

Mass spectrometry

# DIA Publications

## Featuring Thermo Scientific Orbitrap Fusion Tribrid Mass Spectrometers

### Untargeted, spectral library-free analysis of data-independent acquisition proteomics data generated using Orbitrap mass spectrometers soils

Chih-Chiang Tsou, Chia-Feng Tsai, Guo Ci Teo, Yu-Ju Chen, Alexey I. Nesvizhskii

*Proteomics*. 2016 Aug; 16(15–16): 2257–71.

<http://onlinelibrary.wiley.com/doi/10.1002/pmic.201500526/abstract>

### High resolution data-independent acquisition with electron transfer dissociation mass spectrometry: multiplexed analysis of post-translationally modified proteins

Michael J. Sweredoski, Tonya Pekar Second, Jenny Broecker, Annie Moradian, Sonja Hess

*International Journal of Mass Spectrometry Volume 390*, 15 November 2015, Pages 155–162.

<http://www.sciencedirect.com/science/article/pii/S1387380615002018>

### Differential quantification of isobaric phosphopeptides using data-independent acquisition mass spectrometry

Simone Sidoli, Rina Fujiwara, Katarzyna Kulej and Benjamin A. Garcia

*Mol. BioSyst.*, 2016, 12, 2385–2388.

<http://pubs.rsc.org/-/content/articlelanding/2016/mb/c6mb00385k/unauth#!divAbstract>

### Characterization of histone acylations links chromatin modifications with metabolism

Johayra Simithy, Simone Sidoli, Zuo-Fei Yuan, Mariel Coradin, Natarajan V. Bhanu, Dylan M. Marchione, Brianna J. Klein, Gleb A. Bazilevsky, Cheryl E. McCullough, Robert S. Magin, Tatiana G. Kutateladze, Nathaniel W. Snyder, Ronen Marmorstein, Benjamin A. Garcia

*Nature Communications* 8, Article number: 1141 (2017).

<https://www.nature.com/articles/s41467-017-01384-9>

### Data-independent acquisition and parallel reaction monitoring mass spectrometry identification of serum biomarkers for ovarian cancer

Navin Rauniyar, Gang Peng, TuKiet T. Lam, Hongyu Zhao, Gil Mor, Kenneth R. Williams

*Biomark Insights*. 2017 Jun 5;12:1177271917710948.

<http://journals.sagepub.com/doi/full/10.1177/1177271917710948>

### Data-independent acquisition mass spectrometry to quantify protein levels in FFPE tumor biopsies for molecular diagnostics

Yeoun Jin Kim, Steve M. M. Sweet, Jarrett D. Egertson, Andrew J. Sedgewick, Sunghee Woo, Wei-li Liao, Gennifer E. Merrihew, Brian C. Searle, Charlie Vaske, Robert Heaton, Michael J. MacCoss, Todd Hembrough

*J. Proteome Res.*, 2019, 18 (1), Pages 426–435.

<https://pubs.acs.org/doi/10.1021/acs.jproteome.8b00699>

### **Light-mediated discovery of surfaceome nanoscale organization and intercellular receptor interaction networks**

Maik Müller, Fabienne Gräbnitz, Niculò Barandun, Yang Shen, Fabian Wendt, Sebastian N. Steiner, Yannik Severin, Stefan U. Vetterli, Milon Mondal, James R. Prudent, Raphael Hofmann, Marc van Oostrum, Roman C. Sarott, Alexey I. Nesvizhskii, Erick M. Carreira, Jeffrey W. Bode, Berend Snijder, John A. Robinson, Martin J. Loessner, Annette Oxenius, Bernd Wollscheid

*Nature Communications*, Volume 12, Article number: 7036 (2021).

<https://www.nature.com/articles/s41467-021-27280-x>

### **GproDIA enables data-independent acquisition glycoproteomics with comprehensive statistical control**

Yi Yang, Guoquan Yan, Siyuan Kong, Mengxi Wu, Pengyuan Yang, Weiqian Cao, Liang Qiao

*Nature Communications*, Volume 12, Article number: 6073 (2021).

<https://www.nature.com/articles/s41467-021-26246-3>

### **Cocaine self-administration induces sex-dependent protein expression in the nucleus accumbens**

Alberto J. López, Amy R. Johnson, Tanner J. Euston, Rashaun Wilson, Suzanne O. Nolan, Lillian J. Brady, Kimberly C. Thiabeault, Shannon J. Kelly, Veronika Kondev, Patrick Melugin, M. Gunes Kutlu, Emily Chuang, TuKiet T. Lam, Drew D. Kiraly, Erin S. Calipari

*Communications Biology*, Volume 4, Article number: 883 (2021).

<https://www.nature.com/articles/s42003-021-02358-w>

### **An integrated multi-omics approach identifies epigenetic alterations associated with Alzheimer's disease**

Raffaella Nativio, Yemin Lan, Greg Donahue, Simone Sidoli, Amit Berson, Ananth R. Srinivasan, Oksana Shcherbakova, Alexandre Amlie-Wolf, Ji Nie, Xiaolong Cui, Chuan He, Li-San Wang, Benjamin A. Garcia, John Q. Trojanowski, Nancy M. Bonini, Shelley L. Berger

*Nature Genetics*, Volume 52, Pages 1024–1035 (2020).

<https://www.nature.com/articles/s41588-020-0696-0>

### **Mitochondrial dysfunction caused by outer membrane vesicles from gram-negative bacteria activates intrinsic apoptosis and inflammation**

Pankaj Deo, Seong H. Chow, Mei-Ling Han, Mary Speir, Cheng Huang, Ralf B. Schittenhelm, Subhash Dhital, Jack Emery, Jian Li, Benjamin T. Kile, James E. Vince, Kate E. Lawlor, Thomas Naderer

*Nature Microbiology*, Volume 5, Pages 1418–1427 (2020).

<https://www.nature.com/articles/s41564-020-0773-2>

### **Disruption of ATRX-RNA interactions uncovers roles in ATRX localization and PRC2 function**

Wenqing Ren, Nicole Medeiros, Robert Warneford-Thomson, Phillip Wulfridge, Qingqing Yan, Joyce Bian, Simone Sidoli, Benjamin A. Garcia, Emmanuel Skordalakes, Eric Joyce, Roberto Bonasio, Kavitha Sarma

*Nature Communications*, Volume 11, Article number: 2219 (2020).

<https://www.nature.com/articles/s41467-020-15902-9>

### **Arabidopsis proteome and the mass spectral assay library**

Huoming Zhang, Pei Liu, Tiannan Guo, Huayan Zhao, Dalila Bensaddek, Ruedi Aebersold, Liming Xiong

*Scientific Data*, Volume 6, Article number: 278 (2019).

<https://www.nature.com/articles/s41597-019-0294-0>

### **A mass spectrometry-based assay using metabolic labeling to rapidly monitor chromatin accessibility of modified histone proteins**

Simone Sidoli, Mariana Lopes, Peder J. Lund, Naomi Goldman, Maria Fasolino, Mariel Coradin, Katarzyna Kulej, Natarajan V. Bhanu, Golnaz Vahedi, Benjamin A. Garcia

*Scientific Reports*, Volume 9, Article number: 13613 (2019).

<https://www.nature.com/articles/s41598-019-49894-4>

### **Glyco-DIA: a method for quantitative O-glycoproteomics with in silico-boosted glycopeptide libraries**

Zilu Ye, Yang Mao, Henrik Clausen & Sergey Y. Vakhrushev

*Nature Methods*, Volume 16, Pages 902–910 (2019).

<https://www.nature.com/articles/s41592-019-0504-x>

### **Histone serotonylation is a permissive modification that enhances TFIID binding to H3K4me3**

Lorna A. Farrelly, Robert E. Thompson, Shuai Zhao, Ashley E. Lepack, Yang Lyu, Natarajan V. Bhanu, Baichao Zhang, Yong-Hwee E. Loh, Aarthi Ramakrishnan, Krishna C. Vadodaria, Kelly J. Heard, Galina Erikson, Tomoyoshi Nakadai, Ryan M. Bastle, Bradley J. Lukasak, Henry Zebroski III, Natalia Alenina, Michael Bader, Olivier Berton, Robert G. Roeder, Henrik Molina, Fred H. Gage, Li Shen, Benjamin A. Garcia, Haitao Li, Tom W. Muir, Ian Maze

*Nature*, Volume 567, Pages 535–539 (2019).

<https://www.nature.com/articles/s41586-019-1024-7>

### **Proteotype profiling unmask a viral signalling network essential for poxvirus assembly and transcriptional competence**

Karel Novy, Samuel Kilcher, Ulrich Omasits, Christopher Karl, Ernst Bleck, Corina Beerli, Jakob Vowinckel, Caroline K. Martin, Mohammedyaseen Syedbasha, Alessio Maiolica, Ian White, Jason Mercer, Bernd Wollscheid

*Nature Microbiology*, Volume 3, Pages 588–599 (2018).

<https://www.nature.com/articles/s41564-018-0142-6>

### **DIA proteomics data from a UPS1-spiked E. coli protein mixture processed with six software tools**

Clarisse Gotti, Florence Roux-Dalvai, Charles Joly-Beauparlant, Loïc Mangnier, Mickaël Leclercq, Arnaud Droit

*Data in Brief*, Volume 41, 2022, 107829.

<https://www.sciencedirect.com/science/article/pii/S2352340922000415>

### **Proteomic changes of aqueous humor in proliferative diabetic retinopathy patients treated with different intravitreal anti-VEGF agents**

Huan Chen, Bintao Qiu, Guangping Gao, Youxin Chen, Hanyi Min, Zhihong Wu

*Experimental Eye Research*, Volume 216, 2022, 108942.

<https://www.sciencedirect.com/science/article/pii/S0014483522000239>

### **The RSC (Remodels the Structure of Chromatin) complex of *Candida albicans* shows compositional divergence with distinct roles in regulating pathogenic traits**

Vinutha K. Balachandra, Jiyoti Verma, Madhu Shankar, Timothy M. Tucey, Ana Traven, Ralf B. Schittenhelm, Santanu K. Ghosh

*PLoS Genet* 16(11): e1009071, 2020.

<https://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1009071>

### **Subcellular proteomics of dopamine neurons in the mouse brain**

Benjamin D. Hobson, Se Joon Choi, Eugene V. Mosharov, Rajesh K. Soni, David Sulzer, Peter A. Sims

*eLife* 11: e70921, 2022.

<https://elifesciences.org/articles/70921>

### **Genetic and pharmacological evidence for kinetic competition between alternative poly(A) sites in yeast**

Rachael Emily Turner, Paul F. Harrison, Angavai Swaminathan, Calvin A. Kraupner-Taylor, Belinda J. Goldie, Michael See, Amanda L. Peterson, Ralf B. Schittenhelm, David R. Powell, Darren J. Creek, Bernhard Dichtl, Traude H. Beilharz

*eLife* 10: e65331, 2021.

<https://elifesciences.org/articles/65331>

### **IFN $\gamma$ modulates the immunopeptidome of triple negative breast cancer cells by enhancing and diversifying antigen processing and presentation**

Gabriel Goncalves, Kerry A. Mullan, Divya Duscharla, Rochelle Ayala, Nathan P. Croft, Pouya Faridi, Anthony W. Purcell

*Frontiers in Immunology* 12, 2021.

<https://www.frontiersin.org/article/10.3389/fimmu.2021.645770>

### **Folic acid–modified miR-491-5p–loaded ZIF-8 nanoparticles inhibit castration-resistant prostate cancer by regulating the expression of EPHX1**

Ju Guanqun, Liu Bing, Ji Mingfei, Jin Rui, Xu Xiaojian, Xiao Yongshuang, Li Jie, Xu Dongliang, Huang Yuhua, Hou Jianquan

*Frontiers in Bioengineering and Biotechnology* 9, 2021.

<https://www.frontiersin.org/articles/10.3389/fbioe.2021.706536>

**Investigation of the proteomes of the truffles *Tuber albidum pico*, *T. aestivum*, *T. indicum*, *T. magnatum*, and *T. Melanosporum***

Krösser, Dennis, Benjamin Dreyer, Bente Siebels, Hannah Voß, Christoph Krisp, Hartmut Schlüter

*International Journal of Molecular Sciences* 22, No. 23: 12999, 2021.

<https://www.mdpi.com/1422-0067/22/23/12999/htm>

**Development of targeted mass spectrometry-based approaches for quantitation of proteins enriched in the postsynaptic density (PSD)**

Wilson, Rashaun S., Navin Rauniyar, Fumika Sakae, TuKiet T. Lam, Kenneth R. Williams, Angus C. Nairn.

*Proteomes* 7, No. 2: 12, 2019.

<https://www.mdpi.com/2227-7382/7/2/12/htm>

**Integrating transcriptomics, proteomics, glycomics and glycoproteomics to characterize paclitaxel resistance in breast cancer cells**

Lin Cao, Yue Zhou, Xiang Li, Shuai Lin, Zengqi Tan, Feng Guan

*Journal of Proteomics*, Volume 243, 2021, 104266.

<https://www.sciencedirect.com/science/article/pii/S1874391921001652>

**Chromatin dysregulation associated with NSD1 mutation in head and neck squamous cell carcinoma**

Nargess Farhangdoost, Cynthia Horth, Bo Hu, Eric Bareke, Xiao Chen, Yinglu Li, Mariel Coradin, Benjamin A. Garcia, Chao Lu, Jacek Majewski

*Cell Reports*, Volume 34, Issue 8, 2021, 108769.

<https://www.sciencedirect.com/science/article/pii/S2211124721000826>

**Chitosan induces jasmonic acid production leading to resistance of ripened fruit against *Botrytis cinerea* infection**

Zhang Peian, Jia Haifeng, Gong Peijie, Ehsan Sadeghnezhad, Pang Qianqian, Dong Tianyu, Li Teng, Jin Huanchun, Fang Jinggui

*Food Chemistry*, Volume 337, 2021, 127772.

<https://www.sciencedirect.com/science/article/pii/S0308814620316344>

**Proteomics-based detection of immune dysfunction in an elite adventure athlete trekking across the Antarctica**

David C. Nieman, Arnoud J. Groen, Artyom Pugachev, Andrew J. Simonson, Kristine Polley, Karma James, Bassem F. El-Khodor, Saradhadevi Varadharaj, Claudia Hernández-Armenta

*Proteomes* 8, No. 1: 4, 2020.

<https://www.mdpi.com/2227-7382/8/1/4/htm>

**Effects of electron-transfer/higher-energy collisional dissociation (EThcD) on phosphopeptide analysis by data-independent acquisition**

Thierry Schmidlin, Maarten Altaar

*International Journal of Mass Spectrometry*, Volume 452, 2020, 116336.

<https://www.sciencedirect.com/science/article/pii/S1387380620301123>

**Advancing serum peptidomic profiling by data-independent acquisition for clear-cell renal cell carcinoma detection and biomarker discovery**

Lin Lin, Jiaxin Zheng, Fangjian Zheng, Zonglong Cai, Quan Yu

*Journal of Proteomics*, Volume 215, 2020, 103671.

<https://www.sciencedirect.com/science/article/pii/S1874391920300397>

**Acetate production from glucose and coupling to mitochondrial metabolism in mammals, cell**

Xiaojing Liu, Daniel E. Cooper, Ahmad A. Cluntun, Marc O. Warmoes, Steven Zhao, Michael A. Reid, Juan Liu, Peder J. Lund, Mariana Lopes, Benjamin A. Garcia, Kathryn E. Wellen, David G. Kirsch, Jason W. Locasale

*Cell*, Volume 175, Issue 2, 2018, Pages 502–513.e13.

<https://www.sciencedirect.com/science/article/pii/S0092867418311012>

**Mixed-mode ion exchange-based integrated proteomics technology for fast and deep plasma proteome profiling**

Lu Xue, Lin Lin, Wenbin Zhou, Wendong Chen, Jun Tang, Xiujie Sun, Peiwu Huang, Ruijun Tian

*Journal of Chromatography A*, Volume 1564, 2018, Pages 76–84.

<https://www.sciencedirect.com/science/article/pii/S0021967318307635>

**High resolution data-independent acquisition with electron transfer dissociation mass spectrometry: multiplexed analysis of post-translationally modified proteins**

Michael J. Sweredoski, Tonya Pekar Second, Jenny Broeker, Annie Moradian, Sonja Hess

*International Journal of Mass Spectrometry*, Volume 390, 2015, Pages 155–162.

<https://www.sciencedirect.com/science/article/pii/S1387380615002018>

**Quantitative analysis of targeted proteins in complex sample using novel data independent acquisition**

Wei Zhang, Reiko Kiyonami, Zheng Jiang, Wei Chen

*Chinese Journal of Analytical Chemistry*, Volume 42, Issue 12, 2014, Pages 1750–1758.

<https://www.sciencedirect.com/science/article/pii/S1872204014607854>

**Definition of germ layer cell lineage alternative splicing programs reveals a critical role for uaking in specifying cardiac cell fate**

W. Samuel Fagg, Naiyou Liu, Ulrich Braunschweig, Karen Larissa Pereira de Castro, Xiaoting Chen, Frederick S. Ditmars, Steven G. Widen, John Paul Donohue, Katalin Modis, William K. Russell, Jeffrey H. Fair, Matthew T. Weirauch, Benjamin J. Blencowe, Mariano A. Garcia-Blanco

*Nucleic Acids Research*, Volume 50, Issue 9, 20 May 2022, Pages 5313–5334.

<https://academic.oup.com/nar/article/50/9/5313/6584437?searchresult=1>

**RbgA ensures the correct timing in the maturation of the 50S subunits functional sites**

Amal Seffouh, Chirstian Trahan, Tanzila Wasi, Nikhil Jain, Kaustuv Basu, Robert A. Britton, Marlene Oeffinger, Joaquin Ortega

*Nucleic Acids Research*, 2022, *gkac059*.

<https://academic.oup.com/nar/advance-article/doi/10.1093/nar/gkac059/6524255?searchresult=1>

**Multimomics analysis of kernel development in response to short-term heat stress at the grain formation stage in waxy maize**

Jian Guo, Xiaotian Gu, Weiping Lu, Dalei Lu

*Journal of Experimental Botany*, Volume 72, Issue 18, 30 September 2021, Pages 6291–6304.

<https://academic.oup.com/jxb/article/72/18/6291/6299176?searchresult=1>

**ANKRD24 organizes TRIOBP to reinforce stereocilia insertion points**

Jocelyn F. Krey, Chang Liu, Inna A. Belyantseva, Michael Bateschell, Rachel A. Dumont, Jennifer Goldsmith, Paroma Chatterjee, Rachel S. Morrill, Lev M. Fedorov, Sarah Foster, Jinkyung Kim, Alfred L. Nuttall, Sherri M. Jones, Dongseok Choi, Thomas B. Friedman, Anthony J. Ricci, Bo Zhao, Peter G. Barr-Gillespie

*J Cell Biol* (2022) 221 (4): e202109134.

<https://rupress.org/jcb/article/221/4/e202109134/213014/ANKRD24-organizes-TRIOBP-to-reinforce-stereocilia?searchresult=1>

**Overexpression of Lin28A in neural progenitor cells in vivo does not lead to brain tumor formation but results in reduced spine density**

Maximilian Middelkamp, Lisa Ruck, Christoph Krisp, Piotr Sumiślawski, Behnam Mohammadi, Matthias Dottermusch, Valerie Meister, Lukas Küster, Hartmut Schlüter, Sabine Windhorst, Julia E. Neumann

*Acta Neuropathologica Communications*, Volume 9, Article number: 185 (2021).

<https://actaneurocomms.biomedcentral.com/articles/10.1186/s40478-021-01289-1>

**Proteomics reveals the effects of drought stress on the kernel development and starch formation of waxy maize**

Jian Guo, Lingling Qu, Yifan Hu, Weiping Lu, Dalei Lu

*BMC Plant Biology*, Volume 21, Article number: 434 (2021).

<https://bmcpantbiol.biomedcentral.com/articles/10.1186/s12870-021-03214-z>

**Quantitative proteomic characterization of human sperm cryopreservation: using data-independent acquisition mass spectrometry**

Longlong Fu, Qi An, Kaishu Zhang, Ying Liu, Yue Tong, Jianfeng Xu, Fang Zhou, Xiaowei Wang, Ying Guo, Wenhong Lu, Xiaowei Liang, Yiqun Gu

*BMC Urology*, Volume 19, Article number: 133 (2019).

<https://bmcurol.biomedcentral.com/articles/10.1186/s12894-019-0565-2#Sec2>

**Using proteomic profiling to characterize protein signatures of different thymoma subtypes**

Liang-Chuan Lai, Qiang-Ling Sun, Yu-An Chen, Yi-Wen Hsiao, Tzu-Pin Lu, Mong-Hsun Tsai, Lei Zhu, Eric Y. Chuan, Wentao Fang B.

*MC Cancer*, Volume 19, Article number: 796 (2019).

<https://bmccancer.biomedcentral.com/articles/10.1186/s12885-019-6023-4>

**Fast quantitative urinary proteomic profiling workflow for biomarker discovery in kidney cancer**

Lin Lin, Quan Yu, Jiaxin Zheng, Zonglong Cai, Ruijun Tian

*Clinical Proteomics*, Volume 15, Article number: 42 (2018).

<https://clinicalproteomicsjournal.biomedcentral.com/articles/10.1186/s12014-018-9220-2>

**Epiproteomic landscape and histone code of cutaneous T-Cell lymphoma/Sézary syndrome**

Ozlem Onder, Rui Wu, Maria Wysocka, Paul L. Haun, Ellen Kim, Benjamin A Garcia, David Bahler, Alain Rook, Megan S. Lim, Kojo S.J. Elenitoba-Johnson

*Blood* 2018; 132 (Supplement 1): 780.

<https://ashpublications.org/blood/article/132/Supplement%201/780/266022/Epiproteomic-Landscape-and-Histone-Code-of?searchresult=1>

**Mutual balance of histone deacetylases 1 and 2 and the acetyl reader ATAD2 regulates the level of acetylation of histone H4 on nascent chromatin of human cells**

Pavlo Lazarchuk, John Hernandez-Villanueva, Maria N. Pavlova, Alexander Federation, Michael MacCoss, Julia M. Sidorova

*Mol Cell Biol*. 2020 Apr 13; 40(9): e00421-19.

<https://journals.asm.org/doi/10.1128/MCB.00421-19>

**Examining pathways of iron and sulfur acquisition, trafficking, deployment, and storage in mineral-grown methanogen cells**

Devon Payne, Eric M. Shepard, Rachel L. Spietz, Katherine Steward, Sue Brumfield, Mark Young, Brian Bothner, William E. Broderick, Joan B. Broderick, Eric S. Boyd

*J Bacteriol*. 2021 Sep 8; 203(19): e0014621

<https://journals.asm.org/doi/10.1128/JB.00146-21>

**Histone modifications in papillomavirus virion minichromosomes**

Samuel S. Porter, Jennifer C. Liddle, Kristen Browne, Diana V. Pastrana, Benjamin A. Garcia, Christopher B. Buck, Matthew D. Weitzman, Alison A. McBride

*mBio*. 2021 Feb 16; 12(1): e03274-20

<https://journals.asm.org/doi/10.1128/mBio.03274-20>

**Comprehensive map of the artemisia annua proteome and quantification of differential protein expression in chemotypes producing high versus low content of artemisinin**

Minghui Chen, Tingxiang Yan, Liyun Ji, Yu Dong, Simone Sidoli, Zuofei Yuan, Chunlin Cai, Jiwei Chen, Yueli Tang, Qian Shen, Qifang Pan, Xueqing Fu, Xin Ku, Lujian Liao, Benjamin A. Garcia, Wei Yan, Kexuan Tang

*Proteomics* 2020, 20, 1900310.

<https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/pmic.201900310>

**Data-independent acquisition-based quantitative proteomics analysis reveals dynamic network profiles during the macrophage inflammatory response**

Lei Li, Li Chen, Xinya Lu, Chenyang Huang, Haihua Luo, Jingmiao Jin, Zhuzhong Mei, Jinghua Liu, Cuiting Liu, Junmin Shi, Peng Chen, Yong Jiang

*Proteomics* 2020, 20, 1900203.

<https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/pmic.201900203>



**Application of wide selected-ion monitoring data-independent acquisition to identify tomato fruit proteins regulated by the CUTIN DEFICIENT2 transcription factor**

Laetitia B. B. Martin, Robert W. Sherwood, Joshua J. Nicklay, Yong Yang, Tara L. Muratore-Schroeder, Elizabeth T. Anderson, Theodore W. Thannhauser, Jocelyn K.C. Rose, Sheng Zhang

*Proteomics*, 16: 2081–2094, 2016.

<https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/pmic.201500450>

**Improved profiling of low molecular weight serum proteome for gastric carcinoma by data-independent acquisition**

Weifeng Li, Mengna Li, Xiaoli Zhang, Siqin Yue, Yun Xu, Wenjing Jian, Yin Qin, Lin Lin, Wenlan Liu

*Analytical and Bioanalytical Chemistry* (2022).

<https://link.springer.com/article/10.1007/s00216-022-04196-z>

**Quantitation of single and combinatorial histone modifications by integrated chromatography of bottom-up peptides and middle-down polypeptide tails**

Kevin A. Janssen, Mariel Coradin, Congcong Lu, Simone Sidoli, Benjamin A. Garcia

*Journal of The American Society for Mass Spectrometry*, Volume 30, Pages 2449–2459 (2019).

<https://link.springer.com/article/10.1007/s13361-019-02303-6>

**Dynamic 3D proteomes reveal protein functional alterations at high resolution in situ**

Valentina Cappelletti, Thomas Hauser, Ilaria Piazza, Monika Pepelnjak, Liliana Malinowska, Tobias Fuhrer, Yaozong Li, Christian Dörig, Paul Boersema, Ludovic Gillet, Jan Grossbach, Aurelien Dugourd, Julio Saez-Rodriguez, Andreas Beyer, Nicola Zamboni, Amedeo Caflich, Natalie de Souza, Paola Picotti

*Cell*, Volume 184, Issue 2, 2021, Pages 545–559.e22.

<https://www.sciencedirect.com/science/article/pii/S0092867420316913>

**Longitudinal plasma proteomics analysis reveals novel candidate biomarkers in acute COVID-19**

Yassene Mohammed, David R. Goodlett, Matthew P. Cheng, Donald C. Vinh, Todd C. Lee, Allison Mcgeer, David Sweet, Karen Tran, Terry Lee, Srinivas Murthy, John H. Boyd, Joel Singer, Keith R. Walley, David M. Patrick, Curtis Quan, Sara Ismail, Laetitia Amar, Aditya Pal, Rayhaan Bassawon, Lara Fesdekjian, Karine Gou, Francois Lamontagne, John Marshall, Greg Haljan, Robert Fowler, Brent W. Winston, James A. Russell, ARBs CORONA I

*Journal of Proteome Research* 2022, 21, 4, 975–992.

<https://pubs.acs.org/doi/10.1021/acs.jproteome.1c00863>

**Data-independent-acquisition-based proteomic approach towards understanding the acclimation strategy of oleaginous microalga *microchloropsis gaditana* CCMP526 in hypersaline conditions**

Anbarasu Karthikaichamy, John Beardall, Ross Coppel, Santosh Noronha, Dieter Bulach, Ralf B. Schittenhelm, Sanjeeva Srivastava

*ACS Omega* 2021, 6, 34, 22151–22164.

<https://pubs.acs.org/doi/10.1021/acsomega.1c02786>

**Study of differential proteomics in granulosa cells of premature ovarian insufficiency (POI) and the roles and mechanism of RAC1 in granulosa cells**

Qing-yan Zhang, Xin Li, Xing-yu Zhou, Ying Li, Jun Zhang, Xiao-fei Zhang, Yu-dong Liu, Ying-xue Chen, Xiao-min Wu, Lin-zi Ma, Xin Chen, Shi-ling Chen

*Molecular and Cellular Endocrinology*, Volume 555, 2022, 111719.

<https://www.sciencedirect.com/science/article/pii/S0303720722001678>

**High-throughput and integrated chemical proteomic approach for profiling phosphotyrosine signaling complexes**

Qian Kong, Peiwu Huang, Bizhu Chu, Mi Ke, Wendong Chen, Zhendong Zheng, Shanping Ji, Zongwei Cai, Pengfei Li, Ruijun Tian

*Analytical Chemistry* 2020, 92, 13, 8933–8942.

<https://pubs.acs.org/doi/10.1021/acs.analchem.0c00839>

### **Data dependent-independent acquisition (DDIA) proteomics**

Shenheng Guan, Paul P. Taylor, Ziwei Han, Michael F. Moran, Bin Ma

*Journal of Proteome Research* 2020, 19, 8, 3230–3237.

<https://pubs.acs.org/doi/10.1021/acs.jproteome.0c00186>

### **Altered protein dynamics and increased aggregation of human $\gamma$ S-crystallin due to cataract-associated deamidations**

Heather M. Forsythe, Calvin J. Vetter, Kayla Ann Jara, Patrick N. Reardon, Larry L. David, Elisar J. Barbar, and Kirsten J. Lampi

*Biochemistry* 2019, 58, 40, 4112–4124.

<https://pubs.acs.org/doi/10.1021/acs.biochem.9b00593>

### **Data-independent acquisition mass spectrometry to quantify protein levels in FFPE tumor biopsies for molecular diagnostics**

Yeoun Jin Kim, Steve M. M. Sweet, Jarrett D. Egertson, Andrew J. Sedgewick, Sunghee Woo, Wei-li Liao, Gennifer E. Merrihew, Brian C. Searle, Charlie Vaske, Robert Heaton, Michael J. MacCoss, Todd Hembrough

*Journal of Proteome Research* 2019, 18, 1, 426–435.

<https://pubs.acs.org/doi/10.1021/acs.jproteome.8b00699>

### **HYPERSol: high-quality data from archival FFPE tissue for clinical proteomics**

Dylan M. Marchione, Ilyana Ilieva, Kyle Devins, Danielle Sharpe, Darryl J. Pappin, Benjamin A. Garcia, John P. Wilson, John B. Wojcik

*Journal of Proteome Research* 2020, 19, 2, 973–983.

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### **Multiplexed quantification for data-independent acquisition**

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