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**List of Publications**

“Analytical Tools Integrated in Continuous-Flow Reactors: Which One for What?” (review)

Mireia Rodriguez-Zubiri, François-Xavier Felpin,

*Org. Process Res. Dev.* **2022**, 26, 1766-1793. DOI : [10.1021/acs.oprd.2c00102](#)

“Direct C-H arylation of indole-3-acetic acid derivatives enabled by an autonomous self-optimizing flow reactor”

Natarajan Vasudevan, Eric Wimmer, Elvina Barré, Daniel Cortés-Borda, Mireia Rodriguez-Zubiri, François-Xavier Felpin,

*Adv. Synth. Catal.* **2021**, 363, 791. DOI: [10.1002/adsc.202001217](#)

“Development of a continuous flow synthesis of FGIN-1-27 enabled by in-line  $^{19}\text{F}$  NMR analyses and optimization algorithms.”

N. Vasudevan, Ehu C. Aka, Elvina Barré, Eric Wimmer, Daniel Cortés-Borda, Patrick

Giraudeau, Jonathan Farjon, Mireia Rodriguez-Zubiri, François-Xavier Felpin,

*React. Chem. Eng.*, **2021**, 6, 1983. DOI: [10.1039/D1RE00220A](#)

“Merging gradient-based methods to improve benchtop NMR spectroscopy: A new tool for flow reaction optimization”

Shrikant Kunjir, Mireia Rodriguez-Zubiri, Vincent Coeffard, François-Xavier Felpin, Patrick Giraudeau, Jonathan Farjon,

*ChemPhysChem* **2020**, 21, 2311. DOI: [10.1002/cphc.202000573](#)

“Comparing Gas–Liquid Segmented and Tube-in-Tube Setups for the Aerobic Dimerization of Desmethoxycarpacaine with an Automated Flow Platform.”

Ehu Camille Aka, Eric Wimmer, Elvina Barré, Daniel Cortés-Borda, Tchiroua Ekou, Lynda Ekou, Mireia Rodriguez-Zubiri, François-Xavier Felpin,

*Org. Process Res. Dev.* **2020**, 24, 5, 745–751. DOI: [10.1021/acs.oprd.9b00525](#)

“Reconfigurable Flow Platform for Automated Reagent Screening and Autonomous Optimization for Bio-inspired Lignans Synthesis.”

E. Aka, E. Wimmer, E. Barre, N. Vasudevan, D. Cortés-Borda, T. Ekou, L. Ekou, M. Rodriguez-Zubiri, F.-X. Felpin,

*J. Org. Chem.* **2019**, 84, 21, 14101-14112. DOI: [10.1021/acs.joc.9b02263](#)

“An Autonomous Self-Optimizing Flow Reactor for the Synthesis of Natural Product Carpanone.”

D. Cortés-Borda, E. Wimmer, B. Gouilleux, E. Barré, N. Oger, L. Goulamaly, L. Peault, B. Charrier, C. Truchet, P. Giraudeau, M. Rodriguez-Zubiri, E. Le Grogne, F.-X. Felpin,

*J. Org. Chem.* **2018**, 83, 23, 14286-14299. DOI : [10.1021/acs.joc.8b01821](#)

“Ultra-Fast Suzuki and Heck Reactions for the Synthesis of Styrenes and Stilbenes Using Arenediazonium Salts as Super-Electrophiles.”  
M. E. Trusova, M. Rodriguez-Zubiri, K. Kutonova, N. Jung, S. Braese, F.-X. Felpin, P. S. Postnikov,  
*Organic Chemistry Frontiers* **2018**, *5*, 41-45. [DOI : 10.1039/C7QO00750G](https://doi.org/10.1039/C7QO00750G)

“Wilkinson-type immobilized catalyst on diamond nanoparticles for alkene reduction.”  
C. Queffélec, S. H. Schlindwein, D. Gudat, V. Silvestre, M. Rodriguez-Zubiri, F. Fayon, B. Bujoli, Q. Wang, R. Boukherroub, S. Szunerits,  
*ChemCatChem* **2017**, *9*, 432-439. [DOI 10.1002/cctc.201601424](https://doi.org/10.1002/cctc.201601424)

“Optimizing the Heck-Matsuda Reaction in Flow with a Constraint-Adapted Direct Search Algorithm.”  
D. Cortés, K. Kutonova, M. E. Trusova, C. Jamet, F. Zammattio, C. Truchet, M. Rodriguez-Zubiri, F.-X. Felpin,  
*Org. Process Res. Dev.*, **2016**, *20* (11), 1979–1987. [DOI: 10.1021/acs.oprd.6b00310](https://doi.org/10.1021/acs.oprd.6b00310)

“Ultrafast 2D NMR on a benchtop spectrometer: applications and perspectives.”  
B. Gouilleux, B. Charrier, S. Akoka, F.-X. Felpin, M. Rodriguez-Zubiri, P. Giraudeau,  
*Trends Anal. Chem.* **2016**, *83*, Part A, 65-75. [DOI: TRAC14641](https://doi.org/10.1016/j.trac.2014.09.001).

“The promoting effect of pyridine ligands in the Pd-catalysed Heck-Matsuda reaction.”  
W. Khodja, A. Leclair, J. Rull-Barull, F. Zammattio, K. V. Kutonova, M. E. Trusova, F.-X. Felpin, M. Rodriguez-Zubiri,  
*New J. Chem.* **2016**, *40*, 8855-8862. [DOI: 10.1039/C6NJ01717G](https://doi.org/10.1039/C6NJ01717G)

“Real-time reaction monitoring by ultrafast 2D NMR on a benchtop spectrometer.”  
B. Gouilleux, B. Charrier, E. Danieli, J.-N. Dumez, S. Akoka, F.-X. Felpin, M. Rodriguez-Zubiri, P. Giraudeau,  
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<http://www.magritek.com/2015/10/28/real-time-reaction-monitoring-by-ultrafast-2d-nmr-on-a-benchtop-spectrometer/>

“Pt-Catalysed Intermolecular Hydroamination of Non-Activated Olefins Using a Novel Family of Catalysts: Arbuzov-Type Phosphorus Metal Complexes.”  
M. Rodriguez-Zubiri, S. Anguille, J.-J. Brunet, J.-C. Daran,  
*J. Mol Cat A: Chem.* **2013**, *379*, 103-111. [DOI: 10.1016/j.molcata.2013.07.020](https://doi.org/10.1016/j.molcata.2013.07.020)

“Intermolecular Rhodium-Catalyzed Hydroamination of Non-Activated Olefins. Effect of Phosphonium Salt, Phosphine, Amine, and Olefin Nature.”  
M. Rodriguez-Zubiri, C. Baudequin, A. Béthegnies, J.-J. Brunet,  
*ChemPlusChem*, **2012**, *445*-454. [DOI: 10.1002/cplu.201200017](https://doi.org/10.1002/cplu.201200017)

“Kinetico-Mechanistic Information about Alkene Hydroamination with Aniline in Bromide-Rich Ionic Media: Importance of Solvolysis.”  
G. Aullón, K. Gómez, G. González, S. Jansat, M. Martínez, R. Poli, M. Rodríguez-Zubiri  
*Inorg. Chem.* **2011**, *50* (12), 5628-5636. [DOI: 10.1021/ic2003222](https://doi.org/10.1021/ic2003222)

"Hydroamination of ethylene by aniline: catalysis in water"

P. A. Dub, M. Rodriguez-Zubiri, C. Baudequin, R. Poli,  
*Green Chem.* **2010**, *12*, 1392. [DOI: 10.1039/C004727A](https://doi.org/10.1039/C004727A)

"Platinum-catalyzed ethylene hydroamination with aniline: Synthesis, Characterization and Studies of Intermediates."

P. A. Dub, M. Rodriguez-Zubiri, J-C. Daran, J-J. Brunet, R. Poli,  
*Organometallics* **2009**, *28* (16), 4764-4777. [DOI: 10.1021/om9002494](https://doi.org/10.1021/om9002494)

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"Assembling metals and clusters around an octaphosphine ligand based on *N*-substituted bis(diphenylphosphanyl)amines: structural characterization of dendrimer-like Co<sub>12</sub> and Co<sub>16</sub> branched clusters."

M. Rodriguez-Zubiri, V. Gallo, J. Rosé, R. Welter, P. Braunstein,  
*Chem. Commun.* **2008**, 64-66. [DOI: 10.1039/B713540H](https://doi.org/10.1039/B713540H)

"Rhodium-catalyzed hydroamination of ethylene. Highly promoting effect of iodides ions."

C. Baudequin, J-J. Brunet, M. Rodriguez-Zubiri,  
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"Microwave-assisted functionalization of single-wall carbon nanotubes through diazonium."

J. Liu, M. Rodriguez i Zubiri, B. Vigolo, M. Dossot, B. Humbert, Y. Fort, E. McRae,  
*J. Nanosci. Nanotechnol.* **2007**, *7*, 3519-3523. [DOI: 10.1166/jnn.2007.819](https://doi.org/10.1166/jnn.2007.819)

"Platinum-Catalytic Intermolecular Hydroamination of Alkenes. Halide anions promoted platinum catalysis." (review)

J-J. Brunet, N. C. Chu, M. Rodriguez-Zubiri,  
*Eur. J. Inorg. Chem.* **2007**, *30*, 4711-4722. [DOI: 10.1002/ejic.200700737](https://doi.org/10.1002/ejic.200700737)

"Intermolecular hydroamination of non-activated alkenes catalyzed by Pt(II) or Pt(IV)-*n*-Bu<sub>4</sub>PX (X = Cl, Br, I) systems: Key effect of the halide anion."

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"Efficient microwave-assisted radical functionalization of single-wall carbon nanotubes."

J. Liu, M. Rodriguez I. Zubiri, M. Dossot, B. Vigolo, R. H. Hauge, Y. Fort, J-J. Ehrhardt, E. McRae,  
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“Synthesis and structure of new phosphines containing P-N bonds.”

M. Rodriguez i Zubiri, H. L. Milton, A. M. Z. Slawin, J. D. Woollins,  
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“The preparation and coordination of 1,3-C<sub>6</sub>H<sub>4</sub>-{CON(PPh<sub>2</sub>)CH<sub>2</sub>Ph}<sub>2</sub> - a new multidentate ligand.”

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“The preparation and complexation of 5,10-bis(diphenylphosphino)phenazine.”

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*Inorg. Chem. Comm.* **2004**, 7(2), 201-203. [DOI: 10.1016/j.inoche.2003.10.019](https://doi.org/10.1016/j.inoche.2003.10.019)

“Synthesis and uses of phosphines containing P-N bonds.” (review)

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“P-N bond formation as a route to a highly electron rich bidentate phosphine ligand and its application in homogenous catalysis.”

M. Rodriguez i Zubiri, M. L. Clarke, D. F. Foster, D. J. Cole-Hamilton, A. M. Z. Slawin, J. D. Woollins,  
*J. Chem. Soc, Dalton Trans.* **2001**, 969-971. [DOI: 10.1039/B101656N](https://doi.org/10.1039/B101656N)

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M. Rodriguez i Zubiri, A. M. Z. Slawin, D. J. Cole-Hamilton, J. D. Woollins,  
*Phosphorus, Sulf. Silicon.* **2001**, 169, 117-120. [DOI: 10.1080/10426500108546604](https://doi.org/10.1080/10426500108546604)

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J.-M. Teuben, M. Rodriguez i Zubiri, J. Reedijk."

*J. Chem. Soc, Dalton Trans.* **2000**, 369-372. [DOI: 10.1039/A908135F](https://doi.org/10.1039/A908135F)