Mass Spec Studio for Integrative Structural Biology

Structure

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Citation Report

#	Article	IF	CITATIONS
1	Toward Standardizing Deuterium Content Reporting in Hydrogen Exchange-MS. Analytical Chemistry, 2014, 86, 11962-11965.	3.2	8
2	<scp>HXâ€MS</scp> 2 for high performance conformational analysis of complex protein states. Protein Science, 2015, 24, 1313-1324.	3.1	8
3	Exposing the subunit diversity and modularity of protein complexes by structural mass spectrometry approaches. Proteomics, 2015, 15, 2777-2791.	1.3	9
4	Applications of hydrogen deuterium exchange (HDX) for the characterization of conformational dynamics in light-activated photoreceptors. Frontiers in Molecular Biosciences, 2015, 2, 33.	1.6	10
5	Towards integrative structural mass spectrometry: Benefits from hybrid approaches. Methods, 2015, 89, 4-12.	1.9	24
6	Mass spectrometric methods to analyze the structural organization of macromolecular complexes. Methods, 2015, 89, 13-21.	1.9	55
7	Cross-linking and other structural proteomics techniques: how chemistry is enabling mass spectrometry applications in structural biology. Chemical Science, 2016, 7, 4792-4803.	3.7	38
8	High Sensitivity Crosslink Detection Coupled With Integrative Structure Modeling in the Mass Spec Studio. Molecular and Cellular Proteomics, 2016, 15, 3071-3080.	2.5	41
9	MEMHDX: an interactive tool to expedite the statistical validation and visualization of large HDX-MS datasets. Bioinformatics, 2016, 32, 3413-3419.	1.8	52
10	The diverse and expanding role of mass spectrometry in structural and molecular biology. EMBO Journal, 2016, 35, 2634-2657.	3.5	198
12	Addressing proteolytic efficiency in enzymatic degradation therapy for celiac disease. Scientific Reports, 2016, 6, 30980.	1.6	54
13	Mapping Protein–Ligand Interactions with Proteolytic Fragmentation, Hydrogen/Deuterium Exchange-Mass Spectrometry. Methods in Enzymology, 2016, 566, 357-404.	0.4	57
14	A Guided Tour of Selected Image Processing and Analysis Methods for Fluorescence and Electron Microscopy. IEEE Journal on Selected Topics in Signal Processing, 2016, 10, 6-30.	7.3	52
15	Isotope Labeling of Biomolecules. Methods in Enzymology, 2016, 566, 405-426.	0.4	25
16	Novel Allosteric Pathway of Eg5 Regulation Identified through Multivariate Statistical Analysis of Hydrogen-Exchange Mass Spectrometry (HX-MS) Ligand Screening Data. Molecular and Cellular Proteomics, 2017, 16, 428-437.	2.5	12
17	Nanospray HX-MS configuration for structural interrogation of large protein systems. Analyst, The, 2017, 142, 904-910.	1.7	19
18	Structural and functional characterization of the PNKPâ€"XRCC4â€"LigIV DNA repair complex. Nucleic Acids Research, 2017, 45, 6238-6251.	6.5	39
19	Simulated Isotope Exchange Patterns Enable Protein Structure Determination. Angewandte Chemie - International Edition, 2017, 56, 9396-9399.	7.2	19

#	Article	IF	CITATIONS
20	Amino Acid Insertion Frequencies Arising from Photoproducts Generated Using Aliphatic Diazirines. Journal of the American Society for Mass Spectrometry, 2017, 28, 2011-2021.	1.2	42
21	An overview of hydrogen deuterium exchange mass spectrometry (HDX-MS) in drug discovery. Expert Opinion on Drug Discovery, 2017, 12, 981-994.	2.5	110
22	Combining H/D Exchange Mass Spectrometry and Computational Docking To Derive the Structure of Protein†Protein Complexes. Biochemistry, 2017, 56, 6329-6342.	1.2	20
23	Bottom-up hydrogen deuterium exchange mass spectrometry: data analysis and interpretation. Analyst, The, 2017, 142, 2874-2886.	1.7	35
24	The T-Cell Receptor Can Bind to the Peptide-Bound Major Histocompatibility Complex and Uncomplexed $\hat{1}^2$ sub>2-Microglobulin through Distinct Binding Sites. Biochemistry, 2017, 56, 3945-3961.	1.2	8
25	Simulated Isotope Exchange Patterns Enable Protein Structure Determination. Angewandte Chemie, 2017, 129, 9524-9527.	1.6	0
26	Computational methods and challenges in hydrogen/deuterium exchange mass spectrometry. Mass Spectrometry Reviews, 2017, 36, 649-667.	2.8	35
27	Supporting metabolomics with adaptable software: design architectures for the end-user. Current Opinion in Biotechnology, 2017, 43, 110-117.	3.3	10
28	Optimization of Feasibility Stage for Hydrogen/Deuterium Exchange Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 623-629.	1.2	53
29	Contemporary hydrogen deuterium exchange mass spectrometry. Methods, 2018, 144, 27-42.	1.9	96
30	Structural model of human dUTPase in complex with a novel proteinaceous inhibitor. Scientific Reports, 2018, 8, 4326.	1.6	15
31	The emerging role of physical modeling in the future of structure determination. Current Opinion in Structural Biology, 2018, 49, 145-153.	2.6	21
32	Revealing the architecture of protein complexes by an orthogonal approach combining HDXMS, CXMS, and disulfide trapping. Nature Protocols, 2018, 13, 1403-1428.	5.5	21
33	Impact of Cardiolipin and Phosphatidylcholine Interactions on the Conformational Ensemble of Cytochromec. Biochemistry, 2019, 58, 3617-3626.	1.2	8
34	HDX-Viewer: interactive 3D visualization of hydrogen–deuterium exchange data. Bioinformatics, 2019, 35, 5331-5333.	1.8	19
35	Protein dynamics and conformational changes explored by hydrogen/deuterium exchange mass spectrometry. Current Opinion in Structural Biology, 2019, 58, 305-313.	2.6	58
36	Recommendations for performing, interpreting and reporting hydrogen deuterium exchange mass spectrometry (HDX-MS) experiments. Nature Methods, 2019, 16, 595-602.	9.0	452
37	An Integrated Approach for Determining a Protein–Protein Binding Interface in Solution and an Evaluation of Hydrogen–Deuterium Exchange Kinetics for Adjudicating Candidate Docking Models. Analytical Chemistry, 2019, 91, 15709-15717.	3.2	32

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#	ARTICLE	IF	Citations
38	Quantitative Analysis of Protein Covalent Labeling Mass Spectrometry Data in the Mass Spec Studio. Analytical Chemistry, 2019, 91, 8492-8499.	3.2	15
39	Reliable Identification of Significant Differences in Differential Hydrogen Exchange-Mass Spectrometry Measurements Using a Hybrid Significance Testing Approach. Analytical Chemistry, 2019, 91, 8008-8016.	3.2	71
40	Hydrogen/deuterium exchange-mass spectrometry analysis of high concentration biotherapeutics: application to phase-separated antibody formulations. MAbs, 2019, 11, 779-788.	2.6	7
41	DECA, A Comprehensive, Automatic Post-processing Program for HDX-MS Data*. Molecular and Cellular Proteomics, 2019, 18, 2516-2523.	2.5	42
42	An interdomain bridge influences RNA binding of the human La protein. Journal of Biological Chemistry, 2019, 294, 1529-1540.	1.6	10
43	A Unique Conformational Distortion Mechanism Drives Lipocalin 2 Binding to Bacterial Siderophores. ACS Chemical Biology, 2020, 15, 234-242.	1.6	12
44	Integrative Modelling of Biomolecular Complexes. Journal of Molecular Biology, 2020, 432, 2861-2881.	2.0	70
45	Hydrogen-Deuterium Exchange Mass Spectrometry: A Novel Structural Biology Approach to Structure, Dynamics and Interactions of Proteins and Their Complexes. Life, 2020, 10, 286.	1.1	24
46	Combining Experimental Data and Computational Methods for the Non-Computer Specialist. Molecules, 2020, 25, 4783.	1.7	10
47	Harmonizing structural mass spectrometry analyses in the mass spec studio. Journal of Proteomics, 2020, 225, 103844.	1.2	7
48	Mass Spectrometry-Based Protein Footprinting for Higher-Order Structure Analysis: Fundamentals and Applications. Chemical Reviews, 2020, 120, 4355-4454.	23.0	149
49	IMProv: A Resource for Cross-link-Driven Structure Modeling that Accommodates Protein Dynamics. Molecular and Cellular Proteomics, 2021, 20, 100139.	2.5	6
50	Defining the epitope of a blood–brain barrier crossing single domain antibody specific for the type 1 insulin-like growth factor receptor. Scientific Reports, 2021, 11, 4284.	1.6	12
51	Improving Spectral Validation Rates in Hydrogen–Deuterium Exchange Data Analysis. Analytical Chemistry, 2021, 93, 4246-4254.	3.2	16
52	Conformational Dynamics of α-Synuclein during the Interaction with Phospholipid Nanodiscs by Millisecond Hydrogen–Deuterium Exchange Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 1169-1179.	1.2	7
55	Lactoferrin binding protein B – a bi-functional bacterial receptor protein. PLoS Pathogens, 2017, 13, e1006244.	2.1	27
56	Extensive flavivirus E trimer breathing accompanies stem zippering of the postâ€fusion hairpin. EMBO Reports, 2020, 21, e50069.	2.0	8
57	Current Trends in Biotherapeutic Higher Order Structure Characterization by Irreversible Covalent Footprinting Mass Spectrometry. Protein and Peptide Letters, 2019, 26, 35-43.	0.4	5

#	Article	IF	Citations
59	Physics-Based Coarse-Grained Modeling in Bio- and Nanochemistry., 2022,, 31-69.		1
61	Studying Protein–DNA Interactions by Hydrogen/Deuterium Exchange Mass Spectrometry. Methods in Molecular Biology, 2021, 2247, 193-219.	0.4	6
62	The ionâ€coupling mechanism of human excitatory amino acid transporters. EMBO Journal, 2022, 41, e108341.	3.5	13
66	Hydrogen-deuterium exchange mass spectrometry reveals three unique binding responses of mAbs directed to the catalytic domain of hCAIX. MAbs, 2021, 13, 1997072.	2.6	4
67	Computational Modeling of Molecular Structures Guided by Hydrogen-Exchange Data. Journal of the American Society for Mass Spectrometry, 2022, 33, 215-237.	1.2	11
69	Modeling the Dynamics of Protein–Protein Interfaces, How and Why?. Molecules, 2022, 27, 1841.	1.7	4
70	Re-evaluation of the Fijianolide/Laulimalide Chemotype Suggests an Alternate Mechanism of Action for C-15/C-20 Analogs. ACS Omega, 2022, 7, 8824-8832.	1.6	2
71	Advances in mass spectrometry-based epitope mapping of protein therapeutics. Journal of Pharmaceutical and Biomedical Analysis, 2022, 215, 114754.	1.4	8
72	3D-Printed High-Pressure-Resistant Immobilized Enzyme Microreactor (μIMER) for Protein Analysis. Analytical Chemistry, 2022, 94, 8580-8587.	3.2	6
73	Empirical Bayes functional models for hydrogen deuterium exchange mass spectrometry. Communications Biology, 2022, 5, .	2.0	1
74	Chaperone requirements for de novo folding of $\langle i \rangle$ Saccharomyces cerevisiae $\langle i \rangle$ septins. Molecular Biology of the Cell, 2022, 33, .	0.9	2
75	Arsenal of nanobodies shows broad-spectrum neutralization against SARS-CoV-2 variants of concern in vitro and in vivo in hamster models. Communications Biology, 2022, 5, .	2.0	13
76	Epitope mapping of a blood-brain barrier crossing antibody targeting the cysteine-rich region of IGF1R using hydrogen-exchange mass spectrometry enabled by electrochemical reduction. Journal of Biochemistry, $0, \dots$	0.9	1
77	Zero-Degree Celsius Capillary Electrophoresis Electrospray Ionization for Hydrogen Exchange Mass Spectrometry. Analytical Chemistry, 0, , .	3.2	1
78	Covalent polyphenol modification of a reactive cysteine in the major apple allergen Mal d 1. Food Chemistry, 2023, 410, 135374.	4.2	7
79	The Deuterium Calculator: An Open-Source Tool for Hydrogen–Deuterium Exchange Mass Spectrometry Analysis. Journal of Proteome Research, 2023, 22, 532-538.	1.8	2
80	Broadly neutralizing aptamers to SARS-CoV-2: A diverse panel of modified DNA antiviral agents. Molecular Therapy - Nucleic Acids, 2023, 31, 370-382.	2.3	4
81	Apparatus for Automated Continuous Hydrogen Deuterium Exchange Mass Spectrometry Measurements from Milliseconds to Hours. Analytical Chemistry, 2023, 95, 4421-4428.	3.2	1

Article IF Citations