Rainer Cramer

List of Publications by Year in descending order

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122 papers 6,324 citations

57719 44 h-index 71651 76 g-index

125 all docs

125 docs citations

125 times ranked

7480 citing authors

#	Article	IF	CITATIONS
1	Genome Expansion and Gene Loss in Powdery Mildew Fungi Reveal Tradeoffs in Extreme Parasitism. Science, 2010, 330, 1543-1546.	6.0	725
2	Activation of the ATPase Activity of Hsp90 by the Stress-Regulated Cochaperone Aha1. Molecular Cell, 2002, 10, 1307-1318.	4.5	487
3	Evaluation of Two-dimensional Differential Gel Electrophoresis for Proteomic Expression Analysis of a Model Breast Cancer Cell System. Molecular and Cellular Proteomics, 2002, 1, 91-98.	2.5	255
4	Structure and evolution of barley powdery mildew effector candidates. BMC Genomics, 2012, 13, 694.	1.2	238
5	Difference gel electrophoresis. Proteomics, 2008, 8, 4886-4897.	1.3	213
6	Ion stability of nucleic acids in infrared matrix-assisted laser desorption/ionization mass spectrometry. Nucleic Acids Research, 1993, 21, 3347-3357.	6.5	193
7	Phosphorylation of Tyrosine 291 Enhances the Ability of WASp to Stimulate Actin Polymerization and Filopodium Formation. Journal of Biological Chemistry, 2002, 277, 45115-45121.	1.6	185
8	Gene and Protein Expression Profiling of Human Ovarian Cancer Cells Treated with the Heat Shock Protein 90 Inhibitor 17-Allylamino-17-Demethoxygeldanamycin. Cancer Research, 2007, 67, 3239-3253.	0.4	135
9	Direct mass spectrometric sequencing of low-picomole amounts of oligodeoxynucleotides with up to 21 bases by matrix-assisted laser desorption/ionization mass spectrometry. Journal of Mass Spectrometry, 1995, 30, 99-112.	0.7	129
10	Phosphorylation of the WASP-VCA Domain Increases Its Affinity for the Arp2/3 Complex and Enhances Actin Polymerization by WASP. Molecular Cell, 2003, 11, 1229-1239.	4.5	126
11	Glucosinolate-accumulating S-cells in Arabidopsis leaves and flower stalks undergo programmed cell death at early stages of differentiation. Plant Journal, 2010, 64, 456-469.	2.8	112
12	Proteomics – post-genomic cartography to understand gene function. Trends in Pharmacological Sciences, 2001, 22, 376-384.	4.0	104
13	Hydroponic isotope labelling of entire plants (HILEP) for quantitative plant proteomics; an oxidative stress case study. Phytochemistry, 2008, 69, 1962-1972.	1.4	103
14	The urinary proteome in Fanconi syndrome implies specificity in the reabsorption of proteins by renal proximal tubule cells. American Journal of Physiology - Renal Physiology, 2004, 287, F353-F364.	1.3	100
15	Proteomic analysis of redox- and ErbB2-dependent changes in mammary luminal epithelial cells using cysteine- and lysine-labelling two-dimensional difference gel electrophoresis. Proteomics, 2005, 5, 2908-2926.	1.3	100
16	Cloning of a Human Type II Phosphatidylinositol 4-Kinase Reveals a Novel Lipid Kinase Family. Journal of Biological Chemistry, 2001, 276, 16635-16640.	1.6	90
17	Detection and analysis of urinary peptides by on-line liquid chromatography and mass spectrometry: application to patients with renal Fanconi syndrome. Clinical Science, 2003, 104, 483-490.	1.8	90
18	Characterization of Protein Phosphorylation by Mass Spectrometry Using Immobilized Metal Ion Affinity Chromatography with On-Resin β-Elimination and Michael Addition. Analytical Chemistry, 2003, 75, 3232-3243.	3.2	86

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19	Interactions between the Powdery Mildew Effector BEC1054 and Barley Proteins Identify Candidate Host Targets. Journal of Proteome Research, 2016, 15, 826-839.	1.8	85
20	Heat Shock Protein 27 Is the Major Differentially Phosphorylated Protein Involved in Renal Epithelial Cellular Stress Response and Controls Focal Adhesion Organization and Apoptosis. Journal of Biological Chemistry, 2005, 280, 29885-29898.	1.6	81
21	Comparison of IR- and UV-matrix-assisted laser desorption/ionization mass spectrometry of oligodeoxynucleotides. Nucleic Acids Research, 1994, 22, 2460-2465.	6.5	76
22	In Planta Proteomics and Proteogenomics of the Biotrophic Barley Fungal Pathogen Blumeria graminis f. sp. hordei>. Molecular and Cellular Proteomics, 2009, 8, 2368-2381.	2.5	75
23	Matrix-assisted laser desorption and ionization in the Oî—,H and Cî—»O absorption bands of aliphatic and aromatic matrices: dependence on laser wavelength and temporal beam profile. International Journal of Mass Spectrometry and Ion Processes, 1997, 169-170, 51-67.	1.9	74
24	Quantitative amino acid and proteomic analysis: Very low excretion of polypeptides >750 Da in normal urine. Kidney International, 2004, 66, 1994-2003.	2.6	74
25	Mass spectrometry in clinical proteomics – from the present to the future. Proteomics - Clinical Applications, 2009, 3, 6-17.	0.8	71
26	Quantitative plant proteomics. Proteomics, 2011, 11, 756-775.	1.3	70
27	A decade of plant proteomics and mass spectrometry: Translation of technical advancements to food security and safety issues. Mass Spectrometry Reviews, 2013, 32, 335-365.	2.8	70
28	Protein Kinase C Phosphorylates Ribosomal Protein S6 Kinase \hat{l}^2 II and Regulates Its Subcellular Localization. Molecular and Cellular Biology, 2003, 23, 852-863.	1.1	65
29	Factors governing the solubilization of phosphopeptides retained on ferric NTA IMAC beads and their analysis by MALDI TOFMS. Journal of the American Society for Mass Spectrometry, 2002, 13, 1042-1051.	1.2	64
30	Translational plant proteomics: A perspective. Journal of Proteomics, 2012, 75, 4588-4601.	1.2	63
31	Liquid APâ€UVâ€MALDI Enables Stable Ion Yields of Multiply Charged Peptide and Protein Ions for Sensitive Analysis by Mass Spectrometry. Angewandte Chemie - International Edition, 2013, 52, 2364-2367.	7.2	63
32	Proteomic Profiling of Neuromas Reveals Alterations in Protein Composition and Local Protein Synthesis in Hyper-Excitable Nerves. Molecular Pain, 2008, 4, 1744-8069-4-33.	1.0	62
33	Localization of a highly active pool of type II phosphatidylinositol 4-kinase in a p97/valosin-containing-protein-rich fraction of the endoplasmic reticulum. Biochemical Journal, 2003, 373, 57-63.	1.7	61
34	Proteomic analysis of plasma membrane vesicles isolated from the rat renal cortex. Proteomics, 2005, 5, 101-112.	1.3	61
35	Proteogenomics and in silico structural and functional annotation of the barley powdery mildew Blumeria graminis f. sp. hordei. Methods, 2011, 54, 432-441.	1.9	57
36	Differential protein synthesis and expression levels in normal and neoplastic human prostate cells and their regulation by type I and II interferons. Oncogene, 2004, 23, 1693-1703.	2.6	52

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37	Single-cell proteomic analysis of glucosinolate-rich S-cells in Arabidopsis thaliana. Methods, 2011, 54, 413-423.	1.9	52
38	Serum Peptide Profiling using MALDI Mass Spectrometry. Proteomics, 2007, 7, 77-89.	1.3	51
39	Mass spectrometry imaging of glucosinolates in Arabidopsis flowers and siliques. Phytochemistry, 2012, 77, 110-118.	1.4	50
40	The nature of collision-induced dissociation processes of doubly protonated peptides: comparative study for the future use of matrix-assisted laser desorption/ionization on a hybrid quadrupole time-of-flight mass spectrometer in proteomics. Rapid Communications in Mass Spectrometry, 2001, 15, 2058-2066.	0.7	49
41	Production of novel ACE inhibitory peptides from \hat{l}^2 -lactoglobulin using Protease N Amano. International Dairy Journal, 2009, 19, 69-76.	1.5	48
42	Infrared matrix-assisted laser desorption and ionization by using a tunable mid-infrared free-electron laser. Journal of the American Society for Mass Spectrometry, 1996, 7, 1187-1193.	1.2	45
43	Analysis of Phospho- and Glycopolypeptides with Infrared Matrix-Assisted Laser Desorption and Ionization. Analytical Chemistry, 1998, 70, 4939-4944.	3.2	45
44	Combined affinity labelling and mass spectrometry analysis of differential cell surface protein expression in normal and prostate cancer cells. Oncogene, 2005, 24, 5905-5913.	2.6	45
45	Metabolism of the novel Ca2+-mobilizing messenger nicotinic acid–adenine dinucleotide phosphate via a 2′-specific Ca2+-dependent phosphatase. Biochemical Journal, 2002, 365, 295-301.	1.7	43
46	Chromatographic alignment of LC-MS and LC-MS/MS datasets by genetic algorithm feature extraction. Journal of the American Society for Mass Spectrometry, 2007, 18, 1835-1843.	1.2	42
47	Differential Proteome Analysis of Replicative Senescence in Rat Embryo Fibroblasts. Molecular and Cellular Proteomics, 2002, 1, 280-292.	2.5	41
48	Quantitative proteomics using uniform ¹⁵ Nâ€labeling, MASCOT, and the transâ€proteomic pipeline. Proteomics, 2007, 7, 3462-3469.	1.3	41
49	Proteomic analysis of Artemisia annua – towards elucidating the biosynthetic pathways of the antimalarial pro-drug artemisinin. BMC Plant Biology, 2015, 15, 175.	1.6	41
50	Liquid matrix deposition on conductive hydrophobic surfaces for tuning and quantitation in UV-MALDI mass spectrometry. Journal of the American Society for Mass Spectrometry, 2007, 18, 693-697.	1.2	40
51	Liquid ultraviolet matrix-assisted laser desorption/ionization - mass spectrometry for automated proteomic analysis. Proteomics, 2005, 5, 360-370.	1.3	39
52	Mutual binding of polymer end-groups by complementary π–π-stacking: a molecular "Roman Handshake― Chemical Communications, 2013, 49, 454-456.	2.2	33
53	A wellâ€characterised peak identification list of MALDI MS profile peaks for human blood serum. Proteomics, 2010, 10, 3388-3392.	1.3	32
54	Introduction of 4-Chloro-α-cyanocinnamic Acid Liquid Matrices for High Sensitivity UV-MALDI MS. Journal of Proteome Research, 2010, 9, 1931-1940.	1.8	32

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55	MALDI mass spectrometry in prostate cancer biomarker discovery. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 940-949.	1.1	32
56	High-throughput proteomics using matrix-assisted laser desorption/ ionization mass spectrometry. Expert Review of Proteomics, 2005, 2, 407-420.	1.3	31
57	Peptides Generated Ex Vivo from Serum Proteins by Tumor-Specific Exopeptidases Are Not Useful Biomarkers in Ovarian Cancer. Clinical Chemistry, 2010, 56, 262-271.	1.5	31
58	Investigation and optimization of parameters affecting the multiply charged ion yield in AP-MALDI MS. Methods, 2016, 104, 11-20.	1.9	31
59	Enhanced phosphopeptide isolation by Fe(III)-IMAC using $1,1,1,3,3,3$ -hexafluoroisopropanol. Proteomics, 2005, 5, 4376-4388.	1.3	30
60	Identification of novel candidates for replicative senescence by functional proteomics. Oncogene, 2002, 21, 4403-4413.	2.6	29
61	Advancing Liquid Atmospheric Pressure Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Toward Ultrahigh-Throughput Analysis. Analytical Chemistry, 2020, 92, 2931-2936.	3.2	29
62	Purification and molecular cloning of antimicrobial peptides from Scots pine seedlings. Peptides, 2009, 30, 2136-2143.	1.2	27
63	Deciphering the Complexity of Sainfoin (Onobrychis viciifolia) Proanthocyanidins by MALDI-TOF Mass Spectrometry with a Judicious Choice of Isotope Patterns and Matrixes. Analytical Chemistry, 2011, 83, 4147-4153.	3.2	27
64	Stress-induced changes in the Schizosaccharomyces pombe proteome using two-dimensional difference gel electrophoresis, mass spectrometry and a novel integrated robotics platform. Proteomics, 2005, 5, 1669-1685.	1.3	24
65	MALDI MS profiling of postâ€DRE urine samples highlights the potential of βâ€microseminoprotein as a marker for prostatic diseases. Prostate, 2014, 74, 103-111.	1.2	22
66	PDGF regulates the actin cytoskeleton through hnRNP-K-mediated activation of the ubiquitin E3-ligase MIR. EMBO Journal, 2006, 25, 1871-1882.	3.5	21
67	Speciation and milk adulteration analysis by rapid ambient liquid MALDI mass spectrometry profiling using machine learning. Scientific Reports, 2021, 11, 3305.	1.6	21
68	Sample Preparation: A Crucial Factor for the Analytical Performance of Rationally Designed MALDI Matrices. Analytical Chemistry, 2015, 87, 1485-1488.	3.2	20
69	S6K1 is acetylated at lysine 516 in response to growth factor stimulation. Biochemical and Biophysical Research Communications, 2010, 398, 400-405.	1.0	19
70	The composition of liquid atmospheric pressure matrix-assisted laser desorption/ionization matrices and its effect on ionization in mass spectrometry. Analytica Chimica Acta, 2018, 1013, 43-53.	2.6	19
71	Collision-induced dissociation of doubly-charged barium-cationized lipids generated from liquid samples by atmospheric pressure matrix-assisted laser desorption/ionization provides structurally diagnostic product ions. Analytical and Bioanalytical Chemistry, 2018, 410, 1435-1444.	1.9	19
72	Analysis of Barley Leaf Epidermis and Extrahaustorial Proteomes During Powdery Mildew Infection Reveals That the PR5 Thaumatin-Like Protein TLP5 Is Required for Susceptibility Towards Blumeria graminis f. sp. hordei. Frontiers in Plant Science, 2019, 10, 1138.	1.7	19

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73	Bacterial identification by lipid profiling using liquid atmospheric pressure matrix-assisted laser desorption/ionization mass spectrometry. Clinical Chemistry and Laboratory Medicine, 2020, 58, 930-938.	1.4	18
74	Evaluation of Peak-Picking Algorithms for Protein Mass Spectrometry. Methods in Molecular Biology, 2011, 696, 341-352.	0.4	17
75	Ultrahigh-Throughput Sample Analysis Using Liquid Atmospheric Pressure Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 2022, 94, 4141-4145.	3.2	17
76	Automatic internal calibration in liquid chromatography/Fourier transform ion cyclotron resonance mass spectrometry of protein digests. Rapid Communications in Mass Spectrometry, 2006, 20, 3076-3080.	0.7	16
77	Proteomic analysis of the medicinal plant Artemisia annua: Data from leaf and trichome extracts. Data in Brief, 2016, 7, 325-331.	0.5	16
78	Liquid Atmospheric Pressure Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Adds Enhanced Functionalities to MALDI MS Profiling for Disease Diagnostics. ACS Omega, 2019, 4, 12759-12765.	1.6	16
79	Serum Proteomic Abnormality Predating Screen Detection of Ovarian Cancer. Computer Journal, 2009, 52, 326-333.	1.5	15
80	Urinary Proteomics of Renal Fanconi Syndrome. , 2003, 141, 155-169.		14
81	Conformal predictors in early diagnostics of ovarian and breast cancers. Progress in Artificial Intelligence, 2012, 1, 245-257.	1.5	14
82	Enhanced MALDI MS Sensitivity by Weak Base Additives and Glycerol Sample Coating. Analytical Chemistry, 2014, 86, 744-751.	3.2	14
83	Rapid Liquid AP-MALDI MS Profiling of Lipids and Proteins from Goat and Sheep Milk for Speciation and Colostrum Analysis. Proteomes, 2020, 8, 20.	1.7	13
84	Advances in mass spectrometry-based cancer research and analysis: from cancer proteomics to clinical diagnostics. Expert Review of Proteomics, 2016, 13, 593-607.	1.3	12
85	Protein identification using a nanoUHPLC-AP-MALDI MS/MS workflow with CID of multiply charged proteolytic peptides. International Journal of Mass Spectrometry, 2017, 416, 20-28.	0.7	12
86	Characterization of the Proteome of Theobroma cacao Beans by Nano-UHPLC-ESI MS/MS. Proteomics, 2018, 18, 1700339.	1.3	12
87	Melanin production by tyrosinase activity on a tyrosine-rich peptide fragment and pH-dependent self-assembly of its lipidated analogue. Organic and Biomolecular Chemistry, 2019, 17, 4543-4553.	1.5	12
88	Fully automated software solution for protein quantitation by global metabolic labeling with stable isotopes. Rapid Communications in Mass Spectrometry, 2011, 25, 1461-1471.	0.7	11
89	UHPLC–MS/MS analysis of cocoa bean proteomes from four different genotypes. Food Chemistry, 2020, 303, 125244.	4.2	11
90	Raw Cow Milk Bacterial Consortium as Bioindicator of Circulating Anti-Microbial Resistance (AMR). Animals, 2020, 10, 2378.	1.0	11

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91	PIGOK:Â Linking Protein Identity to Gene Ontology and Function. Journal of Proteome Research, 2006, 5, 3429-3432.	1.8	10
92	Boosting the Globalization of Plant Proteomics through INPPO: Current Developments and Future Prospects. Proteomics, 2012, 12, 359-368.	1.3	10
93	Analysis of tyrosine phosphorylation and phosphotyrosine-binding proteins in germinating seeds from Scots pine. Plant Physiology and Biochemistry, 2013, 67, 33-40.	2.8	10
94	On-target oxidation of methionine residues using hydrogen peroxide for composition-restricted matrix-assisted laser desorption/ionisation peptide mass mapping. Rapid Communications in Mass Spectrometry, 2003, 17, 1212-1215.	0.7	9
95	Multiprobabilistic prediction in early medical diagnoses. Annals of Mathematics and Artificial Intelligence, 2015, 74, 203-222.	0.9	9
96	Proteomic and peptidomic UHPLC-ESI MS/MS analysis of cocoa beans fermented using the Styrofoam-box method. Food Chemistry, 2020, 316, 126350.	4.2	9
97	Production and analysis of multiply charged negative ions by liquid atmospheric pressure matrixâ€assisted laser desorption/ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2021, 35, e8246.	0.7	9
98	LAP-MALDI MS coupled with machine learning: an ambient mass spectrometry approach for high-throughput diagnostics. Chemical Science, 2022, 13, 1746-1758.	3.7	9
99	Liquid MALDI MS Analysis of Complex Peptide and Proteome Samples. Journal of Proteome Research, 2016, 15, 2998-3008.	1.8	8
100	Proteomics in the Analysis of Prostate Cancer. , 2003, 81, 277-298.		7
101	Atmospheric Pressure Ultraviolet Laser Desorption and Ionization from Liquid Samples for Native Mass Spectrometry. Analytical Chemistry, 2019, 91, 14192-14197.	3.2	6
102	Early detection of ovarian cancer in samples pre-diagnosis using CA125 and MALDI-MS peaks. Cancer Genomics and Proteomics, 2011, 8, 289-305.	1.0	6
103	Sample Preparation of Gel Electrophoretically Separated Protein Binding Partners for Analysis by Mass Spectrometry., 2004, 261, 499-510.		5
104	MALDI MS. Methods in Molecular Biology, 2009, 564, 85-103.	0.4	5
105	Biomarker Discovery and Redundancy Reduction towards Classification using a Multi-factorial MALDI-TOF MS T2DM Mouse Model Dataset. BMC Bioinformatics, 2011, 12, 140.	1.2	5
106	Plant Proteomics in Crop Improvement. Proteomics, 2013, 13, 1771-1771.	1.3	5
107	Multiprobabilistic Venn Predictors with Logistic Regression. International Federation for Information Processing, 2012, , 224-233.	0.4	5
108	Chaperonin assisted overexpression, purification, and characterisation of human PP2A methyltransferase. Protein Expression and Purification, 2002, 26, 266-274.	0.6	4

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109	Ionic Liquids and Other Liquid Matrices for Sensitive MALDI MS Analysis., 2016,, 51-64.		4
110	High-speed Analysis of Large Sample Sets – How Can This Key Aspect of the Omics Be Achieved?. Molecular and Cellular Proteomics, 2020, 19, 1760-1766.	2.5	4
111	Advances in ionisation techniques for mass spectrometryâ€based omics research. Proteomics, 2022, 22, .	1.3	4
112	Hydroponic Isotope Labeling of Entire Plants and High-Performance Mass Spectrometry for Quantitative Plant Proteomics. Methods in Molecular Biology, 2012, 893, 155-173.	0.4	3
113	Functional Proteomic Analysis of Long-term Growth Factor Stimulation and Receptor Tyrosine Kinase Coactivation in Swiss 3T3 Fibroblasts. Molecular and Cellular Proteomics, 2012, 11, 1690-1708.	2.5	3
114	High-resolution infrared laser desorption/ionization and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of synthetic polymers. , 1999, 34, 1089-1092.		2
115	Editorial for "Advances in Biological Mass Spectrometry and Proteomics― Methods, 2011, 54, 349-350.	1.9	2
116	Distribution analysis of the putative cancer marker \$100A4 across invasive squamous cell carcinoma penile tissue. EuPA Open Proteomics, 2015, 7, 1-10.	2.5	2
117	â€~Next generation' laser-based biological mass spectrometry. Methods, 2016, 104, 1-2.	1.9	1
118	MALDI MS-Based Biomarker Profiling of Blood Samples. , 2011, , 733-747.		0
119	Application of DIGE and Mass Spectrometry in the Study of Type 2 Diabetes Mellitus Mouse Models. Methods in Molecular Biology, 2012, 854, 299-318.	0.4	O
120	INPPO Actions and Recognition as a Driving Force for Progress in Plant Proteomics: Change of Guard, INPPO Update, and Upcoming Activities. Proteomics, 2013, 13, 3093-3100.	1.3	0
121	Coupling Liquid MALDI MS to Liquid Chromatography. , 2016, , 65-76.		0
122	Quantitative Plant Proteomics Using Hydroponic Isotope Labeling of Entire Plants (HILEP)., 2011,, 363-380.		0