

1. Curriculum Vitae

Dr. Nicolas BLANCHARD
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RESEARCH INTERESTS

- **Synthetic methodologies:** cycloadditions, alkyne and hetero-substituted alkyne chemistry, copper-catalyzed reactions.
- **Total synthesis of natural products:** synthesis of complex polyketides from the *Mycobacterium ulcerans* family. Application to the elucidation of the mode of action of these potent human toxins.

ACADEMIC POSITIONS & EDUCATION

- **Since October 2013:** Research Director at CNRS, University of Strasbourg.
- **December 2002-September 2013:** Junior researcher at CNRS, Universities of Orsay (2002-mid 2006), Mulhouse (mid 2006-2012) then Strasbourg (2013).
- **September 2001-December 2002:** Post-doctoral associate, The University of Michigan, USA, Pr. W. R. Roush.
- **April 2001-July 2001:** Post-doctoral associate, University of Paris VI, Pr. J.-F. Normant.
- **September 1997-July 2000:** Ph.D. in Organic Chemistry, University Paris VI, Pr. J. Cossy & Dr. C. Meyer.

AWARDS

2016 “Advanced researcher award” of the French Chemical Society
2015 Syngenta Chemistry Lecturer
2015 Distinguished junior member of the French Chemical Society (2015-2018)
2014 Guy Ourisson Award
2012 JSP fellowship, Burgenstock Stereochemistry conference, CH.
2012 Bronze medal of the CNRS
2009 School of Chemistry of Mulhouse, 1st prize for Innovative research
1999 PhD Award, Roche Symposium, Hoffmann-La Roche, Basel, CH.

BIBLIOMETRICS: full list on page 3

H-index: 27

Number of citations: >3350

Research articles and reviews: 96

(including 87 articles, 1 co-edition with G. Evans of a John WILEY & Sons book "*Copper-mediated Cross-coupling Reactions*", 6 book chapters and 2 patents)

INVITED LECTURES (56): full list on page 14

including: International lectures in symposiums, foreign universities and chemical industries (28)

MEMBERS OF CHEMICAL SOCIETIES

- Société Chimique de France
- French-Japanese Chemical Society
- American Chemical Society
- Royal Society of Chemistry
- Swiss Chemical Society

2. Publication List

2.1 Overview

Updated: June 2018

Total : 96

- 87 research articles and reviews
- 6 book chapters
- 1 book co-edition with Pr. G. Evano (Université Libre de Bruxelles) Copper-mediated Cross-coupling Reactions; John Wiley & Sons, 2013, 800 pages. [Reviewed in 2014:](#) a) Patureau, F. W.; Gooßen, L. J. *Angew. Chem. Int. Ed.* 2014, 53, 5738-5739. b) van Koten, G. *Adv. Synth. Catal.* 2014, 356, 3913-3915.
- 2 patents

H index: 27

Number of citations: >3350

Most cited article (>1350 citations): Evano, G.; Blanchard, N.; Toumi, M. Copper-Mediated Coupling Reactions and Their Applications in Natural Products and Designed Biomolecules Synthesis, *Chem. Rev.* **2008**, 108, 3054.

2.2 Research articles and reviews

2018

87- Intramolecular Diels-Alder Cycloaddition Reactions of Ynamines and Ynamides; Bisseret, P.; Abdelkafi, H.; Blanchard, N. *Chem. Sci.* **2018**, Advance article, DOI: 10.1039/C8SC00780B. [LINK](#)
Mini-review.

2017

86- Acid-Catalyzed Ring-Opening Reactions of Cyclopropanated 3-Aza-2-oxabicyclo[2.2.1]hept-5-enes with Alcohols; Tam, W.; Tait, K.; Horvath, A.; Blanchard, N. *Beilstein J. Org. Chem.* **2017**, *13*, 2888-2894. [LINK](#)

85- Total Syntheses of Mycolactone A/B and its Analogues for the Exploration of the Biology of Buruli Ulcer; Saint-Auret, S.; Chany, A.-C.; Casarotto, V.; Tresse, C.; Parmentier, L.; Abdelkafi, H.; Blanchard, N. *Chimia* **2017**, *12*, 836-840. [LINK](#)
Invited article for themed collection— Natural Products.

84- Synthetic strategies towards mycolactone A/B, an exotoxin secreted by *Mycobacterium ulcerans*; Saint-Auret, S.; Abdelkafi, H.; Le Nouen, D.; Bisseret, P.; Blanchard, N. *Org. Chem. Front.* **2017**, *4*, 2380-2386. [LINK](#)
Invited article for themed collection—Synthetic Approaches to Natural Products via Catalytic Processes.

83- A de novo and scalable total synthesis of mycolactone A/B; Saint-Auret, S.; Abdelkafi, H.; Le Nouen, D.; Guenin-Macé, L.; Demangel, C.; Bisseret, P.; Blanchard, N. *Org. Biomol. Chem.* **2017**, *15*, 7518-7522. [LINK](#)
Highlighted upon invitation in the blog [“The Surg”](#) <https://thesurg.com/decoding-biological-mechanism-buruli-ulcer/>

82- Intramolecular Diels-Alder Cycloaddition Reactions of Ynamines and Ynamides; Duret, G.; Le Fouler, V.; Bisseret, P.; Bizet, V.; Blanchard, N. *Eur. J. Org. Chem.* **2017**, 6816-6830. [LINK](#)
Invited mini-review.

81- Intramolecular Inverse Electron-Demand [4+2] Cycloadditions of Ynamides with Pyrimidines: Scope and DFT Insights; Duret, G.; Quinlan, R.; Yin, B.; Martin, R. E.; Bisseret, P.; Neuburger, M.; Gandon, V.; Blanchard, N. *J. Org. Chem.* **2017**, *82*, 1726-1742. [LINK](#)

80- Intramolecular inverse electron-demand [4+2] cycloadditions of ynamidyl-tethered pyrimidines: Comparative studies in trifluorotoluene and sulfolane; Donnard, M.; Duret, G.; Bisseret, P.; Blanchard, N. *C. R. Acad. Sci.* **2017**, *20*, 643-647. [LINK](#)

2016

79- Mycobacterial pathogen subverts immunity by selective blockade of the Sec61 translocon ; Demangel, C. ; Baron, L. ; Paatero, A. ; Morel, J.-D. ; Impens, F. ; Guenin-Macé, L. ; Saint-Auret, S. ; Blanchard, N. ; Dillmann, R. ; Niang, F. ; Pellegrini, S. ; Taunton, J. ; Paavilainen, V. *J. Exp. Med.* **2016**, *213*, 2885-2896. [LINK](#)

78- Stereodivergent Hydrosilylation, Hydrostannylation and Hydrogermylation of α -Trifluoromethylated Alkynes and their Synthetic Applications; Tresse, C.; Schweizer, S.; Bisseret, Lalevée, J.; Evano, J.; Blanchard, N. *Synthesis*, **2016**, *48*, 3317-3330. [LINK](#)
Special issue in honor of the 80th birthday of Professor Jean-François Normant.

77- A Straightforward Entry to γ -Trifluoromethylated Allenamides and their Synthetic Applications; Guissart, C.; Dolbois, A.; Tresse, C.; Saint-Auret, S.; Evano, G.; Blanchard, N. *Synlett* **2016**, *27*, 2575-2580. [LINK](#)

76- A Journey in the Chemistry of Ynamides: from Synthesis to Applications; Evano, G.; Blanchard, N.; Compain, G.; Coste, A.; Demmer, C. S.; Gati, W.; Guissart, C.; Heimbürger, J.; Henry, N.; Jouvin, K.; Karthikeyan, G.; Laouiti, A.; Lecomte, M.; Martin- Mingot, A.; Métayer, B.; Michelet, B.; Nitelet, A.; Theunissen, C.; Thibaudeau, S.; Wang, J.; Zarca, M.; Zhang, C. *Chem. Lett.* **2016**, *45*, 574-585. [LINK](#)

75- Inverse Electron-Demand [4 + 2]-Cycloadditions of Ynamides: Access to Novel Pyridine Scaffolds; Duret, G.; Quinlan, R.; Martin, R. E.; Bisseret, P.; Neuburger, M.; Gandon, V.; Blanchard, N. *Org. Lett.* **2016**, *18*, 1610. [LINK](#)
Highlighted in *The International Society of Heterocyclic Chemistry*, **2016**, *1*, May 1.

74- Fluorescent brighteners as visible LED-light sensitive photoinitiators for free radical photopolymerizations; Zuo, X.; Morlet-Savary, F.; Graff, B.; Blanchard, N.; Goddard, J.-P.; Lalevée, J. *Macromol. Rap. Commun.* **2016**, *37*, 840-844. [LINK](#)

73- Synthesis of cyclopropanated [2.2.1] heterobicycloalkenes: An improved procedure; Carlson, E.; Duret, G.; Blanchard, N.; Tam, W., *Synth. Commun.* **2016**, *46*, 55-62. [LINK](#)

2015

72- Boron in a new light, Duret, G.; Quinlan, R.; Bisseret, P.; Blanchard, N.; *Chem. Sci.* **2015**, *6*, 5366-5382. [LINK](#)
One of the twenty-five most downloaded articles in the online version of *Chemical Science* between October and December 2015 (<http://blogs.rsc.org/sc/2016/02/17/top25-chemicalscience-q4-2015/>)

71- Sonogashira reactions for the synthesis of polarized pentacene derivatives, Schweizer, S.; Erbland, G.; Bisseret, P.; Lalevée, J.; Le Nouën, D.; Blanchard, N., *Turkish J. Chem.* **2015**, *39*, 1180-1189. [LINK](#)
Invited article, *Cross-coupling reactions special issue*.

70- Shaping mycolactone for therapeutic use against inflammatory disorders. Guenin-Macé, L.; Baron, L.; Chany, A.-C.; Tresse, C.; Saint-Auret, S.; Jönsson, F.; Le Chevalier, F.; Bruhns, P.; Bismuth, G.; Hidalgo-Lucas, S.; Bisson, J.-F.; Blanchard, N.; Demangel, C. *Science Translational Medicine* **2015**, *7*, 289ra285. [LINK](#)

Highlighted in *Transformer les poisons naturels en médicaments*, Braly, J.-P. *Le Journal du CNRS*, 28 May 2015

69- Stereodivergent Hydrogermylations of α -Trifluoromethylated Alkynes and their Applications in Cross-Coupling Reactions, Blanchard, N.; Schweizer, S.; Tresse, C.; Bisseret, P.; Lalevée, J.; Evano, G. *Org. Lett.*, **2015**, *17*, 1794-1797. [LINK](#)

OPEN ACCESS - ACS Author Choice; Highlighted in *Synfacts*, 2015, *11*, 639.

2014

68- Synthetic Variants of Mycolactone Bind and Activate Wiskott-Aldrich Syndrome Proteins, Chany, A.-C.; Veyron-Churlet, R.; Tresse, C.; Mayau, V.; Casarotto, V.; Le Chevalier, F.; Guenin-Macé, L.; Demangel, C.; Blanchard, N. *J. Med. Chem.* **2014**, *57*, 7382–7395. [LINK](#)

67- Chopping unfunctionalized carbon-carbon bonds: a new paradigm for the synthesis of organonitriles, Bisseret, P.; Duret, G.; Blanchard, N. *Org. Chem. Front.* **2014**, *1*, 825-833. [LINK](#)

66- Turning unreactive copper acetylides into remarkably powerful and mild alkyne transfer reagents by oxidative umpolung, Evano, G.; Jouvin, K.; Theunissen, C.; Guissart, C.; Laouiti, A.; Tresse, C.; Heimburger, J.; Bouhoute, Y.; Veillard, R.; Lecomte, M.; Nitelet, A.; Schweizer, S.; Blanchard, N.; Alayrac, C.; Gaumont, A.-C. *Chem. Commun.* **2014**, *50*, 10008-10018. [LINK](#)

65- Practical Methods for the Synthesis of Trifluoromethylated Alkynes: Oxidative Trifluoromethylation of Copper Acetylides and Alkynes, Tresse, C.; Guissart, C.; Schweizer, S.; Bouhoute, Y.; Chany, A.-C.; Goddard, M.-L.; Blanchard, N.; Evano, G. *Adv. Synth. Catal.* **2014**, *356*, 20151-2060. [LINK](#)

64- On The Synthesis, Characterization and Reactivity of N-Heteroaryl-boryl Radicals, a New Radical Class Based on Five-Membered Ring Ligands, Tehfe, M.-A.; Schweizer, S.; Chany, A.-C.; Ysacco, C.; Clément, J.-L.; Gimes, D.; Morlet-Savary, F.; Fouassier, J.-P.; Neuburger, M.; Tschamber, T.; Blanchard, N.; Lalevée, J. *Chem. Eur. J.* **2014**, *20*, 5054-5063. [LINK](#)

63- La synthèse totale, un outil indispensable pour comprendre l'ulcère de Buruli, Chany, A.-C.; Tresse, C.; Casarotto, V.; Blanchard, N. *L'Actualité Chimique* **2014**, *381*, 28-33. [LINK](#)

2013

62- History, Biology and Chemistry of Mycobacterium ulcerans infection (Buruli ulcer disease), Chany, A.-C.; Tresse, C.; Casarotto, V.; Blanchard, N. *Nat. Prod. Rep.* **2013**, *30*, 1527-1567. [LINK](#)

61- Formation of NHC-Boryl Radicals through Electrochemical and Photochemical Cleavage of the B–S bond in N-Heterocyclic Carbene-Boryl Sulfides, Telitel, S., Vallet, A.-L., Schweizer, S., Delpech, B., Blanchard, N., Morlet-Savary, F., Graff, B., Curran, D. P., Robert, M., Lacôte, E., Lalevée, J. *J. Am. Chem. Soc.* **2013**, *135*, 16938-16947. [LINK](#)

60- Taming sulfur dioxide: a breakthrough for its wide utilization in chemistry and biology, Bisseret, P.; Blanchard, N. *Org. Biomol. Chem.* **2013**, *11*, 5393-5398. [LINK](#)

59- Mechanistic and Preparative Studies of Radical Chain Homolytic Substitution Reactions of N-Heterocyclic Carbene Boranes and Disulfides, Pan, X.; Vallet, A.-L.; Schweizer, S.; Dahbi, K. J.-L.; Delpech, B.; Blanchard, N.; Graff, B.; Geib, S. J.; Curran, D. P.; Lalevée, J.; Lacôte, E. *J. Am. Chem. Soc.* **2013**, *135*, 10484-10491. [LINK](#)

58- BODIPY derivatives and boranil as new photoinitiating systems of cationic polymerization exhibiting a tunable absorption in the 400–600 nm spectral range, Telitel, S.; Blanchard, N.; Schweizer, S.; Morlet-Savary, F.; Graff, B.; Fouassier, J.-P.; Lalevée, J. *Polymer* **2013**, *54*, 2071-2076. [LINK](#)

57- Soft Photopolymerizations initiated by Dye-Sensitized Formation of NHC-Boryl Radicals under Visible Light, Telitel, S.; Schweizer, S.; Morlet-Savary, F.; Graff, B.; Tschamber, T.; Blanchard, N.; Fouassier, J. P.; Lelli, M.; Lacôte, E.; Lalevée, J. *Macromolecules* **2013**, *46*, 43-48. [LINK](#)

2012

56- Photopolymerization of Cationic Monomers and Acrylate/Divinylether Blends Under Visible Lights Using Pyrromethene Dyes, Lalevée, J.; Fouassier, J.-P.; Morlet-Savary, F.; Graff, B.; Tehfe, M.; Telitel, S.; Blanchard, N.; Schweizer, S. *Macromolecules* **2012**, *45*, 6864-6868.

55- Photoredox Catalysis for Polymerization Reactions, Lalevée, J.; Tehfe, M.-A.; Morlet-Savary, F.; Graff, B.; Dumur, F.; Gimes, D.; Blanchard, N.; Fouassier, J.-P. *Chimia* **2012**, *66*, 439-441.

54- Tunable Organophotocatalysts for Polymerization Reactions Under Visible Light, Tehfe, M.-A.; Lalevée, J.; Morlet-Savary, F.; Graff, B.; Blanchard, N.; Fouassier, J.-P. *Macromolecules* **2012**, *45*, 1746-1752. **Highlighted in Synfacts, 2012, 505.**

53- Iridium Photocatalysts in Free Radical Photopolymerization under Visible Lights, Lalevée, J.; Dumur, F.; Gimes, D.; Fouassier, J.-P.; Blanchard, N.; Tehfe, M.; Morlet-Savary, F. *ACS MacroLett.* **2012**, *1*, 286-290.

52- Organic Photocatalyst for Polymerization Reactions: 9,10-Bis[(triisopropylsilyl)ethynyl]anthracene, Tehfe, M.-A.; Lalevée, J.; Morlet-Savary, F.; Graff, B.; Blanchard, N.; Fouassier, J.-P. *ACS MacroLett.* **2012**, *1*, 198-203.

51- Household LED irradiation Under Air: Cationic Polymerization Using Iridium or Ruthenium Complex Photocatalysts, Lalevée, J.; Blanchard, N.; Tehfe, M.-A.; Peter, M.; Morlet-Savary, F.; Fouassier, J.-P. *Polymer Bulletin* **2012**, *68*, 341-347.

2011

50- A Diverted Total Synthesis of Mycolactones analogs – Toxins of Buruli Ulcer, Chany, A.-C.; Casarotto, V.; Schmitt, M.; Tarnus, C.; Guenin-Macé, L.; Demangel, C.; Mirguet, O.; Eustache, J.; Blanchard, N. *Chem. Eur. J.* **2011**, *17*, 14413-14419. [Front cover of the issue.](#)

49-Ruthenium-Catalyzed [2+2] Cycloaddition Reactions of a 3-Aza-2-oxabicyclo[2.2.1]hept-5-ene with Unsymmetrical Alkynes, Durham, R.; Mandel, J.; Blanchard, N.; Tam, W. *Can. J. Chem.* **2011**, *89*, 1494-1505.

48- Controlled Synthesis of Poly(vinyl acetate) Branched Polymers by Xanthate-Mediated Reversible-Addition Fragmentation Chain Transfer Self-Condensing Vinyl (co)Polymerization, Schmitt, J.; Blanchard, N.; Delaite, J.; Poly, J. *Polymer Chemistry* **2011**, *2*, 2231-2238.

47- Subtle Ligand Effects in Oxidative Photocatalysis with Iridium Complexes: Application to Photopolymerization, Lalevée, J.; Peter, M.; Dumur, F.; Gigmes, D.; Blanchard, N.; Tehfe, M.-A.; Morlet-Savary, F.; Fouassier, J.-P. *Chem. Eur. J.* **2011**, *17*, 15027-15031.

46- Synthesis of spiroketals under neutral conditions via a type III ring-rearrangement metathesis strategy, Mandel, J.; Dubois, N.; Neuburger, M.; Blanchard, N. *Chem. Commun.* **2011**, *47*, 10284-10286.

45- Efficient Dual Radical/Cationic Photoinitiator under Visible Light: a New Concept, Lalevée, J.; Blanchard, N.; Tehfe, M.-A.; Peter, M.; Morlet-Savary, F.; Gigmes, D.; Fouassier, J.-P. *Polymer Chemistry* **2011**, *2*, 1986-1991.

44- A Novel Photopolymerization Initiating System Based on an Iridium Complex, Lalevée, J.; Blanchard, N.; Tehfe, M. A.; Morlet-Savary, F.; Fouassier, J.-P. *Macromolecular Rapid Communication*, **2011**, *32*, 917-920.

43- Tandem Cationic and Sol-gel Photopolymerizations of a Vinyl Ether Alkoxysilane, Chemtob, A.; Belon, C.; Croutxe-Barghorn, C.; Rigolet, S.; Vidal, L.; Brendlé, J.; Mandel, J.; Blanchard, N. *Polymer Engineering and Science*, **2011**, *51*, 1466-1475.

42- Decatungstate ($W_{10}O_{32}^{4-}$)/Silane: A New And Promising Radical Source Under Soft Light Irradiation, Lalevée, J.; Blanchard, N.; Fouassier, J.-P. *Macromolecular Rapid Communication*, **2011**, *32*, 838-843.

41- Reaction between Aminoalkyl Radicals and Alkyl Halides: Dehalogenation by Electron Transfer, Lalevée, J.; Fouassier, J.-P.; Blanchard, N.; Ingold, K. U. *Chemical Physics Letters* **2011**, *511*, 156-158.

40- New Thioxanthone and Xanthone Photoinitiators Based on Silyl Radical Chemistry, Lalevée, J.; Blanchard, N.; Tehfe, M. A.; Fries, C.; Morlet-Savary, F.; Gigmes, D.; Fouassier, J.-P. *Polymer Chemistry*, **2011**, *2*, 1077-1084.

39- An approach Toward Homocalystegines and Silyl-homocalystegines. Acid-mediated Migrations of Acetates in 7-Membered ring Systems, Beniazza, R.; Desvergnés, V.; Mehta, G.; Blanchard, N.; Robert, F.; Landais, Y. *J. Org. Chem.* **2011**, *76*, 791-799.

38- Silyloxyamines as sources of silyl radicals: ESR spin-trapping, laser flash photolysis investigation, and photopolymerization ability, Versace, D. L. ; Tehfe, M. A. ; Lalevée, J. ; Casarotto, V. ; Blanchard, N. ; Morlet-Savary, F. ; Fouassier, J.-P. *Journal of Physical Organic Chemistry* **2011**, *24*, 342-350.

2010

37- Green Bulb Light Source Induced Epoxy Cationic Polymerization Under air Using Tris(2,2'-bipyridine)ruthenium(II) and Silyl Radicals, Lalevée, J.; Blanchard, N.; Morlet-Savary, F.; Tehfe, M.; Fouassier, J.-P. *Macromolecules*, **2010**, *43*, 10191-10195.

Highlighted in *Synfacts* **2011**, *3*, 271.

36- Near UV-visible light induced cationic photopolymerization reactions: A three component photoinitiating system based on Acridinedione/Silane/Iodonium salt, Tehfe, M. A. ; Lalevée, J.; Morlet-Savary, F. Blanchard, N.; Fries, C. ; Graff, B. ; Allonas, X.; Louërat, F.; Fouassier, J.-P. *European Polymer Journal* **2010**, *46*, 2138-2144.

35- New Boryl Radicals derived from N-heteroaryl-boranes: Generation and Reactivity Lalevée, J.; Blanchard, N.; Tehfe, M. A. ; Chany, A.-C.; Fouassier, J.-P. *Chem. Eur. J.* **2010**, *16*, 12920.

34- alpha-Acyloxynitroso Dienophiles in [4+2] Hetero Diels-Alder Cycloadditions: Mechanistic Insights, Calvet, G.; Coote, S.; Blanchard, N.; Kouklovsky, C. *Tetrahedron* **2010**, *66*, 2969-2980. **Front cover of the issue.**

33- Bis(germyl)ketones: Toward a New Class of Type I Photoinitiating Systems Sensitive Above 500 nm? Tehfe, M. A.; Blanchard, N.; Fries, C.; Lalevée, J.; Allonas, X.; Fouassier, J.-P. *Macromol. Rapid Commun.* **2010**, *31*, 473-478.

2009

32- Rhodium-Catalyzed Ring Opening Reactions of a 3-Aza-2-oxabicyclo[2.2.1]hept-5-ene with Arylboronic Acids, Machin, B. P.; Ballantine, M.; Mandel, J.; Blanchard, N.; Tam, W. *J. Org. Chem.* **2009**, *74*, 7261-7266.

31- Silyl Radical Chemistry and Conventional Photoinitiators: A Route for the Design of Efficient Systems, Lalevée, J.; Blanchard, N.; Chany, A.-C.; El-Roz, M.; Souane, R.; Graff, B.; Allonas, X.; Fouassier, J.-P. *Macromolecules* **2009**, *42*, 6031-6037.

30- Ruthenium-Catalyzed Nucleophilic Ring Opening Reactions of a 3-Aza-2-oxabicyclo[2.2.1]hept-5-ene with Alcohols" Machin, B. P.; Howell, J.; Mandel, J.; Blanchard, N.; Tam, W. *Org. Lett.* **2009**, *11*, 2077-2080.

29- Effect of the Lewis Base Coordination on the Boryl Radicals Reactivity: a Laser Flash Photolysis and ESR Investigation, Lalevée, J.; Blanchard, N.; Chany, A.-C.; Tehfe, M.-A.; Allonas, X.; Fouassier, J.-P. *J. Phys. Org. Chem.* **2009**, *22*, 986-993.

2008

28- Tris(trimethylsilyl)silyl versus tris(trimethylsilyl)germyl: Radical reactivity and oxidation ability Lalevée, Jacques; Blanchard, Nicolas; Graff, Bernadette; Allonas, Xavier; Fouassier, Jean-Pierre *J. Organomet. Chem.* **2008**, *693*, 3643-3649.

27- Copper-Mediated Coupling Reactions and Their Applications in Natural Products and Designed Biomolecules Synthesis Evano, Gwilherm; Blanchard, Nicolas; Toumi, Mathieu *Chem. Rev.* **2008**, *108*, 3054-3131.

26- New Photoinitiators Based on the Silyl Radical Chemistry: Polymerization Ability, ESR Spin Trapping, and Laser Flash Photolysis Investigation Lalevée, Jacques; Blanchard, Nicolas; El-Roz, Mohammad; Graff, Bernadette; Allonas, Xavier; Fouassier, Jean-Pierre *Macromolecules* **2008**, *41*, 4180-4186.

25- Efficient cleavage of the N–O bond of 3,6-dihydro-1,2-oxazines mediated by some α -hetero substituted carbonyl compounds in mild conditions Galvani, Gilles; Calvet, Géraldine; Blanchard, Nicolas; Kouklovsky, Cyrille *Organic and Biomolecular Chemistry* **2008**, *6*, 1063-1070.

24- New Photoiniferters: Respective Role of the Initiating and Persistent Radicals; Lalevée, Jacques; Blanchard, Nicolas; El-Roz, M.; Allonas, Xavier; Fouassier, Jean-Pierre *Macromolecules* **2008**, *41*, 2347-2352.

2007

23- Benzoic acid 2,2-dimethyl-5-nitroso-[1,3]dioxan-5-yl ester, 4-chloro-benzoic acid 2,2-dimethyl-5-nitroso-[1,3]dioxan-5-yl ester and benzoic acid 5-nitroso-[1,3]dioxan-5-yl ester Calvet, Géraldine; Blanchard, Nicolas; Kouklovsky, Cyrille; Guillot, Régis *Acta Crystallographica Section C: Crystal Structure Communications* **2007**, *Volume C63*, 365-368.

22- Domino Metathesis of 3,6-Dihydro-1,2-oxazine: Access to Isoxazolo[2,3-a]pyridin-7-ones Calvet, Géraldine; Blanchard, Nicolas; Kouklovsky, Cyrille *Organic Letters* **2007**, *9*, 1485-1488

2006

21- Metathesis of heteroatom-substituted olefins and alkynes: Current scope and limitations, van de Weghe, Pierre; Bisseret, Philippe, Blanchard, Nicolas; Eustache, Jacques, *Journal of Organometallic Chemistry*, **2006**, *691*, 5078-5108.

20-Daucus carota L. mediated bioreductions of prochiral ketones, Blanchard, Nicolas; van de Weghe, Pierre, *Organic & Biomolecular Chemistry* **2006**, *4*, 2348-2353. **Front cover of the issue.**

2005

19-Synthesis of polysubstituted pyrroles from nitroso-Diels-Alder cycloadducts, Calvet, Geraldine; Blanchard, Nicolas; Kouklovsky, Cyrille *Synthesis* **2005** 3346-3354.

18-Intermolecular nitroso Diels-Alder cycloaddition of α -acetoxynitroso derivatives in aqueous medium, Calvet, Geraldine; Guillot, Regis; Blanchard, Nicolas; Kouklovsky, Cyrille *Organic & Biomolecular Chemistry* **2005**, 4395-4401.

17-Total synthesis of zincophorin, Cossy, Janine; Meyer, Christophe; Defosseux, Magali; Blanchard, Nicolas *Pure and Applied Chemistry* **2005**, 77, 1131-1137.

16-Synthesis of polypropionate subunits from cyclopropanes, Defosseux, Magali; Blanchard, Nicolas; Meyer, Christophe; Cossy, Janine *Tetrahedron* **2005**, 61, 7632-7653.

2004

15-Total Synthesis of Formamycin, Durham, T. B.; Blanchard, N.; Savall, B. M.; Powell, N. A.; Roush, W. R. *J. Am. Chem. Soc.* **2004**, 126, 9307-9317.

14-Lewis Acid Promoted Hetero Diels-Alder Cycloaddition of α -Acetoxynitroso Dienophiles, Calvet, G.; Dussaussois, M.; Blanchard, N.; Kouklovsky, C. *Org. Lett.* **2004**, 6, 2449-2451.

13-Total Synthesis of Zincophorin and Its Methyl Ester, Defosseux, M.; Blanchard, N.; Meyer, C.; Cossy, J. *J. Org. Chem.* **2004**, 69, 4626-4647.

2003

12-Stereoselective Synthesis of Polypropionate Units and Heterocyclic Compounds by Cyclopropylcarbinol Ring-Opening with Mercury(II) Salts, Meyer, C. ; Blanchard, N. ; Defosseux, M. ; Cossy, J. *Acc. Chem. Res.* **2003**, 36, 766-772.

11-Total Synthesis of Zincophorin Methyl Ester, Defosseux, M.; Blanchard, N.; Meyer, C.; Cossy, J. *Org. Lett.* **2003**, 5, 4037-4040.

10-2-Deoxy-2-iodo- α -glucopyranosyl Fluorides: Mild and Highly Stereoselective Glycosyl Donors for the Synthesis of 2-Deoxy- α -glycosides from β -Hydroxy Ketones, Blanchard, N.; Roush, W. R. *Org. Lett.* **2003**, 5, 81-84.

9-Total Synthesis of the Formamycin Aglycon, Formamycinone, Savall, B. M.; Blanchard, N.; Roush, W. R. *Org. Lett.* **2003**, 5, 377-379.

2002

8-A New Synthetic Approach Towards the C1-C9 Subunit of Zincophorin, Cossy, J.; Blanchard, N.; Defosseux, M.; Meyer, C. *Angew. Chem., Int. Ed. Engl.* **2002**, *41*, 2144-2146.

7-Stereoselective Oxymercuration of Cyclopropylcarbinols With Anchimeric Assistance by Aromatic Groups, Cossy, J.; Blanchard, N.; Meyer, C. *Tetrahedron Lett.* **2002**, *43*, 1801-1805.

2001

6-Synthesis of Stereotriads by Oxymercuration of Substituted Cyclopropylcarbinols, Cossy, J.; Blanchard, N.; Meyer, C. *Org. Lett.* **2001**, *3*, 2567-2569.

5-Synthesis of Isopropenylcyclopropanes-Revision of The Relative Configuration Obtained by 1,3-Elimination of γ -Epoxyketones, Cossy, J.; Blanchard, N.; Meyer, C. *Eur. J. Org. Chem.* **2001**, 339-348.

1999

4-Diastereoselectivity in The Dihydroxylation of Isopropenyl Substituted Three-Membered Rings, Cossy, J.; Blanchard, N.; Meyer, C. *Tetrahedron Lett.* **1999**, *40*, 8361-8364.

3-Stereoselective Synthesis of Cyclopropane Bearing Adjacent Stereocenters, Cossy, J.; Blanchard, N.; Meyer, C. *Synthesis* **1999**, 1063-1075.

2-Diastereoselective Hydroboration of Isopropenylcyclopropanes, Cossy, J.; Blanchard, N.; Hamel, C.; Meyer, C. *J. Org. Chem.* **1999**, *64*, 2608-2609.

1998

1-Directing Effect of a Neighboring Aromatic Group in the Cyclopropanation of Allylic Alcohols, Cossy, J.; Blanchard, N.; Meyer, C. *J. Org. Chem.* **1998**, *63*, 5728-5729.

BOOK CHAPTERS

6- "A Walk Across Africa with Captain Grant: Exploring Mycobacterium ulcerans Infection with Mycolactone Analogs", Blanchard, N.; Chany, A.-C.; Tresse, C.; Casarotto, V.; Bréthous, L.; Saint-Auret, S. *Strategies and Tactics in Organic Synthesis*, 2015, *11*, 85-117.

5- "Copper catalysis from a historical perspective: a legacy from the past ", Evano, G.; Blanchard, N. Preface, p xix, in *Copper-Mediated Cross-coupling Reactions*, Eds. Evano, G. and Blanchard, N.; John Wiley & Sons, Inc.: Hoboken, ISBN: 978-1-118-06045-2, November 2013.

4- "Copper-catalyzed C-C bond formation in natural product synthesis: elegant and efficient solutions to a key bond disconnection", Donnard, M.; Blanchard, N. Chapter 18, pp 683-724, in Copper-Mediated Cross-coupling Reactions, Eds. Evano, G. and Blanchard, N.; John Wiley & Sons, Inc.: Hoboken, November 2013.

3- "Thermal Redox and Photoinduced Ring Opening Polymerization Reactions: Initiating Systems Based on Organosilanes Bearing Si-Si Bond", Tehfe, M-A.; Lalevée, J.; El-Roz, M.; Blanchard, N.; Morlet-Savary, F.; Fouassier, J.-P. in Radical Polymerization: New Developments, Eds. Paulauskas, I. O. and Urbonas, L. A.; Nova Publishers, 2012.

2- "Synthesis of Natural Products Containing Medium-size Carbocycles by Ring-Closing Alkene Metathesis", Blanchard, N.; Eustache, J. in Metathesis Reactions: A Milestone in Natural Product Synthesis, Eds. Cossy, J.; Meyer, C.; Arsenyadis, S.; Wiley VCH Verlag, Weinheim, Germany, 2010, pp. 1-44.

1- "Total synthesis of zincophorin and its methyl ester" Meyer, Christophe; Defosseux, Magali; Blanchard, Nicolas; Cossy, Janine in Strategies and Tactics in Organic Synthesis, Ed. Harmata, M.; Elsevier, London, UK, 2004, 5, pp. 303-352

BOOK EDITION

1- Copper-Mediated Cross-coupling Reactions, Eds. Evano, G. and Blanchard, N.; John Wiley & Sons, Inc.: Hoboken, ISBN: 978-1-118-06045-2, November 2013, 800 pages. [Reviewed in 2014:](#)

a) Patureau, F. W.; Gooßen, L. J. *Angew. Chem. Int. Ed.* 2014, 53, 5738-5739.

b) van Koten, G. *Adv. Synth. Catal.* 2014, 356, 3913-3915.

PATENTS

02- Procédé d'hydrosilylation photocatalysé par un composé polyoxométallate, Stévenin, A.; Lafage, M.; Blanchard, N.; Lalevée, J.; Francès, J.-M., Assignee: BlueStar Polymer, PCT Int. Appl. (2014), WO 2014096719 A2, date de priorité: 21/12/2012.

01- Structural variants of mycolactones for use in modulating inflammation, immunity and pain, Demangel, C.; Blanchard, N.; Bismuth, G.; Eustache, J.; Casarotto, V.; Chany, A.-C., Assignee: Institut Pasteur, Fr. PCT Int. Appl. (2013), WO 2013072896 A1 20130523.

3. LIST OF CONFERENCES

3.1 Synopsis

- updated January 2018 -

TOTAL: 56 (including 28 international lectures)

Lectures in international congresses (12)

Lectures in foreign universities (12)

Workshop (3)

Lectures in chemical industries (4)

Lectures in French universities (22)

Lectures in French congresses (3)

3.2 List of conferences by class

Lectures in international congresses (12)

12- 24-27 August 2017, National Organic Symposium Trust (NOST) symposium, Bhopal, India. "De novo and scalable total synthesis of mycolactone A/B"

11- 5-7 October 2016, Annual meeting of the German Pharmaceutical Society – DPhG, Ludwig-Maximilians-University, Munich, Allemagne. "Chemical synthesis of mycolactone analogs - insights into human Mycobacterium ulcerans infection"

10- 7-9 September 2016, Journées de Chimie Organique de la SCF, Palaiseau, France. « Inverse Electron-Demand [4 + 2]-Cycloadditions of Ynamides: Access to Novel Pyridine Scaffolds »

9-21-24 March 2016, Second Anatolian Conference on Synthetic Organic Chemistry (ACSOC-II) of the Turkish Chemists Society. Kusadaci (Turkey). "Problems and detours in the chemical synthesis of mycolactone analogs". PLENARY

8- 8 January 2016 - Heterocyclic and synthesis group meeting of the Royal Society of Chemistry. Institute for Cancer Research (ICR), London (UK). "Problems and detours in the chemical synthesis of mycolactone analogs". PLENARY

7- 14-17 September 2014- Symposium Franco-Japonais de Chimie Fine et Thérapeutique, Lyon (KEYNOTE). "Deciphering the Biological Mechanisms of Buruli Ulcer Thanks to Total Synthesis".

6- 31 aout-4 September 2014: EUCHEMS, Istanbul, Turquie (KEYNOTE). "Deciphering the Biological Mechanisms of Buruli Ulcer Thanks to Total Synthesis".

5- 1-5 June 2014, French-American Chemical Society meeting (KEYNOTE), Avignon (France). "Deciphering the Biological Mechanisms of Buruli Ulcer Thanks to Total Synthesis".

4-7-8 June 2012, Symposium Francophone de Synthèse totale II, Ecole Nationale Supérieure de Chimie de Paris, " Synthèse totale de dérivés de mycolactones, toxines de l'ulcère de Buruli - Implications mécanistiques" (KEYNOTE)

3- 15-17 Avril 2012, Anglo Normand Organic Chemistry Colloquium, «From boryl and silyl radicals to Function Oriented Synthesis in Mycolactone derived natural products: promising synthetic tools" (PLENIER)

2- 17 October 2011, SYNGENTA CH/Ecole Polytechnique colloquium. Total synthesis of mycolactones, toxins of the Buruli ulcer - Insights into the structure/activity relationships (KEYNOTE)

1- January 2011, "Multiple faces of chemistry: from Marie Curie to nowadays", ESPCI ParisTech, Total synthesis of mycolactones, toxins of the Buruli ulcer - Insights into the structure/activity relationships (KEYNOTE).

Lectures in foreign universities (12)

12- 29 August 2017, IIT Bombay, India. "De novo and scalable total synthesis of mycolactone A/B"

11- 17 May 2017, university of Vienna, Austria. "Synthesis of nitrogen heterocycles from ynamides by hydrometalation or pericyclic reactions"

10- 16 May 2017, University of Linz, Austria. "Synthesis of nitrogen heterocycles from ynamides by hydrometalation or pericyclic reactions"

9- 7 April 2017, university of Basel, Switzerland. "Synthetic mycolactones A/B, exotoxins of Buruli ulcer"

8- 23 February 2017, university of Bern, Switzerland. "Synthesis of nitrogen heterocycles from ynamides by hydrometalation or Diels-Alder cycloaddition"

7- 8 December 2016, university of Copenhagen, Denmark. "Chemical synthesis of mycolactone analogs - insights into human Mycobacterium ulcerans infection"

6- 17 October 2016, Université Libre de Bruxelles, Belgium. « Synthesis of nitrogen heterocycles from ynamides by hydrometalation reactions and pericyclic sequences »

5- 4 October 2016, University of Erlangen, Germany. "Chemical synthesis of mycolactone analogs - insights into human Mycobacterium ulcerans infection"

4- 28 May 2015, university of Geneva, Switzerland. "Problems and detours in the chemical synthesis of mycolactone analogues".

3- 19 January 2015, university of Freiburg, Germany, "Deciphering the biology of Buruli ulcer with chemical synthesis"

2-21 June 2014, Symposium "Alexakis", university of Geneva (KEYNOTE). Taking inspiration from Alexakis: oxidative and non-oxidative copper-mediated cross-coupling reactions in total synthesis

1- 29 May 2012, University of Bern, Switzerland, "From boryl radicals to diverted total synthesis - an overview of some Mulhouse Molecular Chemistry"

Workshop (3)

3- March 2013, Scientific committee of the « Fondation Raoul Follereau », Paris. "Can we harness diverted total synthesis for the mechanistic understanding of Buruli ulcer, a neglected tropical disease".

2- March 2013, CEFIPRA Indo-French Center for Organic Synthesis n°8, Goa, India. "Can we harness diverted total synthesis for the mechanistic understanding of Buruli ulcer, a neglected tropical disease".

1- July 2009, 1st EUCHEMS Organic Division Young Investigator Workshop, Liblice castle, Czech Tchèque. "An overview of research interests from Synthetic Methodologies to Life and Material Sciences" (KEYNOTE)

Lectures in chemical industries (4)

4- 11 May 2017, Galapagos, Romainville, France. «Synthesis of nitrogen heterocycles from ynamides by hydrometalation reactions and pericyclic sequences »

3- 7 November 2016, Galderma, Biot, France. « Synthesis of nitrogen heterocycles from ynamides by hydrometalation reactions and pericyclic sequences »

2- 23 April 2015, Syngenta Stein, Switzerland. "Problems and detours in the chemical synthesis of mycolactone analogues".

1- November 1999, Roche Symposium for leading chemists of the next decade, Hoffmann-LaRoche, Basel, Switzerland.

Lectures in French universities (22)

22-20 September 2017, university of Toulouse, LHFA. «Synthesis of nitrogen heterocycles from ynamides by hydrometalation reactions and pericyclic sequences »

21- 22 June 2017, university of Poitiers, Institut de Chimie des Milieux et des Matériaux de Poitiers (IC2MP). "Problems and detours in the chemical synthesis of mycolactone analogs".

20- 18 February 2016, university of Caen. "Problems and detours in the chemical synthesis of mycolactone analogs".

19- 8 March 2016, CEA Saclay. "Problems and detours in the chemical synthesis of mycolactone analogs".

18- 22 January 2015, University of Reims, "Deciphering the biology of Buruli ulcer thanks to chemical synthesis"

17- 7 November 2014, university of Strasbourg, Ecole Doctorale des Sciences Chimiques, "Deciphering the biology of Buruli ulcer thanks to chemical synthesis"

16- 16 May 2014, Université Paris Descartes, Paris. "Synthèse totale et infections mycobactériennes - Le cas des hybrides de mycolactones, toxines de l'ulcère de Buruli".

15-3 April 2014, university of Lyon, "La synthèse totale, un acteur incontournable des études mécanistiques de l'ulcère de Buruli".

14-February 2014, university of Orléans "Les radicaux du groupe 14 au service de la synthèse multi-étapes - le cas des hybrides de mycolactones, toxines de l'ulcère de Buruli"

13-November 2013, university of Marseille, "La synthèse totale, un acteur incontournable des études mécanistiques de l'ulcère de Buruli".

12-November 2013, university of Nice-Sophia-Antipolis, "La synthèse totale, un acteur incontournable des études mécanistiques de l'ulcère de Buruli".

11-January 2013, Faculty of Pharmacy of Strasbourg, Illkirch. "La synthèse totale de produits naturels peut-elle éclairer des mécanismes biologiques? Le cas de l'ulcère de Buruli".

10-October 2012, Institut de Chimie des Substances Naturelles, Gif-sur-Yvette. «From boryl and silyl radicals to Function Oriented Synthesis in Mycolactone derived natural products: promising synthetic tools".

9-March 2012, university of Strasbourg, «From boryl and silyl radicals to Function Oriented Synthesis in Mycolactone derived natural products: promising synthetic tools»

8-Janvier 2012, University of Orsay, «Synthèse totale d'analogues des mycolactones, toxines de l'ulcère de Buruli- implication en SAR »

7-December 2011, university of Rennes, « La réaction de métathèse des oléfines : un élément clé de la synthèse totale d'analogues des mycolactones, toxines de l'ulcère de Buruli »

6-October 2011, university of Nantes, « Exploration fonctionnelle des mycolactones, toxines de l'ulcère de Buruli, par synthèse totale dérivée »

5- June 2011, University Pierre et Marie Curie (Paris VI), Institut Parisien de Chimie Moléculaire « Exploration fonctionnelle des mycolactones, toxines de l'ulcère de Buruli, par synthèse totale dérivée »

4- March 2009, university of Rouen, "Réactions de cycloaddition d'hétéro Diels-Alder - Où en sommes nous ?"

3- January 2009, university of Grenoble, "Nouveautés en réactions de cycloaddition d'hétéro Diels-Alder - Applications synthétiques"

2- November 2008, Université Jules Verne, Amiens, "Cycloaddition de nitroso Diels-Alder d'alpha-acyloxynitrosos - Applications synthétiques"

1- June 2008, university of Versailles Saint-Quentin, "Cycloaddition de nitroso Diels-Alder d'alpha-acyloxynitrosos - Applications synthétiques"

Lectures in French congresses (3)

3-August 2013, Groupe d'Etude en Chimie Organique (GECO) n°54, Pornic. "Réactions d'hydrométallation et application à la synthèse d'analogues des mycolactones A/B".

2-May 2010, French Chemical Society meeting Grand Est 6, Illkirch. "Les mycolactones A/B, toxines de l'ulcère de Buruli – Progrès en études de relations structure/activité" (KEYNOTE)

1-May 2009, SECO VI, La Rochelle. "Cycloaddition d'hétéro Diels-Alder de diénophiles nitrosés. Méthodologies et applications synthétiques" (KEYNOTE)