

PUBLICATIONS DES 5 DERNIERES ANNEES, TOUS DOMAINES CONFONDUS
(mai 2010)

401. Atmanene, C., Chaix, D., Bessin, Y., Declerck, N., Van Dorsselaer, A., Sanglier-Cianferani, S.
Combination of Noncovalent Mass Spectrometry and Traveling Wave Ion Mobility Spectrometry Reveals Sugar-Induced Conformational Changes of CggR / DNA Complex.
Anal Chem, **82**, 3597-605, (2010).

400. Samaha, H., Delorme, V., Pontvianne, F., Cooke, R., Delalande, F., Van Dorsselaer, A., Echeverria, M., Saez Vasquez, J.
Identification of protein factors and U3 snoRNAs from a B. oleracea RNP complex involved in processing of pre-rRNA.
Plant Journal, **61**, 236-249, (2010).

399. Babujee, L., Wurtz, V., Ma, C, Lueder, F., Soni, P., Van Dorsselaer, A., Reumann, S.
The proteome map of spinach leaf peroxisomes indicates partial compartmentalization of phylloquinone (vitamin K1) biosynthesis in plant peroxisomes.
J Exp Bot. , **61**, 1441-53, (2010).

398. Castro, A., Bednarczyk, A., Schaeffer-Reiss, C., Rodríguez-García, M., van Dorsselaer, A., de Dios Alché, J.
Screening of Ole e 1 polymorphism among olive cultivars by peptide mapping and N-glycopeptide analysis.
Proteomics, **10**, 953–962, (2010).

397. Akaddar, A., Doderer-Lang, C., Marzahn, M. R., Delalande, F., Mousli, M., Helle, K., Van Dorsselaer, A., Aunis, D., Dunn, B. M., Metz-Boutigue, M.-H., Candolfi, E.
Catestatin, an endogenous Chromogranin A–derived peptide, inhibits in vitro growth of Plasmodium falciparum.
Cell. Mol. Life Sci., **67**, 1005-15, (2010).

396. Glattard, E., Welters, I. D., Lavaux, T., Muller, A. H., Laux, A., Zhang, D., Schmidt, A. R., Delalande, F., Laventie, B. J., Dirrig-Grosch, S., Colin, D. A., Van Dorsselaer, A., Aunis, D., Metz-Boutigue, M. H., Schneider, F., Goumon, Y.
Endogenous morphine levels are increased in sepsis: a partial implication of neutrophils.
PLoS One, **5**, e8791., (2010).

395. Kuhn, Y., Sanchez, C., Ayoub, D., Saridaki, T., van Dorsselaer, A., Lanzer, M.
Trafficking of the Phosphoprotein PfCRT to the Digestive Vacuolar Membrane in Plasmodium falciparum.
Traffic, **11**, 236-49, (2010).

394. Maenner, S., Blaud, M., Fouillen, L., Savoye, A., Marchand, V., Dubois, A., Sanglier-Cianféran, S., Van Dorsselaer, A., Clerc, P., Avner, P., Visvikis, A., Branlant, C.
2D structure of the A region of Xist RNA and its implication for PRC2 association.
PLoS Biol. , **8**, e1000276, (2010).

393. Vivat Hannah, V., Atmanene, C., Zeyer, D., Van Dorsselaer, A., Sanglier-Cianféran, S.
Native MS: an 'ESI' way to support structure- and fragment-based drug discovery.
Future Med. Chem., **2**, 35-50, (2010).

392. Fridlich, R., Delalande, F., Jaillard, C., Lu, J., Poidevin, L., Cronin, T., Perrocheau, L., Millet-Puel, G., Niepon, M., Poch, O., Holmgren, A., Van Dorsselaer, A., Sahel, J., Léveillard, T.
The thioredoxin-like protein rod-derived cone viability factor (RdCVFL) interacts with TAU and inhibits its phosphorylation in the retina.
Mol Cell Proteomics, **8**, 1206-18, (2009).

391. Ritschel, T., Atmanene, C., Reuter, K., Van Dorsselaer, A., Sanglier-Cianferani, S., Klebe, G. **An integrative approach combining noncovalent mass spectrometry, enzyme kinetics and X-ray crystallography to decipher Tgt protein-protein and protein-RNA interaction.** J Mol Biol, **393**, 833-47, (2009).
390. Kung, J., Heintz, D., Gallien, S., Van Dorsselaer, A., Boll, M. **Identification and characterization of a novel class of tungsten-containing benzoyl-coenzyme A reductases.** PNAS, **106**, 17687-92., (2009).
389. Heintz, D., Gallien, S., Wischgoll, S., Ullmann, A., Schaeffer, C., Kretzschmar, A., van Dorsselaer, A., Boll, M. **Differential membrane proteome analysis reveals novel proteins involved in the degradation of aromatic compounds in Geobacter metallireducens.** Mol Cell Proteomics., **8**, 2159-2169, (2009).
388. Bassett, R., Lispi, M., Ceccarelli, D., Grimaldi, L., Mancinelli, M., Martelli, F., Van Dorsselaer, A. **Analytical identification of novel impurities in urinary derived gonadotrophins.** RBM Online, **19**, 300-313, (2009).
387. Atmanene, C., Wagner-Rousset, E., Malissard, M., Chol, B., Robert, A., Van Dorsselaer, A., Beck, A., Corvaia, N., Sanglier-Cianferani, S. **Extending Mass Spectrometry Contribution to Therapeutic Monoclonal Antibody Lead Optimization: Characterization of Immune Complexes using Noncovalent ESI-MS.** Anal. Chem., **81**, 6364-6373, (2009).
386. Miguet, L., Béchade, G., Fornecker, L., Zink, E., Felden, C., Gervais, C., Herbrecht, R., van Dorsselaer, A., Mauvieux, L., Sanglier-Cianferani, S. **Proteomic Analysis of Malignant B-Cell Derived Microparticles Reveals CD148 as a Potentially Useful Antigenic Biomarker for Mantle Cell Lymphoma Diagnosis.** J Proteome Res, **8**, 3346-3354, (2009).
385. Dahal, D., Heintz, D., Van Dorsselaer, A., Braun, H., Wydra, K. **Pathogenicity and stress related proteins are induced in tomato stems infected with Ralstonia solanacearum.** Plant Physiol Biochem, **47**, 838-46, (2009).
384. Atmanene, C., Laux, A., Glattard, E., Muller, A., Schoentgen, F., Metz-Boutigue, M.-H., Aunis, D., Van Dorsselaer, A., Stefano, G., Sanglier-Cianferani, S., Goumon, Y. **Characterization of human and bovine phosphatidylethanolamine-binding protei (PEBP/RKIP) interactions with morphine and morphine-glucuronides determined by noncovalent mass spectrometry.** Med Sci Monit, **15**, BR178-87, (2009).
383. Villiers, C., Chevallet, M., Diemer, H., Couderc, R., Freitas, H., Van Dorsselaer, A., Marche, P., Rabilloud, T. **From secretome analysis to immunology: Chitosan induces major alterations in the activation of dendritic cells via a TLR4-dependent mechanism.** Mol Cell Proteomics, **8**, 1252-64, (2009).
382. Fridlich, R., Delalande, F., Jaillard, C., Lu, J., Poidevin, L., Cronin, T., Perrocheau, L., Millet-Puel, G., Niepon ML, Poch, O., Holmgren A, V. D. A., Sahel JA, Léveillard T. **The thioredoxin-like protein RdCVFL interacts with Tau and inhibits its phosphorylation in the retina.** Mol Cell Proteomics, **8**, 1206-18, (2009).
381. Levy, N., Oehlmann, M., Delalande, F., Nasheuer, H.-P., Van Dorsselaer, A., Schreiber, V., de Murcia, G., Ménissier-de Murcia, J., Maiorano, D., Bresson, A.

XRCC1 interacts with the p53 subunit of DNA Pol {alpha}-primase and may coordinate DNA repair and replication during S phase.

Nucleic Acids Res, **37**, 3177-88, (2009).

380. Shvadchak, V., Sanglier, S., Rocle, S., Villa, P., Haiech, J., Hibert, M., Van Dorsselaer, A., Bourguignon, J., Mély, Y., de Rocquigny, H.

Identification by high throughput screening of small compounds inhibiting the chaperone activity of the HIV-1 nucleocapsid protein.

Biochimie, **91**, 916-23, (2009).

379. Germain, P., Gaudon, C., Pogenberg, V., Sanglier, S., Van Dorsselaer, A., Royer, C. A., Lazar, M. A., Bourguet, W., Gronemeyer, H.

Differential action on coregulator interaction defines inverse retinoid agonists and neutral antagonists.

Chem Biol, **16**, 479-89, (2009).

378. Rogowski, K., Juge, F., van Dijk, J., Wloga, D., Strub, J., Levilliers, N., Thomas, D., Bré, M., Van Dorsselaer, A., Gaertig, J., Janke, C.

Evolutionary divergence of enzymatic mechanisms for posttranslational polyglycylation.

Cell, **137**, 1076-87, (2009).

377. Maître, B., Angénieux, C., Wurtz, V., Layre, E., Gilleron, M., Collmann, A., Mariotti, S., Mori, L., Fricker, D., Cazenave, J., Van Dorsselaer, A., Gachet, C., De Libero, G., Puzo, G., Hanau, D., de la Salle, H.

The assembly of CD1e is controlled by an N-terminal propeptide which is processed in endosomal compartments.

Biochem J., **419**, 661-8, (2009).

376. Diemer, H., Atmanene, C., Sanglier, S., Morrissey, B., Van Dorsselaer, A., Downard, K. M.

Detection and structural features of the betaB2-B3-crystallin heterodimer by radical probemass spectrometry (RP-MS).

J.Mass. Spectrom. , **44**, 803–812, (2009).

375. Page, N., Schall, N., Strub, J.-M., Quinternet, M., Chaloin, O., De´cossas, M., Cung, M. T., Van Dorsselaer, A., Briand, J.-P., Muller, S.

The Spliceosomal Phosphopeptide P140 Controls the Lupus Disease by Interacting with the HSC70 Protein and via a Mechanism Mediated by $\gamma\delta$ T Cells.

PLoS ONE **4**, e5273, (2009).

374. Delmotte, N., Lasaosa, M., Tholey, A., Heinzle, H., Van Dorsselaer, A., Huber, C. G.

Repeatability of peptide identifications in shotgun proteome analysis employing off-line twodimensional chromatographic separations and iontrap MS.

J. Sep.Sci, **32**, 1156-1164, (2009).

373. Jégou, S., Conreux, A., Villaume, S., Hovasse, A., Schaeffer, C., Cilindre, C., Van Dorsselaer, A., Jeandet, P.

One step purification of the grape vacuolar invertase.

Anal Chim Acta, **638**, 75-8, (2009).

372. Führs, H., Götze, S., Specht, A., Erban, A., Gallien, S., Heintz, D., Van Dorsselaer, A., Kopka, J., Braun, H.-P., HorstW.J.

Characterization of leaf apoplastic peroxidases and metabolites in *Vigna unguiculata* in response to toxic manganese supply and silicon.

J Exp Botany, **60**, 1663-1678, (2009).

371. Gerber, E., Hemmerlin, A., Hartmann, M., Heintz, D., Hartmann, M.-A., Mutterer, J., Rodríguez-Concepción, M., Boronat, A., Van Dorsselaer, A., Rohmer, M., Crowell, D. N., Bach, T. j.

The Plastidial 2-C-Methyl-D-Erythritol 4-Phosphate Pathway Provides the Isoprenyl Moiety for Protein Geranylgeranylation in Tobacco BY-2 Cells.

Plant Cell, **21**, 285–300, (2009).

370. Hébrard, E., Bessin, Y., Michon, T., Longhi, S., Uversky, V. N., Delalande, F., Van Dorsselaer, A., Romero, P., Walter, J., Declerk, N., Fargette, D.
Intrinsic disorder in Viral Proteins Genome-Linked: experimental and predictive analyses.
Virology Journal, **6**, 23, (2009).
369. Ravanat, C., Wurtz, C., Ohlmann, P., Fichter, M., Cazenave, J.-P., Van Dorsselaer, A., Lanza, F., Gachet, C.
Use of tandem Biacore-mass spectrometry to identify platelet membrane targets of novel monoclonal antibodies.
Anal Biochem, **386**, 237-43. , (2009).
368. Bertile, F., Schaeffer, C., Le Maho, Y., Raclot, T., Van Dorsselaer, A.
A proteomic approach to identify differentially expressed plasma proteins between the fed and prolonged fasted states.
Proteomics, **9**, 148-58, (2009).
367. Zhang, D., Shooshtarizadeh, P., Laventie, B., Colin, D., A., Chich, J.-F., Jasmina, de Barry, J., Chasserot-Golaz, S., Delalande, F., Van Dorsselaer, A., Schneider, F., Helle, K., Aunis, D., Prévost, G., Metz-Boutigue, M.-H.
Two Chromogranin A-Derived Peptides Induce Calcium Entry in Human Neutrophils by Calmodulin-Regulated Calcium Independent Phospholipase A2.
PLoSOne, **4**, e4501, (2009).
366. Tocchini-Valentini, G., Rochel, N., Escriva, H., Germain, P., Peluso-Iltis, C., Paris, M., Sanglier-Cianferani, S., Van Dorsselaer, A., Moras, D., Laudet, V.
Structural and functional insights into the ligand binding domain of a non-duplicated RXR from the invertebrate chordate amphioxus.
J Biol Chem., **284**, 1938-48, (2009).
365. Gallien, S., Perrodou, E., Carapito, C., Deshayes, C., JM., R., Van Dorsselaer, A., Poch, O., Schaeffer, C., Lecompte, O.
Ortho-proteogenomics: Multiple proteomes investigation through orthology and a new MS-based protocol.
Genome Res., **19**, 128-135, (2009).
364. Thibaut, S., Cavusoglu, N., de Becker, E., Zerbib, F., Bednarczyk, A., Schaeffer, C., van Dorsselaer, A., Bernard, B.
Transglutaminase-3 Enzyme: A Putative Actor in Human Hair Shaft Scaffolding?
J Invest Dermatol. , **129**, 449-59., (2009).
363. Weiss, S., Carapito, C., Cleiss, J., Koechler, S., Turlin, E., Coppee, J., Heymann, M., Kugler, V., Stauffert, M., Cruveiller, S., Médigue, C., Van Dorsselaer, A., Bertin, P., Arsène-Ploetze, F.
Enhanced structural and functional genome elucidation of the arsenite-oxidizing strain Herminiimonas arsenicoxydans by proteomics data.
Biochimie, **91**, 192-203, (2009).
362. Haas, P. S., Roy, N. B. A., Gibbons, R. J., Deville, M.-A., Fisher, C., Schwabe, M., Bissé, E., Van Dorsselaer, A., Higgs, D. R., Lübbert, M.
The role of X-inactivation in the gender bias of patients with acquired α -thalassemia and myelodysplastic syndrome (ATMDS).
Br J Haematol, **144**, 538-545, (2009).
361. Bissé, E., Zorn, N., Preisler-Adams, S., Epting, T., Sommer, O., Schaeffer, C., Van Dorsselaer, A., Horst, J., Wieland, H.
Haemoglobin Hokusetsu [β52 (D3)] Asp→Gly in German families associated with inclusion body.
Ann Hematol, **87**, 463-6, (2008).

360. Mosca, A., Paleari, R., Galanello, R., Sollaino, C., Perseu, L., Demartis, F. R., Passarello, C., Giambona, A., Maggio, A., Caruso, D., Paleari, R., Mosca, A., Schaeffer, C., Van Dorsselaer, A., Bissé, E., Wild, B., Green, B.
New analytical tools and epidemiological data for the identification of HbA2 borderline subjects in the screening for beta-thalassemia.
Bioelectrochemistry, **73**, 137-40, (2008).
359. Burgess, A., Labbé, J., Vigneron, S., Bonneaud, N., Strub, J., Van Dorsselaer, A., Lorca, T., Castro, A.
Chfr interacts and colocalizes with TCTP to the mitotic spindle.
Oncogene, **27**, 5554 - 5566 (2008).
358. Catusse, J., Strub, J., Job, C., Van Dorsselaer, A., Job, D.
Germination des graines et contrôle de métabolisme.
J Soc Biol, **202**, 223-229., (2008).
357. Chevallet, M., Luche, S., Diemer, H., Strub, J., Van Dorsselaer, A., Rabilloud, T.
Sweet silver: A formaldehyde-free silver staining using aldoses as developing agents, with enhanced compatibility with mass spectrometry.
Proteomics, **8**, 4853-61, (2008).
356. Fauquenoy, F., Morelle, W., Hovasse, A., Bednarczyk, A., Slomianny, C., Schaeffer, C., Van Dorsselaer, A., Tomavo, S.
Proteomic and Glycomic Analyses of N-Glycosylated Structures Involved in Toxoplasma gondii-Host Cell Interactions.
Mol Cell Proteomics, **7**, 891-910, (2008).
355. Beck, A., Wagner-Rousset, E., Bussat, M.-C., Lokteff, M., Klinguer-Hamour, C., Haeuw, J.-F., Goetsch, L., Wurch, T., Van Dorsselaer, A., Corvaia, N.
Trends in glycosylation, glycoanalysis and glycoengineering of therapeutic antibodies and Fc-fusion proteins.
Current Pharm Biotech, **9**, 482-501, (2008).
354. Zöllner, S., Hwang, K. H., Wilzewski, B., Carapito, C., Leize-Wagner, E., Van Dorsselaer, A., Bernhardt, R.
Aldosterone: from biosynthesis to non-genomic action onto the proteome.
Steroids, **73**, 966-72., (2008).
353. Sanglier, S., Atmanene, C., Chevreux, G., Van Dorsselaer, A.
Nondenaturing mass spectrometry to study noncovalent protein/protein and protein/ligand complexes: technical aspects and application to the determination of binding stoichiometries.
Methods Mol Biol., **484**, 217-43, (2008).
- 352a SS seule. Quénet, D., Gasser, V., Fouillen, L., Cammas, F., Sanglier-Cianferani, S., Losson, R., Dantzer, F.
The histone subcode: poly(ADP-ribose) polymerase-1 (Parp-1) and Parp-2 control cell differentiation by regulating the transcriptional intermediary factor TIF1{beta} and the heterochromatin protein HP1{alpha}.
FASEB J., **22**, 3853-65, (2008).
352. Argentini, M., Strub, J.-M., Carapito, C., Sanglier, S., Van Dorsselaer, A.
An optimized MALDI mass spectrometry method for improved detection of lysine/arginine free peptides.
J Proteome Res, **7**, 5062-5069, (2008).
351. Wagner-Rousset, E., Bednarczyk, A., Bussat, M.-C., Colas, O., Corvaia, N., Schaeffer, C., Van Dorsselaer, A., Beck, A.
The way forward, enhanced characterization of therapeutic antibody glycosylation: Comparison of three level mass spectrometry-based strategies.
J Chrom B, **872**, 23-37, (2008).

350. Bissé, E., Schaeffer, C., Hovasse, A., Preisler-Adams, S., Epting, T., Baumstark, M., Van Dorsselaer, A., Horst, J., Wieland, H.
Hemoglobin Noah Mehmet Oeztuerk, (a2δ2143 (H21)His -> Tyr: A novel δ- chain variant in the 2,3-DPG binding site J Chrom B, **871**, 55–59, (2008).
349. Roussel, X., Béchade, G., Kriznik, A., Van Dorsselaer, A., Sanglier-Cianferani, S., Branlant, G., Rahuel-Clermont, S.
Evidence for the formation of a covalent thiosulfinate intermediate with peroxiredoxin in the catalytic mechanism of sulfiredoxin.
J Biol Chem, **283**, 22371-82, (2008).
348. Catusse, J., Strub, J. M., Job, C., Van Dorsselaer, A., Job, D.
Proteome-wide characterization of sugarbeet seed vigor and its tissue specific expression.
PNAS Biological sciences / Plant biology-agricultural sciences, **105**, 10262-10267, (2008).
347. Rousselet, E., Martelli, A., Chevallet, M., Diemer, H., Van Dorsselaer, A., Rabilloud, T., Moulis, J.-M.
Zinc adaptation and resistance to cadmium toxicity in mammalian cells. Molecular insight by proteomic analysis.
Proteomics, **8**, 2244-2255, (2008).
346. Buhr, N., Carapito, C., Schaeffer, C., Kieffer, E., Van Dorsselaer, A., Viville, S.
Nuclear proteome analysis of undifferentiated mouse embryonic stem and germ cells.
Electrophoresis, **29**, 2381-2390, (2008).
345. Izquierdo, E., Bednarczyk, A., Schaeffer, C., Cai, Y., Marchioni, E., Van Dorsselaer, A., Ennahar, S.
Production of Enterocins L50A, L50B, and the New IT by Enterococcus faecium IT62, a Strain Isolated from Italian Ryegrass in Japan.
Antimicrob Agents Chemother. , **52**, 1917-1923, (2008).
344. Diemer, H., Elias, M., Renault, F., Rochu, D., Contreras-Martel, C., Schaeffer, C., Van Dorsselaer, A., Chabriere, E.
Tandem use of X-ray crystallography and mass spectrometry to obtain ab initio the complete and exact amino acids sequence of HPBP, a human 38kDa apolipoprotein.
Proteins, **71**, 1708-1720, (2008).
343. Courjean, O., Chevreux, G., Perret, E., Morel, A., Martin-Ponthieu, A., Sanglier, S., Potier, N., Engel, J., Van Dorsselaer, A., Feracci, H.
Modulation of the E-cadherin monomer folding by cooperative binding of calcium ions.
Biochemistry, 2339-2349 (2008).
342. Muller, A., Glattard, E., Taleb, O., Kemmel, V., Laux, A., Miehé, M., Delalande, F., Roussel, G., Van Dorsselaer, A., Metz-Boutigue, M.-H., Aunis, D., Goumon, Y.
Endogenous Morphine in SH-SY5Y Cells and the Mouse Cerebellum.
PLoS One, **3**, e1641, (2008).
341. Barraud, P., Golinelli-Pimpaneau, B., Atmanene, C., Sanglier, S., Van Dorsselaer, A., Droogmans, L., Dardel, F., Tisne, C.
Crystal structure of Thermus thermophilus tRNA m1A58 methyltransferase and biophysical characterization of its interaction with tRNA.
J. Mol. Biol., **377**, 535-550, (2008).
340. Herbinière, J., Grève, P., Strub, J.-M., Thierse, D., Raimonda, M., Van Dorsselaer, A., Martin, G., Braquart-Varnier, C.
Protein profiling of hemocytes from the terrestrial crustacean *Armadillidium vulgare*.
Dev Comp Immunol, **32**, 875-882, (2008).

339. Fuehrs, H., Hartwig, M., Buitrago Molina, L. E., Heintz, D., Van Dorsselaer, A., Braun, H-P., Horst, W. J.
Early manganese-toxicity response in *Vigna unguiculata* L. A proteomic and transcriptomic study.
Proteomics, **8**, 149-159, (2008).
338. Cilindre, C., Jegou, S., Hovasse, A., Schaeffer, C., Castro, A., Clement, C., Van Dorsselaer, A., Jeandet, P., Marchal, R.
Proteomic approach to identify Champagne wine proteins as modified by *Botrytis cinerea* infection.
J. Proteome Res., **7**, 1199-1208., (2008).
337. Querin, L., Sanvito, R., Magni, F., Busti, S., Van Dorsselaer, A., Alberghina, L., Vanoni, M.
Proteomic analysis of a nutritional Shift-up in *S. cerevisiae* identifies Gvp36 as a BAR-containing protein involved in vesicular traffic and nutritional adaptation.
J Biol Chem **283**, 4730-4743, (2008).
336. van Dijk, J., Miro, J., Strub, J., Lacroix, B., van Dorsselaer, A., Edde, B., Janke, C.
Polyglutamylation is a posttranslational modification with a broad range of substrates.
J Biol Chem. , **283**, 3915-3922, (2008).
335. Chiang, T.-R., Ismail, W., Gallien, S., Heintz, D., Van Dorsselaer, A., Fuchs, G.
Cholest-4-en-3-one- Δ 1-dehydrogenase: A flavoprotein catalyzing the second step in anoxic cholesterol metabolism
Appl Environ Microbiol., **74**, 107-113, (2008).
334. Chiang, Y.-R., Ismail, W., Heintz, D., Schaeffer, C., Van Dorsselaer, A., Fuchs, G.
Study of anoxic and oxic cholesterol metabolism by *Sterolibacterium denitrificans*.
J Bacteriol, **190**, 905-914, (2008).
- 333b. Chevallet, M., Diemer, H., Van Dorsselaer, A., Villiers, C., Rabilloud, T.
Toward a better analysis of secreted proteins: the example of the myeloid cells secretome.
Proteomics, **7**, 1757 - 1770, (2007).
333. Herschbach, H., Brisach, F., Haddaoui, J., Saadioui, M., Leize, E., Van Dorsselaer, A., Arnaud-Neu, F., Böhmer, V.
Lanthanide complexation with CMPO and CMPO-calix[4]arenes in solution: Spectrophotometric and electrospray mass spectrometric approaches.
Talanta, **74**, 39-46, (2007).
332. Ben Othman, A., Lee, J., W, J.-S., Kim, J., Abidi, R., Thuery, P., Strub, J.-M., Van Dorsselaer, A., Vicens, J.
Calix[4]arene-Based, Hg²⁺-Induced Intramolecular Fluorescence Resonance Energy Transfer Chemosensor.
J Org Chem, **72**, 7634-7640, (2007).
331. Luche, S., Lelong, C., Diemer, H., Van Dorsselaer, A., Rabilloud, T.
Ultrafast coelectrophoretic fluorescent staining of proteins with carbocyanines.
Proteomics, **7**, 3234-44 (2007).
330. Miguet, L., Sanglier, S., Schaeffer, C., Potier, N., Mauvieux, L., Van Dorsselaer, A.
Microparticles: a new tool for plasma membrane sub-cellular proteomic.
Subcellular Fractionation and Proteomics
Volume editor: Bertrand & Faupel. Series: Subcellular Biochemistry. Springer Ed., 21-34, (2007).
329. Bertile, F., Robert, F., Delval-Dubois, V., Sanglier, S., Schaeffer, C., Alain Van Dorsselaer, A.
Endogenous Plasma Peptide Detection and Identification in the Rat by a Combination of Fractionation Methods and Mass Spectrometry.
Biomarker Insights, **2**, 385-401, (2007).

328. Datola, A., Richert, S., Bierau, H., Agugiaro, D., Izzo, A., Rossi, M., Cregut, D., Diemer, H., Schaeffer, C., Van Dorsselaer, A., Giartosio, C., Jone, C.
Characterisation of a Novel Growth Hormone Variant Comprising a Thioether Link between Cys182 and Cys189.
ChemMedChem, **2**, 1181-1189, (2007).
327. Peters, F., Heintz, D., Johannes, J., Van Dorsselaer, A., Boll, M.
Genes, enzymes and regulation of para-cresol metabolism in Geobacter metallireducens.
J Bacteriol, **189**, 4729-38, (2007).
326. Beck, A., Klinguer-Hamour, C., Bussat, M.-C., Champion, T., Haeuw, J.-F., Goetsch, L., Wurch, T., Sugawara, M., Milon, A., Van Dorsselaer, A., Nguyen, T., Corvaia, N.
Peptides as tools and drugs for immunotherapies.
J. Pept. Sci., **13** 588-602, (2007).
325. Hamblin, J., Tuna, F., Bunce, S., Childs, L., Jackson, A., Errington, W., Alcock NW, Nierengarten, H., Van Dorsselaer, A., Leize-Wagner, E., Hannon, M.
Supramolecular circular helicates formed by destabilisation of supramolecular dimers.
Chemistry, 9286 – 9296, (2007).
324. Wurtz, V., Hechter, B., Ohlmann, P., Isola, H., Schaeffer-Reiss, C., Cazenave, J. P., Van Dorsselaer, A., Gacher, C.
Identification of PF4 and β TG by LC-MS/MS following profiling of stored apheresis and buffy-coat platelet concentrate supernatants by the ClinProt™ technology.
Tranfusion, **47**, 1099-1101, (2007).
323. Muller D, M. C., Koechler S, Barbe V, Barakat M, Talla E, Bonnefoy V, Krin E, Arsene-Ploetze F, Carapito C, Chandler M, Cournoyer B, Cruveiller S, Dossat C, Duval S, Heymann M, Leize E, Lieutaud A, Lievremont D, Makita Y, Mangenot S, Nitschke W, Ortet P, Perdrial N, Schoepp B, Siguier P, Simeonova DD, Rouy Z, Segurens B, Turlin E, Vallenet D, Dorsselaer AV, Weiss S, Weissenbach J, Lett MC, Danchin A, Bertin PN.
A Tale of Two Oxidation States: Bacterial Colonization of Arsenic-Rich Environments.
PLoS Genet., **3**, 518-530, (2007).
322. Chehimi, S., Delalande, F., Sable, S., Hajlaoui, M. R., Van Dorsselaer, A., Limam, F., Pons, A. M.
Purification and partial amino acid sequence of thuricin S, a new anti-Listeria bacteriocin from Bacillus thuringiensis.
Can. J. Microbiol., **53**, 284-290, (2007).
321. Buhr, N., Carapito, C., Schaeffer, C., Hovasse, A., Van Dorsselaer, A., Viville, S.
Proteome analysis of the culture environment supporting growth of undifferentiated mouse embryonic stem and germ lines.
Electrophoresis, **28**, 1615-1623, (2007).
320. Fang, Y.-Q., Taylor, N. J., Laverdière, F., Hanan, G. S., Loiseau, F., Nastasi, F., Campagna, S., Nierengarten, H., Leize, E., Van Dorsselaer, A.
Ruthenium(II) complexes with improved photophysical properties based on planar 4'-(2-pyrimidinyl)-2,2':6',2''-terpyridine ligands.
Inorg. Chem., **46**, 2854-2863, (2007).
319. Morales, R., Berna, A., Carpentier, P., Contreras-Martel, C., Renault, F., Nicoderne, M., Chesne-Seck, M.-L., Bernier, F., Dupuy, J., Schaeffer, C., Diemer, H., Van Dorsselaer, A., Fontecilla-Camps, J. C., Masson, P., Rochu, D., Chabrière, E.
Découverte et structure cristallographique d'une apolipoprotéine humaine.
Ann Pharm Fr, **65**, 98-107, (2007).
318. Deshayes, C., Perrodou, E., Gallien, S., Euphrasie, D., Schaeffer, C., Van Dorsselaer, A., Poch, O., Lecomte, O., Reyrat, J.

Interrupted coding sequences in *Mycobacterium smegmatis*: authentic mutations or sequencing errors?

Genome Biol., **8**, :R20, (2007).

317. Sizova, D., Charbaut, E., Delalande, F., Poirier, F., High, A. A., Parker, F., Van Dorsselaer, A., Duchesne, M., Diu-Hercend, A.

Proteomic Analysis of Brain Tissue from an Alzheimer's Disease Mouse Model by Two-Dimensional Difference Gel Electrophoresis.

Journal Neurobiology of Aging, **28**, 357-370, (2007).

316. Brizard, J., Carapito, C., Delalande, F., Van Dorsselaer, A., Brugidou, C.

Proteome Analysis of Plant-Virus Interactome: Comprehensive Data for Virus Multiplication Inside Their Hosts.

Mol Cell Proteomics, **5**, 2279-2297, (2006).

315a JMS seul. Glattard, E., Angelone, T., Strub, J., Corti, A., Aunis, D., Tota, B., Metz-Boutigue, M., Goumon, Y.

Characterization of natural vasostatin-containing peptides in rat heart.

FEBS J. , **273**, 3311-3321, (2006).

315. Siroy, A., Cosette, P., Seyer, D., Lemaitre-Guillier, C., Vallenet, D., Van Dorsselaer, A., Boyer-Mariotte, S., Jouenne, T., De, E.

Global comparison of the membrane subproteomes between a multidrug-resistant *Acinetobacter baumannii* strain and a reference strain.

J Proteome Res., **5**, 3385-3398, (2006).

314. de Val, N., Herschbach, H., Potier, N., Van Dorsselaer, A., Crichton, R. R.

Mass spectrometry studies of demetallation of haemin by recombinant horse L chain apoferritin and its mutant (E 53, 56, 57, 60 Q).

FEBS Letters, **580**, 6275-6280, (2006).

313. Hemmerlin, A., Tritsch, D., Hartmann, M., Pacaud, K., Hoeffler, J.-F., Van Dorsselaer, A., Rohmer, M., Bach, T. J.

A cytosolic *Arabidopsis thaliana* D-xylulose kinase catalyzes the phosphorylation of 1-deoxy-D-xylulose into a precursor of the plastidial isoprenoid pathway.

Plant Physiol., **142**, 441-457, (2006).

312. Herschbach, H., Hosomizu, K., Hahn, U., Leize, E., Van Dorsselaer, A., Imahori, H., Nierengarten, J.

Electrospray mass spectrometry analysis of dendritic branches bearing peripheral fullerene subunits.

Anal Bioanal Chem., **386**, 46-51, (2006).

311. Miguet, L., Bogumil, R., Decloquement, P., Herbrecht, R., Potier, N., Mauvieux, L., Van Dorsselaer, A.

Discovery and identification of potential biomarkers in a prospective study of chronic lymphoid malignancies using SELDI-TOF-MS.

J. Prot. Research, **5**, 2258-2269, (2006).

310. Heintz, D., Erxleben, A., High, A., Wurtz, V., Reski, R., Van Dorsselaer, A., Sarnighausen, E.
Rapid alteration of the phosphoproteome in the moss *Physcomitrella patens* after cytokinin treatment.

J. Prot. Research, **5**, 2283-2293, (2006).

309. Kilic, T., Sanglier, S., Van Dorsselaer, A., Suck, D.

Oligomerization behavior of the archaeal Sm2-type protein from *Archaeoglobus fulgidus*.

Protein Sciences, **2006**, 2310-2317, (2006).

308. Winkelmann, T., Heintz, D., Van Dorsselaer, A., Serek, M., Braun, H.-P.

Proteomic analyses of somatic and zygotic embryos of *Cyclamen persicum* Mill. reveal new insights into seed and germination physiology.

Planta, **224**, 508-519, (2006).

307. Winkelmann, T., Heintz, D., Van Dorsselaer, A., Serek, M., Braun, H.-P.

Proteomic analyses of somatic and zygotic embryos and endosperm tissue of *Cyclamen persicum*.

Acta Horticulturae, **714**, 163-169, (2006).

306. Chevallet, M., Lescuyer, P., Diemer, H., Van Dorsselaer, A., Leize-Wagner, E., Rabilloud, T.
Alterations of the mitochondrial proteome caused by the absence of mitochondrial DNA: A proteomic view.

Electrophoresis, **2006**, 1574-1583, (2006).

305. Chevallet, M., Diemer, H., Luche, S., Van Dorsselaer, A., Rabilloud, T., Leize-Wagner, E.
Improved mass spectrometry compatibility is afforded by ammoniacal silver staining.

Proteomics, **6**, 2350-2354, (2006).

304. Bissé, E., Zorn, N., Boussert, S., Epting, T., Van Dorsselaer, A., Wieland, H.

Hemoglobin WURZBURG ($\alpha_2\beta_24(A_2)Thr-Asn$), a new Electrophoretically Silent Variant found through the assay of HA_{1c} in a German diabetic patient.

J. Chromatogr A, 118-124, (2006).

303. Marquis, A., Smith, V., Harrowfield, J., Lehn, J.-M., Herschbach, H., Sanvito R, Leize-Wagner, E., Van Dorsselaer, A.

Messages in Molecules : Ligand/Cation Coding and Self-recognition in a Constitutionally Dynamic System of Heterometallic Double Helicates.

Chem. Eur. J., **2006**, 5632-5641, (2006).

302. Hwang, K.-H., Carapito, C., Böhmer, S., Leize, E., Dorsselaer, A. V., Bernhardt, R.

Proteome analysis of *Schizosaccharomyces pombe* by two-dimensional gel electrophoresis and mass spectrometry.

Proteomics, **6**, 4115-4129, (2006).

301. Perrodou, E., Deshayes, C., Muller, J., Schaeffer, C., Van Dorsselaer, A., Ripp, R., Poch, O., Reyrat, J., Lecompte, O.

ICDS Database : Interrupted CoDing Sequences in prokaryotic genomes.

Nucleic Acids Research, **34**, D338-D343, (2006).

300. Carapito, C., Müller, D., Turlin, E., Danchin, A., Van Dorsselaer, A., Leize-Wagner, E., Bertin, P., Lett, M.-C.

Identification of genes and proteins involved in the pleiotropic response to arsenic stress in *Cenibacter arsenoxydans*, a metalloresistant beta-Proteobacterium with an unsequenced genome.

Biochimie, **88**, 595-606, (2006).

299. Böhmer, S., Carapito, C., Wilzewski, B., Leize, E., Van Dorsselaer, A., Bernhardt, R.

Analysis of aldosterone induced differential receptor-independent protein patterns using 2D-electrophoresis and mass spectrometry.

Biol. Chem., **387**, 917-929, (2006).

298. Nierengarten, J., Hahn, U., Figueira Duarte, T., Cardinali, F., Solladié, N., Walther, M., Van Dorsselaer, A., Herschbach, H., Leize, E., Albrecht-Gary, A., Trabolsi, A., Elhabiri, M.

Ammonium-crown ether interactions for the construction of fullerene-containing photoactive supramolecular devices.

C. R. Chimie, **9**, 1022-1030, (2006).

297. Morales, R., Berna A., Carpentier P., Contreras-Martel, C., Renault, F., Nicodeme, M., Chesne-Seck, M-L., Bernier F., Dupuy, J., Schaeffer, C., Diemer, H., Van-Dorsselaer, A., Fontecilla-Camps, J., Masson, P., Rochu, D., Chabriere, E.

Serendipitous discovery and x-ray structure of a human phosphate binding apolipoprotein.
Structure, **14**, 1-9, (2006).

296. Nierengarten, J., Hahn, U., Trabolsi, A., Herschbach, H., Cardinali, F., Elhabiri, M., Leize, E., Van Dorsselaer, A., Albrecht-Gary, A.

Synthesis of Fullerodendrons with an Ammonium Unit at the Focal Point and Their Cooperative Self-Assembly on a Fluorescent Ditopic Crown Ether Receptor.

Chem. Eur. J., **2006**, 3365-3373, (2006).

295. Goumon Y, M. A., Glattard E, Marban C, Gasnier C, Strub JM, Chasserot-Golaz S, Rohr O, Stefano GB, Welters ID, Van Dorsselaer A, Schoentgen F, Aunis D, Metz-Boutigue MH.

Identification of morphine-6-glucuronide in chromaffin cell secretory granules.

J. Biol. Chem., **281**, 8082-8089, (2006).

294. Rivollier, A., Perrin-Cocon, L., Luche, S., Diemer, H., Strub, J. M., Hanau, D., Van Dorsselaer, A., Lotteau, V., Rabourdin-Combe, C., Rabilloud, T., Servet-Delprat, C.

High expression of antioxidant proteins in dendritic cells: Possible implications in atherosclerosis.

Mol Cell Proteomics, **5**, 726-736, (2006).

293. Solladié, N., Mathieu, E., Walther, M., Herschbach, H., Leize, E., Van Dorsselaer, A., Figueira Duarte, T., Nierengarten, J.

Supramolecular complexes obtained from porphyrin-crown ether conjugates and a fullerene derivative bearing an ammonium unit.

Tetrahedron, **62**, 1979-1987, (2006).

292. Meshcheryakov, D., Bohmer, V., Bolte, M., Hubscher-Bruder, V., Arnaud-Neu, F., Herschbach, H., Van Dorsselaer, A., Thondorf, I., Mogelin, W.

Two Chloride Ions as a Template in the Formation of a Cyclic Hexaurea.

Angew. Chem. Int. Ed. Engl. , **45**, 1648-1652, (2006).

291. Ivanova, S., Pitchon, V., Petit, C., Herschbach, H., Van Dorsselaer, A., Leize, E.

Preparation of alumina supported gold catalysts: Gold complexes genesis, identification and speciation by mass spectrometry.

Applied Catalysis A: General, **298**, 203-210, (2006).

290. Miguet, L., Pacaud, K., Felden, C., Hugel, B., Martinez, M., Freyssinet, J., Herbrecht, R., Potier, N., Van Dorsselaer, A., Mauvieux, L.

Proteomic analysis of malignant lymphocyte membrane microparticles using double ionization coverage optimization.

Proteomics, **6**, 153-171, (2006).

289. Nierengarten, J. F., Hahn, U., Trabolsi, A., Herschbach, H., Cardinali, F., Elhabiri, M., E., L., Van Dorsselaer, A., Albrecht-Gary, A. M.

Synthesis of Fullerodendrons with an Ammonium Unit at the Focal Point and Their Cooperative Self-Assembly on a Fluorescent Ditopic Crown Ether Receptor.

Chem. Eur. J., **2006**, 3365-3373, (2006).

288. Potier, N., Rogniaux, H., Chevreux, G., Van Dorsselaer, A.

Ligand-Metal ion binding to protéins: Investigation by ESI Mass Spectrometry.

Methods in Enzymology. Biological Mass Spectrometry. Ed. A.L. Burlingame, **402**, 361-389, (2005).

287. Hublitz, P., Kunowska, N., Mayer, U. P., Müller, J. M., Heyne, K., Yin, N., Fritzsche, C., Poli, C., Miguet, L., Schupp, I. W., Van Grunsven, L. A., Potier, N., Van Dorsselaer, A., Metzger, E., Roemer, K., Schüle, R.

NIR is a novel INHAT repressor that modulates the transcriptional activity of p53.

Genes & Development, **19**, 2912-2924, (2005).

286. Phalip, V., Delalande, F., Carapito, C., Goubet, F., Hatsch, D., Leize-Wagner, E., Dupree, P., Van Dorsselaer, A., Jeltsch, J.-M.

Diversity of the exoproteome of *Fusarium graminearum* grown on plant cell wall.

Current Genetics, **48**, 366-379, (2005).

285. Solladié, N., Sooambar, C., Herschbach, H., Strub, J., Leize, E., Van Dorsselaer, A., Talarico, A., Ventura, B., Flamigni, L.

A photoactive nona-porphyrine with nucleosidic linkers.

New J. Chem., **29**, 1504-1507, (2005).

284. Wischgoll, S., Heintz, D., Peters, F., Erxleben, A., Sarnighausen, E., Reski, R., Van Dorsselaer, A., Boll, M.

Gene clusters involved in anaerobic benzoate degradation of *Geobacter metallireducens*.

Molecular Microbiology, **58**, 1238-1252, (2005).

283. Castro, A., Carapito, C., Zorn, N., Magne, C., Leize, E., Van Dorsselaer, A., Clement, C.

Proteomic analysis of grapevine (*Vitis vinifera* L.) tissues subjected to herbicide stress.

J Exp Bot, **56**, 2783-95, (2005).

282. Desplancq, D., Bernard, C., Sibler, A., Kieffer, B., Miguet, L., Potier, N., Van Dorsselaer, A., Weiss, E.

Combining inducible protein overexpression with NMR-grade triple isotope labeling in the cyanobacterium *Anabaena* sp. PCC.

Biotechniques, **39**, 405-411, (2005).

281. Hazemann, I., Dauvergne, M., Blakeley, M., Meilleur, F., Haertlein, M., Van Dorsselaer, A., Mitschler, A., Myles, D., Podjarny, A.

High-resolution neutron protein crystallography with radically small crystal volumes: application of perdeuteration to human aldose reductase.

Acta Crystallogr D Biol Crystallogr, **61**, 1413-17, (2005).

280. Hahn, U., Elhabiri, M., Trabolsi, A., Herschbach, H., Leize, E., Van Dorsselaer, A., Albrecht-Gary, A., Nierengarten, J.

Supramolecular Click Chemistry with a Bisammonium-C60 Substrate and a Ditopic Crown Ether Host.

Angew. Chem. int., **44**, 5338-5341, (2005).

279. Chevreux, G., Potier, N., Van Dorsselaer, A., Bahloul, A., Houdusse, A., Wells, A., Sweeney, H. L.

Electrospray Ionization Mass Spectrometry Studies of Noncovalent Myosin VI Complexes Reveal a New Specific Calmodulin Binding Site.

J Am Soc Mass Spectrom, **16**, 1367-1376, (2005).

278. Morelle, W., Slomianny, M.-C., Diemer, H., Schaeffer, C., van Dorsselaer, A., Michalski, J.-C.

Structural characterization of 2-aminobenzamidederivatized oligosaccharides using a matrix-assisted laser desorption/ionization two-stage time-of-flight tandem mass spectrometer.

Rapid Commun. Mass Spectrom., **19**, 2075-2084, (2005).

277. Janke, C., Rogowski, K., Wloga, D., Regnard, C., Kajava, A., Strub, J., Temurak, N., van Dijk, J., Boucher, D., van Dorsselaer, A., Suryavanshi, S., Gaertig, J., Edde, B.

Tubulin Polyglutamylase Enzymes Are Members of the TTL Domain Protein Family.

Science, **308**, 1758-1762, (2005).

276. Goumon, Y., Strub, J., Stefano, G. B., Van Dorsselaer, A., Aunis, D., Metz-Boutigue, M. H.

Characterization of a morphine-like molecule in secretory granules of chromaffin cells.

Med Sci Monit, **11**, MS31-34, (2005).

275. Colin, C., Leblanc, C., Gurvan, M., Wagner, E., Leize-Wagner, E., Van Dorsselaer, A., Potin, P.

Vanadium-dependent iodoperoxidases in *Laminaria digitata*, a novel biochemical function diverging from brown algal bromoperoxidases.

J Biol Inorg Chem, **10**, 156-166, (2005).

274. Beck, A., Bussat, M., Zorn, N., Robillard, V., Klinguer-Hamoura, C., Chenua, S., Goetsch, L., Corvaia, N., Van Dorsselaer, A., Haeuw, J.
Characterization by liquid chromatography combined with mass spectrometry of monoclonal anti-IGF-1 receptor antibodies produced in CHO and NS0 cells.
Journal of Chromatography B, **819**, 203-218, (2005).
273. Vincensini, L., Richert, S., Blisnick, T., Van Dorsselaer, A., Leize-Wagner, E., Rabilloud, T., Braun Breton, C.
Proteomic Analysis Identifies Novel Proteins of the Maurer's Clefts, a Secretory Compartment Delivering *Plasmodium falciparum* Proteins to the Surface of Its Host Cell.
Mol Cell Proteomics, **4**, 582-593, (2005).
272. Nominé, Y., Charbonnier, S., Miguet, L., Potier, N., Van Dorsselaer, A., Atkinson, R. A., Travé, G., Kieffer, B.
¹H and ¹⁵N resonance assignment, secondary structure and dynamic behaviour of the C-terminal domain of human papillomavirus oncoprotein E6.
Journal of Biomolecular NMR, **31**, 129-141, (2005).
271. Cauet, G., Strub, J., Leize, E., Wagner, E., Van Dorsselaer, A., Lusky, M.
Identification of the Glycosylation Site of the Adenovirus Type 5 Fiber Protein.
Biochem., **44**, 5453-5460, (2005).
270. Herbinière, J., Braquart-Varnier, C., Grève, P., Strub, J., Frère, J., Van Dorsselaer, A., Martin, G.
Armadillidin: a novel glycine-rich antibacterial peptide directed against gram-positive bacteria in the woodlouse *Armadillidium vulgare* (Terrestrial Isopod, Crustacean).
Dev Comp Immunol, **29**, 489-99, (2005).
269. Blasius, R., Nierengarten, H., Luhmer, M., Constant, J., Defrancq, E., Dumy, P., van Dorsselaer, A., Moucheron, C., Kirsch-DeMesmaeker, A.
Photoreaction of [Ru(hat)2phen]²⁺ with Guanosine-5'-Monophosphate and DNA: Formation of New Types of Photoadducts.
Chemistry, **11**, 1507-17, (2005).
268. Kamoun-Essghaier, S., Guizani, I., Strub, J., Van Dorsselaer, A., Mabrouk, K., Ouelhazi, L., Dellagi, K.
Proteomic Approach for Characterization of Immunodominant Membrane-Associated 30- to 36-Kilodalton Fraction Antigens of *Leishmania infantum* Promastigotes, Reacting with Sera from Mediterranean Visceral Leishmaniasis Patients.
Clin Diagn Lab Immunol, **12**, 310-320, (2005).
267. Blee, E., Summerer, S., Flenet, M., Rogniaux, H., Van Dorsselaer, A., Schuber, F.
Soybean Epoxide Hydrolase. Identification of the catalytic residues and probing of the reaction mechanism with secondary kinetic isotope effects.
Journal of Biological Chemistry, **280**, 6479-6487, (2005).
266. Delalande, F., Carapito, C., Brizard, J. P., Brugidou, C., Van Dorsselaer, A.
Multigenic families and proteomics: Extended protein characterization as a tool for paralog gene identification.
Proteomics, **5**, 450-460., (2005).
265. Vido, K., Diemer, H., Van Dorsselaer, A., Leize, E., Juillard, V., Gruss, A., Gaudu, P.
Roles of Thioredoxin Reductase during the Aerobic Life of *Lactococcus lactis*.
J Bacteriol., **187**, 601-610, (2005).