CV Détaillé

Dr Nicolas Duguet

Maître de conférences, HDR
Né le 10 mai 1980
Pacsé, 2 enfants (8 ans / 5 ans)
ORCID : 0000-0002-9425-7450

Adresse professionnelle :
Université Claude Bernard Lyon 1, Institut de Chimie et Biochimie Moléculaires et Supramoléculaires (ICBMS), Equipe CAtalyse SYnthèse et ENvironnement (CASYEN), Campus LyonTech la Doua, Bâtiment Lederer, 1 rue Victor Grignard - 69100 Villeurbanne.
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Expériences de recherche

2010-présent Maître de Conférences à l'Université Claude Bernard Lyon1 dans le groupe du Pr Marc Lemaire
ICBMS, UMR 5246 CNRS, Lyon

2010 Stage post-doctoral dans le groupe du Pr Sylvain Routier
ICOA, UMR 6005 CNRS, Orléans

2007-2009 Stage post-doctoral dans le groupe du Pr Andrew D. Smith
School of chemistry, University of St Andrews, Scotland, UK

2003-2006 Thèse de chimie organique (bourse MESR)
LFAOC, IRCOF UMR 6014 CNRS, Rouen
Directeur : Dr Jacques Maddaluno
« Agrégats mixtes amidures de lithium chiraux / organolithiens : Applications en additions énantiosélectives 1,2 et 1,4 » soutenue le 1/12/2006 à Rouen.
Jury : Pr François Couty, Pr Alexandre Alexakis, Pr Olivier Riant, Pr Jacques Rouden, Dr Jacques Maddaluno, Dr Anne Harrison-Marchand.

2005 Stage dans le groupe du Pr Kiyoshi Tomioka (JSPS Summer Program 2005)
Graduate School of Pharmaceutical Sciences, Kyoto University, Japon

Formation / Diplômes

2016 **Habilitation à Diriger des Recherches** - HDR
Université Claude Bernard Lyon1

2003-2006 **Doctorat de Chimie Organique** de l'Université de Rouen
IRCOF (Institut de Recherche en Chimie Organique Fine)

2003 **DEA de Chimie Organique** de l'Université de Rouen
Mention bien

2000-2003 **Cycle ingénieur Chimie Fine & Ingénierie**
INSA (Institut National des Sciences Appliquées) de Rouen

1998-2000 **DUT de Chimie** de l'Université de Rouen

Expériences d'enseignements

2010–présent Maître de Conférences à l'Université Claude Bernard Lyon1 (UCBL).
TD et TP en chimie organique du niveau L1 à M2
Responsable UE « Chimie Verte », public chimistes/biochimistes

2003–2006 Moniteur à l'université de Rouen.
TP de chimie organique du niveau L1 à L3, 96 h de TP / an (64 h eqTD)

Expériences d'encadrements

En cours 1 doctorant, 2 étudiants de M2 (fév. 2022)
2010-2021 1 étudiant de M1, 12 étudiants de M2, 10 doctorants (thèses soutenues)

Production scientifique

53 publications, 8 brevets (7 extensions internationales et 1 européenne), h-factor = 19 (Web of Science)
1 Conférence invitée, 6 Séminaires dans les universités, 17 Communications orales, 18 Communications posters.

Projets financés / primes

2022 : partenaire projet HYCAT, Agence Nationale de la Recherche (ANR)
2020 : Prime d'encadrement doctoral et de recherche (PEDR)
2019 : EMERGENCE@INC International (CNRS)
2019 : porteur projet ThermoPESO, Agence Nationale de la Recherche (ANR)
2017 : porteur projet VALCOUPENZ, Pack ambition recherche (région Auvergne-Rhône-Alpes)
2016 : Prime d'encadrement doctoral et de recherche (PEDR)
2015 : co-porteur projet BIOALDEHYDES, ITE PIVERT
2015 : co-porteur projet PE-Organocat de l'Institut de Chimie de Lyon (ICL)

Production scientifique

1 Chapitre, 53 publications (24 en tant qu'auteur correspondant)**, 8 brevets, facteur H = 19 (WoS)**

1 conférence invitée, 6 séminaires, 17 communications orales, 18 posters

Chapitre de Livre : 1

[1] "La chimie verte". E. Métay, N. Duguet, E. Da Silva, M. Lemaire. *Le développement durable à découvert*, CNRS Editions, Editeurs: A. Euzen, L. Eymard, F. Gaill
DOI: 10.4000/books.editionscnrs.10848

Publications : 53

Publications de thèse (travaux effectués dans le groupe du Dr Jacques Maddaluno) :

[1] "3-Aminopyrrolidine lithium amides as chiral ligands for alkyllithium derivatives: Synthesis, NMR analysis, and computational study of their mixed aggregates". A. Harrison-Marchand,* J.-Y. Valnot, A. Corruble, N. Duguet, H. Oulyadi, D. Desjardins, C. Fressigné, C. Giessner-Prettre, J. Maddaluno, *Pure Appl. Chem.* **2006**, *78*, 321-331 (IF_{2014} = 2.49).
http://dx.doi.org/10.1351/pac200678020321

[2] "Enantioselective conjugate addition of a lithium ester enolate catalysed by chiral lithium amides". N. Duguet, A. Harrison-Marchand, J. Maddaluno,* K. Tomioka,* *Org. Lett.* **2006**, *8*, 5745-5748 (IF_{2014} = 6.36). (Highlighted in *Synfacts* **2007**, *3*, 280-280).
http://dx.doi.org/10.1021/ol062270d

[3] "Origin of the detrimental effect of lithium halides on an enantioselective nucleophilic alkylation of aldehydes". F. Paté, N. Duguet, H. Oulyadi, A. Harrison-Marchand, C. Fressigné, J.-Y. Valnot, M.-C. Lasne, J. Maddaluno,* *J. Org. Chem.* **2007**, *72*, 6982-6991 (IF_{2014} = 4.72).
http://dx.doi.org/10.1021/jo071160x

[4] "Heterocyclic lithium amides as chiral ligands for an enantioselective hydroxyalkylation with *n*-BuLi". N. Duguet, S. M. Petit, P. Marchand, A. Harrison-Marchand, J. Maddaluno,* *J. Org. Chem.* **2008**, *73*, 5397-5409 (IF_{2014} = 4.72).
http://dx.doi.org/10.1021/jo8005396

[5] "Enantioselective conjugate addition of a lithium ester enolate catalysed by chiral lithium amides: a possible intermediate characterized". B. Lecachey, N. Duguet, H. Oulyadi,* C. Fressigné, A. Harrison-Marchand, Y. Yamamoto, K. Tomioka, J. Maddaluno,* *Org. Lett.* **2009**, *11*, 1907-1910 (IF_{2014} = 6.36).
http://dx.doi.org/10.1021/ol900275y

[6] "Dynamics of the lithium amide/alkyllithium interactions: mixed dimers and beyond". A. Harrison-Marchand,* N. Duguet, G. Barozzino-Consiglio, H. Oulyadi, J. Maddaluno,* *Top. Organomet. Chem.* **2014**, *47*, 43-62 (IF_{2014} = 5.29).
http://dx.doi.org/10.1007/3418_2014_75

Publications de postdoc (travaux effectués dans le groupe du Pr Andrew D. Smith) :

[7] "N-Heterocyclic carbene catalysed β-lactam synthesis". N. Duguet, C. D. Campbell, A.M. Z. Slawin, A. D. Smith,* *Org. Biomol. Chem.* **2008**, *6*, 1108-1113 (IF_{2014} = 3.56).
http://dx.doi.org/10.1039/b800857b

[8] "Tandem multi-step synthesis of C-carboxyazlactones using N-heterocyclic carbenes". C. D. Campbell, N. Duguet, K. A. Gallagher, J. E. Thomson, A. G. Lindsay, A. C. O'Donoghue, A. D. Smith,* *Chem. Commun.* **2008**, *10*, 3528-3530 (IF_{2014} = 6.83). (Highlighted as a Hot Article- 07 July 2008).
http://dx.doi.org/10.1039/b806816j

[9] "Probing the efficiency of N-heterocyclic carbene promoted *O*- to C-carbonyl transfer of oxazolyl carbonates". J. E. Thomson, C. D. Campbell, C. Concellón, N. Duguet, K. Rix, A. M. Z. Slawin, A. D. Smith,* *J. Org. Chem.* **2008**, *73*, 2784-2791 (IF_{2014} = 4.72).
http://dx.doi.org/10.1021/jo702720a

[10] "An asymmetric hetero-Claisen approach to 3-alkyl-3-aryloxindoles". N. Duguet, A. M. Z. Slawin, A. D. Smith,* *Org. Lett.* **2009**, *11*, 3858-3861 (IF_{2014} = 6.36). (Highlighted in *Synfacts* **2009**, *11*, 1199-1199).
http://dx.doi.org/10.1021/ol901441t

[11] "N-Heterocyclic carbene-mediated enantioselective addition of phenols to unsymmetrical alkylarylketenes". C. Concellón, N. Duguet, A. D. Smith,* *Adv. Synth. Catal.* **2009**, *351*, 3001-3009 (IF_{2014} = 5.66).
http://dx.doi.org/10.1002/adsc.200900538

[12] "Chiral relay in NHC-mediated asymmetric β-lactam synthesis I; substituent effects in NHCs derived from (1*R*,2*R*)-cyclohexane-1,2-diamine" N. Duguet, A. Donaldson, S. M. Leckie, J. Douglas, P. Shapland, T. B. Brown, G. Churchill, A. M. Z. Slawin, A. D. Smith,* *Tetrahedron: Asymm.* **2010**, *21*, 582-600 (IF_{2014} = 2.16).
http://dx.doi.org/10.1016/j.tetasy.2010.03.001

|13] "Chiral relay in NHC-mediated asymmetric β-lactam synthesis II; asymmetry from NHCs derived from acyclic 1,2-diamines" N. Duguet, A. Donaldson, S. M. Leckie, E. A. Kallstrom, C. D. Campbell, P. Shapland, T. B. Brown, A. M. Z. Slawin, A. D. Smith,* *Tetrahedron: Asymm.* **2010**, *21*, 601-616 (IF_{2014} = 2.16).
http://dx.doi.org/10.1016/j.tetasy.2010.03.002

[14] "Structure-enantioselectivity effects in 3,4-dihydropyrimido[2,1-*b*]-benzothiazole-based isothioureas as enantioselective acylation catalysts" D. Belmessieri, C. Joannesse, P. A. Woods, C. MacGregor, C. Jones, C. D. Campbell, C. P. Johnston, N. Duguet, C. Concellón, R. A. Braggb, A. D. Smith,* *Org. Biomol. Chem.* **2011**, *9*, 559-570 (IF_{2014} = 3.56).
http://dx.doi.org/10.1039/c0ob00515k

[15] "Asymmetric Pericyclic Cascade Approach to Spirocyclic Oxindoles" E. Richmond, N. Duguet, A. M. Z. Slawin, T. Lébl, A. D. Smith,* *Org. Lett.* **2012**, *14*, 2762-2765 (IF_{2014} = 6.36).
http://dx.doi.org/10.1021/ol300982f

[16] "An asymmetric pericyclic cascade approach to 3-alkyl-3-aryloxindoles: generality, applications and mechanistic investigations" E. Richmond, K. B. Ling, N. Duguet, L. B. Manton, N. Çelebi-Ölçüm, Y.-H. Lam, S. Alsancak, A. M. Z. Slawin, K. N. Houk,* A. D. Smith,* *Org. Biomol. Chem.* **2015**, *13*, 1807-1817 (IF_{2014} = 3.56).
http://dx.doi.org/10.1039/C4OB02526A

Publication de postdoc (travaux effectués dans le groupe du Pr Sylvain Routier) :

[17] "Identification of new non-steroid RORα ligands; related structure-activity relationships and docking studies" M. Dubernet, N. Duguet, L. Colliandre, C. Berini, S. Helleboid, M. Bourotte, M. Daillet, L. Maingot, S. Daix, J.-F. Delhomel, L. Morin-Allory, S. Routier, R. Walczak,* *ACS Med. Chem. Lett.* **2013**, *4*, 504-508 (IF_{2014} = 3.12).
http://dx.doi.org/10.1021/ml300471d

Publication de maître de conférences (travaux effectués dans le groupe du Pr Marc Lemaire) :

[18] "New research areas inspired by sustainable development" E. Da Silva, W. Dayoub, N. Duguet, E. Métay, F. Popowycz, M. Lemaire,* *C. R. Chimie* **2013**, *16,* 343-349 (IF_{2014} = 1.71).
http://dx.doi.org/10.1016/j.crci.2012.12.019

[19] "Biphasic Glycerol/2-MeTHF, Ruthenium-Catalysed Enantioselective Transfer Hydrogenation of Ketones Using Sodium Hypophosphite as Hydrogen Donor" C. Guyon, E. Métay, N. Duguet, M. Lemaire,* *Eur. J. Org. Chem.* **2013**, *19*, 5439-5444 (IF_{2014} = 3.06).
http://dx.doi.org/10.1002/ejoc.201300506

[20] "One-Pot, Solvent-Free Access to Unsymmetrical Ureas by Palladium-Catalysed Reductive Alkylation Using Molecular Hydrogen" T. Mohy El Dine, S. Chapron, M.-C. Duclos, N. Duguet, F. Popowycz, M. Lemaire,* *Eur. J. Org. Chem.* **2013**, *19*, 5445-5454 (IF_{2014} = 3.06).
http://dx.doi.org/10.1002/ejoc.201300642

[21] "Amidation of phenol derivatives: a direct synthesis of paracetamol (acetaminophen) from hydroquinone" R. Joncour, N. Duguet, E. Métay, A. Ferreira, M. Lemaire,* *Green Chem.* **2014**, *16*, 2997-3002 (IF_{2014} = 8.02).
http://dx.doi.org/10.1039/C4GC00166D

[22] "Catalytic reductive cleavage of methyl α-D-glucoside acetals to ethers using hydrogen as a clean reductant" C. Gozlan, R. Lafon, N. Duguet, A. Redl, M. Lemaire,* *RSC Adv.* **2014**, *4*, 50653-50661 (IF_{2014} = 3.84).
http://dx.doi.org/10.1039/c4ra09350j

[23] "Thiazolylidene-catalysed cleavage of methyl oleate-derived α-hydroxyketone to the corresponding free aldehydes" E. Deruer, N. Duguet,* M. Lemaire,* *ChemSusChem* **2015**, *8*, 2481-2486. (IF_{2014} = 7.66).
http://dx.doi.org/10.1002/cssc.201500462

[24] "Glycerol Ether Synthesis: A Bench Test for Green Chemistry Concepts and Technologies" M. Sutter, E. Da Silva, N. Duguet, Y. Raoul, E. Métay, M; Lemaire,* *Chem. Rev.* **2015**, *115*, 8609-8651 (IF_{2014} = 46.57).
http://dx.doi.org/10.1021/cr5004002

[25] "Preparation of Amphiphilic Sorbitan Monoethers through Hydrogenolysis of Sorbitan Acetals and Evaluation as Bio-Based Surfactants" C. Gozlan, E. Deruer, M.-C. Duclos, V. Molinier, J.-M. Aubry, A. Redl, N. Duguet, M. Lemaire,* *Green Chem.* **2016**, *18*, 1994-2004 (IF_{2014} = 8.02).
http://dx.doi.org/10.1039/C5GC02131F

[26] "Synthesis, Surfactant Properties and Antimicrobial Activities of Methyl Glycopyranoside Ethers" D. Belmessieri, C. Gozlan, M.-C. Duclos, V. Molinier, J.-M. Aubry, O. Dumitrescu, G. Lina, A. Redl, N. Duguet,* M. Lemaire,* *Eur. J. Med. Chem.* **2017**, *128*, 98-106 (IF_{2014} = 3.90).
http://dx.doi.org/10.1016/j.ejmech.2017.01.038

[27] "Homogeneous and Heterogeneous Catalytic (Dehydrogenative) Oxidation of Oleochemical 1,2-Diols to α-Hydroxyketones". N. D. Vu, B. Guicheret, N. Duguet,* E. Metay,* M. Lemaire, *Green Chem.* **2017**, *19*, 3390-3399 (IF_{2016} = 9.125).
http://dx.doi.org/10.1039/c7gc00867h

[28] "Dodecyl sorbitan ethers as antimicrobials against Gram-positive bacteria". D. Belmessieri, C. Gozlan, M.-C. Duclos, O. Dumitrescu, G. Lina,* A. Redl, N. Duguet,* M. Lemaire,* *Bioorg. Med. Chem. Lett.* **2017**, *27*, 4660-4663 (IF_{2016} = 2.454).
http://dx.doi.org/10.1016/j.bmcl.2017.09.015.

[29] "Trialkylamine-Catalyzed Aldolisation of Unprotected 1,3-Dihydroxyacetone (DHA) towards C-C Bond-Linked Tetraol Surfactants". B. Zhu, D. Belmessieri, J. F. Ontiveros, J.-M. Aubry, G.-R. Chen, N. Duguet,* M. Lemaire,* *ACS Sustainable Chem. Eng.* **2018**, *6*, 2630 − 2640 (IF_{2017} = 6.140).
DOI: 10.1021/acssuschemeng.7b04135

[30] "Preparation and Catalytic Properties of Various Oxides and Mesoporous Materials Containing Niobium and Sulfate Ions, in the Etherification Reaction of 2-Naphtol". A. H. Hussein, H. Nahas, M. Jahjah, M. Srour, R. Jahjah, N. Duguet, M. Lemaire, D. Naoufal,* *Int. J. Org. Chem.*, **2018**, *8*, 16-40 (IF_{2016} = 0.75).
DOI: 10.4236/ijoc.2018.81002

[31] "Catalytic Properties of Various Oxides and Mesoporous Materials Containing Niobium and Sulfate Ions, in the Oxidation Reaction of 1-Octanol". A. H. Hussein, A. Khalil, M. Jahjah, M. Srour, R. Jahjah, N. Duguet, M. Lemaire, D. Naoufal,* *Int. J. Org. Chem.*, **2018**, *8*, 41-53 (IF_{2016} = 0.75).
DOI: 10.4236/ijoc.2018.81003

[32] "Preparation of *para*-Aminophenol from Nitrobenzene through Bamberger Rearrangement Using a Mixture of Heterogeneous and Homogeneous Acid Catalysts". R. Joncour, A. Ferreira, N. Duguet,* M. Lemaire,* *Org. Process Res. Dev.* **2018**, *22*, 312−320 (IF_{2016} = 2.857).
DOI: 10.1021/acs.oprd.7b00354

[33] "Sucres et huiles : des ingrédients clés pour la chimie biosourcée". N. Duguet,* E. Métay,* M. Lemaire, S. Moebs-Sanchez, M. Ahmar, F. Popowycz, Y. Queneau,* *Actualité Chimique* **2018**, *427-428*, 39-45.
Link

[34] "Robust organocatalysts for the cleavage of vegetable oil derivatives to aldehydes through retro-benzoin condensation". N. D. Vu, S. Bah, E. Deruer, N. Duguet,* M. Lemaire,* *Chem. – Eur. J.* **2018**, *24*, 8141-8150 (IF_{2016} = 5.317).
DOI: 10.1002/chem.201800091

[35] "Direct aldolization of unprotected fructose to bio-based surfactants". B. Zhu, G.-R. Chen, N. Duguet,* M. Lemaire,* *ACS Sustainable Chem. Eng.* **2018**, *6*, 11695-11703 (IF_{2017} = 6.140).
DOI: 10.1021/acssuschemeng.8b01953

[36] "Solvent-free direct α-alkylation of ketones by alcohols catalyzed by nickel supported on silica-alumina". A. Charvieux, J. B. Giorgi, N. Duguet,* E. Métay,* *Green Chem.* **2018**, *20*, 4210–4216 (IF_{2017} = 8.586).
DOI: 10.1039/c8gc01958d

[37] "Valorization of methyl azelaaldehydate – a vegetable oil-based platform molecule – to monomers through Stetter reaction". A. Charvieux, N. D. Vu, N. Duguet,* M. Lemaire,* *Eur. J. Org. Chem.* **2019**, 1251–1256 (IF_{2018} = 3.029).
DOI: 10.1002/ejoc.201801611

[38] "α-Methylation of ketones with methanol catalyzed by Ni/SiO_2-Al_2O_3". A. Charvieux, N. Duguet,* E. Métay,* *Eur. J. Org. Chem.* **2019**, 3694–3698 (IF_{2018} = 3.029). (Highlighted in *Synfacts* **2019**, *15*, 1044-1044).
DOI: 10.1002/ejoc.201900602

[39] "Organocatalytic cleavage of fatty 1,2-diketones to esters". N. D. Vu, R. Chavallard, T. De Dios Miguel, N. Duguet,* M. Lemaire, *ACS Sustainable Chem. Eng.* **2019**, *7*, 13865−13872 (IF_{2018} = 6.97).
DOI: 10.1021/acssuschemeng.9b02026

[40] "Solvent-free *N*-alkylation of amides with alcohols catalyzed by nickel on silica-alumina". A. Charvieux, L. Le Moigne, G. Borrego, N. Duguet,* E. Métay,* *Eur. J. Org. Chem.* **2019**, 6842–6846 (IF_{2018} = 3.029).

DOI: 10.1002/ejoc.201901291

[41] "Polyurethane Thermosets Using Lipidic Poly(α-hydroxyketone)". B. Briou, N. D. Vu, S. Caillol, J.-J. Robin, N. Duguet, M. Lemaire, P. Etienne, L. Bonnet, V. Lapinte,* *J. Am. Oil Chem. Soc.* **2020**, *97*, 81–91 (IF_{2018} = 1.72).
DOI: 10.1002/aocs.12289

[42] "A thermomorphic polyethylene-supported imidazolium salt for the fixation of CO_2 into cyclic carbonates". K. Grollier, N. D. Vu, K. Onida, A. Akhdar, S. Norsic, F. D'Agosto, C. Boisson, N. Duguet* *Adv. Synth. Catal.* **2020**, *362*, 1696– 1705 (IF_{2019} = 5.85). (Highlighted in *Synfacts* **2020**, *16*, 0834).
DOI: 10.1002/adsc.202000032

[43] "Enzymatic Synthesis of Aliphatic Acyloins Catalyzed by Thermostable Transketolase" H. Casajus, A. Lagarde, M. Leremboure, T. De Dios Miguel, L. Nauton, V. Thery, W.-D. Fessner, N. Duguet, F. Charmantray,* L. Hecquet,* *ChemCatChem* **2020**, 12, 5772–5757 (IF_{2019} = 4.853).
DOI: 10.1002/cctc.202001160

[44] "Biobased aldehydes from fatty epoxides through thermal cleavage of β-hydroxy hydroperoxides". T. De Dios Miguel, N. D. Vu, M. Lemaire, N. Duguet,* *ChemSusChem* **2021**, *14*, 379–386 (IF_{2020} = 8.928).
DOI: 10.1002/cssc.202002364

[45] "Thermomorphic polyethylene-supported organocatalysts for the valorization of vegetable oils and CO_2". A. Akhdar, K. Onida, N. D. Vu, K. Grollier, S. Norsic, C. Boisson, F. D'Agosto, N. Duguet*, *Adv. Sustainable Syst.* **2021**, *5*, 2000218 (IF_{2020} = 6.271).
DOI: 10.1002/adsu.202000218

[46] "Selective Catalytic Oxidation of diglycerol". H. Wang, N. D. Vu, G.-R. Chen, E. Métay, N. Duguet,* M. Lemaire,* *Green Chem.* **2021**, *23*, 1154–1159 (IF_{2020} = 10.182).
DOI: 10.1039/D0GC03239E

[47] "Synthesis of imidazoles from fatty 1,2-diketones". M. Bouchakour, M. Daaou, N. Duguet,* *Eur. J. Org. Chem.* **2021**, 1647–1652 (IF_{2020} = 3.021).
DOI: 10.1002/ejoc.202100053

[48] "The chemistry of β-hydroxy hydroperoxides". D. Louvel, T. De Dios Miguel, N. D. Vu, N. Duguet,* *Eur. J. Org. Chem.* **2021**, 2990–3014 (IF_{2020} = 3.021).
DOI: 10.1002/ejoc.202100343

[49] "Synthesis of indoles through acceptorless dehydrogenative coupling catalyzed by nickel on silica-alumina". A. A. Hammoud, A. Charvieux, N. Duguet,* E. Métay,* *Tetrahedron Lett.* **2021**, *78*, 153270 (IF_{2020} = 2.415).
DOI: 10.1016/j.tetlet.2021.153270

[50] "Organocatalytic synthesis of substituted vinylene carbonates". K. Onida, A. Haddleton, S. Norsic, C. Boisson, F. D'Agosto, N. Duguet,* *Adv. Synth. Catal.* **2021**, *363*, 5129– 5137 (IF_{2020} = 5.84). Selected by the journal as a *Very Important Publication* (VIP paper).
First published as a preprint: 10.33774/chemrxiv-2021-mm08f
DOI: 10.1002/adsc.202100870

[51] "Synthesis of fatty 1,2,4-trioxanes by peracetalization of β-hydroxy hydroperoxides". T. De Dios Miguel, D. Louvel, K. Onida, A. Lavoignat, S. Picot, N. Duguet*, *Synthesis*, **2022**, *54*, 617–628 (IF_{2020} = 3.157). Invited Feature Article.
DOI: 10.1055/a-1643-3057

[52] "Cleavage of aliphatic α-Hydroxy Ketones by Evolved Transketolase from Geobacillus stearothermophilus". H. Casajus, A. Lagarde, L. Nauton, N. Ocal, M. Leremboure, W.-D. Fessner, N. Duguet, F. Charmantray,*L. Hecquet*, *ACS Catal.* **2022**, *12*, 3566-3576 (IF_{2020} = 13.084).
DOI: 10.1021/acscatal.1c05140

[53] "Direct Synthesis of Vinylene Carbonates from Aromatic Aldehydes". K. Onida, L. Ibrahimli, N. Duguet,* *Eur. J. Org. Chem.* **2022**, e202200153 (IF_{2020} = 3.021).
First published as a preprint: 10.26434/chemrxiv-2021-mw0p
DOI: 10.1002/ejoc.202200153

Brevets : 8

[1] "Process for preparation of carboxylic acids or aldehydes from olefins, diols, or epoxides by oxidative cleavage". M. Lemaire, E. Métay, M. Sutter, J. Debray, Y. Raoul, N. Duguet. *Fr. Demande*, **2014**, FR 2994178 A1 20140207.
"Process for preparation of carboxylic acids from diols or epoxides by oxidative cleavage". M. Lemaire, E. Métay, M. Sutter, J. Debray, Y. Raoul, N. Duguet. *PCT Int. Appl.*, **2014**, WO 2014020281 A1 20140206.

[2] "Procédé pour la préparation d'acétals cycliques alkyl à longues chaînes, à base de sucres". C. Gozlan, N. Duguet, M. Lemaire, Y. Queneau, A. Redl. *Fr. Demande*, **2014**, FR 3007031 A1 20141219.
"Method for preparing long-chain alkyl cyclic acetals made from sugars". C. Gozlan, N. Duguet, M. Lemaire, Y. Queneau, A. Redl. *PCT Int. Appl.*, **2014**, WO 2014/199345 A1 20141218.

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