

Plamen A Demirev

List of Publications by Year in descending order

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90
papers

5,164
citations

136885

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88593

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93
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93
docs citations

93
times ranked

4165
citing authors

#	ARTICLE	IF	CITATIONS
1	Proteolytic ¹⁸ O Labeling for Comparative Proteomics: A Model Studies with Two Serotypes of Adenovirus. <i>Analytical Chemistry</i> , 2001, 73, 2836-2842.	3.2	807
2	Characterization of intact microorganisms by MALDI mass spectrometry. <i>Mass Spectrometry Reviews</i> , 2001, 20, 157-171.	2.8	750
3	Microorganism Identification by Mass Spectrometry and Protein Database Searches. <i>Analytical Chemistry</i> , 1999, 71, 2732-2738.	3.2	307
4	Dried Blood Spots: Analysis and Applications. <i>Analytical Chemistry</i> , 2013, 85, 779-789.	3.2	222
5	Mass Spectrometry for Rapid Characterization of Microorganisms. <i>Annual Review of Analytical Chemistry</i> , 2008, 1, 71-93.	2.8	143
6	Kurstakins: A New Class of Lipopeptides Isolated from <i>Bacillus thuringiensis</i> . <i>Journal of Natural Products</i> , 2000, 63, 1492-1496.	1.5	137
7	Effects of Charge State on Fragmentation Pathways, Dynamics, and Activation Energies of Ubiquitin Ions Measured by Blackbody Infrared Radiative Dissociation. <i>Analytical Chemistry</i> , 1997, 69, 1119-1126.	3.2	135
8	Microorganism Identification by Matrix-Assisted Laser/Desorption Ionization Mass Spectrometry and Model-Derived Ribosomal Protein Biomarkers. <i>Analytical Chemistry</i> , 2003, 75, 3817-3822.	3.2	132
9	Top-Down Proteomics for Rapid Identification of Intact Microorganisms. <i>Analytical Chemistry</i> , 2005, 77, 7455-7461.	3.2	130
10	Impedance-Based Battery Management System for Safety Monitoring of Lithium-Ion Batteries. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 6497-6504.	5.2	125
11	Bioinformatics and Mass Spectrometry for Microorganism Identification: A Proteome-Wide Post-Translational Modifications and Database Search Algorithms for Characterization of Intact <i>H. pylori</i> . <i>Analytical Chemistry</i> , 2001, 73, 4566-4573.	3.2	113
12	Identification of <i>Bacillus</i> Spores by Matrix-Assisted Laser Desorption Ionization Mass Spectrometry. <i>Applied and Environmental Microbiology</i> , 1999, 65, 4313-4319.	1.4	113
13	Testing the Significance of Microorganism Identification by Mass Spectrometry and Proteome Database Search. <i>Analytical Chemistry</i> , 2000, 72, 3739-3744.	3.2	112
14	Tandem Mass Spectrometry of Intact Proteins for Characterization of Biomarkers from <i>Bacillus cereus</i> Spores. <i>Analytical Chemistry</i> , 2001, 73, 5725-5731.	3.2	93
15	Mass spectrometry in biodefense. <i>Journal of Mass Spectrometry</i> , 2008, 43, 1441-1457.	0.7	92
16	Detection of Malaria Parasites in Blood by Laser Desorption Mass Spectrometry. <i>Analytical Chemistry</i> , 2002, 74, 3262-3266.	3.2	84
17	Mass Spectrometry-Based Proteolytic Mapping for Rapid Virus Identification. <i>Analytical Chemistry</i> , 2002, 74, 2529-2534.	3.2	84
18	Mass spectral analysis of complex lipids desorbed directly from lyophilized membranes and cells. <i>Biochemical and Biophysical Research Communications</i> , 1987, 142, 194-199.	1.0	73

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19	Top-Down Identification of Protein Biomarkers in Bacteria with Unsequenced Genomes. <i>Analytical Chemistry</i> , 2009, 81, 9633-9642.	3.2	69
20	Glutathione as a matrix for plasma desorption mass spectrometry of large peptides. <i>Analytical Chemistry</i> , 1986, 58, 1303-1307.	3.2	66
21	Rapid monitoring of impedance phase shifts in lithium-ion batteries for hazard prevention. <i>Journal of Power Sources</i> , 2018, 405, 30-36.	4.0	63
22	Matrix-assisted laser desorption with ultra-short laser pulses. <i>Rapid Communications in Mass Spectrometry</i> , 1992, 6, 187-191.	0.7	54
23	Approaches and Limits for Accurate Mass Characterization of Large Biomolecules. <i>Analytical Chemistry</i> , 1995, 67, 3793-3798.	3.2	53
24	RAPID DETECTION OF MALARIA INFECTION IN VIVO BY LASER DESORPTION MASS SPECTROMETRY. <i>American Journal of Tropical Medicine and Hygiene</i> , 2004, 71, 546-551.	0.6	53
25	Sample morphology effects in matrix-assisted laser desorption/ionization mass spectrometry of proteins. <i>Journal of Mass Spectrometry</i> , 1995, 30, 206-211.	0.7	47
26	Evolution on the Biophysical Fitness Landscape of an RNA Virus. <i>Molecular Biology and Evolution</i> , 2018, 35, 2390-2400.	3.5	45
27	Formation of fullerenes in MeV ion track plasmas. <i>Chemical Physics Letters</i> , 1992, 191, 345-350.	1.2	42
28	Formation of fullerenes in MeV-ion sputtering from organic solids. <i>Physical Review B</i> , 1993, 47, 7560-7567.	1.1	42
29	Establishing Drug Resistance in Microorganisms by Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 1194-1201.	1.2	42
30	Genomic Signatures of Strain Selection and Enhancement in <i>Bacillus atrophaeus</i> var. <i>globigii</i> , a Historical Biowarfare Simulant. <i>PLoS ONE</i> , 2011, 6, e17836.	1.1	41
31	Corona plasma discharge for rapid analysis of microorganisms by mass spectrometry. , 1999, 13, 604-606.		38
32	Multiply-Protonated Protein Ions in the Gas Phase: Calculation of the Electrostatic Interactions between Charged Sites. <i>Journal of Physical Chemistry B</i> , 1997, 101, 9645-9650.	1.2	36
33	Arrayed Time-of-Flight Mass Spectrometry for Time-Critical Detection of Hazardous Agents. <i>Analytical Chemistry</i> , 2005, 77, 3954-3959.	3.2	36
34	Photochemical Versus Thermal Mechanisms in Matrix-assisted Laser Desorption/Ionization Probed by Back Side Desorption. <i>Rapid Communications in Mass Spectrometry</i> , 1996, 10, 821-824.	0.7	34
35	Probing Combinatorial Library Diversity by Mass Spectrometry. <i>Analytical Chemistry</i> , 1997, 69, 2893-2900.	3.2	33
36	Sample exposure effects in matrix-assisted laser desorption/ionization mass spectrometry of large biomolecules. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1994, 130, 107-115.	1.9	32

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37	DETECTION OF PLASMODIUM FALCIPARUM IN PREGNANCY BY LASER DESORPTION MASS SPECTROMETRY. American Journal of Tropical Medicine and Hygiene, 2005, 73, 485-490.	0.6	32
38	High-mass ion fragmentation as a function of time and mass. Analytical Chemistry, 1987, 59, 1951-1954.	3.2	31
39	Particle-induced desorption in mass spectrometry. Part I. Mechanisms and processes. Mass Spectrometry Reviews, 1995, 14, 279-308.	2.8	30
40	Detection and identification of immobilized low-volatility organophosphates by desorption ionization mass spectrometry. International Journal of Mass Spectrometry, 2008, 278, 158-165.	0.7	28
41	Characterization of microbial mixtures by mass spectrometry. Mass Spectrometry Reviews, 2018, 37, 321-349.	2.8	27
42	Isotope depletion of large biomolecules: Implications for molecular mass measurements. Journal of the American Society for Mass Spectrometry, 1998, 9, 149-156.	1.2	26
43	Generation of hydrogen radicals for reactivity studies in Fourier transform ion cyclotron resonance mass spectrometry. , 2000, 14, 777-781.		26
44	Hydrogenation of solid C60 by atomic hydrogen. Chemical Physics Letters, 1993, 214, 45-49.	1.2	25
45	Reviewâ€™Thermal Safety Management in Li-Ion Batteries: Current Issues and Perspectives. Journal of the Electrochemical Society, 2020, 167, 140516.	1.3	25
46	A plasma desorption time-of-flight mass spectrometer with a single-stage ion mirror: improved resolution and calibration procedure. International Journal of Mass Spectrometry and Ion Processes, 1992, 114, 183-207.	1.9	24
47	Matrix-assisted laser desorption/ionization: Dependence of the ion yield on the laser beam incidence angle. Rapid Communications in Mass Spectrometry, 1994, 8, 388-393.	0.7	24
48	Mass spectrometry for malaria diagnosis. Expert Review of Molecular Diagnostics, 2004, 4, 821-829.	1.5	24
49	Measurement of MeV Ion Track Structure in an Organic Solid. Physical Review Letters, 1996, 77, 667-670.	2.9	20
50	Low-mass secondary-ion ejection from molecular solids by MeV heavy ions: Radial velocity distributions. Physical Review B, 1996, 54, 3173-3183.	1.1	19
51	Ion Mobility Spectrometry - High Resolution LTQ-Orbitrap Mass Spectrometry for Analysis of Homemade Explosives. Journal of the American Society for Mass Spectrometry, 2017, 28, 1531-1539.	1.2	19
52	Rapid detection of malaria infection in vivo by laser desorption mass spectrometry. American Journal of Tropical Medicine and Hygiene, 2004, 71, 546-51.	0.6	19
53	Photodissociation dynamics of gas-phaseC60probed by optical emission spectroscopy. Physical Review B, 1996, 53, 12541-12544.	1.1	18
54	Photon emission from gas phase fullerenes excited by 193 nm laser radiation. Journal of Chemical Physics, 1997, 107, 10440-10445.	1.2	18

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55	Modification of Wiley-Mclaren ToF Analyzers for Laser Desorption. Instrumentation Science and Technology, 1987, 16, 93-115.	0.9	16
56	252-Californium plasma desorption mass spectrometry of glycerophospholipids. Biomedical & Environmental Mass Spectrometry, 1987, 14, 241-246.	1.6	15
57	Enhanced In-Source Fragmentation in MALDI-TOF-MS of Oligonucleotides Using 1,5-Diaminonaphthalene. Journal of the American Society for Mass Spectrometry, 2012, 23, 773-777.	1.2	15
58	Covariance mapping in matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. Rapid Communications in Mass Spectrometry, 2003, 17, 991-995.	0.7	13
59	Radial velocities of ejected ions: implications for the mechanisms of molecular ion formation in plasma desorption mass spectrometry of biomolecules. International Journal of Mass Spectrometry and Ion Processes, 1991, 111, 41-53.	1.9	12
60	Plasma desorption mass spectrometry in studies of formation and sputtering of fullerenes by MeV atomic ions. International Journal of Mass Spectrometry and Ion Processes, 1994, 138, 159-172.	1.9	12
61	Ammonia/desorption chemical ionization mass spectrometry of some cyclopentane iridoid glucosides. Organic Mass Spectrometry, 1991, 26, 151-153.	1.3	11
62	Total yield and polar-angle distributions of biomolecules sputtered by fast heavy ions. Physical Review B, 1996, 54, 15025-15033.	1.1	11
63	Kinetic Energies of Secondary Ions in MeV and keV Particle-induced Desorption. Rapid Communications in Mass Spectrometry, 1996, 10, 1966-1974.	0.7	10
64	Enhanced specificity of bacterial spore identification by oxidation and mass spectrometry. Rapid Communications in Mass Spectrometry, 2004, 18, 2719-2722.	0.7	10
65	Characterization of intact microorganisms by MALDI mass spectrometry. , 2001, 20, 157.		10
66	MeV atomic ion sputtering of fullerenes: a radial velocity distribution study. International Journal of Mass Spectrometry and Ion Processes, 1996, 152, 193-200.	1.9	9
67	Particle-induced desorption in mass spectrometry. Part II. Effects and applications. Mass Spectrometry Reviews, 1995, 14, 309-326.	2.8	8
68	Gas chromatographic/mass spectrometric method for the identification of ^{13}C -5,7-sterols in sterol mixtures. Biomedical Mass Spectrometry, 1984, 11, 608-610.	1.8	7
69	Mechanism of formation of alkali metal cation adducts in plasma desorption mass spectrometry of biomolecules. Organic Mass Spectrometry, 1991, 26, 471-475.	1.3	7
70	On molecular ion formation by hydride abstraction in plasma desorption mass spectrometry. International Journal of Mass Spectrometry and Ion Processes, 1993, 123, 69-75.	1.9	7
71	Formation and sputtering of fullerenes by MeV atomic ion. Carbon, 1994, 32, 809-814.	5.4	7
72	Interaction of MEV atomic ions with molecular solids: Ion track structure and sputtering phenomena. Radiation Measurements, 1997, 28, 101-110.	0.7	7

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73	MALDI Mass Spectrometry for Rapid Detection and Characterization of Biological Threats. ACS Symposium Series, 2011, , 211-224.	0.5	7
74	Rapid detection of ribosome inactivating protein toxins by mass-spectrometry-based functional assays. International Journal of Mass Spectrometry, 2012, 312, 41-44.	0.7	7
75	CTI: A novel charge-related topological index with low degeneracy. Journal of Mathematical Chemistry, 1991, 8, 367-382.	0.7	6
76	Delayed electron emission from electronically sputtered C ₆₀ ⁺ ions. Physical Review B, 1994, 50, 9636-9639.	1.1	6
77	High mass fragmentation. Matrix effects in plasma desorption mass spectrometry. International Journal of Mass Spectrometry and Ion Processes, 1987, 78, 251-258.	1.9	4
78	Rapid Characterization of Microorganisms by Mass Spectrometry: An Overview. ACS Symposium Series, 2011, , 1-4.	0.5	4
79	Determination of Isotope-Enrichment Ratios in Proteins by High-Resolution Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. European Journal of Mass Spectrometry, 2002, 8, 163-167.	0.5	3
80	Using Mass Spectrometry To Identify and Characterize Bacteria. Microbe Magazine, 2014, 9, 23-29.	0.4	3
81	2,4-Dinitrophenylhydrazides of polysialogangliosides. Chemistry and Physics of Lipids, 1988, 48, 261-266.	1.5	2
82	Interaction of near-infrared femtosecond laser pulses with biological materials in water. Optical Engineering, 2014, 53, 051510.	0.5	2
83	Electron impact mass spectra of 2,3-dihydro-4(1H)-quinolines. Organic Mass Spectrometry, 1990, 25, 241-242.	1.3	1
84	Investigation of the fragmentation of explosives by femtosecond laser mass spectrometry. , 2006, , .		1
85	Mass spectrometry of infectious pathogens. , 2008, , 291-308.		1
86	Thermally enhanced enzymatic proteolysis for rapid ¹⁸ O labeling in proteomics. International Journal of Mass Spectrometry, 2012, 312, 24-29.	0.7	1
87	Corona plasma discharge for rapid analysis of microorganisms by mass spectrometry. , 1999, 13, 604.		1
88	Stable-Isotope-Based Strategies for Rapid Determination of Drug Resistance by Mass Spectrometry. , 2016, , 317-326.		1
89	Early-Stage Heat- And Discharge-Induced Transformations in a Lithium-Ion Cell Monitored by an Advanced Battery Management System. Journal of the Electrochemical Society, 2022, 169, 020522.	1.3	1
90	Studies of Malaria by Mass Spectrometry. , 2006, , 161-180.		0