



NONAT Aline

SynPA, IPHC (UMR 7178)
ECPM, Bât R1N0, 25 rue Becquerel, 67087
Strasbourg Cedex 02
+33 3 68 85 27 41
aline.nonat@unistra.fr



PERSONAL SITUATION

38 years old (24/11/1982)

PACS, 2 children (2012, 2016)



CURRENT POSITION (SINCE 2010)

CNRS researcher (CRCN), Institut Pluridisciplinaire Hubert Curien (UMR 7178), Strasbourg

Equipe de Synthèse pour l'Analyse (SynPA, L. Charbonnière)

- Bispidine-based radiotracers for Positron Emission Tomography imaging and therapy
- Energy transfer in polymetallic coordination complexes and supramolecular luminescent assemblies: up and downconversion



FORMATION

2020 | Habilitation degree in chemistry (University of Strasbourg, France)

2007 | PhD in bio-inorganic chemistry (Grenoble Alpes University, France)

2004 | MSc in organic chemistry (University of Montpellier II, France)

2004 | Diplôme d'ingénieur chimiste (ENSC Montpellier)



PREVIOUS POSITIONS

2009-10 | ICMUB (University of Burgundy, Dijon, France)

TEACHING AND RESEARCH ASSISTANT (ATER), Porphyrin-polyazamacrocyclic conjugates and their d-f complexes for an application to PET/MRI imaging (Pr. F. Denat, Pr. C. Gros)

2007-09 | Trinity College Dublin (Ireland)

POST-DOCTORAL POSITION, NIR emitting d-f complexes for DNA targeting and ion sensing (Pr T. Gunnlaugsson)

2004-07 | CEA Grenoble (France)

PHD, Ln(III) complexes for MRI and Time-Resolved Luminescence Imaging (Pr. M. Mazzanti)



PUBLICATIONS

H-index = 20, citations: 1286 (without self-citations: 1159) (on 05/01/2021)

49 publications in peer-reviewed international journals (including 4 review articles., 1 *Nat. Commun.*, 3 *Angew. Chem. Int. Ed.*; 2 *J. Am. Chem. Soc.*; 1 *Prog. Photov. Res. App.*; 1 *Chem. Commun.*; 1 *Coord. Chem. Rev.*; 9 *Chem. Eur. J.*; 8 *Inorg. Chem.*; 1 *J. Org. Chem.*)

2 patents – 2 book chapters



AWARDS AND HONORS

2019 | Bronze medal of the CNRS (highest French distinction four young tenured scientist)

2014-17 | Bonus for scientific excellence (CNRS)

7 invitations in international meetings, 4 in national meetings, 4 invited seminars in universities (France, Hong-Kong)



SUPERVISION AND TEACHING ACTIVITIES

Supervision: Post-doctoral associates: 3; Doctoral fellows: 8, Undergraduate students: 13 (since 2010)

Teaching:

2009-10 | Organic chemistry, Molecular and structural chemistry, Organic chemistry in life sciences (L3) (University of Burgundy, Dijon, France)

2012 | Luminescent materials (M2) (University of Strasbourg, France)

2011-19 | Research projects in analytical chemistry (M1 ECPM, Strasbourg, France)

2011-21 | Research projects in organic chemistry (M1 ECPM, Strasbourg, France)



RESEARCH GRANTS

ANR JCJC CopperNanopincers (PI, 2011-14), Région Alsace (PI, 2011-14), IPVF (col, 2015, 2018), PICS CNRS UPBRIGHT (PI, 2018-20), PRIME 80 CNRS COMBI (2020-23)



EXPERTISES AND RESPONSABILITIES

Scientific advisory board of the Institute (IPHC UMR7178, alternate member)

International advisory board member of the journal Results in Chemistry (Elsevier)

External referee for ANR and peer-reviewed journals including top chemistry journals (*Angew. Chem.*, *Chem. Eur. J.*, *Inorg. Chem.*,...)

TOP 5 PUBLICATIONS

A. Nonat, C. F. Chan, T. Liu, C. Platas-Iglesias, Z. Liu, W.-T. Wong, W.-K. Wong, K-L. Wong, L. J. Charbonnière, Room temperature molecular up conversion in solution, *Nature Commun.* **2016**, *81*, 7:1197, <https://www.nature.com/articles/ncomms11978>

A. Nonat, S. Bahamyirou, A. Lecointre, F. Przybilla, Y. Mély, C. Platas-Iglesias, F. Camerel, O. Jeannin, L. J. Charbonnière, Molecular Upconversion in Water in Heteropolynuclear Supramolecular Tb/Yb Assemblies, *J. Am. Chem. Soc.*, **2019**, *141*, 4, 1568-1576, <https://doi-org/10.1021/jacs.8b10932>

R. Gillet, A. Roux, J. Brandel, S. Huclier-Markai, F. Camerel, O. Jeannin, A. M. Nonat*, L. J. Charbonnière*, A Bispidol Chelator with a Phosphonate Pendant Arm: Synthesis, Cu(II) Complexation, and ⁶⁴Cu Labeling, *Inorg. Chem.*, **2017**, *56*, 11738-11752, <https://doi-org/10.1021/acs.inorgchem.7b01731> .

T. W. Price, S. Yap, R. Gillet, H. Savoie, L. Charbonnière, R. Boyle*, A. M. Nonat*, G. J. Stasiuk*, Evaluation of a bispidine-based chelator for gallium-68 and of the porphyrin conjugate as PET/PDT theranostic agent, *Chem. Eur. J.*, **2020**, *18*, 7602-7608, <https://doi.org/10.1002/chem.201905776> (hot paper)

D. Ndiaye, M. Sy, A. Pallier, S. Mème, I. de Silva, S. Lacerda, A. M. Nonat, L. J. Charbonnière*, E. Tóth*, Unprecedented kinetic inertness for a Mn²⁺-bispidine chelate: a novel structural entry for Mn²⁺-based imaging agents, *Chem. Eur. J.*, **2020**, *13*, 11958-11963, <https://doi.org/10.1002/anie.202003685> (cover article)