Seetharaman Vaidyanathan

List of Publications by Year
in descending order

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65	3,821	168829	139680
papers	citations	31 h-index	61 g-index

69	69	69	5393
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Co-culturing microbial consortia: approaches for applications in biomanufacturing and bioprocessing. Critical Reviews in Biotechnology, 2022, 42, 46-72.	5.1	34
2	Towards a Phaeodactylum tricornutum biorefinery in an outdoor UK environment. Bioresource Technology, 2022, 344, 126320.	4.8	7
3	Response to nutrient variation on lipid productivity in green microalgae captured using second derivative FTIR and Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 270, 120830.	2.0	7
4	The transition away from chemical flocculants: Commercially viable harvesting of Phaeodactylum tricornutum. Separation and Purification Technology, 2021, 255, 117733.	3.9	9
5	Enabling large-scale production of algal oil in continuous output mode. IScience, 2021, 24, 102743.	1.9	3
6	Interactions between polyethylene and polypropylene microplastics and Spirulina sp. microalgae in aquatic systems. Heliyon, 2021, 7, e07676.	1.4	40
7	Biomolecular transitions and lipid accumulation in green microalgae monitored by FTIR and Raman analysis. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 224, 117382.	2.0	41
8	Influence of gas management on biochemical conversion of CO2 by microalgae for biofuel production. Applied Energy, 2020, 261, 114420.	5.1	44
9	Influence of nutrient status on the biohydrogen and lipid productivity in Parachlorella kessleri: a biorefinery approach. Applied Microbiology and Biotechnology, 2020, 104, 10293-10305.	1.7	11
10	Diatoms for Carbon Sequestration and Bio-Based Manufacturing. Biology, 2020, 9, 217.	1.3	23
11	Microbial consortia: Concept and application in fruit crop management. , 2020, , 353-366.		11
12	Phaeodactylum tricornutum: A Diatom Cell Factory. Trends in Biotechnology, 2020, 38, 606-622.	4.9	129
13	Effects of cryopreservation on viability and functional stability of an industrially relevant alga. Scientific Reports, 2019, 9, 2093.	1.6	40
14	Effect of ammonium and high light intensity on the accumulation of lipids in Nannochloropsis oceanica (CCAP 849/10) and Phaeodactylum tricornutum (CCAP 1055/1). Biotechnology for Biofuels, 2018, 11, 60.	6.2	28
15	Microbial consortia: a critical look at microalgae co-cultures for enhanced biomanufacturing. Critical Reviews in Biotechnology, 2018, 38, 690-703.	5.1	115
16	Microalgae: a robust â€œgreen bio-bridgeâ€•between energy and environment. Critical Reviews in Biotechnology, 2018, 38, 351-368.	5.1	43
17	Quenching for Microalgal Metabolomics: A Case Study on the Unicellular Eukaryotic Green Alga Chlamydomonas reinhardtii. Metabolites, 2018, 8, 72.	1.3	5
18	The Effect of High-Intensity Ultraviolet Light to Elicit Microalgal Cell Lysis and Enhance Lipid Extraction. Metabolites, 2018, 8, 65.	1.3	20

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19	Microwave-Assisted Extraction for Microalgae: From Biofuels to Biorefinery. Biology, 2018, 7, 18.	1.3	130
20	Influence of washing and quenching in profiling the metabolome of adherent mammalian cells: a case study with the metastatic breast cancer cell line MDA-MB-231. Analyst, The, 2017, 142, 2038-2049.	1.7	35
21	The Search for a Lipid Trigger: The Effect of Salt Stress on the Lipid Profile of the Model Microalgal Species Chlamydomonas reinhardtii for Biofuels Production. Current Biotechnology, 2016, 5, 305-313.	0.2	30
22	Proteome response of Phaeodactylum tricornutum , during lipid accumulation induced by nitrogen depletion. Algal Research, 2016, 18, 213-224.	2.4	104
23	Towards quantitative mass spectrometry-based metabolomics in microbial and mammalian systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150363.	1.6	56
24	Dissolved inorganic carbon speciation in aquatic environments and its application to monitor algal carbon uptake. Science of the Total Environment, 2016, 541, 1282-1295.	3.9	29
25	Capture agents, conversion mechanisms, biotransformations and biomimetics: general discussion. Faraday Discussions, 2015, 183, 463-487.	1.6	1
26	An efficient TOF-SIMS image analysis with spatial correlation and alternating nonâ€“negativity-constrained least squares. Bioinformatics, 2015, 31, 753-760.	1.8	7
27	Influence of nutrient status on the accumulation of biomass and lipid in Nannochloropsis salina and Dunaliella salina. Energy Conversion and Management, 2015, 106, 61-72.	4.4	47
28	Cell line dependence of metabolite leakage in metabolome analyses of adherent normal and cancer cell lines. Metabolomics, 2015, 11, 1743-1755.	1.4	26
29	Vapourâ€mediated ion activation for enhanced SIMS imaging. Surface and Interface Analysis, 2013, 45, 290-293.	0.8	3
30	Cellular metabolic profiling using ToFâ€SIMS. Surface and Interface Analysis, 2013, 45, 255-259.	0.8	2
31	Simultaneous assay of pigments, carbohydrates, proteins and lipids in microalgae. Analytica Chimica Acta, 2013, 776, 31-40.	2.6	126
32	HILIC- and SCX-Based Quantitative Proteomics of Chlamydomonas reinhardtii during Nitrogen Starvation Induced Lipid and Carbohydrate Accumulation. Journal of Proteome Research, 2012, 11, 5959-5971.	1.8	67
33	A solvation-based screening approach for metabolite arrays. Analyst, The, 2012, 137, 2350.	1.7	1
34	A selective metabolite array for the detection of phosphometabolites. Analytica Chimica Acta, 2012, 724, 119-126.	2.6	3
35	A simple, reproducible and sensitive spectrophotometric method to estimate microalgal lipids. Analytica Chimica Acta, 2012, 724, 67-72.	2.6	38
36	Towards proteomics-on-chip: The role of the surface. Molecular BioSystems, 2011, 7, 101-115.	2.9	20

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37	Explanatory multivariate analysis of ToF-SIMS spectra for the discrimination of bacterial isolates. Analyst, The, 2009, 134, 2352.	1.7	10
38	Exploratory analysis of TOF-SIMS data from biological surfaces. Applied Surface Science, 2008, 255, 1599-1602.	3.1	8
39	Uncovering new challenges in bio-analysis with ToF-SIMS. Applied Surface Science, 2008, 255, 1264-1270.	3.1	30
40	TOF-SIMS investigation of Streptomyces coelicolor, a mycelial bacterium. Applied Surface Science, 2008, 255, 922-925.	3.1	12
41	Subsurface Biomolecular Imaging of Streptomyces coelicolor Using Secondary Ion Mass Spectrometry. Analytical Chemistry, 2008, 80, 1942-1951.	3.2	61
42	TOF-SIMS 3D Biomolecular Imaging ofXenopuslaevisOocytes Using Buckminsterfullerene (C60) Primary Ions. Analytical Chemistry, 2007, 79, 2199-2206.	3.2	284
43	Quantitative detection of metabolites using matrix-assisted laser desorption/ionization mass spectrometry with 9-aminoacridine as the matrix. Rapid Communications in Mass Spectrometry, 2007, 21, 2072-2078.	0.7	48
44	Laser desorption/ionization mass spectrometry on porous silicon for metabolome analyses: influence of surface oxidation. Rapid Communications in Mass Spectrometry, 2007, 21, 2157-2166.	0.7	26
45	Direct infusion electrospray ionization mass spectra of crude cell extracts for microbial characterizations: influence of solvent conditions on the detection of proteins. Rapid Communications in Mass Spectrometry, 2006, 20, 21-30.	0.7	6
46	Matrix-suppressed laser desorption/ionisation mass spectrometry and its suitability for metabolome analyses. Rapid Communications in Mass Spectrometry, 2006, 20, 1192-1198.	0.7	63
47	High-Throughput Microbial Characterizations Using Electrospray Ionization Mass Spectrometry and Its Role in Functional Genomics. , 2006, , 229-256.		0
48	A laser desorption ionisation mass spectrometry approach for high throughput metabolomics. Metabolomics, 2005, 1, 243-250.	1.4	27
49	Profiling microbial metabolomes: what do we stand to gain?. Metabolomics, 2005, 1, 17-28.	1.4	19
50	Metabolomics by numbers: acquiring and understanding global metabolite data. Trends in Biotechnology, 2004, 22, 245-252.	4.9	1,156
51	Selective Detection of Proteins in Mixtures Using Electrospray Ionization Mass Spectrometry:Â Influence of Instrumental Settings and Implications for Proteomics. Analytical Chemistry, 2004, 76, 5024-5032.	3.2	21
52	Influence of morphology on the near-infrared spectra of mycelial biomass and its implications in bioprocess monitoring. Biotechnology and Bioengineering, 2003, 82, 715-724.	1.7	20
53	Explanatory Optimization of Protein Mass Spectrometry via Genetic Search. Analytical Chemistry, 2003, 75, 6679-6686.	3.2	39
54	Metabolome and Proteome Profiling for Microbial Characterization. , 2003, , 9-38.		4

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55	Metabolic profiling using direct infusion electrospray ionisation mass spectrometry for the characterisation of olive oils. Analyst, The, 2002, 127, 1457-1462.	1.7	127
56	Flow-injection electrospray ionization mass spectrometry of crude cell extracts for high-throughput bacterial identification. Journal of the American Society for Mass Spectrometry, 2002, 13, 118-128.	1.2	97
57	Sample preparation in matrix-assisted laser desorption/ionization mass spectrometry of whole bacterial cells and the detection of high mass (>20?kDa) proteins. Rapid Communications in Mass Spectrometry, 2002, 16, 1276-1286.	0.7	53
58	Assessment of the Structure and Predictive Ability of Models Developed for Monitoring Key Analytes in a Submerged Fungal Bioprocess Using Near-Infrared Spectroscopy. Applied Spectroscopy, 2001, 55, 444-453.	1.2	20
59	Discrimination of Aerobic Endospore-forming Bacteria via Electrospray-Ionization Mass Spectrometry of Whole Cell Suspensions. Analytical Chemistry, 2001, 73, 4134-4144.	3.2	93
60	Assessment of near-infrared spectral information for rapid monitoring of bioprocess quality. Biotechnology and Bioengineering, 2001, 74, 376-388.	1.7	58
61	Deconvolution of near-infrared spectral information for monitoring mycelial biomass and other key analytes in a submerged fungal bioprocess. Analytica Chimica Acta, 2001, 428, 41-59.	2.6	33
62	At-line monitoring of a submerged filamentous bacterial cultivation using near-infrared spectroscopy. Enzyme and Microbial Technology, 2000, 27, 691-697.	1.6	46
63	Critical Evaluation of Models Developed for Monitoring an Industrial Submerged Bioprocess for Antibiotic Production Using Near-Infrared Spectroscopy. Biotechnology Progress, 2000, 16, 1098-1105.	1.3	36
64	Monitoring of Submerged Bioprocesses. Critical Reviews in Biotechnology, 1999, 19, 277-316.	5.1	51
65	Fundamental investigations on the near-infrared spectra of microbial biomass as applicable to bioprocess monitoring. Analyst, The, 1999, 124, 157-162.	1.7	36