

Books, Reviews and book Chapters 2004 -2019

Books

7. Organometallics for Green Catalysis

P. H. Dixneuf, and Jean-François Soulé Eds.,
Topics in Organometallic Chemistry series, Springer, **2019**, volume 63

6.C-H Bond Activation and catalytic functionalization,

P. H. Dixneuf, H. Doucet Eds.,
Topics in Organometallic Chemistry series, Springer, **2016**, 56, Volume II.
ISBN: 978-3-319-24802-8 (Print) 978-3-319-29319-6 (Online)

5. C-H Bond Activation and catalytic functionalization,

P. H. Dixneuf, H. Doucet Eds.,
Topics in Organometallic Chemistry series, Springer, **2015**, 55, Volume I,
ISSN 1436-6002; ISBN 978-3-319-24628-4

4. Ruthenium in Catalysis

Christian Bruneau and Pierre H. Dixneuf,
Topics in Organometallic Chemistry series, Springer, **2014**,
DOI 10.1007/978-3-319-08482-4; ISBN 978-3-319-08482-4

3. Metal Catalyzed reactions in water

Pierre H. Dixneuf and Victorio Cadierno Editors Wiley-VCH, **2013**,
ISBN: 978-3527-33188-8

2. Metal Vinylidenes and Allenylidenes in Catalysis.

C. Bruneau, P. H. Dixneuf Editors
Wiley-VCH, **2008**,
ISBN 978-3-527-31892-6

1. Ruthenium catalysts in fine chemistry

C. Bruneau, P. H. Dixneuf Editors
Topics in organometallic chemistry, **2004**, volume 11, Springer,
ISBN-3-540-20543-8

8 Patents

Reviews and book chapters

Book Chapter

Functionalizations of C(sp²)-H Bonds of Heterocycles and Arenes Assisted with Photoredox-Catalysts for the C-C Bond Formation

P. H. Dixneuf, J.-F. Soulé

In "Organometallics for Green Catalysis ", P. H. Dixneuf, J. F. Soulé Eds., Top. OrganoMet. Chem., Springer, 2019, Volume 63

Transformations of Terpenes via Carbon-Carbon Double Bond Metathesis

Bruneau, christian; Fischmeister, Cédric; Mandelli, Dalmo; Carvalho, Wagner; dos Santos, Eduardo; Dixneuf, pierre; Sarmiento Fernandes, Luciana

Catal. Sci. Technol., **2018**, 8, 3989-4004, CY-MRV-06-2018-001152.R1

Photoredox Catalysis for Building C-C Bonds from C(sp²)-H Bonds

Chang-Sheng Wang, Pierre H. Dixneuf, and Jean-François Soulé

Chem. Rev. **2018**, 118, 7532-7585. DOI: 10.1021/acs.chemrev.8b00077

Late Stage Modifications of P-Containing Ligands using Transition-Metal-Catalysed C-H Bond Functionalisation ,

Zhuan Zhang, Pierre H Dixneuf and Jean-Francois Soule ,

Feature Article, *Chem. Commun.*, **2018**, 54, 7265 – 7280

DOI: [10.1039/C8CC02821D](https://doi.org/10.1039/C8CC02821D)

Review *Dedicated to Yves Chauvin*

Alkene metathesis catalysis: a key for transformations of unsaturated plant oils and renewable derivatives.

Pierre H. Dixneuf, Christian Bruneau, Cédric Fischmeister

Oil & Gas Sci. Technol.– Rev. IFP Energies nouvelles **2016**, 71, 19 (21 pages)

DOI: 10.2516/ogst/2015033

Ruthenium(II)-catalyzed functionalization of C-H bonds with alkenes: alkenylation *versus* alkylation"

Christian Bruneau and Pierre H. Dixneuf, in "C-H Bond Activation and catalytic functionalization", P. H. Dixneuf, H. Doucet Eds., Top. OrganoMet. Chem., Springer, **2015**, 55, volume I, 137-188.

Ruthenium Indenylidene Catalysts for Alkene Metathesis

P. H. Dixneuf, C. Bruneau

in "Handbook of Metathesis, Volume 1: Catalyst Development and Mechanism", R. H. Grubbs, A. G. Wenzel Eds., Wiley VCH, Weinheim, 2nd edition, **2015**, pp 389-416.

Early steps of homogeneous catalysis in Rennes: carbon dioxide incorporation, alkyne activation and ruthenium catalysis.

Pierre H. Dixneuf, *Catal. Lett.*, **2015**, 145, 360–372. DOI: 10.1007/s10562-014-1444-9

Dedicated to M. I. Bruce and B. M. Trost

Activation of sp² C-H bonds and C-C cross-coupling reactions with ruthenium(II) catalysts; B. Li; P. H. Dixneuf, in *Ruthenium in Catalysis* (Eds: Bruneau C.;Dixneuf, P. H.), Topics in Organometallic Chemistry series, Springer, **2014**, p 119-193.

sp²C-H Bond activation in water and catalytic cross-coupling reactions

B. Li , P. H. Dixneuf

*Chem. Soc. Rev.***2013**, *42* (13), **5744 - 5767** DOI:10.1039/C3CS60020C.

Metal-catalyzed C-H bond activation and C-C bond formation in water

B. Li; P. H. Dixneuf, in *metal-catalyzed reactions in water* (Eds: Dixneuf, P. H.; Cadierno V.), Wiley, **2013**, chapter 2, PP 47-86, ISBN: 978-3-527-33188-8

Ruthenium(II) Catalyzed C-H Bond Activation and Functionalization

Percia Beatrice Arockiam, Christian Bruneau, Pierre H. Dixneuf *Chem.*

Rev. **2012**, *112* (11), 5879–5918. DOI : 10.1021/cr300153j

A Green Route to nitrogen-containing groups: the acrylonitrile cross-metathesis and applications to plant oil derivatives.

X. Miao, P. H. Dixneuf, C. Fischmeister, C. Bruneau Review

: *Green Chem.*, 2011, 13, 2258-2271

Alkene metathesis and renewable materials: selective transformations of plant oils

R. Malacea, P. H. Dixneuf,

Book chapter Nato series Dragutan Eds, 2009

(Arene)ruthenium catalysts for olefin metathesis

C. Bruneau, C. Fischmeister, P. H. Dixneuf Review

Chem. Today 27 (2009) 17-19

R. Malacea, P. H. Dixneuf “Ruthenium allenylidenes and indenylidenes as catalysts in alkene metathesis” in *Metal Vinylidenes and Allenylidenes in Catalysis*, C. Bruneau, P. H. Dixneuf Editors Wiley-VCH, 2008, 251-277

C. Fischmeister, P. H. Dixneuf “New ruthenium catalysts for alkene metathesis” in *Metathesis Chemistry: from Nanostructure Design to synthesis of Advanced Materials*, Y. Imamoglu, V. Dragutan Eds, Springer, 2007,

F. Pozgan, P. H. Dixneuf “Recent applications of alkene metathesis for fine chemical and supramoleclar system synthesis” in *Metathesis Chemistry: from Nanostructure Design to synthesis of Advanced Materials*, Y. Imamoglu, V. Dragutan Eds, Springer, 2007, 195-222

Cascade and sequential catalytic transformations initiated by ruthenium catalysts

C. Bruneau, S. Dérien, P. H. Dixneuf

book chapter “*Cascade catalytic reactions*” T. Müller, Ed. Springer 2006, 295-326

Redox Active Architectures and Carbon-Rich Ruthenium Complexes as Models For Molecular Wires

S. Rigaut, D. Touchard, P. H. Dixneuf

book chapter "*Redox Systems Under Nano-Space Control*" Toshikazu Hirao, Ed. Springer 2006, p. 55-84

Metal vinylidenes and allenylidenes in catalysis. Applications in anti-Markovnikov additions to terminal alkynes and alkene metathesis

C. Bruneau, P. H. Dixneuf

Angew. Chem. Int. Ed., 2006, 45, 2176-2203

CH transformation at sp-hybridized carbon atoms at terminal alkynes: Dimerization of terminal alkynes

E. Bustelo, P. H. Dixneuf

in Handbook of CH Transformations, G. Dyker Ed, Wiley-VCH, Weinheim, 2005, vol. 1, 62-72

Allenylidene-Ruthenium Complexes as Versatile Precatalysts for Alkene Metathesis Reactions

R. Castarlenas, C. Fischmeister, C. Bruneau, P. H. Dixneuf

Review J. Mol. Catal. A: Chem. 2004, **213**, 31-37

The versatility of molecular ruthenium catalyst RuCl(COD)(C5Me5)

S. Dérien, P. H. Dixneuf

Review "Frontiers in Organometallic Chemistry"

J. Organomet. Chem., 2004, **689**, 1382-1392