

## Matthias Mann

### Publications (a total of 701) as at March 2019

#### 1988-1993:

- 1) Meng, C. K., **M. Mann** and J. B. Fenn (1988). "Of Protons and Proteins." Zeitschrift für Physik, D, Atoms, Molecules and Clusters **10**: 361 - 368.
- 2) **Mann, M.**, C. K. Meng and J. B. Fenn (1989). "Interpreting Mass Spectra of Multiply Charged Ions." Analytical Chemistry **61**: 1702 - 1708.
- 3) Elliott, J., K. Stone, W. Roberts, M. LoPresti, R. DeAngelis, M. Crawford, J. Kapouch, E. Jacobson, K. Williams, W. McMurray, C. K. Meng, **M. Mann** and J. B. Fenn (1989). Structure of Symposium Test Peptide-3. Techniques in Protein Chemistry. Hugli, Academic Press. **1989**: 569 - 580
- 4) Fenn, J. B., **M. Mann**, C. K. Meng, S. F. Wong and C. M. Whitehouse (1989). "Electrospray ionization for mass spectrometry of large biomolecules." Science **246**(4926): 64-71.
- 5) Fenn, J. B., **M. Mann**, C. K. Meng, S. F. Wong and C. M. Whitehouse (1990). "Electrospray ionization - principles and practice." Mass Spectrometry Reviews **9**: 37 - 70.
- 6) Gallagher, R. T., J. R. Chapman and **M. Mann** (1990). "Design and performance of an electrospray ionization source for a doubly-focusing magnetic sector mass spectrometer." Rapid Communications in Mass Spectrometry **4**: 369-372.
- 7) **M. Mann** (1990). "Electrospray: Its Potential and Limitations as an Ionization Method for Biomolecules." Organic Mass Spectrometry **25**: 575.
- 8) **M. Mann**, H. Rahbek-Nielsen and P. Roepstorff (1990). Practical Aspects of Calibration and Effect of Non-Protein Compounds on Spectrum Quality in Protein Analysis by PDMS. Ion Formation from Organic Solids (IFOS V). A. Hedin, B. U. R. Sundqvist and A. Benninghoven. New York, Wiley: 47 - 54.
- 9) **M. Mann** a., S.-F. Wong and J. B. Fenn (1990). Where do all the Charges go in Electrospray Ionization? Ion Formation from Organic Solids (IFOS V). A. Hedin, B. U. R. Sundqvist and A. Benninghoven. New York, Wiley: 139 -144.
- 10) Salephour, M., I. K. Perera, J. Kjellberg, A. Hedin, M. A. Islamian, P. Håkansson, B. U. R. Sundqvist, P. Roepstorff, **M. Mann** and K. Klarskov (1990). UV-Laser Induced Desorption Mass Spectrometry of Hydrophobic- and Glyco-Proteins. Ion Formation from Organic Solids (IFOS V). A. Hedin, B. U. R. Sundqvist and A. Benninghoven. New York, Wiley: 119 - 124.
- 11) Chapman, J. R., R. T. Gallagher and **M. Mann** (1991). "Some biochemical applications of electrospray-magnetic sector mass spectrometry." Biochem Soc Trans **19**: 940 - 943.
- 12) Roepstorff, P., K. Klarskov, J. Andersen, **M. Mann**, O. Vorm, G. Etienne and J. Parelo (1991). "Mass spectrometry of proteins: studies of parvalbumins by plasma desorption, laser desorption and electrospray mass spectrometry." International Journal of Mass Spectrometry and Ion Processes **111**: 151-172.
- 13) **M. Mann**, S. Shen and J. B. Fenn (1992). Electrospray Mass Spectrometry: Principles and Methods. Mass Spectrometry: Clinical and Biomedical Applications. D. M. Desiderio. New York, Plenum Press. **I**: 1 - 35.
- 14) **M. Mann**, P. Højrup and P. Roepstorff (1993). "Use of Mass Spectrometric Molecular Weight Information to Identify Proteins in Sequence Databases." Biological Mass Spectrometry **22**: 338-345.
- 15) Morand, K., G. Talbo and **M. Mann** (1993). "Oxidation of peptides during electrospray ionization." Rapid Communications in Mass Spectrometry **7**: 738 - 743.

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- 16) Leitz, T., K. Morand and **M. Mann** (1994). "Metamorphosin A: A Novel Peptide Controlling Development of the Lower Metazoan *Hydractinia echinata* (Coelenterata, Hydrozoa)." Developmental Biology **163**: 440 - 446.
- 17) **M. Mann** (1994). "Role of Mass Accuracy in the Identification of Proteins by Their Mass Spectrometric Peptide Maps." J Protein Chemistry **13**: 506-507.
- 18) **M. Mann** (1994). Sequence Database Searching by Mass Spectrometric Data. Microcharacterization of Proteins. R. Kellner, F. Lottspeich and H. E. Meyer. Weinheim, VCH: 223 - 245.
- 19) **M. Mann** and M. Wilm (1994). "Error-tolerant identification of peptides in sequence databases by peptide sequence tags." Anal. Chem. **66**(24): 4390-4399.
- 20) Mørtz, E., O. Vorm, **M. Mann** and P. Roepstorff (1994). "Identification of Proteins in Polyacrylamide Gels by Mass Spectrometric Peptide Mapping Combined with Database Search." Biological Mass Spectrometry **23**: 249-261.
- 21) Rasmussen, H. H., E. Mørtz, **M. Mann**, P. Roepstorff and J. E. Celis (1994). "Identification of transformation sensitive proteins recorded in human two-dimensional gel protein databases by mass spectrometric peptide mapping alone and in combination with microsequencing." Electrophoresis **15**: 406-416.
- 22) Talbo, G. and **M. Mann** (1994). Distinction between Phosphorylated and Sulfated Peptides by Matrix Assisted Laser Desorption Ionization Reflectron Mass Spectrometry at the Sub Picomole Level. Techniques in Protein Chemistry V. J. W. Crabb. New York, Academic Press. **V**: 105 - 113.
- 23) Vorm, O. and **M. Mann** (1994). "Improved Mass Accuracy in Matrix Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry of Peptides." Journal of the American Society of Mass Spectrometry **5**: 955 - 958.
- 24) Vorm, O., P. Roepstorff and **M. Mann** (1994). "Matrix Surfaces Made by Fast Evaporation Yield Improved Resolution and Very High Sensitivity in MALDI TOF." Analytical Chemistry **66**: 3281-3287.
- 25) Wilm, M. S. and **M. Mann** (1994). "Electrospray and Taylor - Cone Theory, Dole's Beam of Macromolecules At Last ?" International Journal of Mass Spectrometry and Ion Processes **136**: 167 - 180.

**1995:**

- 26) Acedo, M., G. Tarrason, J. Piulats, **M. Mann**, M. Wilm and R. Eritja (1995). "Preparation of Oligonucleotide-Dexamethasone Conjugates." Bioorganic & Medicinal Chemistry Letters **5**(15): 1577-1580.
- 27) Calvio, C., G. Neubauer, **M. Mann** and A. I. Lamond (1995). "Identification of hnRNP P2 as TLS/FUS using Electrospray Mass Spectrometry." RNA **1**: 724 - 733.
- 28) Houthaeve, T., H. Gausepohl, **M. Mann** and K. Ashman (1995). "Automation of micro-preparation and enzymatic cleavage of gel electrophoretically separated proteins." FEBS letters **376**: 91 -94.
- 29) Just, I., J. Selzer, M. Wilm, C. v. Eichel-Streiber, **M. Mann** and K. Aktories (1995). "The cytotoxin from *Clostridium difficile* (toxin B) acts by glycosylation of the Rho proteins." Nature **375**: 500 - 503.

- 30) Just, I., M. Wilm, J. Setzer, G. Rex, C. v. Eichel-Streiber, **M. Mann** and K. Aktories (1995). "The enterotoxin from *Clostridium difficile* (toxin A) mono glucosylates the Rho proteins." J. Biol. Chem. **270**: 13932 - 13936.
- 31) Kellner, R., G. Talbo, T. Houthaeve and **M. Mann** (1995). Edman Degradation and MALDI Sequencing Enables N- and C-Terminal Sequence Analysis of Peptides. Techniques in Protein Chemistry VI. J. W. Crabb. New York, Academic Press: 47 - 54.
- 32) **Mann, M.** and M. Wilm (1995). "Electrospray Mass Spectrometry for Protein Characterisation." Trends in Biochemical Sciences **20**: 219 - 223.
- 33) Wilm, M., T. Houthaeve, G. Talbo, R. Kellner, P. Mortensen and **M. Mann** (1995). Approaches to the Practical Use of MS/MS in a Protein Sequencing Facility. Mass Spectrometry in the Biological Sciences. A. L. Burlingame and S. A. Carr. Clifton, NJ, Humana Press: 245-265.

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- 34) Aviño, A., R. G. Garcia, F. Albericio, **M. Mann**, M. Wilm, G. Neubauer and R. Eritja (1996). "New Carbamate Supports for the Preparation of 3'-Amino-modified Oligonucleotides." Bioorganic & Medicinal Chemistry **4**: 1649-1658.
- 35) Dietrich, A., D. Brazil, O. N. Jensen, Michael Meister, M. Schrader, John F. Moomaw, **M. Mann**, D. Illenberger and P. Gierschik (1996). "Isoprenylation of the G protein  $\gamma$  subunit is both necessary and sufficient for  $\beta\gamma$  dimer-mediated stimulation of Phospholipase C." Biochemistry **35**: 15174 - 15182.
- 36) Jensen, O. N., T. Houthaeve, A. Shevchenko, S. Cudmore, T. Ashford, **M. Mann**, G. Griffiths and J. K. Locker (1996). "Identification of the major membrane and core proteins of vaccinia virus by two-dimensional electrophoresis." J. Virology **70**: 7485 - 7497.
- 37) Jensen, O. N., A. Podtelejnikov and **M. Mann** (1996). "Delayed Extraction Improves Specificity in Database Searches by MALDI Peptide Maps." Rapid Communications in Mass Spectrometry **10**: 1371 - 1378.
- 38) Jensen, O. N., O. Vorm and **M. Mann** (1996). "Sequence patterns produced by incomplete enzymatic digestion or one-step Edman degradation of peptide mixtures as probes for protein database searches." Electrophoresis **17**: 938-944.
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- 40) **Mann, M.** (1996). "A shortcut to interesting human genes: Peptide Sequence Tags, ESTs and Computers." Trends in Biochemical Sciences **21**: 494-495.
- 41) **Mann, M.** and G. Talbo (1996). "Developments in matrix-assisted laser desorption/ionization peptide mass spectrometry." Current Opinion in Biotechnology **7**: 11 - 19.
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- 47) Shevchenko, A., M. Wilm, O. Vorm and **M. Mann** (1996). "Mass Spectrometric Sequencing of Proteins from Silver Stained Polyacrylamide Gels." Analytical Chemistry **68**: 850 - 858.
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- 49) Talbo, G. and **M. Mann** (1996). "Aspects of the sequencing of carbohydrates and oligonucleotides by Matrix-Assisted Laser Desorption/Ionization Post-Source Decay." Rapid Communications Mass Spectrometry **10**: 100 - 103.
- 50) Weijland, A., G. Neubauer, S. A. Courtneidge, **M. Mann**, R. K. Wierenga and G. Superti-Furga (1996). "The purification and characterization of the catalytic domain of Src expressed in *S.pombe*: comparison of unphosphorylated and tyrosine phosphorylated species." European Journal of Biochemistry **240**: 756 - 764.
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- 53) Wilm, M., A. Shevchenko, T. Houthaeve, S. Breit, L. Schweigerer, T. Fotsis and **M. Mann** (1996). "Femtomole Sequencing of Proteins from Polyacrylamide Gels by Nano Electrospray Mass Spectrometry." Nature **379**: 466 - 469.

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- 55) Deissler, H., M. Wilm, B. Genc, B. Schumity, T. Ternes, F. Naumann, **M. Mann** and W. Doerfler (1997). "Rapid Protein Sequencing by Tandem Mass Spectrometry and cDNA Cloning of p20-CGGBP. A Novel Protein That Binds To the Unstable Triplet Repeat 5'-(CGG)<sub>n</sub>-3' In The Human FMR1 Gene." Journal of Biological Chemistry **272**: 16761 - 16768.
- 56) Grandi, P., T. Dang, N. Panté, A. Shevchenko, **M. Mann**, D. Forbes and E. Hurt (1997). "Nup93, a vertebrate homologue of yeast Nic96p, forms a complex with a novel 205-kDa protein and is required for correct nuclear pore assembly." Molecular Biology of the Cell **8**: 2017-2038.
- 57) Grawunder, U., M. Wilm, X. Wu, P. Kulesza, T. E. Wilson, **M. Mann** and M. R. Lieber (1997). "Activity of DNA ligase IV stimulated by complex formation with XRCC4 protein in mammalian cells." Nature **388**: 492- 495.
- 58) Hauschildt, S., C. Schwarz, H. Heine, A. Ulmer, H. Flad, E. Rietschel, O. Jensen and **M. Mann** (1997). "Actin: a target of lipopolysaccharid-induced phosphorylation in human monocytes." Biochem Biophys Res Commun. **241**: 670-674.
- 59) Jensen, O. N., P. Mortensen, O. Vorm and **M. Mann** (1997). "Automation of Matrix Assisted Laser Desorption/Ionization Mass Spectrometry Using Fuzzy Logic Feedback Control." Analytical Chemistry **69**: 1706 - 1714.

- 60) Jensen, O. N., A. V. Podtelejnikov and **M. Mann** (1997). "Identification of the components of simple protein mixtures by high-accuracy peptide mass mapping and database searching." *Anal Chem.* **69**: 4741-4750.
- 61) Jensen, O. N., A. Shevchenko and **M. Mann** (1997). Protein Analysis by Mass Spectrometry. *PROTEIN STRUCTURE – A PRACTICAL APPROACH 2nd Edition.* T. E. Chreighton. Oxford, Oxford University Press: 29 -57.
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- 63) Lamond, A. I. and **M. Mann** (1997). "Cell Biology and the Genome Projects - a concerted strategy for characterizing multi-protein complexes using mass spectrometry." *Trends in Cell Biology* **7**: 139 - 142.
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- 79) Bailer, S., S. Siniossoglou, A. Podtelejnikov, A. Hellwig, **M. Mann** and E. Hurt (1998). "Nup116p and Nup100p are interchangeable through a conserved motif which constitutes a docking site for the mRNA transport factor Gle2p." EMBO J **17**: 1107-1119.
- 80) Bruyns, E., A. Marie-Cardine, H. Kirchgessner, K. Sagolla, A. Shevchenko, **M. Mann**, F. Autschbach, A. Bensussan, S. Meuer and B. Schraven (1998). "T cell receptor (TCR) interacting molecule (TRIM), a novel disulfide-linked dimer associated with the TCR-CD3-zeta complex, recruits intracellular signaling proteins to the plasma membrane." J Exp Med **188**: 561-75.
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