



GC-TOFMS Articles & Reference Materials

2012

- Abu Dawud, R., Schreiber, K., Schomburg, D., and Adjaye, J. (2012). Human embryonic stem cells and embryonal carcinoma cells have overlapping and distinct metabolic signatures. *PLoS ONE*, 7(6):e39896+.
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0039896>
- Araújo, W. L., Trofimova, L., Mkrtchyan, G., Steinhauser, D., Krall, L., Graf, A., Fernie, A. R., and Bunik, V. I. (2012). On the role of the mitochondrial 2-oxoglutarate dehydrogenase complex in amino acid metabolism. *Amino Acids*, pages 1–18.
<http://www.springerlink.com/content/y16653x38v260wjh/>
- Arnhard, K., Schmid, R., Kobold, U., and Thiele, R. (2012). Rapid detection and quantification of 35 benzodiazepines in urine by GC-TOF-MS. *Analytical and Bioanalytical Chemistry*, 403(3):755–768. <http://www.springerlink.com/content/j21t114q15121341/>
- Baumgartner, B. L. and Cooper, B. R. (2012). Evaluation of a tandem gas chromatography/time-of-flight mass spectrometry metabolomics platform as a single method to investigate the effect of starvation on whole-animal metabolism in rainbow trout (*oncorhynchus mykiss*). *The Journal of Experimental Biology*, 215(10):1627–1632. <http://jeb.biologists.org/content/215/10/1627>
- Budczies, J., Denkert, C., Muller, B., Brockmoller, S., Klauschen, F., Gyorffy, B., Dietel, M., Ehrenstein, C. R., Marten, U., Salek, R., Griffin, J., Hilvo, M., Oresic, M., Wohlgemuth, G., and Fiehn, O. (2012). Remodeling of central metabolism in invasive breast cancer compared to normal breast tissue - a GC-TOFMS based metabolomics study. *BMC Genomics*, 13(1):334+.
<http://www.biomedcentral.com/1471-2164/13/334>
- Businge, E., Brackmann, K., Moritz, T., and Egertsdotter, U. (2012). Metabolite profiling reveals clear metabolic changes during somatic embryo development of norway spruce (*picea abies*). *Tree Physiology*, 32(2):232–244.
<http://treephys.oxfordjournals.org/content/32/2/232>
- Buszewski, B., Ligor, T., Jeziorski, T., Wenda-Piesik, A., Walczak, M., and Rudnicka, J. (2012). Identification of volatile lung cancer markers by gas chromatography-mass spectrometry: comparison with discrimination by canines. *Analytical and Bioanalytical Chemistry*, 404(1):141–146. <http://www.springerlink.com/content/qm2mq76x47548980/>
- Cárdenas, M., Jiro, P., and Pekár, S. (2012). Selective olfactory attention of a specialised predator to intraspecific chemical signals of its prey. *Naturwissenschaften*, 99(8):597–605. <http://www.springerlink.com/content/902583332413441/>
- Carreno-Quintero, N., Acharjee, A., Maliepaard, C., Bachem, C. W., Mumm, R., Bouwmeester, H., Visser, R. G., and Keurentjes, J. J. (2012). Untargeted metabolic quantitative trait loci analyses reveal a relationship between primary metabolism and potato tuber quality. *Plant physiology*, 158(3):1306–1318. <http://www.plantphysiol.org/content/158/3/1306>
- Choe, S., Woo, S. H., Kim, D. W., Park, Y., Choi, H., Hwang, B. Y., Lee, D., and Kim, S. (2012). Development of a target component extraction method from GC-MS data with an in-house program for metabolite profiling. *Analytical Biochemistry*, 426(2):94–102.
<http://www.sciencedirect.com/science/article/pii/S0003269712002229>
- Chorell, E., Svensson, M. B., Moritz, T., and Antti, H. (2012). Physical fitness level is reflected by alterations in the human plasma metabolome. *Mol. BioSyst.*, 8(4):1187–1196. <http://pubs.rsc.org/en/Content/ArticleLanding/2012/MB/c2mb05428k>
- Duan, L.-X., Chen, T.-L., Li, M., Chen, M., Zhou, Y.-Q., Cui, G.-H., Zhao, A.-H., Jia, W., Huang, L.-Q., and Qi, X. (2012). Use of the metabolomics approach to characterize chinese medicinal material huangqi. *Molecular Plant*, 5(2):376–386.
http://pubget.com/paper/22138859/Use_of_the_metabolomics_approach_to_characterize_Chinese_medicinal_material_Huangqi
- Dunn, W. B., Brown, M., Worton, S. A., Davies, K., Jones, R. L., Kell, D. B., and Heazell, A. E. P. (2012a). The metabolome of human placental tissue: investigation of first trimester tissue and changes related to preeclampsia in late pregnancy. *Metabolomics*, 8(4):579–597. <http://www.springerlink.com/content/t77522340k2w8445/>
- Dunn, W. B., Summers, A., Brown, M., Goodacre, R., Lambie, M., Johnson, T., Wilkie, M., Davies, S., Topley, N., and Brenchley, P. (2012b). Proof-of-principle study to detect metabolic changes in peritoneal dialysis effluent in patients who develop encapsulating peritoneal sclerosis. *Nephrology Dialysis Transplantation*, 27(6):2502–2510.
http://pubget.com/paper/22294777/Proof_of_principle_study_to_detect_metabolic_changes_in_peritoneal_dialysis_effluent_in_patients_who_develop_encapsulating_peritoneal_sclerosis
- Eckert, A. J., Wegrzyn, J. L., Cumbie, W. P., Goldfarb, B., Huber, D. A., Tolstikov, V., Fiehn, O., and Neale, D. B. (2012). Association genetics of the loblolly pine (*pinus taeda*, pinaceae) metabolome. *New Phytologist*, 193(4):890–902.
[http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2012.04153.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance](http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2011.03976.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance)
- Florez-Sarasa, I., Araújo, W. L., Wallström, S. V., Rasmusson, A. G., Fernie, A. R., and Ribas-Carbo, M. (2012). Light-responsive metabolite and transcript levels are maintained following a dark-adaptation period in leaves of *arabidopsis thaliana*. *New Phytologist*, 195(1):136–148. <http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2012.04153.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Führs, H., Specht, A., Erban, A., Kopka, J., and Horst, W. J. (2012). Functional associations between the metabolome and manganese tolerance in vigna unguiculata. *Journal of Experimental Botany*, 63(1):329–340. <http://jxb.oxfordjournals.org/content/63/1/329>
- Gómez, M. J., Herrera, S., Solé, D., García-Calvo, E., and Fernández-Alba, A. R. (2012a). Spatio-temporal evaluation of organic contaminants and their transformation products along a river basin affected by urban, agricultural and industrial pollution. *Science of The Total Environment*, 420:134–145. <http://www.sciencedirect.com/science/article/pii/S0048969712000721>

- Gómez, S., Steinbrenner, A. D., Osorio, S., Schueller, M., Ferrieri, R. A., Fernie, A. R., and Orians, C. M. (2012b). From shoots to roots: transport and metabolic changes in tomato after simulated feeding by a specialist lepidopteran. *Entomol Exp Appl*, 144(1):101–111. <http://onlinelibrary.wiley.com/doi/10.1111/j.1570-7458.2012.01268.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Gómez-Cortés, P., Brenna, J. T., and Sacks, G. L. (2012). Production of isotopically labeled standards from a uniformly labeled precursor for quantitative volatile metabolomic studies. *Anal. Chem.*, 84(12):5400–5406. <http://pubs.acs.org/doi/abs/10.1021/ac300933d>
- Halter, D., Gouhen-Chollet, F., Gallien, S., Casiot, C., Hamelin, J., Gilard, F., Heintz, D., Schaeffer, C., Carapito, C., Van Dorsselaer, A., Tcherkez, G., Arsene-Ploetze, F., and Bertin, P. N. (2012). In situ proteo-metabolomics reveals metabolite secretion by the acid mine drainage bio-indicator, euglena mutabilis. *ISME J*, 6(7):1391–1402. http://pubget.com/paper/22237547/In_situ_proteo_metabolomics_reveals_metabolite_secretion_by_the_acid_mine_drainage_bio_indicator_Euglena_mutabilis
- Houshyani, B., Kabouw, P., Muth, D., Vos, R. C. H., Bino, R. J., and Bouwmeester, H. J. (2012). Characterization of the natural variation in *arabidopsis thaliana* metabolome by the analysis of metabolic distance. *Metabolomics*, 8(0):131–145. <http://www.springerlink.com/content/y02479670p744532/>
- Kalinová, B., Do Nascimento, R. R., Hoskovec, M., Mendonça, A. L., Silva, E. L., De Freitas, M. R. T., Cabral-Jr, C. R., Silva, C. E., Sant'Ana, A. E. G., and Svato, A. (2012). Identification of two components of the female sex pheromone of the sugarcane-borer diatraea *flavipennella* (lepidoptera: Crambidae). *Journal of Applied Entomology*, 136(3):203–211. <http://onlinelibrary.wiley.com/doi/10.1111/j.1439-0418.2011.01625.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Kim, S., Koo, I., Jeong, J., Wu, S., Shi, X., and Zhang, X. (2012). Compound identification using partial and semipartial correlations for gas Chromatography/Mass spectrometry data. *Anal. Chem.*, 84(15):6477–6487. <http://pubs.acs.org/doi/abs/10.1021/ac301350n>
- Kim, Y.-H. and Kim, K.-H. (2012). Ultimate detectability of volatile organic compounds: How much further can we reduce their ambient air sample volumes for analysis? *Anal. Chem.* <http://pubs.acs.org/doi/abs/10.1021/ac301792x>
- Kobayashi, S., Nagasawa, S., Yamamoto, Y., Donghyo, K., Bamba, T., and Fukusaki, E. (2012). Metabolic profiling and identification of the genetic varieties and agricultural origin of cnidium officinale and ligusticum chuanxiong. *Journal of Bioscience and Bioengineering*, 114(1):86–91. <http://www.sciencedirect.com/science/article/pii/S138917231200076X>
- Laulhé, S., Bogdanov, B., Johannes, L. M., Gutierrez, O., Harrison, J. G., Tantillo, D. J., Zhang, X., and Nantz, M. H. (2012). Fragmentation of oxime and silyl oxime ether odd-electron positive ions by the McLafferty rearrangement: new insights on structural factors that promote α,β fragmentation. *J. Mass. Spectrom.*, 47(6):676–686. <http://onlinelibrary.wiley.com/doi/10.1002/jms.2986/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Lee, D. Y., Park, J.-J., Barupal, D. K., and Fiehn, O. (2012). System response of metabolic networks in *chlamydomonas reinhardtii* to total available ammonium. *Molecular & Cellular Proteomics*. <http://www.mcponline.org/content/11/10/973>
- Lehmann, M., Laxa, M., Sweetlove, L. J., Fernie, A. R., and Obata, T. (2012). Metabolic recovery of *Arabidopsis thaliana* roots following cessation of oxidative stress. *Metabolomics*, 8(1):143–153. <http://www.springerlink.com/content/6h1177442u372355/>
- Li, Q. and Zhang, G.-F. (2012). Identification of n-hydroxy acid metabolites in electron impact ionization mass spectrometry. *Rapid Commun. Mass Spectrom.*, 26(11):1355–1362. <http://onlinelibrary.wiley.com/doi/10.1002/rcm.6233/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Li, X., Hansen, J., Zhao, X., Lu, X., Weigert, C., Häring, H.-U., Pedersen, B. K., Plomgaard, P., Lehmann, R., and Xu, G. (2012a). Independent component analysis in non-hypothesis driven metabolomics: Improvement of pattern discovery and simplification of biological data interpretation demonstrated with plasma samples of exercising humans. *Journal of Chromatography B*. <http://www.sciencedirect.com/science/article/pii/S1570023212003753>
- Li, Y., Ruan, Q., Li, Y., Ye, G., Lu, X., Lin, X., and Xu, G. (2012b). A novel approach to transforming a non-targeted metabolic profiling method to a pseudo-targeted method using the retention time locking gas chromatography/mass spectrometry-selected ions monitoring. *Journal of Chromatography A*, 1255:228–236. <http://www.sciencedirect.com/science/article/pii/S0021967312002026>
- Luedemann, A., Malotky, L., Erban, A., and Kopka, J. (2012). TagFinder: Preprocessing software for the fingerprinting and the profiling of gas Chromatography-Mass spectrometry based metabolome analyses plant metabolomics. volume 860 of *Methods in Molecular Biology*, chapter 16, pages 255–286. Humana Press, Totowa, NJ. <http://www.springerlink.com/content/j1m050r25432rv13/#section=1038704&page=1>
- Mo, F.-F., Qin, H.-H., Wang, X.-L., Shen, Z.-L., Xu, Z., Wang, K.-H., Cai, Y.-L., and Li, M. (2012). Acute hyperglycemia is related to gastrointestinal symptoms in motion sickness: An experimental study. *Physiology & Behavior*, 105(2):394–401. <http://www.sciencedirect.com/science/article/pii/S0031938411004197>
- Ni, Y., Qiu, Y., Jiang, W., Suttemyre, K., Su, M., Zhang, W., Jia, W., and Du, X. (2012). ADAP-GC 2.0: Deconvolution of coeluting metabolites from GC/TOF-MS data for metabolomics studies. *Anal. Chem.*, 84(15):6619–6629. <http://pubs.acs.org/doi/abs/10.1021/ac300898h>
- Ochi, H., Bamba, T., Naito, H., Iwatsuki, K., and Fukusaki, E. (2012a). Metabolic fingerprinting of hard and semi-hard natural cheeses using gas chromatography with flame ionization detector for practical sensory prediction modeling. *Journal of Bioscience and Bioengineering*, 114(5):506–511. <http://www.sciencedirect.com/science/article/pii/S1389172312002526>

- Ochi, H., Naito, H., Iwatsuki, K., Bamba, T., and Fukusaki, E. (2012b). Metabolomics-based component profiling of hard and semi-hard natural cheeses with gas chromatography/time-of-flight-mass spectrometry, and its application to sensory predictive modeling. *Journal of Bioscience and Bioengineering*, 113(6):751–758. <http://www.sciencedirect.com/science/article/pii/S1389172312000679>
- Ogawa, Y., Sakurai, N., Oikawa, A., Kai, K., Morishita, Y., Mori, K., Moriya, K., Fujii, F., Aoki, K., Suzuki, H., Ohta, D., Saito, K., and Shibata, D. (2012). High-Throughput cryopreservation of plant cell cultures for functional genomics. *Plant and Cell Physiology*, 53(5):943–952. <http://pcp.oxfordjournals.org/content/53/5/943>
- Omais, B., Charon, N., Courtiade, M., Ponthus, J., and Thiébaut, D. (2012a). A novel analytical approach for oxygen speciation in coal-derived liquids. *Fuel*. <http://www.sciencedirect.com/science/article/pii/S0016236112003316>
- Omais, B., Courtiade, M., Charon, N., Roullet, C., Ponthus, J., and Thiébaut, D. (2012b). Using gas chromatography to characterize a direct coal liquefaction naphtha. *Journal of Chromatography A*, 1226:61–70. <http://www.sciencedirect.com/science/article/pii/S0021967311010077>
- Osorio, S., Do, P. T., and Fernie, A. R. (2012). Profiling primary metabolites of tomato fruit with gas Chromatography/Mass spectrometry plant metabolomics. volume 860 of *Methods in Molecular Biology*, chapter 7, pages 101–109. Humana Press, Totowa, NJ. <http://www.springerlink.com/content/r7t2w886462w4ngn/#section=1038553&page=1>
- Pang, X. and Lewis, A. C. (2012). A microfluidic lab-on-chip derivatisation technique for the measurement of gas phase formaldehyde. *Anal. Methods*, 4(7):2013–2020. <http://pubs.rsc.org/en/Content/ArticleLanding/2012/AY/c2ay25028d>
- Qi, Y., Li, P., Zhang, Y., Cui, L., Guo, Z., Xie, G., Su, M., Li, X., Zheng, X., Qiu, Y., Liu, Y., Zhao, A., Jia, W., and Jia, W. (2012). Urinary metabolite markers of precocious puberty. *Molecular & Cellular Proteomics*, 11(1). <http://www.mcponline.org/content/11/1/M111.011072>
- Rehman, S., Xu, Y., Dunn, W. B., Day, P. J. R., Westerhoff, H. V., Goodacre, R., and Bayat, A. (2012). Dupuytren's disease metabolite analyses reveals alterations following initial short-term fibroblast culturing. *Mol. BioSyst.*, 8(9):2274–2288. <http://pubs.rsc.org/en/Content/ArticleLanding/2012/MB/c2mb25173f>
- Ryona, I., Reinhardt, J., and Sacks, G. L. (2012). Treatment of grape juice or must with silicone reduces 3-alkyl-2-methoxypyrazine concentrations in resulting wines without altering fermentation volatiles. *Food Research International*, 47(1):70–79. <http://www.sciencedirect.com/science/article/pii/S0963996912000622>
- Siahpoosh, M. R., Sanchez, D. H., Schlereth, A., Scofield, G. N., Furbank, R. T., van Dongen, J. T., and Kopka, J. (2012). Modification of OsSUT1 gene expression modulates the salt response of rice *oryza sativa* cv. taipei 309. *Plant Science*, 182:101–111. <http://www.sciencedirect.com/science/article/pii/S0168945211000185>
- Song, I.-S. S., Lee, D. Y. o. . Y., Shin, M.-H. H., Kim, H., Ahn, Y. G. G., Park, I., Kim, K. H. H., Kind, T., Shin, J.-G. G., Fiehn, O., and Liu, K.-H. H. (2012). Pharmacogenetics meets metabolomics: discovery of tryptophan as a new endogenous OCT2 substrate related to metformin disposition. *Plos one*, 7(5):e36637+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0036637>
- Thormählen, I., Ruber, J., Von roepenack Lahaye, E., Ehrlich, s.-M., Massot, V., Hümmer, C., Tezycka, J., Issakidis-Bourguet, E., and Geigenberger, P. (2012). Inactivation of thioredoxin f1 leads to decreased light activation of ADP-glucose pyrophosphorylase and altered diurnal starch turnover in leaves of arabidopsis plants. *Plant, Cell & Environment*, page no. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3040.2012.02549.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Vaníková, L., do Nascimento, R. R., Hoskovec, M., Jeková, Z., Bízová, R., Tomala, A., and Kalinová, B. (2012). Are the wild and laboratory insect populations different in semiochemical emission? the case of the medfly sex pheromone. *J. Agric. Food Chem.*, 60(29):7168–7176. <http://pubs.acs.org/doi/abs/10.1021/jf301474d>
- Wei, Z., Walters, C. C., Michael Moldowan, J., Mankiewicz, P. J., Pottorf, R. J., Xiao, Y., Maze, W., Nguyen, P. T. H., Madincea, M. E., Phan, N. T., and Peters, K. E. (2012). Thiadiamondoids as proxies for the extent of thermochemical sulfate reduction. *Organic Geochemistry*, 44:53–70. <http://www.sciencedirect.com/science/article/pii/S0146638011003032>
- Witt, S., Galicia, L., Liseć, J., Cairns, J., Tiessen, A., Araus, J. L., Palacios-Rojas, N., and Fernie, A. R. (2012). Metabolic and phenotypic responses of Greenhouse-Grown maize hybrids to experimentally controlled drought stress. *Molecular Plant*, 5(2):401–417. <http://mplant.oxfordjournals.org/content/5/2/401>
- Wu, Y., Zhang, Y., Xie, G., Zhao, A., Pan, X., Chen, T., Hu, Y., Liu, Y., Cheng, Y., Chi, Y., Yao, L., and Jia, W. (2012). The metabolic responses to aerial diffusion of essential oils. *Plos one*, 7(9):e44830+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0044830>
- Xue, Z., Duan, L., Liu, D., Guo, J., Ge, S., Dicks, J., ÓMáille, P., Osbourn, A., and Qi, X. (2012). Divergent evolution of oxidosqualene cyclases in plants. *New Phytologist*, 193(4):1022–1038. <http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2011.03997.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Yan, S., Liang, Y., Zhang, J., and Liu, C. M. (2012). *Aspergillus flavus* grown in peptone as the carbon source exhibits spore density- and peptone concentration-dependent aflatoxin biosynthesis. *BMC Microbiology*, 12(1):106+. <http://www.biomedcentral.com/1471-2180/12/106>
- Yoshida, K.-i., Sanbongi, A., Murakami, A., Suzuki, H., Takenaka, S., and Takami, H. (2012). Three inositol dehydrogenases involved in utilization and interconversion of inositol stereoisomers in a thermophile, *geobacillus kaustophilus* HTA426. *Microbiology*, 158(Pt 8):1942–1952. http://mic.sgmjournals.org/content/158/Pt_8/1942

Zauber, H., Mosler, S., Heßberg, A., and Schulze, W. X. (2012). Dynamics of salivary proteins and metabolites during extreme endurance sports - a case study. *Proteomics*, 12(13):2221–2235.
<http://onlinelibrary.wiley.com/doi/10.1002/pmic.201100228/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>

Zhang, J., Gao, Q., and Zheng, C. (2012). Retention index system transformation method incorporated optimal molecular descriptors through particle swarm optimization intelligent computing theories and applications. volume 7390 of *Lecture Notes in Computer Science*, chapter 47, pages 366–374. Springer Berlin / Heidelberg, Berlin, Heidelberg.
<http://www.springerlink.com/content/mr216745466kv633/>

Zhao, T., Zhang, H., Zhao, T., Zhang, X., Lu, J., Yin, T., Liang, Q., Wang, Y., Luo, G., Lan, H., and Li, P. (2012). Intrarenal metabolomics reveals the association of local organic toxins with the progression of diabetic kidney disease. *Journal of Pharmaceutical and Biomedical Analysis*, 60:32–43. <http://www.sciencedirect.com/science/article/pii/S0731708511006376>

Zheng, T., Liu, L., Aa, J., Wang, G., Cao, B., Li, M., Shi, J., Wang, X., Zhao, C., Gu, R., Zhou, J., Xiao, W., Yu, X., Sun, R., Zhou, Y., Zuo, Y., and Zhu, X. (2012). Metabolic phenotype of rats exposed to heroin and potential markers of heroin abuse. *Drug and Alcohol Dependence*. <http://www.sciencedirect.com/science/article/pii/S0376871612002633>

Zuno-Floriano, F. G., Miller, M. G., Aldana-Madrid, M. L., Hengel, M. J., Gaikwad, N. W., Tolstikov, V., and Contreras-Cortés, A. G. (2012). Effect of acinetobacter sp on metalaxyl degradation and metabolite profile of potato seedlings (*solanum tuberosum* L.) alpha variety. *PLoS ONE*, 7(2):e31221+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0031221>

2011

Akai, M., Onai, K., Kusano, M., Sato, M., Redestig, H., Toyooka, K., Morishita, M., Miyake, H., Hazama, A., Checchetto, V., Szabò, I., Matsuoka, K., Saito, K., Yasui, M., Ishiura, M., and Uozumi, N. (2011). Plasma membrane aquaporin AqpZ protein is essential for glucose metabolism during photomixotrophic growth of *synechocystis* sp. PCC 6803. *Journal of Biological Chemistry*, 286(28):25224–25235. <http://www.jbc.org/content/286/28/25224>

Beato, V. M., Teresa Navarro-Gochicoa, M., Rexach, J., Begoña Herrera-Rodríguez, M., Camacho-Cristóbal, J. J., Kempa, S., Weckwerth, W., and González-Fontes, A. (2011). Expression of root glutamate dehydrogenase genes in tobacco plants subjected to boron deprivation. *Plant Physiology and Biochemistry*, 49(11):1350–1354. <http://www.sciencedirect.com/science/article/pii/S0981942811001811>

Brendolise, C., Yauk, Y.-K., Eberhard, E. D., Wang, M., Chagne, D., Andre, C., Greenwood, D. R., and Beuning, L. L. (2011). An unusual plant triterpene synthase with predominant -amyrin-producing activity identified by characterizing oxisqualene cyclases from *malus x domestica*. *FEBS Journal*, 278(14):2485–2499. <http://onlinelibrary.wiley.com/doi/10.1111/j.1742-4658.2011.08175.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>

Calingacion, M. N., Boualaphanh, C., Dayon, V. D., Anacleto, R., Sackville Hamilton, R., Biais, B., Deborde, C., Maucourt, M., Moing, A., Mummm, R., Vos, R. C. H., Erban, A., Kopka, J., Hansen, T. H., Laursen, K. H., Schjoerring, J. K., Hall, R. D., and Fitzgerald, M. A. (2011). A genomics and multi-platform metabolomics approach to identify new traits of rice quality in traditional and improved varieties. *Metabolomics*, pages 1–13. <http://www.springerlink.com/content/v7350351817722g1/>

Catchpole, G., Platzer, A., Weikert, C., Kempkensteffen, C., Johannsen, M., Krause, H., Jung, K., Miller, K., Willmitzer, L., Selbig, J., and Weikert, S. (2011). Metabolic profiling reveals key metabolic features of renal cell carcinoma. *Journal of Cellular and Molecular Medicine*, 15(1):109–118. <http://onlinelibrary.wiley.com/doi/10.1111/j.1582-4934.2009.00939.x/abstract;jsessionid=D94092FC082E8335AA1507F1B6708A6Fd01t01?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>

Chen, J., Zhang, Y., Wang, C., Lü, W., Jin, J. B., and Hua, X. (2011a). Proline induces calcium-mediated oxidative burst and salicylic acid signaling. *Amino Acids*, 40(5):1473–1484. <http://www.springerlink.com/content/47t7r037n3167r18/>

Chen, T., Xie, G., Wang, X., Fan, J., Qiu, Y., Zheng, X., Qi, X., Cao, Y., Su, M., Wang, X., Xu, L. X., Yen, Y., Liu, P., and Jia, W. (2011b). Serum and urine metabolite profiling reveals potential biomarkers of human hepatocellular carcinoma. *Molecular & Cellular Proteomics*, 10(7). <http://www.mcponline.org/content/10/7/M110.004945>

Chi, Y., Xia, H., Su, M., Song, P., Qi, X., Cui, Y., Cao, Y., Chen, T., Qiu, Y., Zhao, A., Ma, X., Zheng, X., and Jia, W. (2011). Metabonomic phenotyping reveals an embryotoxicity of Deca-Brominated diphenyl ether in mice. *Chem. Res. Toxicol.*, 24(11):1976–1983. <http://pubs.acs.org/doi/abs/10.1021/tx200300v>

Dasgupta, S., Banerjee, K., Dhumal, K. N., and Adsule, P. G. 2011 Optimization of detection conditions and Single-Laboratory validation of a multiresidue method for the determination of 135 pesticides and 25 organic pollutants in grapes and wine by gas chromatography Time-of-Flight mass spectrometry. *Journal of AOAC International*, pages 273–285. <http://www.ingentaconnect.com/content/aoac/jaoac/2011/00000094/00000001/art00031>

David, Heftner, J., Ferretti, P., Stein, R., and Haug, G. H. (2011). Sea surface temperatures did not control the first occurrence of hudson strait heinrich events during MIS 16. *Paleoceanography*, 26(4):PA4201+. <http://www.agu.org/pubs/crossref/2011/2011PA002135.shtml>

Dejaegere, E. A., Thybaut, J. W., Marin, G. B., Baron, G. V., and Denayer, J. F. M. (2011). Modeling of toluene acetylation with acetic anhydride on H-USY zeolite. *Ind. Eng. Chem. Res.*, 50(21):11822–11832. <http://pubs.acs.org/doi/abs/10.1021/ie2007906>

Dunn, W. B., Broadhurst, D., Begley, P., Zelena, E., Francis-McIntyre, S., Anderson, N., Brown, M., Knowles, J. D., Halsall, A., Haselden, J. N., Nicholls, A. W., Wilson, I. D., Kell, D. B., and Goodacre, R. (2011). Procedures for large-scale metabolic profiling of serum and plasma using gas chromatography and liquid chromatography coupled to mass spectrometry. *Nature Protocols*, 6(7):1060–1083. <http://www.nature.com/nprot/journal/v6/n7/full/nprot.2011.335.html>

- Geigenberger, P., Tiessen, A., and Meurer, J. (2011). Use of non-aqueous fractionation and metabolomics to study chloroplast function in arabidopsis chloroplast research in arabidopsis. volume 775 of *Methods in Molecular Biology*, chapter 8, pages 135–160. Humana Press, Totowa, NJ. <http://www.springerlink.com/content/v25453m45uw66w2g/#section=947121&page=1>
- Goehring, I., Sauter, N. S., Catchpole, G., Assmann, A., Shu, L., Zien, K. S., Moehlig, M., Pfeiffer, A. F. H., Oberholzer, J., Willmitzer, L., Spranger, J., and Maedler, K. (2011). Identification of an intracellular metabolic signature impairing beta cell function in the rat beta cell line INS-1E and human islets. *Diabetologia*, 54(10):2584–2594. <http://www.springerlink.com/content/a44j772274171140/>
- Koek, M. M., Jellema, R. H., Greef, J., Tas, A. C., and Hankemeier, T. (2011). Quantitative metabolomics based on gas chromatography mass spectrometry: status and perspectives. *Metabolomics*, 7(3):307–328. <http://www.springerlink.com/content/f517582456x17q32/>
- Kumari, S., Stevens, D., Kind, T., Denkert, C., and Fiehn, O. (2011). Applying In-Silico retention index and mass spectra matching for identification of unknown metabolites in accurate mass GC-TOF mass spectrometry. *Anal. Chem.*, 83(15):5895–5902. <http://pubs.acs.org/doi/abs/10.1021/ac2006137>
- Kusano, M., Jonsson, P., Fukushima, A., Gullberg, J., Sjöström, M., Trygg, J., and Moritz, T. (2011). Metabolite signature during Short-Day induced growth cessation in populus. *Frontiers in plant science*, 2. http://www.frontiersin.org/Plant_Physiology/10.3389/fpls.2011.00029/abstract
- Lee, S., Km, Y.-S., Choi, H.-K., and Cho, S. K. (2011a). Determination of the volatile components in the fruits and leaves of guava plants (*psidium guajava* l.) grown on jeju island, south korea. *Journal of Essential Oil Research*, 23(6):52–56. <http://www.tandfonline.com/doi/abs/10.1080/10412905.2011.9712282>
- Lee, S. M., Kwon, G. Y., Kim, K.-O., and Kim, Y.-S. (2011b). Metabolomic approach for determination of key volatile compounds related to beef flavor in glutathione-Maillard reaction products. *Analytica Chimica Acta*, 703(2):204–211. <http://www.sciencedirect.com/science/article/pii/S000326701100969X>
- Lin, X., Zhang, Y., Ye, G., Li, X., Yin, P., Ruan, Q., and Xu, G. (2011). Classification and differential metabolite discovery of liver diseases based on plasma metabolic profiling and support vector machines. *J. Sep. Science*, 34(21):3029–3036. <http://onlinelibrary.wiley.com/doi/10.1002/jssc.201100408/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Lloyd, A. J., Fave, G., Beckmann, M., Lin, W., Taillart, K., Xie, L., Mathers, J. C., and Draper, J. (2011). Use of mass spectrometry fingerprinting to identify urinary metabolites after consumption of specific foods. *American Journal of Clinical Nutrition*, 94(4):981–991. <http://ajcn.nutrition.org/content/94/4/981>
- Lorjai, P., Wongkasemjit, S., Chaisuwan, T., and Jamieson, A. M. (2011). Significant enhancement of thermal stability in the non-oxidative thermal degradation of bisphenol-A/aniline based polybenzoxazine aerogel. *Polymer Degradation and Stability*, 96(4):708–718. <http://www.sciencedirect.com/science/article/pii/S014391010004593>
- Lou, Q., Ma, C., Wen, W., Zhou, J., Chen, L., Feng, F., Xu, X., Lu, X., Luo, L., Mei, H., and Xu, G. (2011). Profiling and association mapping of grain metabolites in a subset of the core collection of chinese rice germplasm (*oryza sativa* l.). *J. Agric. Food Chem.*, 59(17):9257–9264. <http://pubs.acs.org/doi/abs/10.1021/jf2016024>
- Lu, H., Gan, D., Zhang, Z., and Liang, Y. (2011). Sample classification of GC-ToF-MS metabolomics data without the requirement for chromatographic deconvolution. *Metabolomics*, 7(2):191–205. <http://www.springerlink.com/content/30k5739444h16n56/>
- Ma, B., Zhang, Q., Wang, G.-j., Ji-ye, Wu, D., Liu, Y., Cao, B., Liu, L.-s., Hu, Y.-y., Wang, Y.-l., and Zheng, Y.-y. (2011). GC-TOF/MS-based metabolomic profiling of estrogen deficiency-induced obesity in ovariectomized rats. *Acta Pharmacol Sin*, 32(2):270–278. <http://www.nature.com/aps/journal/v32/n2/full/aps2010196a.html>
- Majcher, M. A. and Jeleni, H. H. (2011). Key odorants of oscypek, a traditional polish ewe's milk cheese. *J. Agric. Food Chem.*, 59(9):4932–4937. <http://pubs.acs.org/doi/abs/10.1021/jf2002602>
- Marcinowska, R., Trygg, J., Wolf-Watz, H., Mortiz, T., and Surowiec, I. (2011). Optimization of a sample preparation method for the metabolomic analysis of clinically relevant bacteria. *Journal of Microbiological Methods*, 87(1):24–31. <http://www.sciencedirect.com/science/article/pii/S016770121100251X>
- Massie, C. E., Lynch, A., Ramos-Montoya, A., Boren, J., Stark, R., Fazli, L., Warren, A., Scott, H., Madhu, B., Sharma, N., Bon, H., Zecchini, V., Smith, D.-M., DeNicola, G. M., Matthews, N., Osborne, M., Hadfield, J., MacArthur, S., Adryan, B., Lyons, S. K., Brindle, K. M., Griffiths, J., Gleave, M. E., Rennie, P. S., Neal, D. E., and Mills, I. G. (2011). The androgen receptor fuels prostate cancer by regulating central metabolism and biosynthesis. *The EMBO Journal*, 30(13):2719–2733. <http://www.nature.com/emboj/journal/v30/n13/full/emboj2011158a.html>
- Mollá-Morales, A., Sarmiento-Mañús, R., Robles, P., Quesada, V., Pérez-Pérez, J. M., González-Bayón, R., Hannah, M. A., Willmitzer, L., Ponce, M. R., and Micol, J. L. (2011). Analysis of ven3 and ven6 reticulate mutants reveals the importance of arginine biosynthesis in arabidopsis leaf development. *The Plant Journal*, 65(3):335–345. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.2010.04425.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Pang, X., Lewis, A. C., and Hamilton, J. F. (2011). Determination of airborne carbonyls via pentafluorophenylhydrazine derivatization by GC-MS and its comparison with HPLC method. *Talanta*, 85(1):406–414. <http://www.sciencedirect.com/science/article/pii/S0039914011002773>
- Petronilho, S., Maraschin, M., Delgadillo, I., Coimbra, M. A., and Rocha, S. M. (2011). Sesquiterpenic composition of the inflorescences of brazilian chamomile (*matricaria recutita* L.): Impact of the agricultural practices. *Industrial Crops and Products*, 34(3):1482–1490. <http://www.sciencedirect.com/science/article/pii/S0926669011001397>

- Pietra Torres, M., Cabrita, da Silva, G., Palma, V., and Freitas, C. (2011). The impact of malolactic fermentation on the volatile composition of the trincadeira wine variety. *Journal of Food Biochemistry*, 35(3):898–913. <http://onlinelibrary.wiley.com/doi/10.1111/j.1745-4514.2010.00424.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Qi, X., Zhang, Y., Gao, J., Chen, T., Zhao, A., Yan, Y., and Jia, W. (2011). Metabolite profiling of hemodialysate using gas chromatography time-of-flight mass spectrometry. *Journal of Pharmaceutical and Biomedical Analysis*, 55(5):1142–1147. <http://www.sciencedirect.com/science/article/pii/S0731708511001981>
- Redestig, H., Kobayashi, M., Saito, K., and Kusano, M. (2011). Exploring matrix effects and quantification performance in metabolomics experiments using artificial biological gradients. *Anal. Chem.*, 83(14):5645–5651. <http://pubs.acs.org/doi/abs/10.1021/ac200786y>
- Revelsky, A. I., Samokhin, A. S., Virus, E. D., Rodchenkov, G. M., and Revelsky, I. A. (2011). High sensitive analysis of steroids in doping control using gas chromatography/time-of-flight mass-spectrometry. *Drug Test Analysis*, 3(4):263–267. <http://onlinelibrary.wiley.com/doi/10.1002/dta.221/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Rodilla, J. M., Silva, L. A., Martinez, N., Lorenzo, D., Davyt, D., Castillo, L., Giménez, C., Cabrera, R., González-Coloma, A., Zrostlíková, J., and Dellacassa, E. (2011). Advances in the identification and agrochemical importance of sesquiterpenoids from bulnesia sarmientoi essential oil. *Industrial Crops and Products*, 33(2):497–503. <http://www.sciencedirect.com/science/article/pii/S0926669010002657>
- Rohrmann, J., Tohge, T., Alba, R., Osorio, S., Caldana, C., McQuinn, R., Arvidsson, S., van der Merwe, M. J., Riaño Pachón, D. M., Mueller-Roeber, B., Fei, Z., Nesi, A. N., Giovannoni, J. J., and Fernie, A. R. (2011). Combined transcription factor profiling, microarray analysis and metabolite profiling reveals the transcriptional control of metabolic shifts occurring during tomato fruit development. *The Plant Journal*, 68(6):999–1013. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.2011.04750.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Rudnicka, J., Kowalkowski, T., Ligor, T., and Buszewski, B. (2011). Determination of volatile organic compounds as biomarkers of lung cancer by SPME-GC-TOF/MS and chemometrics. *Journal of Chromatography B*, 879(30):3360–3366. <http://www.sciencedirect.com/science/article/pii/S1570023211005812>
- Rudovich, N. N., Nikiforova, V. J., Otto, B., Pivovarova, O., Gögebakan, O., Erban, A., Möhlig, M., Weickert, M. O., Spranger, J., Tschöp, M. H., Willmitzer, L., Nauck, M., and Pfeiffer, A. F. H. (2011). Metabolomic linkage reveals functional interaction between glucose-dependent insulinotropic polypeptide and ghrelin in humans. *American Journal of Physiology - Endocrinology And Metabolism*, 301(4):E608–E617. <http://ajpendo.physiology.org/content/301/4/E608>
- Scarlett, A. G., Clough, R., West, C., Lewis, C. A., Booth, A. M., and Rowland, S. J. (2011). Alkylnaphthalenes: Priority pollutants or minor contributors to the poor health of marine mussels? *Environ. Sci. Technol.*, 45(14):6160–6166. <http://pubs.acs.org/doi/abs/10.1021/es201234a>
- Shima, N., Miyawaki, I., Bando, K., Horie, H., Zaitsu, K., Katagi, M., Bamba, T., Tsuchihashi, H., and Fukusaki, E. (2011). Influences of methamphetamine-induced acute intoxication on urinary and plasma metabolic profiles in the rat. *Toxicology*, 287(1-3):29–37. <http://www.sciencedirect.com/science/article/pii/S0300483X1100206X>
- Su, M., Zheng, X. Y., Zhang, T., Pei, L., Wang, F., Zheng, X., Gu, X., Song, X., Lu, X., Chen, G., Bao, Y., Chen, T., Zhao, A., Bao, Y., Jia, W. P., Zeisel, S. H., and Jia, W. (2011). Integrated profiling of metabolites and trace elements reveals a multifaceted malnutrition in pregnant women from a region with a high prevalence of congenital malformations. *Metabolomics*, pages 1–14. <http://www.springerlink.com/content/e47378316915845p/>
- Susanti, R. F., Nugroho, A., Lee, J., Kim, Y., and Kim, J. (2011). Noncatalytic gasification of isooctane in supercritical water: A strategy for high-yield hydrogen production. *International Journal of Hydrogen Energy*, 36(6):3895–3906. <http://www.sciencedirect.com/science/article/pii/S0360319910024377>
- Sysi-Aho, M., Ermolov, A., Gopalacharyulu, P. V., Tripathi, A., Seppänen-Laakso, T., Maukonen, J., Mattila, I., Ruohonen, S. T., Vähätalo, L., Yetukuri, L., Härkönen, T., Lindfors, E., Nikkilä, J., Ilonen, J., Simell, O., Saarela, M., Knip, M., Kaski, S., Savontaus, E., and Orei, M. (2011). Metabolic regulation in progression to autoimmune diabetes. *PLoS Comput Biol*, 7(10):e1002257+. <http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1002257>
- Tsugawa, H., Bamba, T., Shinohara, M., Nishiumi, S., Yoshida, M., and Fukusaki, E. (2011a). Practical non-targeted gas chromatography/mass spectrometry-based metabolomics platform for metabolic phenotype analysis. *Journal of Bioscience and Bioengineering*, 112(3):292–298. <http://www.sciencedirect.com/science/article/pii/S1389172311001848>
- Tsugawa, H., Tsujimoto, Y., Arita, M., Bamba, T., and Fukusaki, E. (2011b). GC/MS based metabolomics: development of a data mining system for metabolite identification by using soft independent modeling of class analogy (SIMCA). *BMC Bioinformatics*, 12(1):131+. <http://www.biomedcentral.com/1471-2105/12/131>
- Tumilty, L., Davison, G., Beckmann, M., and Thatcher, R. (2011). Oral tyrosine supplementation improves exercise capacity in the heat. *European Journal of Applied Physiology*, 111(12):2941–2950. <http://www.springerlink.com/content/c72477481j735650/>
- Wedge, D. C., Allwood, J. W., Dunn, W., Vaughan, A. A., Simpson, K., Brown, M., Priest, L., Blackhall, F. H., Whetton, A. D., Dive, C., and Goodacre, R. (2011). Is serum or plasma more appropriate for intersubject comparisons in metabolomic studies? an assessment in patients with Small-Cell lung cancer. *Anal. Chem.*, 83(17):6689–6697. <http://pubs.acs.org/doi/abs/10.1021/ac2012224>
- Xu, Y., Cheung, W., Winder, C. L., Dunn, W. B., and Goodacre, R. (2011). Metabolic profiling of meat: assessment of pork hygiene and contamination with salmonella typhimurium. *Analyst*, 136(3):508–514. <http://pubs.rsc.org/en/Content/ArticleLanding/2011/AN/c0an00394h>

- Yang, J., Chen, T., Sun, L., Zhao, Z., Qi, X., Zhou, K., Cao, Y., Wang, X., Qiu, Y., Su, M., Zhao, A., Wang, P., Yang, P., Wu, J., Feng, G., He, L., Jia, W., and Wan, C. (2011). Potential metabolite markers of schizophrenia. *Molecular Psychiatry*, aop(current). <http://www.nature.com/mp/journal/vaop/ncurrent/full/mp2011131a.html>
- Yu, H. T., Xu, S. B., Zheng, C. H., and Wang, T. (2011a). Comparative proteomic study reveals the involvement of diurnal cycle in cell division, enlargement, and starch accumulation in developing endosperm of oryza sativa. *J. Proteome Res.*, 11(1):359–371. <http://pubs.acs.org/doi/abs/10.1021/pr200779p>
- Yu, L., Aa, J., Xu, J., Sun, M., Qian, S., Cheng, L., Yang, S., and Shi, R. (2011b). Metabolomic phenotype of gastric cancer and precancerous stages based on gas chromatography time-of-flight mass spectrometry. *Journal of Gastroenterology and Hepatology*, 26(8):1290–1297. <http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1746.2011.06724.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Zhang, J., Fang, A., Wang, B., Kim, S. H., Bogdanov, B., Zhou, Z., McClain, C., and Zhang, X. (2011a). iMatch: A retention index tool for analysis of gas chromatography-mass spectrometry data. *Journal of Chromatography A*, 1218(37):6522–6530. <http://www.sciencedirect.com/science/article/pii/S0021967311010302>
- Zhang, Y., Filiou, M. D., Reckow, S., Gormanns, P., Maccarrone, G., Kessler, M. S., Frank, E., Hambach, B., Holsboer, F., Landgraf, R., and Turck, C. W. (2011b). Proteomic and metabolomic profiling of a trait anxiety mouse model implicate affected pathways. *Molecular & Cellular Proteomics*, 10(12). <http://www.mcponline.org/content/10/12/M111.008110>
- Zheng, X., Su, M., Pei, L., Zhang, T., Ma, X., Qiu, Y., Xia, H., Wang, F., Zheng, X., Gu, X., Song, X., Li, X., Qi, X., Chen, G., Bao, Y., Chen, T., Chi, Y., Zhao, A., and Jia, W. (2011). Metabolic signature of pregnant women with neural tube defects in offspring. *J. Proteome Res.*, 10(10):4845–4854. <http://pubs.acs.org/doi/abs/10.1021/pr200666d>
- Zhou, Z.-Y., Zhang, C.-G., Wu, L., Zhang, C.-G., Chai, J., Wang, M., Jha, A., Jia, P.-F., Cui, S.-J., Yang, M., Chen, R., and Guo, G.-Q. (2011). Functional characterization of the CKRC1/TAAL gene and dissection of hormonal actions in the arabidopsis root. *The Plant Journal*, 66(3):516–527. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.2011.04509.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>

2010

- Abate, S., Ahn, Y. G., Kind, T., Cataldi, T. R. I., and Fiehn, O. (2010). Determination of elemental compositions by gas chromatography/time-of-flight mass spectrometry using chemical and electron ionization. *Rapid Commun. Mass Spectrom.*, 24(8):1172–1180. <http://onlinelibrary.wiley.com/doi/10.1002/rcm.4482/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Brinsmade, S. R., Kleijn, R. J., Sauer, U., and Sonenshein, A. L. (2010). Regulation of CodY activity through modulation of intracellular Branched-Chain amino acid pools. *Journal of Bacteriology*, 192(24):6357–6368. <http://jb.asm.org/content/192/24/6357>
- Bruce, S. J., Breton, I., Decombaz, J., Boesch, C., Scheurer, E., Montoliu, I., Rezzi, S., Kochhar, S., and Guy, P. A. (2010). A plasma global metabolic profiling approach applied to an exercise study monitoring the effects of glucose, galactose and fructose drinks during post-exercise recovery. *Journal of Chromatography B*, 878(29):3015–3023. <http://www.sciencedirect.com/science/article/pii/S1570023210005805>
- Buko, M., Jele, H., Góral, T., Chmielewski, J., Stuper, K., Szwajkowska-Michałek, L., Tyrakowska, B., and Perkowski, J. (2010). Volatile metabolites in various cereal grains. *Food Additives & Contaminants: Part A*, 27(11):1574–1581. <http://www.tandfonline.com/doi/abs/10.1080/19440049.2010.506600>
- Cais-Sokoliska, D. and Majcher, M. (2010). Sensory properties and volatile composition of full and non-fat cheese produce from curd - ripened fried acid tvarog. *Acta Alimentaria*, 39(1):69–80. <http://www.akademiai.com/content/h06236mt03637403/?genre=article&id=doi%3a10.1556%2fAAlim.39.2010.1.7>
- Dettmer, K., Almstetter, M. F., Appel, I. J., Nürnberg, N., Schlamberger, G., Gronwald, W., Meyer, H. H. D., and Oefner, P. J. (2010). Comparison of serum versus plasma collection in gas chromatography - mass spectrometry-based metabolomics. *ELECTROPHORESIS*, 31(14):2365–2373. <http://onlinelibrary.wiley.com/doi/10.1002/elps.200900778/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Ebert, B., Zöller, D., Erban, A., Fehrle, I., Hartmann, J., Niehl, A., Kopka, J., and Fisahn, J. (2010). Metabolic profiling of arabidopsis thaliana epidermal cells. *Journal of Experimental Botany*, 61(5):1321–1335. <http://jxb.oxfordjournals.org/content/61/5/1321>
- Fiehn, O., Garvey, W. T., Newman, J. W., Lok, K. H., Hoppel, C. L., and Adams, S. H. (2010). Plasma metabolomic profiles reflective of glucose homeostasis in Non-Diabetic and type 2 diabetic obese African-American women. *PLoS ONE*, 5(12):e15234+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0015234>
- Frenzel, M., Scarlett, A., Rowland, S. J., Galloway, T. S., Burton, S. K., Lappin-Scott, H. M., and Booth, A. M. (2010). Complications with remediation strategies involving the biodegradation and detoxification of recalcitrant contaminant aromatic hydrocarbons. *Science of The Total Environment*, 408(19):4093–4101. <http://www.sciencedirect.com/science/article/pii/S0048969710004389>
- Gu, S., Jiye, Wang, G., Zha, W., Yan, B., Zhang, Y., Ren, H., Cao, B., and Liu, L. (2010). Metabonomic profiling of liver metabolites by gas chromatography-mass spectrometry and its application to characterizing hyperlipidemia. *Biomed. Chromatogr.*, 24(3):245–252. <http://onlinelibrary.wiley.com/doi/10.1002/bmc.1279/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>

- Hager, J., Pellny, T. K., Mauve, C., Lelarge-Trouverie, C., Paepe, R., Foyer, C. H., and Noctor, G. (2010). Conditional modulation of NAD levels and metabolite profiles in *Nicotiana sylvestris* by mitochondrial electron transport and carbon/nitrogen supply. *Planta*, 231(5):1145–1157. <http://www.springerlink.com/content/r05i711056802156/>
- Holding, D. R., Meeley, R. B., Hazebroek, J., Selinger, D., Gruis, F., Jung, R., and Larkins, B. A. (2010). Identification and characterization of the maize argeninate dehydrogenase gene family. *Journal of Experimental Botany*, 61(13):3663–3673. <http://jxb.oxfordjournals.org/content/61/13/3663>
- Jeon, B. S., Kim, B.-C., Um, Y., and Sang, B.-I. (2010). Production of hexanoic acid from d-galactitol by a newly isolated clostridium sp. BS-1. *Applied Microbiology and Biotechnology*, 88(5):1161–1167. <http://www.springerlink.com/content/u567364h4m338r21/>
- Kim, J. Y., Kwon, H. J., Jung, J. Y., Kwon, H. Y., Baek, J. G., Kim, Y.-S., and Kwon, O. (2010). Comparison of absorption of 1-Deoxyojirimycin from mulberry water extract in rats. *J. Agric. Food Chem.*, 58(11):6666–6671. <http://pubs.acs.org/doi/abs/10.1021/jf100322y>
- Kleijn, R. J., Buescher, J. M., Le Chat, L., Jules, M., Aymerich, S., and Sauer, U. (2010). Metabolic fluxes during strong carbon catabolite repression by malate in bacillus subtilis. *Journal of Biological Chemistry*, 285(3):1587–1596. <http://www.jbc.org/content/285/3/1587>
- Kümmel, A., Ewald, J. C., Fendt, S.-M., Jol, S. J., Picotti, P., Aebersold, R., Sauer, U., Zamboni, N., and Heinemann, M. (2010). Differential glucose repression in common yeast strains in response to HXK2 deletion. *FEMS Yeast Research*, 10(3):322–332. <http://onlinelibrary.wiley.com/doi/10.1111/j.1567-1364.2010.00609.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Lee, S., Choi, H.-K., Cho, S. K., and Kim, Y.-S. (2010). Metabolic analysis of guava (*psidium guava* L) fruits at different ripening stages using different data-processing approaches. *Journal of Chromatography B*, 878(29):2983–2988. <http://www.sciencedirect.com/science/article/pii/S1570023210005799>
- McGaw, E. A., Phinney, K. W., and Lowenthal, M. S. (2010). Comparison of orthogonal liquid and gas chromatography-mass spectrometry platforms for the determination of amino acid concentrations in human plasma. *Journal of Chromatography A*, 1217(37):5822–5831. <http://www.sciencedirect.com/science/article/pii/S0021967310009453>
- Mervaala, E., Biala, A., Merasto, S., Lempiäinen, J., Mattila, I., Martonen, E., Eriksson, O., Louhelainen, M., Finckenberg, P., Kaheinen, P., Muller, D. N., Luft, F. C., Lapatto, R., and Oresic, M. (2010). Metabolomics in angiotensin II-induced cardiac hypertrophy. *Hypertension*, 55(2):508–515. <http://hyper.ahajournals.org/content/55/2/508>
- Mhamdi, A., Mauve, C., Gouia, H., Saindrenan, P., Hodges, M., and Noctor, G. (2010). Cytosolic NADP-dependent isocitrate dehydrogenase contributes to redox homeostasis and the regulation of pathogen responses in arabidopsis leaves. *Plant, Cell & Environment*, 33(7):1112–1123. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3040.2010.02133.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Naafs, Stein, R., Hefta, J., Khelifi, N., De Schepper, S., and Haug, G. H. (2010). Late pliocene changes in the north atlantic current. *Earth and Planetary Science Letters*, 298(3-4):434–442. <http://www.sciencedirect.com/science/article/pii/S0012821X10005339>
- Nam, Y. S., Agustin-Camacho, M. R., Park, H. M., and Lee, K. B. (2010). Herbicide contamination of live armclad rockfish, clam and pen shell by moss-control agents used in aquariums of seafood restaurants in korea. *Food Additives and Contaminants: Part B*, 3(4):289–295. <http://www.tandfonline.com/doi/abs/10.1080/19393210.2010.520339>
- Pan, L., Qiu, Y., Chen, T., Lin, J., Chi, Y., Su, M., Zhao, A., and Jia, W. (2010). An optimized procedure for metabonomic analysis of rat liver tissue using gas chromatography/time-of-flight mass spectrometry. *Journal of Pharmaceutical and Biomedical Analysis*, 52(4):589–596. <http://www.sciencedirect.com/science/article/pii/S0731708510000671>
- Renberg, L., Johansson, A. I., Shutova, T., Stenlund, H., Aksmann, A., Raven, J. A., Gardeström, P., Moritz, T., and Samuelsson, G. (2010). A metabolomic approach to study major metabolite changes during acclimation to limiting CO₂ in chlamydomonas reinhardtii. *Plant Physiology*, 154(1):187–196. <http://www.plantphysiol.org/content/154/1/187>
- Rocha, M., Licausi, F., Araújo, W. L., Nunes-Nesi, A., Sodek, L., Fernie, A. R., and van Dongen, J. T. (2010). Glycolysis and the tricarboxylic acid cycle are linked by alanine aminotransferase during hypoxia induced by waterlogging of lotus japonicus. *Plant Physiology*, 152(3):1501–1513. <http://www.plantphysiol.org/content/152/3/1501>
- Sana, T. R., Fischer, S., Wohlgemuth, G., Katrekar, A., Jung, K.-h., Ronald, P. C., and Fiehn, O. (2010). Metabolomic and transcriptomic analysis of the rice response to the bacterial blight pathogen *Xanthomonas oryzae* pv. *Oryzae*. *Metabolomics*, 6(3):451–465. <http://www.springerlink.com/content/76237734r2520068/>
- Scherling, C., Roscher, C., Giavalisco, P., Schulze, E.-D., and Weckwerth, W. (2010). Metabolomics unravel contrasting effects of biodiversity on the performance of individual plant species. *PLoS ONE*, 5(9):e12569+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0012569>
- Schurek, J., Nazafarin, L., and Kovalczuk, T. (2010a). Application potential of gas chromatography high speed time-of-flight mass spectrometry system in analysis of pesticides. part 1. *Journal of Analytical Chemistry*, 65(14):1540–1544. <http://www.springerlink.com/content/tt0662p539r54475/>
- Schurek, J., Pulkrabova, J., Hajsova, J., Nazafarin, L., and Kovalczuk, T. (2010b). Application potential of microextraction in packed syringe coupled with gas chromatography time-of-flight mass spectrometry in analysis of brominated flame retardants in waste water. part 2. *Journal of Analytical Chemistry*, 65(14):1545–1548. <http://www.springerlink.com/content/q763610217kr1v23/>

- Seifert, E. L., Fiehn, O., Bezaire, V., Bickel, D. R., Wohlgemuth, G., Adams, S. H., and Harper, M.-E. (2010). Long-Chain fatty acid combustion rate is associated with unique metabolite profiles in skeletal muscle mitochondria. *PLoS ONE*, 5(3):e9834+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0009834>
- Shin, M. H., Lee, D. Y., Skogerson, K., Wohlgemuth, G., Choi, I.-G., Fiehn, O., and Kim, K. H. (2010a). Global metabolic profiling of plant cell wall polysaccharide degradation by saccharophagus degradans. *BioTechnol. BioEng.*, 105(3):477–488. <http://onlinelibrary.wiley.com/doi/10.1002/bit.22557/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Shin, M. H., Lee, D. Y., Wohlgemuth, G., Choi, I.-G., Fiehn, O., and Kim, K. H. (2010b). Global metabolite profiling of agarose degradation by saccharophagus degradans 2-40. *New Biotechnology*, 27(2):156–168. <http://www.sciencedirect.com/science/article/pii/S187167841000395X>
- Skogerson, K., Harrigan, G. G., Reynolds, T. L., Halls, S. C., Ruebelt, M., Landolino, A., Pandravada, A., Glenn, K. C., and Fiehn, O. (2010). Impact of genetics and environment on the metabolite composition of maize grain. *J. Agric. Food Chem.*, 58(6):3600–3610. <http://pubs.acs.org/doi/abs/10.1021/jf903705y>
- Sparkman, O. D. (2009). Mass spectrometry PittCon® 2009. *Journal of The American Society for Mass Spectrometry*, 20(6):R3–R17. <http://www.springerlink.com/content/pr22742677v71107/>
- Spégel, P., Danielsson, A. P. H., Bacos, K., Nagorny, C. L. F., Moritz, T., Mulder, H., and Filipsson, K. (2010). Metabolomic analysis of a human oral glucose tolerance test reveals fatty acids as reliable indicators of regulated metabolism. *Metabolomics*, 6(1):56–66. <http://www.springerlink.com/content/w263646271v80005>
- Steinfath, M., Strehmel, N., Peters, R., Schauer, N., Groth, D., Hummel, J., Steup, M., Selbig, J., Kopka, J., Geigenberger, P., and Van Dongen, J. T. (2010). Discovering plant metabolic biomarkers for phenotype prediction using an untargeted approach. *Plant Biotechnology Journal*, 8(8):900–911. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-7652.2010.00516.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Strehmel, N., Praeger, U., König, C., Fehrle, I., Erban, A., Geyer, M., Kopka, J., and van Dongen, J. T. (2010). Time course effects on primary metabolism of potato (*Solanum tuberosum*) tuber tissue after mechanical impact. *Postharvest Biology and Technology*, 56(2):109–116. <http://www.sciencedirect.com/science/article/pii/S0925521409002555>
- Taylor, S. L., Ganti, S., Bukanov, N. O., Chapman, A., Fiehn, O., Osier, M., Kim, K., and Weiss, R. H. (2010). A metabolomics approach using juvenile cystic mice to identify urinary biomarkers and altered pathways in polycystic kidney disease. *American Journal of Physiology - Renal Physiology*, 298(4):F909–F922. <http://ajrenal.physiology.org/content/298/4/F909>
- Urayama, S., Zou, W., Brooks, K., and Tolstikov, V. (2010). Comprehensive mass spectrometry based metabolic profiling of blood plasma reveals potent discriminatory classifiers of pancreatic cancer. *Rapid Commun. Mass Spectrom.*, 24(5):613–620. <http://onlinelibrary.wiley.com/doi/10.1002/rcm.4420/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- van der Meer, J. A., Trap, H. C., Noort, D., and van der Schans, M. J. (2010). Comprehensive gas chromatography with time of flight MS and large volume introduction for the detection of fluoride-induced regenerated nerve agent in biological samples. *Journal of Chromatography B*, 878(17–18):1320–1325. <http://www.sciencedirect.com/science/article/pii/S1570023210001042>
- Ward, J. L., Forcat, S., Beckmann, M., Bennett, M., Miller, S. J., Baker, J. M., Hawkins, N. D., Vermeer, C. P., Lu, C., Lin, W., Truman, W. M., Beale, M. H., Draper, J., Mansfield, J. W., and Grant, M. (2010). The metabolic transition during disease following infection of *Arabidopsis thaliana* by *Pseudomonas syringae* pv. *tomato*. *The Plant Journal*, 63(3):443–457. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.2010.04254.x/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Wibom, C., Surowiec, I., Mörén, L., Bergström, P., Johansson, M., Antti, H., and Bergenheim, A. T. (2010). Metabolomic patterns in glioblastoma and changes during radiotherapy: A clinical microdialysis study. *J. Proteome Res.*, 9(6):2909–2919. <http://pubs.acs.org/doi/abs/10.1021/pr901088r>
- Wienkoop, S., Wei[German sz ligature], J., May, P., Kempa, S., Irgang, S., Recuenco-Munoz, L., Pietzke, M., Schwemmer, T., Rupprecht, J., Egelhofer, V., and Weckwerth, W. (2010). Targeted proteomics for *Chlamydomonas reinhardtii* combined with rapid subcellular protein fractionation, metabolomics and metabolic flux analyses. *Mol. BioSyst.*, 6(6):1018–1031. <http://pubs.rsc.org/en/Content/ArticleLanding/2010/MB/b920913a>

2009

- Afzal, A. J., Natarajan, A., Saini, N., Iqbal, M. J., Geisler, M., El Shemy, H. A., Mungur, R., Willmitzer, L., and Lightfoot, D. A. (2009). The nematode resistance allele at the *rhg1* locus alters the proteome and primary metabolism of soybean roots. *Plant Physiology*, 151(3):1264–1280. <http://www.plantphysiol.org/content/151/3/1264>
- Allwood, J. W., Erban, A., Koning, S., Dunn, W. B., Luedemann, A., Lommen, A., Kay, L., Löscher, R., Kopka, J., and Goodacre, R. (2009). Inter-laboratory reproducibility of fast gas chromatography-electron impact-time of flight mass spectrometry (GC-EI-TOF/MS) based plant metabolomics. *Metabolomics*, 5(4):479–496. <http://www.springerlink.com/content/m27h9159p3723041/>
- Andersson, E., Rotander, A., Kronholm, T., Berggren, A., Ivarsson, P., Hollert, H., and Engwall, M. (2009). AhR agonist and genotoxicant bioavailability in a PAH-contaminated soil undergoing biological treatment. *Environmental Science and Pollution Research*, 16(5):521–530. <http://www.springerlink.com/content/g573430u31775066/>

- Brown, M., Dunn, W. B., Dobson, P., Patel, Y., Winder, C. L., Francis-McIntyre, S., Begley, P., Carroll, K., Broadhurst, D., Tseng, A., Swainston, N., Spasic, I., Goodacre, R., and Kell, D. B. (2009). Mass spectrometry tools and metabolite-specific databases for molecular identification in metabolomics. *Analyst*, 134(7):1322–1332. <http://pubs.rsc.org/en/Content/ArticleLanding/2009/AN/b901179j>
- Büchscher, J. M., Czernik, D., Ewald, J. C., Sauer, U., and Zamboni, N. (2009). Cross-Platform comparison of methods for quantitative metabolomics of primary metabolism. *Anal. Chem.*, 81(6):2135–2143. <http://pubs.acs.org/doi/abs/10.1021/ac8022857>
- Cajka, T., Hajslova, J., Pudil, F., and Riddellova, K. (2009). Traceability of honey origin based on volatiles pattern processing by artificial neural networks. *Journal of Chromatography A*, 1216(9):1458–1462. <http://www.sciencedirect.com/science/article/pii/S0021967308022498>
- Chorell, E., Moritz, T., Branth, S., Antti, H., and Svensson, M. B. (2009). Predictive metabolomics evaluation of Nutrition-Modulated metabolic stress responses in human blood serum during the early recovery phase of strenuous physical exercise. *J. Proteome Res.*, 8(6):2966–2977. <http://pubs.acs.org/doi/abs/10.1021/pr900081q>
- Ewald, J. C., Heux, S., and Zamboni, N. (2009). High-Throughput quantitative metabolomics: Workflow for cultivation, quenching, and analysis of yeast in a multiwell format. *Anal. Chem.*, 81(9):3623–3629. <http://pubs.acs.org/doi/abs/10.1021/ac900002u>
- Führs, H., Götze, S., Specht, A., Erban, A., Gallien, S., Heintz, D., Van Dorsselaer, A., Kopka, J., Braun, H.-P., and Horst, W. J. (2009). Characterization of leaf apoplastic peroxidases and metabolites in vigna unguiculata in response to toxic manganese supply and silicon. *Journal of Experimental Botany*, 60(6):1663–1678. <http://jxb.oxfordjournals.org/content/60/6/1663>
- Galindo, F. G., Dejmek, P., Lundgren, K., Rasmussen, A. G., Vicente, A., and Moritz, T. (2009). Metabolomic evaluation of pulsed electric field-induced stress on potato tissue. *Planta*, 230(3):469–479. <http://www.springerlink.com/content/r1j30gx78t72m742/>
- González, C. A., Bartoszek, M., Martin, A., and Correa, C. M. (2009). Hydrodechlorination of light organochlorinated compounds and their mixtures over Pd/TiO₂-washcoated minimonoliths. *Ind. Eng. Chem. Res.*, 48(6):2826–2835. <http://pubs.acs.org/doi/abs/10.1021/ie8013742>
- Hanus, R., Luxová, A., obotník, J., Kalinová, B., Jiro, P., Keek, J., Bourguignon, T., and Bordereau, C. (2009). Sexual communication in the termite *Prorhinotermes simplex* (isoptera, rhinotermitidae) mediated by a pheromone from female tergal glands. *Insectes Sociaux*, 56(2):111–118. <http://www.springerlink.com/content/m02088v244376185/>
- Hayashi, S., Akiyama, S., Tamaru, Y., Takeda, Y., Fujiwara, T., Inoue, K., Kobayashi, A., Maegawa, S., and Fukusaki, E. (2009). A novel application of metabolomics in vertebrate development. *Biochemical and Biophysical Research Communications*, 386(1):268–272. <http://www.sciencedirect.com/science/article/pii/S0006291X09011747>
- Inostroza, A. C., Caldana, C., Redestig, H., Kusano, M., Liseć, J., Cortes, H. P., Willmitzer, L., and Hannah, M. (2009). TargetSearch - a bioconductor package for the efficient preprocessing of GC-MS metabolite profiling data. *BMC Bioinformatics*, 10(1):428+. <http://www.biomedcentral.com/1471-2105/10/428>
- Jumtee, K., Bamba, T., and Fukusaki, E. (2009a). Fast GC-FID based metabolic fingerprinting of Japanese green tea leaf for its quality ranking prediction. *J. Sep. Science*, 32(13):2296–2304. <http://onlinelibrary.wiley.com/doi/10.1002/jssc.200900096/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Jumtee, K., Okazawa, A., Harada, K., Fukusaki, E., Takano, M., and Kobayashi, A. (2009b). Comprehensive metabolite profiling of phyA phyB phyC triple mutants to reveal their associated metabolic phenotype in rice leaves. *Journal of Bioscience and Bioengineering*, 108(2):151–159. <http://www.sciencedirect.com/science/article/pii/S1389172309001522>
- Kajander, K., Myllyluoma, E., Kyrönpalo, S., Rasmussen, M., Sipponen, P., Mattila, I., Seppänen-Laakso, T., Vapaatalo, H., Oresic, M., and Korpeila, R. (2009). Elevated pro-inflammatory and lipotoxic mucosal lipids characterise irritable bowel syndrome. *World Journal of Gastroenterology : WJG*, 15(48):6068–6074. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2797663/>
- Kind, T., Wohlgemuth, G., Lee, D. Y., Lu, Y., Palazoglu, M., Shahbaz, S., and Fiehn, O. (2009). FiehnLib: Mass spectral and retention index libraries for metabolomics based on quadrupole and Time-of-Flight gas chromatography/Mass spectrometry. *Anal. Chem.*, 81(24):10038–10048. <http://pubs.acs.org/doi/abs/10.1021/ac9019522>
- Koek, M. M., Bakels, F., Engel, W., van den Maagdenberg, A., Ferrari, M. D., Coulier, L., and Hankemeier, T. (2009). Metabolic profiling of ultrasmall sample volumes with GC/MS: From microliter to nanoliter samples. *Anal. Chem.*, 82(1):156–162. <http://pubs.acs.org/doi/abs/10.1021/ac9015787>
- Koesukwiwat, U., Lehotay, S. J., Mastovska, K., Dorweiler, K. J., and Leepipatpiboon, N. (2009). Extension of the QuEChERS method for pesticide residues in cereals to flaxseeds, peanuts, and doughs†. *J. Agric. Food Chem.*, 58(10):5950–5958. <http://pubs.acs.org/doi/abs/10.1021/jf902988b>
- Kuhn, F. and Natsch, A. (2009). Body odour of monozygotic human twins: a common pattern of odorant carboxylic acids released by a bacterial aminoacylase from axilla secretions contributing to an inherited body odour type. *Journal of The Royal Society Interface*, 6(33):377–392. <http://rsif.royalsocietypublishing.org/content/6/33/377>
- Kuksis, A., Suomela, J.-P., Tarvainen, M., and Kallio, H. (2009). Lipidomic analysis of glycerolipid and cholesteryl ester autoxidation products. *Molecular Biotechnology*, 42(2):224–268. <http://www.springerlink.com/content/q7674333w75144k/>
- Lee, J. Y. and Lane, D. A. (2009). Unique products from the reaction of naphthalene with the hydroxyl radical. *Atmospheric Environment*, 43(32):4886–4893. <http://www.sciencedirect.com/science/article/pii/S1352231009006104>
- Lindinger, C., Pollien, P., de Vos, R. C. H., Tikunov, Y., Hageman, J. A., Lambot, C., Fumeaux, R., Voirol-Baliguet, E., and Blank, I. (2009). Identification of ethyl formate as a quality marker of the fermented off-note in coffee by a nontargeted chemometric approach. *J. Agric. Food Chem.*, 57(21):9972–9978. <http://pubs.acs.org/doi/abs/10.1021/jf901673d>

- Lommen, A. (2009). MetAlign: Interface-Driven, versatile metabolomics tool for hyphenated Full-Scan mass spectrometry data preprocessing. *Anal. Chem.*, 81(8):3079–3086. <http://pubs.acs.org/doi/abs/10.1021/ac900036d>
- Maruyama, K., Takeda, M., Kidokoro, S., Yamada, K., Sakuma, Y., Urano, K., Fujita, M., Yoshiwara, K., Matsukura, S., Morishita, Y., Sasaki, R., Suzuki, H., Saito, K., Shibata, D., Shinozaki, K., and Yamaguchi-Shinozaki, K. (2009). Metabolic pathways involved in cold acclimation identified by integrated analysis of metabolites and transcripts regulated by DREB1A and DREB2A. *Plant Physiology*, 150(4):1972–1980. <http://www.plantphysiol.org/content/150/4/1972>
- Meimoun, P., Goussot-Dupont, A., Lebouteiller, B., Ambard-Bretteville, F., Besin, E., Lelarge, C., Mauve, C., Hodges, M., and Vidal, J. (2009). The impact of PEPC phosphorylation on growth and development of arabidopsis thaliana: Molecular and physiological characterization of PEPC kinase mutants. *FEBS Letters*, 583(10):1649–1652. <http://www.sciencedirect.com/science/article/pii/S0014579309003226>
- Nakabayashi, R., Kusano, M., Kobayashi, M., Tohge, T., Yonekura-Sakakibara, K., Kogure, N., Yamazaki, M., Kitajima, M., Saito, K., and Takayama, H. (2009). Metabolomics-oriented isolation and structure elucidation of 37 compounds including two anthocyanins from arabidopsis thaliana. *Phytochemistry*, 70(8):1017–1029. <http://www.sciencedirect.com/science/article/pii/S003194220900137X>
- Nakamichi, N., Kusano, M., Fukushima, A., Kita, M., Ito, S., Yamashino, T., Saito, K., Sakakibara, H., and Mizuno, T. (2009). Transcript profiling of an arabidopsis PSEUDO RESPONSE REGULATOR arrhythmic triple mutant reveals a role for the circadian clock in cold stress response. *Plant and Cell Physiology*, 50(3):447–462. <http://pcp.oxfordjournals.org/content/50/3/447>
- Parker, D., Beckmann, M., Zubair, H., Enot, D. P., Caracuel-Rios, Z., Overy, D. P., Snowdon, S., Talbot, N. J., and Draper, J. (2009). Metabolomic analysis reveals a common pattern of metabolic re-programming during invasion of three host plant species by magnaporthe grisea. *The Plant Journal*, 59(5):723–737. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.2009.03912.x/abstract;jsessionid=967A8D53708A6B7E00D06DD03326E52.d02t03?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- Parveen, I., Moorby, J. M., Fraser, M. D., Erban, A., and Kopka, J. (2009). Relationship between grazing lamb growth rate and blood plasma analytes as profiled by gas chromatography with Time-of-Flight mass spectrometry (GC-TOF/MS). *J. Agric. Food Chem.*, 58(2):913–917. <http://pubs.acs.org/doi/abs/10.1021/jf902116m>
- Patil, S. H., Banerjee, K., Dasgupta, S., Oulkar, D. P., Patil, S. B., Jadhav, M. R., Savant, R. H., Adsule, P. G., and Deshmukh, M. B. (2009). Multiresidue analysis of 83 pesticides and 12 dioxin-like polychlorinated biphenyls in wine by gas chromatography-time-of-flight mass spectrometry. *Journal of Chromatography A*, 1216(12):2307–2319. <http://www.sciencedirect.com/science/article/pii/S0021967309001502>
- Ratel, J. and Engel, E. (2009). Determination of benzenic and halogenated volatile organic compounds in animal-derived food products by one-dimensional and comprehensive two-dimensional gas chromatography-mass spectrometry. *Journal of Chromatography A*, 1216(45):7889–7898. <http://www.sciencedirect.com/science/article/pii/S002196730901348X>
- Ryona, I., Pan, B. S., and Sacks, G. L. (2009). Rapid measurement of 3-Alkyl-2-methoxypyrazine content of winegrapes to predict levels in resultant wines. *J. Agric. Food Chem.*, 57(18):8250–8257. <http://pubs.acs.org/doi/abs/10.1021/jf9019695>
- Tolstikov, V. V. (2009). Metabolic analysis micro and nano technologies in bioanalysis. volume 544 of *Methods in Molecular Biology*, chapter 22, pages 343–353. Humana Press, Totowa, NJ. <http://www.springerlink.com/content/u4583t07k1r31492/#section=67800&page=1>
- van den Berg, A. K., Perkins, T. D., Isselhardt, M. L., Godshall, M. A., and Lloyd, S. W. (2009). Air injection into concentrated maple sap during processing: impact on syrup composition and flavour. *J. Sci. Food Agric.*, 89(10):1770–1774. <http://onlinelibrary.wiley.com/doi/10.1002/jsfa.3654/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+on+27+October+from+10%3A00-12%3A00+BST+%2805%3A00-07%3A00+EDT%29+for+essential+maintenance>
- van Dongen, J. T., Fröhlich, A., Ramírez-Aguilar, S. J., Schauer, N., Fernie, A. R., Erban, A., Kopka, J., Clark, J., Langer, A., and Geigenberger, P. (2009). Transcript and metabolite profiling of the adaptive response to mild decreases in oxygen concentration in the roots of arabidopsis plants. *Annals of Botany*, 103(2):269–280. <http://aob.oxfordjournals.org/content/103/2/269>
- Yan, B., JiYe, Hao, H., Wang, G., Zhu, X., Zha, W., Liu, L., Guan, E., Zhang, Y., Gu, S., Huang, Q., and Zheng, Y. (2009a). Metabonomic phenotype and identification of “heart blood stasis obstruction pattern” and “qi and yin deficiency pattern” of myocardial ischemia rat models. *Science in China Series C: Life Sciences*, 52(11):1081–1090. <http://www.springerlink.com/content/7406495341178x55/>
- Yan, B., Jiye, A., Wang, G., Lu, H., Huang, X., Liu, Y., Zha, W., Hao, H., Zhang, Y., Liu, L., Gu, S., Huang, Q., Zheng, Y., and Sun, J. (2009b). Metabolomic investigation into variation of endogenous metabolites in professional athletes subject to strength-endurance training. *Journal of Applied Physiology*, 106(2):531–538. <http://jap.physiology.org/content/106/2/531>
- Ying, Z., Jiye, A., Wang, G., Qing, H., Bei, Y., Weibin, Z., Shenghua, G., Linsheng, L., Hongcan, R., Meiting, R., and Longsheng, S. (2009). Organic solvent extraction and metabonomic profiling of the metabolites in erythrocytes. *Journal of Chromatography B*, 877(18–19):1751–1757. <http://www.sciencedirect.com/science/article/pii/S1570023209003080>
- Zha, W., Jiye, Wang, G., Yan, B., Gu, S., Zhu, X., Hao, H., Huang, Q., Sun, J., Zhang, Y., Cao, B., and Ren, H. (2009). Metabonomic characterization of early atherosclerosis in hamsters with induced cholesterol. *Biomarkers*, 14(6):372–380. <http://informahealthcare.com/doi/abs/10.1080/13547500903026401>
- Zhang, S.-W., Li, C.-H., Cao, J., Zhang, Y.-C., Zhang, S.-Q., Xia, Y.-F., Sun, D.-Y., and Sun, Y. (2009). Altered architecture and enhanced drought tolerance in rice via the Down-Regulation of Indole-3-Acetic acid by TLD1/OsGH3.13 activation. *Plant Physiology*, 151(4):1889–1901. <http://www.plantphysiol.org/content/151/4/1889>
- Zou, W. and Tolstikov, V. (2009). Pattern recognition and pathway analysis with genetic algorithms in mass spectrometry based metabolomics. *Algorithms*, 2(2):638–666. <http://www.mdpi.com/1999-4893/2/2/638>

2008

- Accettola, F., Guebitz, G. M., and Schoeftner, R. (2008). Siloxane removal from biogas by biofiltration: biodegradation studies. *Clean Technologies and Environmental Policy*, 10(2):211–218. <http://www.springerlink.com/content/dj0632t65212qqgx/>
- Aginsky, V. N. (2008). Chapter 27 Writing media and documents, volume 6, pages 923–941. Elsevier. <http://www.sciencedirect.com/science/article/pii/S156771920606027X>
- Akihiro, T., Koike, S., Tani, R., Tominaga, T., Watanabe, S., Iijima, Y., Aoki, K., Shibata, D., Ashihara, H., Matsukura, C., Akama, K., Fujimura, T., and Ezura, H. (2008). Biochemical mechanism on GABA accumulation during fruit development in tomato. *Plant and Cell Physiology*, 49(9):1378–1389. <http://pcp.oxfordjournals.org/content/49/9/1378>
- Beckmann, B., Hofmann, P., März, C., Schouten, S., Sinninghe Damsté, J. S., and Wagner, T. (2008). Coniacian-Santonian deep ocean anoxia/euxinia inferred from molecular and inorganic markers: Results from the demerara rise (ODP leg 207). *Organic Geochemistry*, 39(8):1092–1096. <http://www.sciencedirect.com/science/article/pii/S0146638008001071>
- Bedair, M. and Sumner, L. W. (2008). Current and emerging mass-spectrometry technologies for metabolomics. *TrAC Trends in Analytical Chemistry*, 27(3):238–250. <http://www.sciencedirect.com/science/article/pii/S0165993608000071>
- Bougeard Cynthia, M. M., Janmohamed Imran, H. S., Goslan Emma, H., Bruce, J., Watson Jonathan, S., Morgan Geraint, H., and Parsons Simon, A. (2008). Parameters affecting haloacetic acid and trihalomethane concentrations in treated UK drinking waters. 995:95–108. <http://pubs.acs.org/doi/abs/10.1021/bk-2008-0995.ch007>
- Cajka, T., Hajslova, J., Lacina, O., Mastovska, K., and Lehotay, S. J. (2008). Rapid analysis of multiple pesticide residues in fruit-based baby food using programmed temperature vaporiser injection-low-pressure gas chromatography-high-resolution time-of-flight mass spectrometry. *Journal of Chromatography A*, 1186(1-2):281–294. <http://www.sciencedirect.com/science/article/pii/S0021967307021176>
- Chin, S. T., Nazimah, S. A., Quek, S. Y., Che Man, Y. B., Abdul Rahman, R., and Mat Hashim, D. (2008). Changes of volatiles' attribute in durian pulp during freeze- and spray-drying process. *LWT - Food Science and Technology*, 41(10):1899–1905. <http://www.sciencedirect.com/science/article/pii/S0023643808000443>
- Coolong, T. W. and Randle, W. M. (2008). The effects of calcium chloride and ammonium sulfate on onion bulb quality at harvest and during storage. *HortScience*, 43(2):465–471. <http://hortsci.ashpublications.org/content/43/2/465.abstract>
- Dailey, O. D., Prevost, N. T., and Strahan, G. D. (2008). Synthesis and characterization of Branched-Chain derivatives of methyl oleate. *Clean Soil Air Water*, 36(8):687–693. <http://onlinelibrary.wiley.com/doi/10.1002/clen.200800058/abstract>
- Denkert, C., Budczies, J., Weichert, W., Wohlgemuth, G., Scholz, M., Kind, T., Niesporek, S., Noske, A., Buckendahl, A., Dietel, M., and Fiehn, O. (2008). Metabolite profiling of human colon carcinoma - deregulation of TCA cycle and amino acid turnover. *Molecular Cancer*, 7(1):72+. <http://www.molecular-cancer.com/content/7/1/72>
- Ding, M.-J., Zong, Z.-M., Zong, Y., Ou-Yang, X.-D., Huang, Y.-G., Zhou, L., Wang, F., Cao, J.-P., and Wei, X.-Y. (2008). Isolation and identification of fatty acid amides from shengli coal. *Energy Fuels*, 22(4):2419–2421. <http://pubs.acs.org/doi/abs/10.1021/ef700499y>
- Eisenhut, M., Huege, J., Schwarz, D., Bauwe, H., Kopka, J., and Hagemann, M. (2008). Metabolome phenotyping of inorganic carbon limitation in cells of the wild type and photorespiratory mutants of the cyanobacterium *synechocystis* sp. strain PCC 6803. *Plant Physiology*, 148(4):2109–2120. <http://www.plantphysiol.org/content/148/4/2109>
- Fiehn, O., Wohlgemuth, G., Scholz, M., Kind, T., Lee, D. Y., Lu, Y., Moon, S., and Nikolau, B. (2008). Quality control for plant metabolomics: reporting MSI-compliant studies. *The Plant Journal*, 53(4):691–704. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.2007.03387.x/abstract>
- Garcia, D. E., Baidoo, E. E., Benke, P. I., Pingitore, F., Tang, Y. J., Villa, S., and Keasling, J. D. (2008). Separation and mass spectrometry in microbial metabolomics. *Current Opinion in Microbiology*, 11(3):233–239. <http://www.sciencedirect.com/science/article/pii/S1369527408000532>
- Geib, S. M., Filley, T. R., Hatcher, P. G., Hoover, K., Carlson, J. E., del Mar Jimenez-Gasco, M., Nakagawa-Izumi, A., Sleighter, R. L., and Tien, M. (2008). Lignin degradation in wood-feeding insects. *Proceedings of the National Academy of Sciences*, 105(35):12932–12937. <http://www.pnas.org/content/105/35/12932>
- Hadorn, R., Eberhard, P., Guggisberg, D., Piccinini, P., and Schlichtherle-Cerny, H. (2008). Effect of fat score on the quality of various meat products. *Meat Science*, 80(3):765–770. <http://www.sciencedirect.com/science/article/pii/S0309174008000892>
- Hamers, B., Bäuerlein, P. S., Müller, C., and Vogt, D. (2008). Hydroaminomethylation of n-Alkenes in a biphasic ionic liquid system. *Adv. Synth. Catal.*, 350(2):332–342. <http://onlinelibrary.wiley.com/doi/10.1002/adsc.200700132/abstract>
- Han, L., Zong, Z.-M., Jin, X., Wang, Y.-Q., Wang, F., Yu, T.-T., Tian, G.-F., Zhao, S.-Q., Bao, X.-J., Ma, X.-X., and Wei, X.-Y. (2008). Solubility of dagang vacuum residue and molecular composition of the soluble fractions in different solvents. *Fuel*, 87(2):260–263. <http://www.sciencedirect.com/science/article/pii/S0016236107003262>
- Heazell, A. E. P., Brown, M., Dunn, W. B., Worton, S. A., Crocker, I. P., Baker, P. N., and Kell, D. B. (2008). Analysis of the metabolic footprint and tissue metabolome of placental villous explants cultured at different oxygen tensions reveals novel redox biomarkers. *Placenta*, 29(8):691–698. [http://www.placentajournal.org/article/S0143-4004\(08\)00159-8/abstract](http://www.placentajournal.org/article/S0143-4004(08)00159-8/abstract)
- Heftter, J. (2008). Analysis of alkenone unsaturation indices with fast gas Chromatography/Time-of-Flight mass spectrometry. *Anal. Chem.*, 80(6):2161–2170. <http://pubs.acs.org/doi/abs/10.1021/ac702194m>

- Jiye, Huang, Q., Wang, G., Zha, W., Yan, B., Ren, H., Gu, S., Zhang, Y., Zhang, Q., Shao, F., Sheng, L., and Sun, J. (2008). Global analysis of metabolites in rat and human urine based on gas chromatography/time-of-flight mass spectrometry. *Analytical Biochemistry*, 379(1):20–26. <http://www.sciencedirect.com/science/article/pii/S0003269708002534>
- Jumtee, K., Bamba, T., Okazawa, A., Fukusaki, E., and Kobayashi, A. (2008). Integrated metabolite and gene expression profiling revealing phytochrome a regulation of polyamine biosynthesis of arabidopsis thaliana. *Journal of Experimental Botany*, 59(6):1187–1200. <http://jxb.oxfordjournals.org/content/59/6/1187>
- Kagan, I. A., Coe, B. L., Smith, L. L., Huo, C.-J., Dougherty, C. T., and Strickland, J. R. (2008). A validated method for gas chromatographic analysis of y-Aminobutyric acid in tall fescue herbage. *J. Agric. Food Chem.*, 56(14):5538–5543. <http://pubs.acs.org/doi/abs/10.1021/jf8000229>
- Kahandawala, M. S. P., DeWitt, M. J., Corporan, E., and Sidhu, S. S. (2008). Ignition and emission characteristics of surrogate and practical jet fuels. *Energy Fuels*, 22(6):3673–3679. <http://pubs.acs.org/doi/abs/10.1021/ef800303a>
- Kempa, S., Krasensky, J., Dal Santo, S., Kopka, J., and Jonak, C. (2008). A central role of abscisic acid in Stress-Regulated carbohydrate metabolism. *PLoS ONE*, 3(12):e3935+. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0003935>
- Kuhl, J., Moritz, T., Wagner, H., Stenlund, H., Lundgren, K., Bävenholm, P., Efendic, S., Norstedt, G., and Tollet-Egnell, P. (2008). Metabolomics as a tool to evaluate exercise-induced improvements in insulin sensitivity. *Metabolomics*, 4(3):273–282. <http://www.springerlink.com/content/ew64621695420707/>
- Lee, D. and Fiehn, O. (2008). High quality metabolomic data for chlamydomonas reinhardtii. *Plant Methods*, 4(1):7+. <http://www.plantmethods.com/content/4/1/7>
- Leung, H.-T., Tseng-Crank, J., Kim, E., Mahapatra, C., Shino, S., Zhou, Y., An, L., Doerge, R. W., and Pak, W. L. (2008). DAG lipase activity is necessary for TRP channel regulation in drosophila photoreceptors. *Neuron*, 58(6):884–896. <http://www.cell.com/neuron/retrieve/pii/S0896627308004108>
- Lu, H., Liang, Y., Dunn, W. B., Shen, H., and Kell, D. B. (2008a). Comparative evaluation of software for deconvolution of metabolomics data based on GC-TOF-MS. *TrAC Trends in Analytical Chemistry*, 27(3):215–227. <http://www.sciencedirect.com/science/article/pii/S0165993607002439>
- Lu, Y., Jiye, Wang, G., Hao, H., Huang, Q., Yan, B., Zha, W., Gu, S., Ren, H., Zhang, Y., Fan, X., Zhang, M., and Hao, K. (2008b). Gas chromatography/time-of-flight mass spectrometry based metabonomic approach to differentiating hypertension- and age-related metabolic variation in spontaneously hypertensive rats. *Rapid Commun. Mass Spectrom.*, 22(18):2882–2888. <http://onlinelibrary.wiley.com/doi/10.1002/rcm.3670/abstract>
- May, P., Wienkoop, S., Kempa, S., Usadel, B., Christian, N., Rupprecht, J., Weiss, J., Recuenco-Munoz, L., Ebenhöh, O., Weckwerth, W., and Walther, D. (2008). Metabolomics- and Proteomics-Assisted genome annotation and analysis of the draft metabolic network of chlamydomonas reinhardtii. *Genetics*, 179(1):157–166. <http://www.genetics.org/content/179/1/157> Meesters, R., Duisken, M., Jahnigen, H., and Hollender, J. (2008). Sensitive determination of monoterpene alcohols in urine by HPLC-FLD combined with ESI-MS detection after online-solid phase extraction of the monoterpene-coumarincarbamate derivates. *Journal of Chromatography B*, 875(2):444–450. <http://www.sciencedirect.com/science/article/pii/S1570023208006995>
- Meyer, A. and Imming, P. (2008). R(-)-Canadaline as first secoberbine alkaloid from corydalis cava. *Phytochemistry Letters*, 1(3):168–170. <http://www.sciencedirect.com/science/article/pii/S1874390008000530>
- Michell, A. W., Mosedale, D., Grainger, D. J., and Barker, R. A. (2008). Metabolomic analysis of urine and serum in parkinson's disease. *Metabolomics*, 4(3):191–201. <http://www.springerlink.com/content/y85r820m84510512/>
- Mirhosseini, H., Tan, C. P., Yusof, S., and Hamid, N. S. (2008). Solid-phase microextraction for determining twelve orange flavour compounds in a model beverage emulsion. *Phytochem. Anal.*, 19(5):429–437. <http://onlinelibrary.wiley.com/doi/10.1002/pca.1068/abstract>
- Niri, V. H., Bragg, L., and Pawliszyn, J. (2008). Fast analysis of volatile organic compounds and disinfection by-products in drinking water using solid-phase microextraction-gas chromatography/time-of-flight mass spectrometry. *Journal of Chromatography A*, 1201(2):222–227. <http://www.sciencedirect.com/science/article/pii/S0021967308004986>
- Ong, B. T., Nazimah, S. A. H., Tan, C. P., Mirhosseini, H., Osman, A., Mat Hashim, D., and Rusul, G. (2008). Analysis of volatile compounds in five jackfruit (*artocarpus heterophyllus* L.) cultivars using solid-phase microextraction (SPME) and gas chromatography-time-of-flight mass spectrometry (GC-TOFMS). *Journal of Food Composition and Analysis*, 21(5):416–422. <http://www.sciencedirect.com/science/article/pii/S088915750800029X>
- Pedneault, K., Angers, P., Gosselin, A., and Tweddell, R. J. (2008). Fatty acid profiles of polar and neutral lipids of ten species of higher basidiomycetes indigenous to eastern canada. *Mycological Research*, 112(12):1428–1434. <http://www.sciencedirect.com/science/article/pii/S0953756208001846>
- Peiris, D., Dunn, W. B., Brown, M., Kell, D. B., Roy, I., and Hedger, J. N. (2008). Metabolite profiles of interacting mycelial fronts differ for pairings of the wood decay basidiomycete fungus, *Stereum hirsutum* with its competitors *Coprinus micaceus* and *Coprinus disseminatus*. *Metabolomics*, 4(1):52–62. <http://www.springerlink.com/content/485081w52056g860/>
- Pettersson, M., Unelius, C. R., Valterová, I., and Borg-Karlsson, A.-K. (2008). Semiochemicals related to the aphid cinara pilicornis and its host, picea abies: A method to assign nepetalactone diastereomers. *Journal of Chromatography A*, 1180(1-2):165–170. <http://www.sciencedirect.com/science/article/pii/S0021967307021747>

- Riewe, D., Grosman, L., Fernie, A. R., Wucke, C., and Geigenberger, P. (2008a). The Potato-Specific apyrase is apoplastically localized and has influence on gene expression, growth, and development. *Plant Physiology*, 147(3):1092–1109.
<http://www.plantphysiol.org/content/147/3/1092>
- Riewe, D., Grosman, L., Zauber, H., Wucke, C., Fernie, A. R., and Geigenberger, P. (2008b). Metabolic and developmental adaptations of growing potato tubers in response to specific manipulations of the adenylate energy status. *Plant Physiology*, 146(4):1579–1598.
<http://www.plantphysiol.org/content/146/4/1579>
- Scarlett, A., Rowland, S. J., Galloway, T. S., Lewis, A. C., and Booth, A. M. (2008). Chronic sublethal effects associated with branched alkylbenzenes bioaccumulated by mussels. *Environmental Toxicology and Chemistry*, 27(3):561–567.
<http://onlinelibrary.wiley.com/doi/10.1897/07-347.1/abstract>
- Schantz, M. M., Bedner, M., Long, S. E., Molloy, J. L., Murphy, K. E., Porter, B. J., Putzbach, K., Rimmer, C. A., Sander, L. C., Sharpless, K. E., Thomas, J. B., Wise, S. A., Wood, L. J., Yen, J. H., Yarita, T., NguyenPho, A., Sorenson, W. R., and Betz, J. M. (2008). Development of saw palmetto (*Serenoa repens*) fruit and extract standard reference materials. *Analytical and Bioanalytical Chemistry*, 392(3):427–438.
<http://www.springerlink.com/content/j631551163736k52/>
- Sellick, C. A., Hansen, R., Maqsood, A. R., Dunn, W. B., Stephens, G. M., Goodacre, R., and Dickson, A. J. (2008). Effective quenching processes for physiologically valid metabolite profiling of suspension cultured mammalian cells. *Anal. Chem.*, 81(1):174–183.
<http://pubs.acs.org/doi/abs/10.1021/ac8016899>
- Siripatrawan, U. (2008). Rapid differentiation between *e. coli* and *salmonella typhimurium* using metal oxide sensors integrated with pattern recognition. *Sensors and Actuators B: Chemical*, 133(2):414–419.
<http://www.sciencedirect.com/science/article/pii/S0925400508001846>
- Son, S.-H., Lee, J.-H., Byeon, S.-H., and Lee, C.-H. (2008). Surface chemical analysis of corroded alloys in subcritical and supercritical water oxidation of 2-Chlorophenol in continuous anticorrosive reactor system. *Ind. Eng. Chem. Res.*, 47(7):2265–2272.
<http://pubs.acs.org/doi/abs/10.1021/ie0709281>
- Strehmel, N., Hummel, J., Erban, A., Strassburg, K., and Kopka, J. (2008). Retention index thresholds for compound matching in GC-MS metabolite profiling. *Journal of Chromatography B*, 871(2):182–190.
<http://www.sciencedirect.com/science/article/pii/S1570023208002511>
- Tianniam, S., Tarachiwin, L., Bamba, T., Kobayashi, A., and Fukusaki, E. (2008). Metabolic profiling of angelica acutiloba roots utilizing gas chromatography-time-of-flight-mass spectrometry for quality assessment based on cultivation area and cultivar via multivariate pattern recognition. *Journal of Bioscience and Bioengineering*, 105(6):655–659.
<http://www.sciencedirect.com/science/article/pii/S13891723080701245>
- Wihlborg, R., Pippitt, D., and Marsili, R. (2008). Headspace sorptive extraction and GC-TOFMS for the identification of volatile fungal metabolites. *Journal of Microbiological Methods*, 75(2):244–250.
<http://www.sciencedirect.com/science/article/pii/S0167701208002303>
- Wiklund, S., Johansson, E., Sjostrom, L., Mellerowicz, E. J., Edlund, U., Shockcor, J. P., Gottfries, J., Moritz, T., and Trygg, J. (2007). Visualization of GC/TOF-MS-based metabolomics data for identification of biochemically interesting compounds using OPLS class models. *Anal. Chem.*, 80(1):115–122. <http://pubs.acs.org/doi/abs/10.1021/ac0713510>
- Winder, C. L., Dunn, W. B., Schuler, S., Broadhurst, D., Jarvis, R., Stephens, G. M., and Goodacre, R. (2008). Global metabolic profiling of *escherichia coli* cultures: an evaluation of methods for quenching and extraction of intracellular metabolites. *Anal. Chem.*, 80(8):2939–2948. <http://pubs.acs.org/doi/abs/10.1021/ac7023409>
- Wunschel, D. S., Colburn, H. A., Fox, A., Fox, K. F., Harley, W. M., Wahl, J. H., and Wahl, K. L. (2008). Detection of agar, by analysis of sugar markers, associated with bacillus anthracis spores, after culture. *Journal of Microbiological Methods*, 74(2-3):57–63.
<http://www.sciencedirect.com/science/article/pii/S0167701208001097>
- Zelinková, Z., Novotný, O., Schrek, J., Velíek, J., Hajlová, J., and Doleal, M. (2008). Occurrence of 3-MCPD fatty acid esters in human breast milk. *Food Additives & Contaminants: Part A*, 25(6):669–676. <http://www.tandfonline.com/doi/abs/10.1080/02652030701799375>
- Zhao, X., Zong, Z., Cao, J., Ma, Y., Han, L., Liu, G., Zhao, W., Li, W., Xie, K., and Bai, X. (2008). Difference in chemical composition of carbon disulfide-extractable fraction between vitrinite and inertinite from Shenfu-Dongsheng and pingshuo coals. *Fuel*, 87(4-5):565–575. <http://www.sciencedirect.com/science/article/pii/S0016236107001007>



Delivering the Right Results

LECO Corporation

3000 Lakeview Avenue • St. Joseph, MI 49085 • Phone: 800-292-6141 • Fax: 269-982-8977
info@leco.com • www.leco.com • ISO-9001:2000 • No. FM 24045 • LECO is a registered trademark of LECO Corporation.