

Publication list 2006-2009

Articles in internationally reviewed journals

Vanoirbeek, E., Eelen, G., Verlinden, L., Marchal, K., Engelen, K., De Moor, B., Beullens, I., Marcelis, S., De Clercq, P., Bouillon, R., Verstuyf, A. (2009). Microarray analysis of MCF-7 breast cancer cells treated with 1,25-dihydroxyvitamin D3 or a 17-methyl-D-ring analog. *Anticancer Research*, 29(9), 3585-3590.

Kint, G., Sonck, K., Schoofs, G., De Coster, D., Vanderleyden, J., De Keersmaecker, S. (2009). 2D Proteome Analysis initiates new Insights on the Salmonella Typhimurium LuxS Protein. *BMC Microbiology*, 9(1), 198.

Sun, H., Lemmens, K., Van den Bulcke, T., Engelen, K., De Moor, B., Marchal, K. (2009). ViTraM: Visualization of Transcriptional Modules. *Bioinformatics*, 25(18), 2450-2451.

Pedreschi, R., Hertog, M., Robben, J., Lilley, K., Karp, N., Baggerman, G., Vanderleyden, J., Nicolai, B. (2009). Gel-based proteomics approach to the study of metabolic changes in pear tissue during storage. *Journal of Agricultural and Food Chemistry*, 57(15), 6997-7004.

Francois, I., Cammue, B., Bresseleers, S., Fleuren, H., Hoornaert, G., Mehta, V., Modha, S., Van der Eycken, E., Thevissen, K. (2009). Synthesis and fungicidal activity of 3,5-dichloropyrazin-2(1H)-one derivatives. *Bioorganic & medicinal chemistry letters*, 19(15), 4064-4066.

De Meulenaere, E., Asselberghs, I., de Wergifosse, M., Botek, E., Spaepen, S., Champagne, B., Vanderleyden, J., Clays, K. (2009). Second-order nonlinear optical properties of fluorescent proteins for second-harmonic imaging. *Journal of Materials Chemistry*, 19, art.nr. DOI: 10.1039/b907789h, 7514-7519.

Lebeer, S., Verhoeven, T., Francius, G., Schoofs, G., Lambrichts, I., Dufrêne, Y., Vanderleyden, J., De Keersmaecker, S. (2009). Identification of a gene cluster for the biosynthesis of a longgalactose-rich exopolysaccharide in *Lactobacillus rhamnosus* GG and functional analysis of the priming glycosyltransferase. *Applied and Environmental Microbiology*, 75(11), 3554-3563.

Van Dommelen, A., Croonenborghs, A., Spaepen, S., Vanderleyden, J. (2009). Wheat growth promotion through inoculation with an ammonium-excreting mutant of *Azospirillum brasilense*. *Biology and Fertility of Soils*, 45(5), 549-553.

Van Dommelen, A., Spaepen, S., Vanderleyden, J. (2009). Identification of the glutamine synthetase adenylyltransferase of *Azospirillum brasilense*. *Research in Microbiology*, 160(3), 205-212.

Sonck, K., Kint, G., Schoofs, G., Vander Wauven, C., Vanderleyden, J., De Keersmaecker, S. (2009). The proteome of *Salmonella Typhimurium* grown under in vivo-mimicking conditions. *Proteomics*, 9(3), 565-579.

Joshi, A., De Smet, R., Marchal, K., Van de Peer, Y., Michoel, T. (2009). Module networks revisited: computational assessment of model predictions. *Bioinformatics*, 25(4), 490-496.

Spaepen, S., Das, F., Luyten, E., Michiels, J., Vanderleyden, J. (2009). Indole-3-acetic acid-regulated genes in *Rhizobium etli* CNPAF512. *FEMS Microbiology Letters*, 291(2), 195-200.

Thilakarathne, P., Verbeke, G., Engelen, K., Marchal, K. (2009). A Nonlinear Mixed-Effects Model for Estimating Calibration Intervals for Unknown Concentrations in Two-Color Microarray Data with Spike-Ins. *Statistical Applications in Genetics and Molecular Biology*, 8(1), art.nr. 5, -.

Spaepen, S., Van Durme, J., Das, F., Maurer-Stroh, S., Rousseau, F., Schymkowitz, J., Vanderleyden, J. (2009). Brominated phenols as auxin-like molecules. *European Journal of Soil Biology*, 45(1), 81-87.

- Sun, H., De Bie, T., Storms, V., Fu, Q., Dhollander, T., Lemmens, K., Verstuyl, A., De Moor, B., Marchal, K. (2009). ModuleDigger: an itemset mining framework for the detection of cis-regulatory modules. *BMC Bioinformatics*, 10(1), S30.
- Cappuyns, A., Bernaerts, K., Vanderleyden, J., Van Impe, J. (2009). A dynamic model for diauxic growth, overflow metabolism and AI-2-mediated cell-cell communication of *Salmonella Typhimurium* based on systems biology concepts. *Biotechnology and Bioengineering*, 102(1), 280-293.
- Vercruysse, M., Fauvart, M., Cloots, L., Engelen, K., Thijs, I., Marchal, K., Michiels, J. (2009). Genome-wide detection of predicted non-coding RNAs in *Rhizobium etli* expressed during free-living and host-associated growth using a high-resolution tiling array. *BMC Genomics*.
- De Groote, V., Verstraeten, N., Fauvart, M., Kint, C., Verbeeck, A., Beullens, S., Cornelis, P., Michiels, J. (2009). Novel persistence genes in *Pseudomonas aeruginosa* identified by high-throughput screening. *Fems microbiology letters*, 297(1), 73-79.
- Thevissen, K., Marchand, A., Chaltin, P., Meert, E., Cammue, B. (2009). Antifungal carbazoles. *Current Medicinal Chemistry - Anti-Infective Agents*, 16(17), 2205-2211.
- Michael, T., De Smet, R., Joshi, A., Marchal, K., Van de Peer, Y. (2009). Reverse-engineering transcriptional modules from gene expression data. *Annals of the New York Academy of Sciences*, 1158, 36-43.
- Fauvart, M., Verstraeten, N., Dombrecht, B., Venmans, R., Beullens, S., Heusdens, C., Michiels, J. (2009). *Rhizobium etli* HrpW is a pectin-degrading enzyme and differs from phytopathogenic homologues in enzymically crucial tryptophan and glycine residues. *Microbiology (Reading, England)*, 155(Pt 9), 3045-3054.
- Ryan, R., Romeo, T., De Keersmaecker, S., Coulthurst, S. (2009). Nurturing scientific mutualism: a report from the 'Young Microbiologists Mini-Symposium on microbe signalling, organisation and pathogenesis'. *Molecular microbiology*, 73, 760-774.
- Lemmens, K., De Bie, T., Dhollander, T., De Keersmaecker, S., Thijs, I., Schoofs, G., De Weerd, A., De Moor, B., Vanderleyden, J., Collado-Vides, J., Engelen, K., Marchal, K. (2009). DISTILLER: a data integration framework to reveal condition dependency of complex regulons in *Escherichia coli*. *Genome Biology (Online Edition)*, 10(3), R27.
- François, I., Thevissen, K., Pellens, K., Meert, E., Heeres, J., Freyne, E., Croesemans, E., Viellevoe, M., Deroose, F., Martinez Gonzalez, S., Pastor, J., Corens, D., Meerpoel, L., Borgers, M., Ausma, J., Dispersyn, G., Cammue, B. (2009). Design and Synthesis of a Series of Piperazine-1-carboxamide Derivatives with Antifungal Activity Resulting from Accumulation of Endogenous Reactive Oxygen Species. *ChemMedChem*, 4(10), 1714-1721.
- Kankainen, M., Paulin, L., Tynkkynen, S., von Ossowski, I., Reunanen, J., Partanen, P., Satokari, R., Vesterlund, S., Hendrickx, A., Lebeer, S., De Keersmaecker, S., Vanderleyden, J., Hämäläinen, T., Laukkanen, S., Salovuori, N., Ritari, J., Alatalo, E., Korpela, R., Mattila-Sandholm, T., Lassig, A., Hatakka, K., Kinnunen, K., Karjalainen, H., Saxelin, M., Laakso, K., Surakka, A., Palva, A., Salusjärvi, T., Auvinen, P., de Vos, W. (2009). Comparative genomic analysis of *Lactobacillus rhamnosus* GG reveals pili containing a human-mucus binding protein. *Proceedings of the National Academy of Sciences of the United States of America*, 106(40), 17193-17198.
- Fadda, A., Fierro, A., Lemmens, K., Monsieurs, P., Engelen, K., Marchal, K. (2009). Inferring the transcriptional network of *Bacillus subtilis*. *Molecular Biosystems*, accepted.
- François, I., Cammue, B., Bresseleers, S., Fleuren, H., Hoornaert, G., Mehta, V., Modha, S., Van der Eycken, E., Thevissen, K. (2009). Synthesis and fungicidal activity of 3,5-dichloropyrazin-2(1H)-one derivatives. *Bioorganic & Medicinal Chemistry Letters*, 19, 4064-4066.
- Francius, G., Alsteens, D., Dupres, V., Lebeer, S., De Keersmaecker, S., Vanderleyden, J., Gruber, H., Dufrene, Y. (2009). Stretching polysaccharides on live cells using single molecule force spectroscopy. *Nature Protocols*, 4(6), 939-946.

- Aerts, A., Zabrocki, P., Govaert, G., Mathys, J., Carmona-Gutierrez, D., Madeo, F., Winderickx, J., Cammue, B., Thevissen, K. (2009). Mitochondrial dysfunction leads to reduced chronological lifespan and increased apoptosis in yeast. *FEBS Letters*, 583, 113-117.
- François, I., Bink, A., Vandercappellen, J., Ayscough, K., Toulmay, A., Schneider, R., van Gysegem, E., Van den Mooter, G., Borgers, M., Vandenbosch, D., Coenye, T., Cammue, B., Thevissen, K. (2009). Membrane rafts are involved in intracellular miconazole accumulation. *Journal of Biological Chemistry*, 284(47), 32680-32685.
- Spaepen, S., Vanderleyden, J., Okon, Y. (2009). Plant growth-promoting actions of rhizobacteria. *Advances in Botanical Research*, 51, art.nr. 7, 283-320.
- Lemmens, K., De Bie, T., Dhollander, T., Monsieurs, P., De Moor, B., Collado-Vides, J., Engelen, K., Marchal, K. (2009). The condition-dependent transcriptional network in Escherichia coli. *Annals of the New York Academy of Sciences*, 1158, 29-35.
- Rediers, H., Vanderleyden, J., De Mot, R. (2009). Nitrate respiration in Pseudomonas stutzeri A15 and its involvement in rice and wheat root colonization. *Microbiological Research*, 164(4), 461-468.
- Lebeer, S., Vanderleyden, J., De Keersmaecker, S. (2009). Host interactions of probiotic bacterial surface molecules: comparison with commensals and pathogens. *Nature Reviews. Microbiology*, accepted.
- Aerts, A., Carmona-Gutierrez, D., Lefevre, S., Govaert, G., François, I., Madeo, F., Santos, R., Cammue, B., Thevissen, K. (2009). The antifungal plant defensin RsAFP2 from radish induces apoptosis in a metacaspase independent way in Candida albicans. *FEBS Letters*, 583, 2513-2516.
- Smets, B., De Snijder, P., Engelen, K., Joossens, E., Ghillebert, R., Thevissen, K., Marchal, K., Winderickx, J. (2008). Genome-wide expression analysis reveals TORC1-dependent and -independent functions of Sch9. *FEMS Yeast Research*, 8(8), 1276-1288.
- Thevissen, K., Madeo, F., Ludovico, P., Cammue, B., Winderickx, J. (2008). Joined in death: Highlights of the Sixth International Meeting on Yeast Apoptosis in Leuven, Belgium, 30 April-4 May 2008. *Yeast*, 25(12), 927-934.
- Tavares, P., Thevissen, K., Cammue, B., François, I., Barreto-Bergter, E., Taborda, C., Marques, A., Rodrigues, M., Nimrichter, L. (2008). In Vitro Activity of the Antifungal Plant Defensin RsAFP2 against Candida Isolates and Its In Vivo Efficacy in Prophylactic Murine Models of Candidiasis. *Antimicrobial Agents and Chemotherapy*, 52(12), 4522-4525.
- Lebeer, S., Vanderleyden, J., De Keersmaecker, S. (2008). Genes and molecules of Lactobacilli supporting probiotic action. *Microbiology and Molecular Biology Reviews*, 72(4), 728-764.
- Spaepen, S., Dobbelaere, S., Croonenborghs, A., Vanderleyden, J. (2008). Effects of Azospirillum brasilense indole-3-acetic acid production on inoculated wheat plants. *Plant and Soil*, 312(1-2), 15-23.
- Janssens, J., Steenackers, H., Robijns, S., Gellens, E., Levin, J., Zhao, H., Hermans, K., De Coster, D., Verhoeven, T., Marchal, K., Vanderleyden, J., De Vos, D., De Keersmaecker, S. (2008). Brominated furanones inhibit biofilm formation by Salmonella enterica serovar Typhimurium. *Applied and Environmental Microbiology*, 74(21), 6639-6648.
- Remans, R., Ramaekers, L., Schelkens, S., Hernandez, G., Garcia, A., Reyes, J., Mendez, N., Toscano, V., Mulling, M., Galvez, L., Vanderleyden, J. (2008). Effect of Rhizobium-Azospirillum coinoculation on nitrogen fixation and yield of two contrasting Phaseolus vulgaris L. genotypes cultivated across different environments in Cuba. *Plant and Soil*, 312(1-2), 25-37.
- González Mosquera, D., Kilonda, A., Toppet, S., Compennolle, F., Dehaen, W., François, I., Cammue, B., Cuéllar Cuéllar, A. (2008). New flavonoids from Boldoa purpurascens cav. *Planta medica*, 74(12), 1468-1473.
- Verstraeten, N., Braeken, K., Debkumari, B., Fauvart, M., Fransaeer, J., Vermant, J., Michiels, J. (2008). Living on a surface: swarming and biofilm formation. *Trends in microbiology*, 16(10), 496-506.

- Janssens, J., De Keersmaecker, S., De Vos, D., Vanderleyden, J. (2008). Small molecules for interference with cell-cell-communication systems in gram-negative bacteria. *Current Medicinal Chemistry*, 15(21), 2144-2156.
- Francius, G., Lebeer, S., Alsteens, D., Wildling, L., Gruber, H., Hols, P., De Keersmaecker, S., Vanderleyden, J., Dufrière, Y. (2008). Detection, localization, and conformational analysis of single polysaccharide molecules on live bacteria. *ACS Nano*, 2(9), 1921-1929.
- Lebeer, S., Claes, I., Verhoeven, T., Shen, C., Lambrichts, I., Ceuppens, J., Vanderleyden, J., De Keersmaecker, S. (2008). Impact of luxS and suppressor mutations on the gastrointestinal transit of *Lactobacillus rhamnosus* GG. *Applied and Environmental Microbiology*, 74(15), 4711-4718.
- Fauvart, M., Michiels, J. (2008). Rhizobial secreted proteins as determinants of host specificity in the rhizobium-legume symbiosis. *FEMS microbiology letters*, 285(1), 1-9.
- Eelen, G., Vanden Bempt, I., Verlinden, L., Drijkoningen, M., Smeets, A., Neven, P., Christiaens, M., Marchal, K., Bouillon, R., Verstuyf, A. (2008). Expression of the BRCA1-interacting protein Brip1/BACH1/FANCJ is driven by E2F and correlates with human breast cancer malignancy. *Oncogene*, 27(30), 4233-4241.
- Thirunavukkarasu, N., Mishra, M., Spaepen, S., Vanderleyden, J., Gross, C., Tripathi, A. (2008). An extra-cytoplasmic function sigma factor and anti-sigma factor control carotenoid biosynthesis in *Azospirillum brasilense*. *Microbiology*, 154, 2096-2105.
- Ormeño-Orrillo, E., Rosenblueth, M., Luyten, E., Vanderleyden, J., Martínez-Romero, E. (2008). Mutations in lipopolysaccharide biosynthetic genes impair maize rhizosphere and root colonization of *Rhizobium tropici* CIAT899. *Environmental Microbiology*, 10(5), 1271-1284.
- Delauré, S., Van Hemelrijck, W., De Bolle, M., Cammue, B., De Coninck, B. (2008). Building up plant defense by breaking down proteins. *Plant science: an international journal of experimental plant biology*, 174, 375-385.
- Thorrez, L., Van Deun, K., Tranchevent, L., Van Lommel, L., Engelen, K., Marchal, K., Moreau, Y., Van Mechelen, I., Schuit, F. (2008). Using Ribosomal Protein genes as reference : a tale of caution. *PLoS One*, 3(3), e1854.
- Gevaert, O., Pochet, N., De Smet, F., Engelen, K., Van Gorp, T., Amant, F., De Moor, B., Timmerman, D., Vergote, I. (2008). Expression profiling to predict the clinical behaviour of ovarian cancer fails independent evaluation. *BMC Cancer*, 8(1), 18-18.
- Fierro Gutiérrez, A., Thuret, R., Engelen, K., Bernot, G., Marchal, K., Pollet, N. (2008). Evaluation of time profile reconstruction from complex two-color microarray designs. *BMC Bioinformatics*, 9.
- Remans, R., Beebe, S., Blair, M., Manrique, G., Tovar, E., Rao, I., Croonenborghs, A., Torres Gutierrez, R., El-Howeity, M., Michiels, J., Vanderleyden, J. (2008). Physiological and genetic analysis of root responsiveness to auxin-producing plant growth-promoting bacteria in common bean (*Phaseolus vulgaris* L.). *Plant and Soil*, 302(1-2), 149-161.
- Braeken, K., Daniels, R., Vos, K., Fauvart, M., Debkumari, B., Vanderleyden, J., Michiels, J. (2008). Genetic Determinants of Swarming in *Rhizobium etli*. *Microbial Ecology*, 55(1), 54-64.
- Braeken, K., Fauvart, M., Vercruyssen, M., Beullens, S., Lambrichts, I., Michiels, J. (2008). Pleiotropic effects of a rel mutation on stress survival of *Rhizobium etli* CNPAF512. *BMC Microbiology*, 8, artnr 219.
- Thevissen, K., Hillaert, U., Meert, E., Chow, K., Cammue, B., Van Calenbergh, S., François, I. (2008). Fungicidal activity of truncated analogues of dihydrosphingosine. *Bioorganic & medicinal chemistry letters*, 18, 3728-3730.
- Fierro, A., Vandenbussche, F., Engelen, K., Van de Peer, Y., Marchal, K. (2008). Meta analysis of gene expression data within and across species. *Current Genomics*, 9, 525-534.
- Fredslund, L., Sniegowski, K., Wick, L., Jacobsen, C., De Mot, R., Springael, D. (2008). Surface motility

of polycyclic aromatic hydrocarbon (PAH)-degrading mycobacteria. *Research in microbiology*, 159, 255-262.

Van Leemput, K., Van den Bulcke, T., Dhollander, T., De Moor, B., Marchal, K., van Remortel, P. (2008). Exploring the operational characteristics of inference algorithms for transcriptional networks by means of synthetic data. *Artificial Life*, 14(1), 49-63.

Aerts, A., Zabrocki, P., François, I., Carmona-Gutierrez, D., Govaert, G., Mao, C., Smets, B., Madeo, F., Winderickx, J., Cammue, B., Thevissen, K. (2008). Ydc1p ceramidase triggers organelle fragmentation, apoptosis and accelerated ageing in yeast. *Cellular and molecular life sciences*, 65(12), 1933-1942.

Aerts, A., François, I., Cammue, B., Thevissen, K. (2008). The mode of antifungal action of plant, insect and human defensins. *Cellular and molecular life sciences*, 65(13), 2069-2079.

Sels, J., Mathys, J., De Coninck, B., Cammue, B., De Bolle, M. (2008). Plant pathogenesis-related (PR) proteins: a focus on PR peptides. *Plant physiology and biochemistry*, 46, 941-950.

Marchal, K., De Keersmaecker, S. (2008). Bacterial networking. *Genome Biology (Online Edition)*, 9(11), 327.1-327.3.

Versées, W., Spaepen, S., Wood, M., Leeper, F., Vanderleyden, J., Steyaert, J. (2007). Molecular Mechanism of Allosteric Substrate Activation in a Thiamine Diphosphate-dependent Decarboxylase. *Journal of Biological Chemistry*, 282(48), 35269-35278.

Lebeer, S., Verhoeven, T., Perea Vélez, M., Vanderleyden, J., De Keersmaecker, S. (2007). Impact of environmental and genetic factors on biofilm formation by the probiotic strain *Lactobacillus rhamnosus* GG. *Applied and Environmental Microbiology*, 73(21), 6768-6775.

Remans, R., Croonenborghs, A., Torres Gutierrez, R., Michiels, J., Vanderleyden, J. (2007). Effects of plant growth-promoting rhizobacteria on nodulation of *Phaseolus vulgaris* L. are dependent on plant P nutrition. *European Journal of Plant Pathology*, 119(3), 341-351.

Spaepen, S., Versées, W., Gocke, D., Pohl, M., Steyaert, J., Vanderleyden, J. (2007). Characterization of phenylpyruvate decarboxylase, involved in auxin production of *Azospirillum brasilense*. *Journal of Bacteriology*, 189(21), 7626-7633.

Perea Vélez, M., De Keersmaecker, S., Vanderleyden, J. (2007). Adherence factors of *Lactobacillus* in the human gastrointestinal tract. *FEMS Microbiology Letters*, 276(2), 140-148.

Dhollander, T., Sheng, Q., Lemmens, K., De Moor, B., Marchal, K., Moreau, Y. (2007). Query-driven module discovery in microarray data. *Bioinformatics*, 23(19), 2573-2580.

Velez, M., Hermans, K., Verhoeven, T., Lebeer, S., Vanderleyden, J., De Keersmaecker, S. (2007). Identification and characterization of starter lactic acid bacteria and probiotics from Columbian dairy products. *Journal of Applied Microbiology*, 103(3), 666-674.

Cappuyns, A., Bernaerts, K., Smets, I., Ona, O., Prinsen, E., Vanderleyden, J., Van Impe, J. (2007). Optimal fed batch experiment design for estimation of Monod kinetics of *Azospirillum brasilense*: from theory to practice. *Biotechnology Progress*, 23(5), 1074-1081.

Fauvart, M., Braeken, K., Daniels, R., Vos, K., Ndayizeye, M., Noben, J., Robben, J., Vanderleyden, J., Michiels, J. (2007). Identification of a novel glyoxylate reductase supports phylogeny-based enzymatic substrate specificity prediction. *Biochimica et Biophysica Acta. Proteins and Proteomics*, 1774(9), 1092-1098.

Sels, J., Delauré, S., Aerts, A., Proost, P., Cammue, B., De Bolle, M. (2007). Use of a PTGS-MAR expression system for efficient in planta production of bioactive *Arabidopsis thaliana* plant defensins. *Transgenic Research*, 16(4), 531-538.

Verlinden, L., Vanden Bempt, I., Eelen, G., Drijkoningen, M., Verlinden, I., Marchal, K., Peeters, C., Christiaens, M., Michiels, L., Bouillon, R., Verstuyf, A. (2007). The E2F-Regulated Gene Chk1 Is Highly Expressed in Triple-Negative Estrogen Receptor /Progesterone Receptor /HER-2 Breast Carcinomas.

Cancer Research, 67(14), 6574-6581.

Nagarajan, T., Vanderleyden, J., Tripathi, A. (2007). Identification of salt stress inducible genes that control cell envelope related functions in *Azospirillum brasilense* Sp7. *Molecular Genetics and Genomics*, 278(1), 43-51.

Spaepen, S., Vanderleyden, J., Remans, R. (2007). Indole-3-acetic acid in microbial and microorganism-plant signaling. *FEMS Microbiology Reviews*, 31(4), 425-448.

Zhao, H., Engelen, K., De Moor, B., Marchal, K. (2007). CALIB: a Bioconductor package for estimating absolute expression levels from two-color microarray data. *Bioinformatics*, 23(13), 1700-1701.

Vos, K., Braeken, K., Fauvart, M., Ndayizeye, M., Verhaert, J., Zachurzok, S., Lambrichts, I., Michiels, J. (2007). The *Rhizobium etli* opt operon is required for symbiosis and stress resistance. *Environmental microbiology*, 9(7), 1665-1674.

Thijs, I., De Keersmaecker, S., Fadda, A., Engelen, K., Zhao, H., McClelland, M., Marchal, K., Vanderleyden, J. (2007). Delineation of the *Salmonella enterica* serovar typhimurium HilA regulon through genome-wide location and transcript analysis. *Journal of Bacteriology*, 189(13), 4587-4596.

Thevissen, K., Ayscough, K., Aerts, A., Du, W., De Brucker, K., Meert, E., Ausma, J., Borgers, M., Cammue, B., François, I. (2007). Miconazole induces changes in actin cytoskeleton prior to reactive oxygen species induction in yeast. *Journal of Biological Chemistry*, 282(30), 21592-21597.

Pedreschi Plasencia, R., Vanstreels, E., Carpentier, S., Hertog, M., Lammertyn, J., Robben, J., Noben, J., Swennen, R., Vanderleyden, J., Nicolaï, B. (2007). Proteomic analysis of core breakdown disorder in Conference pears (*Pyrus communis* L.). *Proteomics*, 7(12), 2083-2099.

Vélez, M., Verhoeven, T., Draing, C., Von Aulock, S., Pfitzenmaier, M., Geyer, A., Lambrichts, I., Grangette, C., Pot, B., Vanderleyden, J., De Keersmaecker, S. (2007). Functional Analysis of D-Alanylation of Lipoteichoic Acid in the Probiotic Strain *Lactobacillus rhamnosus* GG. *Applied and Environmental Microbiology*, 73(11), 3595-3604.

Van Deun, K., Marchal, K., Heiser, W., Engelen, K., Van Mechelen, I. (2007). Joint mapping of genes and conditions via multidimensional unfolding analysis. *BMC Bioinformatics*, 8(181).

Benhassine, T., Fauvart, M., Vanderleyden, J., Michiels, J. (2007). Interaction of an IHF-like protein with the *Rhizobium etli* nifA promoter. *FEMS Microbiology Letters*, 271(1), 20-26.

Versées, W., Spaepen, S., Vanderleyden, J., Steyaert, J. (2007). The crystal structure of phenylpyruvate decarboxylase from *Azospirillum brasilense* at 1.5 Å resolution. Implications for its catalytic and regulatory mechanism. *FEBS Journal*, 274(9), 2363-2375.

De Mot, R., Schoofs, G., Nagy, I. (2007). Proteome analysis of *Streptomyces coelicolor* mutants affected in the proteasome system reveals changes in stress-responsive proteins. *Archives of Microbiology*, 188(3), 257-271.

Verlinden, L., Eelen, G., Van Hellefont, R., Engelen, K., Beullens, I., Van Camp, M., Marchal, K., Mathieu, C., Bouillon, R., Verstuyf, A. (2007). 1 α ,25-dihydroxyvitamin D(3)-induced down-regulation of the checkpoint proteins. Chk1 and Claspin, is mediated by the pocket proteins. *Journal of Steroid Biochemistry and Molecular Biology*, 103(3-5), 411-415.

Lievens, B., Claes, L., Vanachter, A., Krause, M., Cammue, B., Thomma, B. (2007). Assessing populations of a disease suppressive microorganism and plant pathogen using DNA arrays. *Plant science: an international journal of experimental plant biology*, 172, 505-515.

Lebeer, S., De Keersmaecker, S., Verhoeven, T., Fadda, A., Marchal, K., Vanderleyden, J. (2007). Functional analysis of luxS in the probiotic strain *Lactobacillus rhamnosus* GG reveals a central metabolic role important for growth and biofilm formation. *Journal of Bacteriology*, 189(3), 860-871.

Janssens, J., Metzger, K., Daniels, R., Ptacek, D., Verhoeven, T., Habel, L., Vanderleyden, J., De Vos, D., De Keersmaecker, S. (2007). Synthesis of N-acyl homoserine lactone analogues reveals strong

activators of SdiA, the *Salmonella enterica* serovar Typhimurium LuxR homologue. *Applied and Environmental Microbiology*, 73(2), 535-544.

Remans, R., Snoeck, C., Verreth, C., Croonenborghs, A., Luyten, E., Ndayizeye, M., Martinez-Romero, E., Michiels, J., Vanderleyden, J. (2007). Inactivation of the nodH gene in *Sinorhizobium* sp. BR816 enhances symbiosis with *Phaseolus vulgaris* L. *FEMS Microbiology Letters*, 266(2), 210-217.

Aerts, A., Thevissen, K., Bresseleers, S., Sels, J., Wouters, P., Cammue, B. (2007). *Arabidopsis thaliana* plants expressing human beta-defensin-2 are more resistant to fungal attack: functional homology between plant and human defensins. *Plant Cell Rep.*, 26(8), 1391-1398.

De Mot, R. (2007). Actinomycete-like proteasomes in a Gram-negative bacterium. *Trends in microbiology*, 15, 335-338.

Breugelmans, P., D'Huys, P., De Mot, R., Springael, D. (2007). Characterization of novel linuron-mineralizing bacterial consortia enriched from long-term linuron-treated agricultural soils. *FEMS microbiology ecology*, 62, 374-385.

Michoel, T., Maere, S., Bonnet, E., Joshi, A., Saeys, Y., Van den Bulcke, T., Van Leemput, K., van Remortel, P., Kuiper, M., Marchal, K., Van de Peer, Y. (2007). Validating module network learning algorithms using simulated data. *BMC Bioinformatics*, 8 Suppl 2, S5.

De Bolle, M., Butaye, K., Goderis, I., Wouters, P., Jacobs, A., Delauré, S., Depicker, A., Cammue, B. (2007). The influence of matrix attachment regions on transgene expression in *Arabidopsis thaliana* wild type and gene silencing mutants. *Plant Mol.Biol.*, 63(4), 533-543.

Aerts, A., François, I., Meert, E., Li, Q., Cammue, B., Thevissen, K. (2007). The antifungal activity of RsAFP2, a plant defensin from *Raphanus sativus*, involves the induction of reactive oxygen species in *Candida albicans*. *J.Mol.Microb.Biotech.*, 13(4), 243-247.

Thevissen, K., Kristensen, H., Thomma, B., Cammue, B., François, I. (2007). Therapeutic potential of antifungal plant and insect defensins. *Drug discovery today*, 12(21-22), 966-971.

De Keersmaecker, S., Thijs, I., Vanderleyden, J., Marchal, K. (2006). Integration of omics data: how well does it work for bacteria?. *Molecular Microbiology*, 62(5), 1239-1250.

Daniels, R., Reynaert, S., Hoekstra, H., Verreth, C., Janssens, J., Braeken, K., Fauvart, M., Beullens, S., Heusdens, C., Lambrichts, I., De Vos, D., Vanderleyden, J., Vermant, J., Michiels, J. (2006). Quorum signal molecules as biosurfactants affecting swarming in *Rhizobium etli*. *Proceedings of the National Academy of Sciences of the United States of America*, 103(40), 14965-14970.

Van den Bulcke, T., Lemmens, K., Van de Peer, Y., Marchal, K. (2006). Inferring transcriptional networks by mining 'omics' data. *Current Bioinformatics*, 1(3), 301-313.

De Keersmaecker, S., Braeken, K., Verhoeven, T., Perea Vélez, M., Lebeer, S., Vanderleyden, J., Hols, P. (2006). Flow cytometric testing of green fluorescent protein-tagged *Lactobacillus rhamnosus* GG for response to defensins. *Applied and Environmental Microbiology*, 72(7), 4923-4930.

Remans, R., Spaepen, S., Vanderleyden, J. (2006). Auxin signaling in plant defense. *Science*, 313(5784), 171-171.

Thevissen, K., François, I., Winderickx, J., Pannecouque, C., Cammue, B. (2006). Ceramide involvement in apoptosis and apoptotic diseases. *Mini reviews in medicinal chemistry*, 6(6), 699-709.

De Keersmaecker, S., Verhoeven, T., Desair, J., Marchal, K., Vanderleyden, J., Nagy, I. (2006). Strong antimicrobial activity of *Lactobacillus rhamnosus* GG against *Salmonella typhimurium* is due to accumulation of lactic acid. *FEMS Microbiology Letters*, 259(1), 89-96.

Engelen, K., Naudts, B., De Moor, B., Marchal, K. (2006). A calibration method for estimating absolute expression levels from microarray data. *Bioinformatics*, 22(10), 1251-1258.

Aerts, A., François, I., Bammens, L., Cammue, B., Smets, B., Winderickx, J., Accardo, S., De Vos, D.,

Thevissen, K. (2006). Level of M(IP)2C sphingolipid affects plant defensin sensitivity, oxidative stress resistance and chronological life-span in yeast. *FEBS Letters*, 580(7), 1903-1907.

De Keersmaecker, S., Sonck, K., Vanderleyden, J. (2006). Let LuxS speak up in AI-2 signaling. *Trends in Microbiology*, 14(3), 114-119.

De Smet, F., Pochet, N., Engelen, K., Van Gorp, T., Van Hummelen, P., Marchal, K., Amant, F., Timmerman, D., De Moor, B., Vergote, I. (2006). Predicting the clinical behavior of ovarian cancer from gene expression profiles. *International Journal of Gynecological Cancer*, 16, 147-151.

Monsieurs, P., Thijs, G., Fadda, A., De Keersmaecker, S., Vanderleyden, J., De Moor, B., Marchal, K. (2006). More robust detection of motifs in coexpressed genes by using phylogenetic information. *BMC Bioinformatics*, 7(1), 160.

Denolet, E., De Gendt, K., Allemeersch, J., Engelen, K., Marchal, K., Van Hummelen, P., Tan K. A., L., Sharpe R., M., Saunders P. T., K., Swinnen, J., Verhoeven, G. (2006). The effect of a Sertoli cell-selective knockout of the androgen receptor on testicular gene expression in prepubertal mice. *Molecular Endocrinology*, 20(2), 321-334.

Braeken, K., Moris, M., Daniels, R., Vanderleyden, J., Michiels, J. (2006). New horizons for (p)ppGpp in bacterial and plant physiology. *Trends in Microbiology*, 14(1), 45-54.

Lievens, B., Claes, L., Vanachter, A., Cammue, B., Thomma, B. (2006). Detecting single nucleotide polymorphisms using DNA arrays for plant pathogen diagnosis. *FEMS microbiology letters*, 255(1), 129-139.

Van den Bulcke, T., Van Leemput, K., Naudts, B., van Remortel, P., Ma, H., Verschoren, A., De Moor, B., Marchal, K. (2006). SynTRen: a generator of synthetic gene expression data for design and analysis of structure learning algorithms. *BMC Bioinformatics*, 7(43), 7-43.

Van Hemelrijck, W., Wouters, P., Brouwer, M., Windelinckx, A., Goderis, I., De Bolle, M., Thomma, B., Cammue, B., Delauré, S. (2006). The Arabidopsis defence response mutant *esa1* as a model to discover novel resistance traits against Fusarium diseases. *Plant Science*, 171(5), 585-595.

François, I., Cammue, B., Borgers, M., Ausma, J., Dispersyn, G., Thevissen, K. (2006). Azoles: mode of antifungal action and resistance development. Effect of miconazole on endogenous reactive oxygen species production in *Candida albicans*. *Anti-Infective Agents in Medicinal Chemistry*, 5, 3-13.

Lemmens, K., Dhollander, T., De Bie, T., Monsieurs, P., Engelen, K., Smets, B., Winderickx, J., De Moor, B., Marchal, K. (2006). Inferring transcriptional modules from ChIP-chip, motif and microarray data. *Genome Biology (Online Edition)*, 7(5), R37.

Mirouze, M., Sels, J., Richard, O., Czernic, P., Loubet, S., Jacquier, A., François, I., Cammue, B., Lebrun, M., Berthomieu, P., Marquès, L. (2006). A putative novel role for plant defensins: a defensin from the zinc hyper-accumulating plant, *Arabidopsis halleri*, confers zinc tolerance. *The plant journal*, 47(3), 329-342.

Broekaert, W., Delauré, S., De Bolle, M., Cammue, B. (2006). The role of ethylene in host-pathogen interactions. *Annual Review of Phytopathology*, 44, 393-416.

Lievens, B., Brouwer, M., Vanachter, A., Cammue, B., Thomma, B. (2006). Real-time PCR for detection and quantification of fungal and oomycete tomato pathogens in plant and soil samples. *Plant Science*, 171(1), 155-165.

This list is generated from Lirias and contains data from Lirias as it is entered and validated by the researcher.