

Madhavi Z Martin

List of Publications by Year in descending order

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Version: 2024-02-01

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 | Trace elemental analysis by laser-induced breakdown spectroscopyâ€™ Biological applications. Surface Science Reports, 2012, 67, 233-243. | 7.2 | 149 |
| 2 | 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 |
| 3 | <i>Pseudomonas fluorescens</i> 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 |
| 4 | 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 |
| 5 | Laser-induced breakdown spectroscopy for the environmental determination of total carbon and nitrogen in soils. Applied Optics, 2003, 42, 2072. | 2.1 | 91 |
| 6 | 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 |
| 7 | 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 |
| 8 | <i>Populus trichocarpa</i> and <i>Populus deltoides</i> Exhibit Different Metabolomic Responses to Colonization by the Symbiotic Fungus <i>Laccaria bicolor</i> . Molecular Plant-Microbe Interactions, 2014, 27, 546-556. | 2.6 | 69 |
| 9 | Aerosol Measurement by Laser-Induced Plasma Technique: A Review. Aerosol Science and Technology, 1999, 31, 409-421. | 3.1 | 68 |
| 10 | Novel Multivariate Analysis for Soil Carbon Measurements Using Laser-Induced Breakdown Spectroscopy. Soil Science Society of America Journal, 2010, 74, 87-93. | 2.2 | 67 |
| 11 | Detection of Chromium Aerosol Using Time-Resolved Laser-Induced Plasma Spectroscopy. Applied Spectroscopy, 2000, 54, 1279-1285. | 2.2 | 63 |
| 12 | Extraction of information from laser-induced breakdown spectroscopy spectral data by multivariate analysis. Applied Optics, 2008, 47, G158. | 2.1 | 53 |
| 13 | Characterization of <i>Clostridium thermocellum</i> strains with disrupted fermentation end-product pathways. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 725-734. | 3.0 | 50 |
| 14 | Quantification of rare earth elements using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 114, 65-73. | 2.9 | 49 |
| 15 | 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 |
| 16 | The nature of the progression of drought stress drives differential metabolomic responses in <i>Populus deltoides</i> . Annals of Botany, 2019, 124, 617-626. | 2.9 | 45 |
| 17 | Cellular Response of <i>Shewanella oneidensis</i> to Strontium Stress. Applied and Environmental Microbiology, 2006, 72, 890-900. | 3.1 | 44 |
| 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Pleiotropic and Epistatic Network-Based Discovery: Integrated Networks for Target Gene Discovery. <i>Frontiers in Energy Research</i> , 2018, 6, . | 2.3 | 32 |
| 20 | Pinoresinol reductase 1 impacts lignin distribution during secondary cell wall biosynthesis in <i>Arabidopsis</i> . <i>Phytochemistry</i> , 2015, 112, 170-178. | 2.9 | 31 |
| 21 | Integrated omics analyses reveal the details of metabolic adaptation of <i>Clostridium thermocellum</i> to lignocellulose-derived growth inhibitors released during the deconstruction of switchgrass. <i>Biotechnology for Biofuels</i> , 2017, 10, 14. | 6.2 | 30 |
| 22 | Ectopic Defense Gene Expression Is Associated with Growth Defects in <i>Medicago truncatula</i> Lignin Pathway Mutants. <i>Plant Physiology</i> , 2019, 181, 63-84. | 4.8 | 27 |
| 23 | Multivariate Analysis of Laser-Induced Breakdown Spectroscopy Spectra of Soil Samples. <i>Soil Science</i> , 2010, 175, 447-452. | 0.9 | 25 |
| 24 | Elemental Analysis of Environmental and Biological Samples Using Laser-Induced Breakdown Spectroscopy and Pulsed Raman Spectroscopy. <i>Journal of Dispersion Science and Technology</i> , 2005, 25, 687-694. | 2.4 | 23 |
| 25 | Multi-Phenotype Association Decomposition: Unraveling Complex Gene-Phenotype Relationships. <i>Frontiers in Genetics</i> , 2019, 10, 417. | 2.3 | 20 |
| 26 | High-speed optical response of pseudomorphic InGaAs high electron mobility transistors. <i>IEEE Photonics Technology Letters</i> , 1992, 4, 1012-1014. | 2.5 | 19 |
| 27 | Electrical conductivity measurements in a Ge-Se-Ti system. <i>Journal of Non-Crystalline Solids</i> , 1988, 103, 195-200. | 3.1 | 17 |
| 28 | Laser-induced breakdown spectroscopy used to detect palladium and silver metal dispersed in bacterial cellulose membranes. <i>Applied Optics</i> , 2003, 42, 6174. | 2.1 | 17 |
| 29 | Laser-induced breakdown spectroscopy used to detect endophyte-mediated accumulation of metals by tall fescue. <i>Applied Optics</i> , 2010, 49, C161. | 2.1 | 15 |
| 30 | Laser Induced Breakdown Spectroscopy analysis of europium and samarium in aluminum oxide. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 149, 30-34. | 2.9 | 15 |
| 31 | Finding New Cell Wall Regulatory Genes in <i>Populus trichocarpa</i> Using Multiple Lines of Evidence. <i>Frontiers in Plant Science</i> , 2019, 10, 1249. | 3.6 | 13 |
| 32 | Enhanced negative ion formation in ultraviolet-laser irradiated silane: Implications for plasma deposition of amorphous silicon. <i>Applied Physics Letters</i> , 1994, 65, 2571-2573. | 3.3 | 11 |
| 33 | Correlating laser-induced breakdown spectroscopy with neutron activation analysis to determine the elemental concentration in the ionome of the <i>Populus trichocarpa</i> leaf. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 138, 46-53. | 2.9 | 11 |
| 34 | Laser-induced breakdown spectroscopy for environmental monitoring of soil carbon and nitrogen. , 2002, 4576, 188. | | 9 |
| 35 | Tree-Ring Growth and Wood Chemistry Response to Manipulated Precipitation Variation for Two Temperate <i>Quercus</i> Species. <i>Tree-Ring Research</i> , 2012, 68, 17-29. | 0.6 | 8 |
| 36 | Effect of β -irradiation on non-linear I-V behaviour and thermoelectric measurements in amorphous semiconducting $\text{As}_{1-x}\text{Se}_x\text{Te}$ system. <i>Journal of Non-Crystalline Solids</i> , 1985, 74, 47-55. | 3.1 | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | 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 |
| 38 | Application of Emerging Tools and Techniques for Measuring Carbon and Microbial Communities in Reclaimed Mine Soils. Environmental Management, 2004, 33, S518. | 2.7 | 6 |
| 39 | Inorganic characterization of switchgrass biomass using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 186, 106323. | 2.9 | 6 |
| 40 | North American Symposium on Laser-Induced Breakdown Spectroscopy: introduction to the feature issue. Applied Optics, 2008, 47, LIBS1. | 2.1 | 4 |
| 41 | Spectral analysis of rare earth elements using laser-induced breakdown spectroscopy. , 2015, , . | | 4 |
| 42 | 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 |
| 43 | Applications of High Resolution Laser: Induced Breakdown Spectroscopy for Environmental and Biological Samples. Springer Series in Optical Sciences, 2014, , 439-456. | 0.7 | 2 |
| 44 | Preliminary design of laser-induced breakdown spectroscopy for proto-Material Plasma Exposure eXperiment. Review of Scientific Instruments, 2014, 85, 11D806. | 1.3 | 2 |
| 45 | Genetic Improvement, Sustainable Production and Scalable Small Microenterprise of Jatropha as a Biodiesel Feedstock. Journal of Bioremediation & Biodegradation, 2013, s4, . | 0.5 | 1 |
| 46 | Transport properties and infrared spectra of CuCl thin films. Journal of Applied Physics, 1990, 67, 3097-3101. | 2.5 | 0 |
| 47 | 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 |
| 48 | Fourier transform Raman spectroscopy-application to process control. , 1994, 2089, 210. | | 0 |
| 49 | Environmental monitoring of total carbon and nitrogen in soils using laser-induced breakdown spectroscopy. , 2002, , . | | 0 |
| 50 | Laser-induced breakdown spectroscopy used to detect palladium metal dispersed in cellulose membranes. , 2002, , . | | 0 |