Laser-Induced Breakdown Spectroscopy: introduction to the feature issue. Applied Optics, 2008, 47, LIBS1.	2.1	4
32	High resolution applications of laser-induced breakdown spectroscopy for environmental and forensic applications. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1426-1432.	2.9	91
33	Cellular Response of Shewanella oneidensis to Strontium Stress. Applied and Environmental Microbiology, 2006, 72, 890-900.	3.1	44
34	Analysis of preservative-treated wood by multivariate analysis of laser-induced breakdown spectroscopy spectra. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1179-1185.	2.9	139
35	Elemental Analysis of Environmental and Biological Samples Using Laserâ€Induced Breakdown Spectroscopy and Pulsed Raman Spectroscopy. Journal of Dispersion Science and Technology, 2005, 25, 687-694.	2.4	23
36	Application of Emerging Tools and Techniques for Measuring Carbon and Microbial Communities in Reclaimed Mine Soils. Environmental Management, 2004, 33, S518.	2.7	6

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37	Laser-induced breakdown spectroscopy for the environmental determination of total carbon and nitrogen in soils. Applied Optics, 2003, 42, 2072.	2.1	91
38	Laser-induced breakdown spectroscopy used to detect palladium and silver metal dispersed in bacterial cellulose membranes. Applied Optics, 2003, 42, 6174.	2.1	17
39	<title>Laser-induced breakdown spectroscopy for environmental monitoring of soil carbon and nitrogen</title>. , 2002, 4576, 188.		9
40	Environmental monitoring of total carbon and nitrogen in soils using laser-induced breakdown spectroscopy. , 2002, , .		0
41	Laser-induced breakdown spectroscopy used to detect palladium metal dispersed in cellulose membranes. , 2002, , .		0
42	Detection of Chromium Aerosol Using Time-Resolved Laser-Induced Plasma Spectroscopy. Applied Spectroscopy, 2000, 54, 1279-1285.	2.2	63
43	Aerosol Measurement by Laser-Induced Plasma Technique: A Review. Aerosol Science and Technology, 1999, 31, 409-421.	3.1	68
44	Electrical and optical response of a very high frequency AlGaAs/GaAs heterojunction bipolar transistor. Journal of Applied Physics, 1994, 76, 3847-3849.	2.5	0
45	Enhanced negative ion formation in ultravioletâ€laser irradiated silane: Implications for plasma deposition of amorphous silicon. Applied Physics Letters, 1994, 65, 2571-2573.	3.3	11
46	Fourier transform Raman spectroscopy-application to process control. , 1994, 2089, 210.		0
47	High-speed optical response of pseudomorphic InGaAs high electron mobility transistors. IEEE Photonics Technology Letters, 1992, 4, 1012-1014.	2.5	19
48	Transport properties and infrared spectra of CuCl thin films. Journal of Applied Physics, 1990, 67, 3097-3101.	2.5	0
49	Electrical conductivity measurements in a Ge-Se-Ti system. Journal of Non-Crystalline Solids, 1988, 103, 195-200.	3.1	17
50	Effect of Î³-irradiation on non-linear I-V behaviour and thermoelectric measurements in amorphous semiconducting Asî—¸Seî—¸Te system. Journal of Non-Crystalline Solids, 1985, 74, 47-55.	3.1	7