

Publications de Grégory DURAND – Liste des publications depuis 2003

- 32/ Mass spectrometry analysis of amphipol-trapped membrane proteins. Cherine Bechara, Gerard Bolbach, Paola Bazzacco, Shivaji K. Sharma, Grégory Durand, Jean-Luc Popot, Francesca Zito, Sandrine Sagan*. *Analytical Chemistry*, accepted, dx.doi.org/10.1021/ac301035r. (IF_2011 : 5.856)
- 31/ Non-Ionic Amphiphilic Homopolymers: Synthesis, Solution Properties and Biochemical Validation. K. Shivaji Sharma, Grégory Durand,* Frank Gabel, Paola Bazzacco, Christel Le-Bon, Emmanuelle Billon-Denis, Laurent Catoire, Jean-Luc Popot,* Jean-Luc; Christine Ebel,* Bernard Pucci. *Langmuir*, 2012, 28, 4625-4639. (IF_2011 : 4.186)
- 30/ Structural basis of functional selectivity in GPCR revealed by LRET spectroscopy. Rita Rahmeh, Marjorie Damian, Martin Cottet, Hélène Orcel, Christiane Mendre, Thierry Durroux, K. Shivaji Sharma, Grégory Durand, Bernard Pucci, Eric Trinquet, Jurriaan M. Zwier, Xavier Deupi, Patrick Bron, Jean-Louis Baneres, Bernard Mouillac,* Sébastien Granier*. *Proceedings of the National Academy of Sciences USA*, 2012, 109, 6733-6738.
- 29/ Non-ionic homopolymeric amphipols: Application to membrane protein folding, cell-free synthesis, and solution NMR. Paola Bazzacco,† Emmanuelle Billon-Denis,† K. Shivaji, Sharma, Laurent Catoire, Sophie Mary,Christel Le Bon, Elodie Point, Jean-Louis Baneres, Grégory Durand, Francesca Zito, Bernard Pucci, Jean-Luc Popot* (†These authors contributed equally to the work). *Biochemistry*, 2012, 51, 1416-1430. (IF_2011 : 3.422)
- 28/ Folding of diphtheria toxin T-domain in the presence of amphipols and fluorinated surfactants: Toward thermodynamic measurements of membrane protein folding. Alexander Kyrchenko, Mykola V. Rodnin, Mauricio Vargas-Urbe, Shivaji K. Sharma, Grégory Durand, Bernard Pucci, Jean-Luc Popot, Alexey S. Ladokhin*. *Biochimica et Biophysica Acta (Biomembranes)*, 2012, 1006-1012. (IF_2010 : 4.647)
- 27/ Synthesis of Tris-hydroxymethyl-Based Nitron Derivatives with Highly Reactive Nitronyl Carbon. Fanny Choteau, Beatrice Tuccio, Beatrice, Frederick A. Villamena, Laurence Charles, Bernard Pucci, Grégory Durand*. *The Journal of Organic Chemistry*, 2012, 77, 938-948. (IF_2011 : 4.450)
- 26/ New Glucose-Based Fluorinated Surfactants to Handle Integral Membrane Proteins in Aqueous Solution. Maher Abla, Grégory Durand,* Cécile Breyton, Simon Raynal, Christine Ebel, and Bernard Pucci*. *Journal of Fluorine Chemistry*, 2012, 134, 63–71. (IF_2010 : 1.719)
- 25/ Synthesis and polymerization rate constant of beta-D-glucosylated monomers. K. Shivaji Sharma, Grégory Durand,* and Bernard Pucci*. *Designed Monomers and Polymers*, 2011, 14, 499–513. (IF_2010 : 0.711)
- 24/ Propyl-Ended Hemifluorinated Surfactants: Synthesis and Self-Assembling Properties. Maher Abla, Grégory Durand* and Bernard Pucci*. *The Journal of Organic Chemistry*, 2011, 76, 2084–2093. (IF_2011 : 4.450)
- Article republié dans SynFact : The Tale (Tail) of Hemifluorinated Surfactants. Maher Abla, Grégory Durand and Bernard Pucci. *Synfact*, 2011, 6, 0617-0617.
- 23/ Cholesterol-based alpha-phenyl-N-tert-butyl nitron derivatives as antioxidants against light-induced retinal degeneration. Fanny Choteau, Grégory Durand,* Isabelle Ranchon-Cole,

Christine Cercy, and Bernard Pucci*. *Bioorganic and Medicinal Chemistry Letters*, 2010, 20, 7405-7409. (IF_2010 : 2.661)

22/ Amphiphilic Amide Nitrones: A New Class of Protective Agents Acting as Modifiers of Mitochondrial Metabolism. Grégory Durand,* Burkhard Poeggeler, Stéphanie Ortial, Ange Polidori, Frederick A. Villamena, Jutta Böker, Rüdiger Hardeland, Miguel A. Pappolla and Bernard Pucci*. *Journal of Medicinal Chemistry*, 2010, 53, 4849-4861. (IF_2010 : 5.207)

21/ Synthesis, Physical-Chemical and Biological Properties of Amphiphilic Amino Acid Conjugates of Nitroxides. Grégory Durand,* Fanny Choteau, Robert A. Prosak, Antal Rockenbauer, Frederick A. Villamena* and Bernard Pucci. *New Journal of Chemistry*, 2010, 34, 1909-1920. (IF_2010 : 2.631)

20/ Trapping and Stabilization of Integral Membrane Proteins by Hydrophobically Grafted Glucose-Based Telomers. Paola Bazzacco,† K. Shivaji Sharma,† Grégory Durand,* Fabrice Giusti, Christine Ebel, Jean-Luc Popot* and Bernard Pucci* (†These two authors contributed equally to the work). *Biomacromolecules*, 2009, 10, 3317–3326. (IF_2009 : 4.502)

19/ Spin Trapping and Cytoprotective Properties of Fluorinated Amphiphilic Carrier Conjugates of Cyclic versus Linear Nitrones. Grégory Durand,* Yongbin Han, Robert A. Prosak, Stéphanie Ortial, Antal Rockenbauer, Bernard Pucci, and Frederick A. Villamena*. *Chemical Research in Toxicology*, 2009, 22, 1570-1581. (IF_2009 : 3.740)

18/ Micellar and biochemical properties of (hemi)fluorinated surfactants are controlled by the size of the polar head. Cécile Breyton,* Frank Gabel, Maher Abl, Yves Pierre, Florence Lebaupain, Grégory Durand, Jean-Luc Popot, Christine Ebel* and Bernard Pucci. *Biophysical Journal*, 2009, 97, 1077-1086. (IF_2009 : 4.390)

17/ Lipophilic β -Cyclodextrin Cyclic-Nitron Conjugate: Synthesis and Spin Trapping Studies. Yongbin Han, Yangping Liu, Antal Rockenbauer, Jay L. Zweier, Grégory Durand and Frederick A. Villamena*. *The Journal of Organic Chemistry*, 2009, 74, 5369-5380. (IF_2008 : 4.219)

16/ Glucose-Based Amphiphilic Telomers Designed to Keep Membrane Proteins Soluble in Aqueous Solutions: Synthesis and Physicochemical Characterization. K. Shivaji Sharma, Grégory Durand,* Fabrice Guisti, Blandine Olivier, Anne-Sylvie Fabiano, Paola Bazzacco, Tassadite Dahmane, Christine Ebel, Jean Luc Popot, and Bernard Pucci*. *Langmuir*, 2008, 24, 13581-13590. (IF_2008 : 4.097)

15/ Reactivity of Superoxide Radical Anion and Hydroperoxyl Radical with alpha-Phenyl-N-tert-butyl nitron (PBN) Derivatives. Grégory Durand,* Fanny Choteau, Bernard Pucci and Frederick A. Villamena*. *Journal of Physical Chemistry A*, 2008, 112, 12498-12509. (IF_2008 : 2.871)

14/ Glucose-Based Surfactants with Hydrogenated, Fluorinated or Hemifluorinated Tails: Synthesis and Comparative Physical-chemical Characterization. Maher Abl, Grégory Durand* and Bernard Pucci*. *The Journal of Organic Chemistry* (Featured Article), 2008, 73, 8142-8153. (IF_2008 : 3.952)

13/ Mixtures of hydrogenated and fluorinated lactobionamide surfactants with cationic surfactants: Study of hydrogenated and fluorinated chains miscibility through potentiometric techniques. Véronique Peyre,* Sandeep Patil, Grégory Durand and Bernard Pucci. *Langmuir*, 2007, 23, 11465-11474. (IF_2007 : 4.009)

12/ Fine-Tuning the Amphiphilicity: A Crucial Parameter in the Design of alpha-Phenyl-N-tert-butyl nitron Analogs. Grégory Durand,* Burkhard Poeggeler, Jutta Böker, Simon Raynal, Ange Polidori, Miguel A. Pappolla, Rüdiger Hardeland and Bernard Pucci*. *Journal of Medicinal Chemistry*, 2007, 50, 3976-3979. (IF_2007 : 4.895)

11/ Study of β -Cyclodextrin/Fluorinated Trimethyl Ammonium Bromide Surfactant Inclusion Complex by Fluorinated Surfactant Ion Selective Electrode. Sandeep R. Patil, Mireille Turmine, Véronique Peyre,* Grégory Durand, Bernard Pucci. *Talanta*, 2007, 74, 72-77. (IF_2007 : 3.374)

10/ A new amphiphilic derivative, (N-[4-(lactobionamidomethylene) benzylidene]-N-(1,1-dimethyl-3-thia)undecylamine N-oxide, has a protective effect against copper-induced fulminant hepatitis in Long-Evans Cinnamon rats at an extremely low concentration compared with its original form α -phenyl-N-tert-butyl nitron. Taketoshi Asanuma,* Hironobu Yasui, Osamu Inanami, Kenji Waki, Momoko Takahashi, Daisuke Iizuka, Taketo Uemura, Grégory Durand, Ange Polidori, Yasuhiro Kon, Bernard Pucci, Mikinori Kuwabara. *Chemistry and Biodiversity*, 2007, 4, 2253-2267. (IF_2007 : 1.460)

9/ Lactobionamide surfactants with hydrogenated, perfluorinated or hemifluorinated tails: Physical-chemical and biochemical characterization. Florence Lebaupain,† Andres Salvay,† Blandine Olivier,† Grégory Durand, Anne-Sylvie Fabiano, Nicolas Michel, Jean Luc Popot, Christine Ebel,* Cécile Breyton* and Bernard Pucci* (†These authors contributed equally to the work). *Langmuir*, 2006, 22, 8881-8890. (IF_2006 : 3.902)

8/ Fluorinated Amphiphilic Amino Acid Derivatives as Antioxidant Carriers: a New Class of Protective Agents. Stéphanie Ortial, Grégory Durand,* Burkhard Poeggeler, Ange Polidori, Miguel A. Pappolla, Jutta Böker, Rüdiger Hardeland and Bernard Pucci*. *Journal of Medicinal Chemistry*, 2006, 49, 2812-2820. (IF_2006 : 5.115)

7/ Protection against reactive oxygen species injuries in rat isolated perfused hearts: effects of LPBNAH a new amphiphilic spin-trap derived from PBN. Stéphane Tanguy,* Grégory Durand, Cyril Reboul, Ange Polidori, Bernard Pucci, Michel Dauzat and Philippe Obert. *Cardiovascular Drugs and Therapy*, 2006, 20, 147-149. (IF_2006 : 1.700)

6/ Mitochondrial medicine : neuroprotection and life extension by the new amphiphilic nitron LPBNAH acting as a highly potent antioxidant. Burkhard Poeggeler,* Grégory Durand, Ange Polidori, Miguel A. Pappolla, Ignacio Vega-Naredo, Ana Coto-Montes, Jutta Böker, Rüdiger Hardeland, Bernard Pucci. *Journal of Neurochemistry*, 2005, 95, 962-973. (IF_2005 : 4.604)

5/ La vectorisation de pièges à radicaux libres : Nouvelle stratégie thérapeutique. Grégory Durand,* Ange Polidori* et Bernard Pucci*. *L'Actualité Chimique*, Novembre-Décembre 2003, 24-27. (IF_2003 : 0.112)

4/ PBN Derived Amphiphilic Spin-Traps. I/ Synthesis and Study of Their Miscibility with Polyunsaturated Phospholipids. Sandrine Morandat, Grégory Durand, Ange Polidori, Léa Desigaux, Muriel Bortolato, Bernard Roux* and Bernard Pucci*. *Langmuir*, 2003, 19, 9699-9705. (IF_2003 : 3.098)

3/ Synthesis and Preliminary Biological Evaluations of Ionic and Nonionic Amphiphilic α -Phenyl-N-tert-butyl nitron Derivatives. Grégory Durand, Ange Polidori,* Olivier Ouari, Paul Tordo, Vanna Geromel, Pierre Rustin, and Bernard Pucci*. *Journal of Medicinal Chemistry*, 2003, 46, 5230-5237. (IF_2003 : 4.820)

2/ Synthesis and Antioxidant Efficiency of a New Amphiphilic Spin-Trap Derived From PBN and Lipoic Acid. Grégory Durand, Ange Polidori,* Jean Pierre Salles, Michel Prost, Philippe Durand and Bernard Pucci*. *Bioorganic & Medicinal Chemistry Letters*, 2003, 13, 2673-2676. (IF_2003 : 2.182)

1/ Synthesis of a New Family of Glycolipidic Nitrones as Potential Antioxidant Drugs for Neurodegenerative Disorders. Grégory Durand, Ange Polidori,* Jean-Pierre Salles and Bernard Pucci*. *Bioorganic & Medicinal Chemistry Letters*, 2003, 13, 859-862. (IF_2003 : 2.182)