

List of Publications - Dr. Christophe Farès

- 1) Rumpel, S., Siebel, J. F., Farès, C., Duan, J., Reijerse, E., Happe, T., Lubitz, W. and Winkler, M. (2014): "Enhancing hydrogen production of microalgae by redirecting electrons from photosystem I to hydrogenase". *Energy & Environmental Science* DOI: 10.1039/c4ee01444h
- 2) Peng, B., Geerdink, D., Fares, C. and Maulide, N. (2014): "Chemoselective intermolecular alpha-arylation of amides". *Angew Chem Int Ed Engl* **53**(21), 5462-5466. DOI: 10.1002/anie.201402229
- 3) Kaldstrom, M., Meine, N., Fares, C., Schüth, F. and Rinaldi, R. (2014): "Deciphering 'water-soluble lignocellulose' obtained by mechanocatalysis: new insights into the chemical processes leading to deep depolymerization". *Green Chemistry* **16**(7), 3528-3538. DOI: Doi 10.1039/C4gc00004h
- 4) Kaldstrom, M., Meine, N., Fares, C., Rinaldi, R. and Schüth, F. (2014): "Fractionation of 'water-soluble lignocellulose' into C5/C6 sugars and sulfur-free lignins". *Green Chemistry* DOI: 10.1039/C4GC00168K
- 5) Helander, S., Montecchio, M., Lemak, A., Fares, C., Almlof, J., Li, Y., Yee, A., Arrowsmith, C. H., Dhe-Paganon, S. and Sunnerhagen, M. (2014): "Basic Tilted Helix Bundle - a new protein fold in human FKBP25/FKBP3 and HectD1". *Biochem Biophys Res Commun* **447**(1), 26-31. DOI: 10.1016/j.bbrc.2014.03.068
- 6) Souris, C., Luparia, M., Frebault, F., Audisio, D., Fares, C., Goddard, R. and Maulide, N. (2013): "An Atom-Economical and Stereoselective Domino Synthesis of Functionalised Dienes". *Chemistry-a European Journal* **19**(21), 6566-6570. DOI: DOI 10.1002/chem.201300776
- 7) Souris, C., Frebault, F., Audisio, D., Fares, C. and Maulide, N. (2013): "Direct Domino Synthesis of Azido-Dienoic Acids: Potential Linker Units". *Synlett* **24**(10), 1286-1290. DOI: DOI 10.1055/s-0033-1338452
- 8) Lifchits, O., Mahlau, M., Reisinger, C. M., Lee, A., Fares, C., Polyak, I., Gopakumar, G., Thiel, W. and List, B. (2013): "The Cinchona Primary Amine-Catalyzed Asymmetric Epoxidation and Hydroperoxidation of alpha,beta-Unsaturated Carbonyl Compounds with Hydrogen Peroxide". *Journal of the American Chemical Society* **135**(17), 6677-6693. DOI: Doi 10.1021/Ja402058v
- 9) Kozma, A., Gopakumar, G., Fares, C., Thiel, W. and Alcarazo, M. (2013): "Synthesis and Structure of Carbene-Stabilized N-Centered Cations [L2N]+, [L2NR]2+, [LNR3]2+, and [L3N]3+". *Chemistry-a European Journal* **19**(11), 3542-3546. DOI: DOI 10.1002/chem.201204186
- 10) Huang, X. L., Patil, M., Fares, C., Thiel, W. and Maulide, N. (2013): "Sulfur(IV)-Mediated Transformations: From Ylide Transfer to Metal-Free Arylation of Carbonyl Compounds". *Journal of the American Chemical Society* **135**(19), 7312-7323. DOI: Doi 10.1021/Ja4017683
- 11) Audisio, D., Gopakumar, G., Xie, L. G., Alves, L. G., Wirtz, C., Martins, A. M., Thiel, W., Farès, C. and Maulide, N. (2013): "Palladium-Catalyzed Allylic Substitution at Four-Membered-Ring Systems: Formation of eta(1)-Allyl Complexes and Electrocyclic Ring Opening". *Angewandte Chemie-International Edition* **52**(24), 6313-6316. DOI: DOI 10.1002/anie.201301034
- 12) Klimczyk, S., Huang, X. L., Fares, C. and Maulide, N. (2012): "Sulfoxide-mediated Umpolung of alkali halide salts". *Organic & Biomolecular Chemistry* **10**(22), 4327-4329. DOI: Doi 10.1039/C2ob25459j
- 13) Andresen, C., Helander, S., Lemak, A., Farès, C., Csizmok, V., Carlsson, J., Penn, L. Z., Forman-Kay, J. D., Arrowsmith, C. H., Lundstrom, P. and Sunnerhagen, M. (2012): "Transient structure and dynamics in the disordered c-Myc transactivation domain affect Bin1 binding". *Nucleic Acids Res* 6353-6366. DOI: 10.1093/nar/gks263

- 14) Lemak, A., Gutmanas, A., Chitayat, S., Karra, M., Fares, C., Sunnerhagen, M. and Arrowsmith, C. H. (2011): "A novel strategy for NMR resonance assignment and protein structure determination". *Journal of Biomolecular NMR* **49**(1), 27-38. DOI: DOI 10.1007/s10858-010-9458-0
- 15) Boess, E., Sureshkumar, D., Sud, A., Wirtz, C., Fares, C. and Klussmann, M. (2011): "Mechanistic Studies on a Cu-Catalyzed Aerobic Oxidative Coupling Reaction with N-Phenyl Tetrahydroisoquinoline: Structure of Intermediates and the Role of Methanol As a Solvent". *Journal of the American Chemical Society* **133**(21), 8106-8109. DOI: Doi 10.1021/Ja201610c
- 16) Wu, B., Skarina, T., Yee, A., Jobin, M. C., Dileo, R., Semesi, A., Fares, C., Lemak, A., Coombes, B. K., Arrowsmith, C. H., Singer, A. U. and Savchenko, A. (2010): "NleG Type 3 Effectors from Enterohaemorrhagic Escherichia coli Are U-Box E3 Ubiquitin Ligases". *Plos Pathogens* **6**(6), DOI: ARTN e1000960
DOI 10.1371/journal.ppat.1000960
- 17) Cerchietti, L. C., Ghetu, A. F., Zhu, X., Da Silva, G. F., Zhong, S. J., Matthews, M., Bunting, K. L., Polo, J. M., Fares, C., Arrowsmith, C. H., Yang, S. N., Garcia, M., Coop, A., MacKerell, A. D., Prive, G. G. and Melnick, A. (2010): "A Small-Molecule Inhibitor of BCL6 Kills DLBCL Cells In Vitro and In Vivo". *Cancer Cell* **17**(4), 400-411. DOI: DOI 10.1016/j.ccr.2009.12.050
- 18) Fares, C., Lakomek, N. A., Walter, K. F. A., Frank, B. T. C., Meiler, J., Becker, S. and Griesinger, C. (2009): "Accessing ns- μ s side chain dynamics in ubiquitin with methyl RDCs". *Journal of Biomolecular NMR* **45**(1-2), 23-44. DOI: DOI 10.1007/s10858-009-9354-7
- 19) Mao, D. Y., Neculai, D., Downey, M., Orlicky, S., Haffani, Y. Z., Ceccarelli, D. F., Ho, J. S., Szilard, R. K., Zhang, W., Ho, C. S., Wan, L., Fares, C., Rumpel, S., Kurinov, I., Arrowsmith, C. H., Durocher, D. and Sicheri, F. (2008): "Atomic structure of the KEOPS complex: an ancient protein kinase-containing molecular machine". *Mol Cell* **32**(2), 259-275. DOI: 10.1016/j.molcel.2008.10.002
- 20) Lange, O. F., Lakomek, N. A., Fares, C., Schroder, G. F., Walter, K. F. A., Becker, S., Meiler, J., Grubmuller, H., Griesinger, C. and de Groot, B. L. (2008): "Recognition dynamics up to microseconds revealed from an RDC-derived ubiquitin ensemble in solution". *Science* **320**(5882), 1471-1475. DOI: DOI 10.1126/science.1157092
- 21) Lakomek, N. A., Walter, K. F. A., Fares, C., Lange, O. F., de Groot, B. L., Grubmuller, H., Bruschiweiler, R., Munk, A., Becker, S., Meiler, J. and Griesinger, C. (2008): "Self-consistent residual dipolar coupling based model-free analysis for the robust determination of nanosecond to microsecond protein dynamics". *Journal of Biomolecular NMR* **41**(3), 139-155. DOI: DOI 10.1007/s10858-008-9244-4
- 22) Lakomek, N. A., Lange, O. F., Walter, K. F. A., Fares, C., Egger, D., Lunkenheimer, P., Meiler, J., Grubmuller, H., Becker, S., de Groot, B. L. and Griesinger, C. (2008): "Residual dipolar couplings as a tool to study molecular recognition of ubiquitin". *Biochemical Society Transactions* **36**(1433-1437). DOI: Doi 10.1042/Bst0361433
- 23) Fares, C., Hassfeld, J., Menche, D. and Carlomagno, T. (2008): "Simultaneous determination of the conformation and relative configuration of archazolide A by using nuclear Overhauser effects, J couplings, and residual dipolar couplings". *Angewandte Chemie-International Edition* **47**(20), 3722-3726. DOI: DOI 10.1002/anie.200800225
- 24) Fares, C., Amata, I. and Carlomagno, T. (2007): "C-13-Detection in RNA bases: Revealing structure-chemical shift relationships". *Journal of the American Chemical Society* **129**(51), 15814-15823. DOI: Doi 10.1021/Ja0727417
- 25) Hassfeld, J., Fares, C., Steinmetz, H., Carlomagno, T. and Menche, D. (2006): "Stereochemical determination of archazolide A and B, highly potent vacuolar-type ATPase inhibitors from the myxobacterium Archangium gephyra". *Organic Letters* **8**(21), 4751-4754. DOI: Doi 10.1021/Ol061831y
- 26) Fares, C., Libich, D. S. and Harauz, G. (2006): "Solution NMR structure of an immunodominant epitope of myelin basic protein - Conformational dependence on environment of an intrinsically unstructured protein". *FEBS Journal* **273**(3), 601-614. DOI: Doi 10.1111/J.1742-4658.2005.05093.X

- 27) Fares, C. and Carlomagno, T. (2006): "SHARP-TACSY: Triple-band tailored correlated spectroscopy for base-to-sugar transfer in nucleic acid residues with intermediate time scale motions" *Journal of the American Chemical Society* **128**(30), 9856-9862. DOI: Artn Ja061424h
Doi 10.1021/Ja061424h
- 28) Lakomek, N. A., Fares, C., Becker, S., Carlomagno, T., Meiler, J. and Griesinger, C. (2005): "Side-chain orientation and hydrogen-bonding imprint supra-tau(c) motion on the protein backbone of ubiquitin". *Angewandte Chemie-International Edition* **44**(47), 7776-7778. DOI: DOI 10.1002/anie.200502573
- 29) Fares, C., Qian, J. and Davis, J. H. (2005): "Magic angle spinning and static oriented sample NMR studies of the relaxation in the rotating frame of membrane peptides". *Journal of Chemical Physics* **122**(19), DOI: Artn 194908
Doi 10.1063/1.1899645
- 30) Harauz, G., Ishiyama, N., Hill, C. M. D., Bates, I. R., Libich, D. S. and Fares, C. (2004): "Myelin basic protein - diverse conformational states of an intrinsically unstructured protein and its roles in myelin assembly and multiple sclerosis". *Micron* **35**(7), 503-542. DOI: DOI 10.1016/j.micron.2004.04.005
- 31) Fares, C., Sharom, F. J. and Davis, J. H. (2002): "N-15,H-1 heteronuclear correlation NMR of gramicidin A in DMPC-d(67)". *Journal of the American Chemical Society* **124**(38), 11232-11233. DOI: Doi 10.1021/Ja0264549
- 32) Fares, C., Davis, J. H. and Sharom, F. J. (1997): "H-1 MAS NMR of gramicidin A in a liquid-crystalline multilamellar phase.". *Biophysical Journal* **72**(2), Mp285-Mp285.