



## Curriculum Vitae of Anne-Marie CAMINADE

- Director of Research Exceptional Class CNRS (DRCE2, the very highest grade of the CNRS)
- Leader of the team « Dendrimers and Heterochemistry » at Laboratoire de Chimie de Coordination (LCC, UPR8241), 205 route de Narbonne, 31077 Toulouse Cedex 4, France
- e-mail: [anne-marie.caminade@lcc-toulouse.fr](mailto:anne-marie.caminade@lcc-toulouse.fr)
- Research ID: E-2819-2015. ORCID identifier: 0000-0001-8487-3578

### Education and career

- 1<sup>st</sup> PhD thesis (Toulouse, 1984) and 1<sup>st</sup> Post-Doc. at the IFP (1984, Rueil-Malmaison Paris, France)
- 2<sup>nd</sup> PhD thesis (Toulouse, 1988) and 2<sup>nd</sup> Post-Doc (1988-1989, University of Saarbrücken, Germany)
- Associated Researcher CNRS (CR2) in 1985, CR1 in 1989, Director of Research CNRS (DR2) in 1997, DR1 in 2004, Director of Research Exceptional Class (DRCE1) in 2014, DRCE2 in 2017 (LCC UPR 8241, Toulouse)
- Head of the “Dendrimers and Heterochemistry group”, (2006- )

### Scientific production

- Co-author of 462 publications in journals for Web of Science, 479 answers for SciFinder CAPLUS), 1<sup>st</sup> rank in the world for the number of publications about dendrimers (source SciFinder)
- Co-auteur of 53 book chapters and Editor of two books
- Co-inventor of 16 priority patents + 16 World extensions (WO)
- 164 invited conferences (107 in congresses, and 57 in academic or industrial laboratories)
- h index = 64 (13,393 citations) source Web of Sciences (all data bases) (September 25, 2018)

### Awards, rewards, distinctions

- ❖ “Advisory Editor” of *Chemical Society Reviews* (IF<sub>2017</sub> = 40.182) 2011-
- ❖ CNRS scientific excellence premium (2009-2012, 2013-2016)
- ❖ Organic Chemistry award of the French Chemical Society, 2006
- ❖ Bronze medal of the CNRS, 1989
- ❖ Alexander von Humboldt Fellow, 1988-1989

### Scientific interests

- All the fields of **phosphorus** chemistry, with emphasis on:
- low coordinences of phosphorus (1982-1988), and their interaction with metallic hydrides (1986-1991),
- phosphorus macrocycles, cryptants and multimacrocycles (1988-1997)
- Everything related to **dendrimers** (hyperbranched and perfectly defined nanometric molecules) (1993- ) and to the chemical approach of **nanosciences**, in particular:
  - Synthesis and physico-chemical studies of dendrimers (example: fluorescence),
  - Homogeneous catalysis (recycling dendrimer, “green chemistry”), coordination chemistry, asymmetric catalysis, catalysis in water, organocatalysis,
  - Materials, nanometric modifications on the surface of materials (electrodes, nanolatexes, metallic surfaces, silica, alumina), elaboration of ultra-sensitive DNA Chips, chemical sensors; materials incorporating dendrimers (nanotubes, microcapsules, hydrogels, fibers, organic-inorganic materials, etc.),
  - Biologie/nanomedecine (dendrimers as anti-prion, anti-HIV, anti-cancer, antibacterial and anti-inflammatory agents, for immunology, medical imaging and genetic transfection, against Uveitis, Multiple Sclerosis, Rheumatoid Arthritis, tuberculosis, etc.)

### 5 selected recent publications and 1 book

- “Pyrene-tagged dendritic catalysts non-covalently grafted onto magnetic Co/C nanoparticles: an efficient and recyclable system for drug synthesis”. Keller M., Collière V., Reiser O., Caminade A.M., Majoral J.P., Ouali A. *Angew. Chem. Int. Ed.* **2013**, 52, 3626-3629.
- “The key role of the scaffold on the efficiency of dendrimer nanodrugs”. Caminade A.M., Fruchon S., Turrin C.O., Poupot M., Ouali A., Maraval A., Garzoni M., Maly M., Furer V., Kovalenko V., Majoral J.P., Pavan G.M., Poupot R. *Nature Comm.* **2015**, 6, 7722.
- “Coordination chemistry with phosphorus dendrimers. Applications as catalysts, for materials, and in biology”. Caminade A.M., Ouali A., Laurent R., Turrin C.O., Majoral J.P. *Coord. Chem. Rev.* **2016**, 308, 478-497
- “Inorganic dendrimers: recent advances for catalysis, nanomaterials, and nanomedicine”. Caminade A.M. *Chem. Soc. Rev.* **2016**, 45, 5174
- “Phosphorus dendrimers for nanomedicine”. Caminade A.M. *Chem. Comm.* **2017**, 53, 9830.
- “Phosphorous Dendrimers in Biology and Nanomedicine” Caminade A.M., C.O Turrin, Majoral J.P. (Eds). Pan Stanford Publishing, **2018**

### Advisor or co-advisor of Post-Docs and Students

48 Post-Docs, 35 PhD students, 43 Masters, 75 trainees.

### Editorial activities

- ❖ Advisory Editor of *Chemical Society Reviews* (2011 - ) (IF<sub>2015</sub>: 34.09)
- ❖ Advisory Editor of *Inorganic Chemistry Communications* (2013 - )
- Guest Editor of a special issue of *Inorganica Chimica Acta* published in January 2014 about “metallo-dendrimers”
- Guest Editor of a special issue of *Chemical Society Reviews* about “dendrimers” published in May 2015
- Guest Editor of a special issue of *Coordination Chemistry Reviews* at the occasion of the “40<sup>th</sup> Anniversary of the Laboratoire de Chimie de Coordination”, published in February 2016.
- Guest Editor of a special issue of *Chemical Society Reviews* about “Smart Inorganic Polymers” (September 2016)

## Organization of International Conferences

- IDS:5 (5<sup>th</sup> International Dendrimer Symposium), Toulouse, 28 August – 1 September 2007, *Chair*
- EUCOMC XIX, Toulouse, 3-7 July 2011, *Member* of the scientific committee.
- SUDOE CliNK (NK Cells for clinical uses), Toulouse, 18-19 June 2012, *Chair*
- ICONAN 2016 (nanobiotechnologies), Paris, 28-30 September 2016, *Chair*
- PBSi 2017 (main group chemistry), Paris, 3-5 July 2017, *Chair*
- PEMED 2018 (Personalized Medicine), Paris, 25-27 July 2018, *Chair*

## Other responsibilities

- Member of committees about Nanosciences: ACI Nanosciences and Nanotechnologies (1999-2004) ; ANR P-Nano program Nanosciences and Nanotechnologies (2005-2010), ANR CE09 (2018)
- Member of committees of evaluation of the French Agency for the Evaluation of Research (AERES) since 2010
- Leader of a Working Group and MC (Management Committee Member) of COST CM1302 SIPs (2013-2018)
- Member of the Scientific Council of the Doctoral School SDM of the University of Toulouse since 2010
- Frequently president or member of juries (PhD thesis, Habilitations) in France, Spain, Italy, Morocco.
- President or member of juries for the recruitment of « Maitres de Conférence » (Associated professors), Professors
- « Referee » of innumerable publications for journals (*J. Am. Chem. Soc.*, *Angew. Chem.*, *ACS Nano*, *Chem. Rev.*, *Chem. Soc. Rev.*, *Chem. Eur. J.*, *Organometallics*, *New J. Chem.*, *Eur. J. Med. Chem.* etc...)
- « Referee » of numerous projects, including for foreign countries (USA (NSF), Switzerland, Israel, etc...)

## Academic and industrial contracts (and theme)

As *coordinator* (for the French side in case of international grants):

- Contracts with industries: Rhône-Poulenc Agro, 1999-2000 and Rhodia Services, 2002-2003
- ACI nanosciences DENDRISO (adaptative materials), 2004-2007
- Contract with industry : IFP (Institut Français du Pétrole), (materials for trapping CO<sub>2</sub>), 2005-2008
- ANR PCV 2006 BIODENDRIDOT (dendritic fluorophores for biomedical imaging), 2007-2010
- ANR 2009 International DENDSWITCH, with Germany (Stimuli-responsive dendrimers), 2010-2013
- FRM (Fondation pour la Recherche Médicale) (Searching the receptor of a phosphorus dendrimer), 2012-2015
- CEFIPRA (French-Indian) (dendrimers against tuberculosis), 2015-2019
- ANR 2017 SLOW2 (stereo laser writing on water), 2017-2021
- TOUBKAL 2018 (French-Moroccan) (functionalization of graphene), 2018-2021

As *Partner*:

- EU RTN Marie Curie AQUACHEM (Chemistry in water), 2003-2007
- INCa (Institut National du Cancer) (amplification of NK cells), 2006-2009
- EU EST Marie Curie NANOTOOL (nano-objects) 2006-2010
- LEA LTPMM Toulouse-Barcelona (dendrimers and catalysis) 2007-2013
- EU COST CM0802 PhoSciNet (Phosphorus Science Network, vice-leader of a WG) 2008-2012
- LIA LCMMF Morocco-Toulouse (Dendrimers and clays) 2008-2016
- EU COST TD0802 Biodendrimers (biological applications of dendrimers, MC substitute) 2009-2013
- EU SUDOE Interreg CliNK (New protocols for immunotherapy) 2011-2013
- ANR Emergence 2010 INNO-THE-RA (Dendrimers against Rheumatoid Arthritis), 2011-2013
- ANR Blanc SIMI 7 2011 CLICK-UNCLICK (innovative systems for the delivery of drugs), 2011-2014
- ANR RPIB 2011 DENDRI'MS (dendrimers against Multiple Sclerosis), 2011-2014
- EU COST CM1302 SIPs (Smart Inorganic Polymers, MC and WG leader) 2013-2018
- MESI 2017 (Canadian-French-Spanish) (dendrimers against cancers) 2018-2021

## Selected recent invitations in International Conferences

- Washington-Gaithersburg (**USA**), IDS7, 26 June - 2 July 2011
- Pune (**India**), 7<sup>th</sup> IFCOS, 7 - 9 December 2011
- Sao Paulo (**Brazil**), Dendrimer Symposium 1 - 3 October 2012 (Plenary conference)
- Rabat (**Morocco**), 3<sup>ème</sup> colloque Chimie, 15 - 18 October 2012 (Plenary and introductory conference)
- Madrid (**Spain**), IDS8, 23 - 27 June 2013 (Plenary conference)
- Lugano (**Switzerland**), Biodendrimers 2012, 18 - 20 June 2014 (Plenary conference)
- Saarbrücken (**Germany**), International Symposium New Molecules for New Materials, 18 February 2015
- Leipzig (**Germany**), 13<sup>th</sup> Ferrocene Colloquium, 22 - 24 February 2015 (Plenary conference)
- Montreal (**Canada**), IDS9, 12-17 July 2015 (Plenary conference)
- Huatulco (**Mexico**), Polymat-2015, 18 - 22 October 2015 (Plenary conference)
- Budapest (**Hungary**) Athene's Chemistry Conference of Outstanding Women Scientists, 27 November 2015
- San Diego Carlsbad (**USA**), Zing Conference, 12 - 15 February 2016 (Plenary conference)
- Kazan (**Russia**), ICPC-21, 5 - 10 June 2016 (Plenary conference)
- Porto (**Portugal**) 3<sup>rd</sup> EUSIPs, 12-14 September 2016
- Kaohsiung (**Taiwan**) Symposium of Dendrimer Chemistry, 11-13 July 2017
- Weihai (**China**), IDS10, 5-9 August 2017 (Plenary conference)
- Barcelona (**Spain**) ICONAN 2017, 25-27 September 2017 (Plenary conference)
- Moscow (**Russia**) Modern trends in dendrimer chemistry, 1-4 October 2017 (Plenary conference)
- Zagreb (**Croatia**) EUSIPs4, 1-3 March 2018
- Urbino (**Italy**) Biodendrimers 2018, 4-7 June 2018 (Plenary conference)
- Lucknow (**India**) Dendrimer symposium, 4-7 September 2018

## List of Publications and book chapters of Anne-Marie Caminade

- 1- Réactions de l'ozone sur des molécules phosphorées: ozonides  
Caminade A.M., El Khatib F., Koenig M.  
*Phosphorus and Sulfur*, **1983**, 14, 381
- 2- Phosphorus ozonides adducts  
Caminade A.M., El Khatib F., Koenig M.  
*Phosphorus and Sulfur*, **1983**, 18, 97
- 3- Ozonides du phosphore: stabilité et stéréochimie  
El Khatib F., Caminade A.M., Koenig M.  
*Phosphorus and Sulfur*, **1984**, 20, 55
- 4- Laser irradiation of a diphosphene: evidence for the first cis-trans isomerization  
Caminade A.M., Verrier M., Adès C., Paillous N., Koenig M.  
*J. Chem. Soc. Chem. Commun.* **1984**, 875
- 5- Ozonolysis of bis[tris(trimethylsilyl)methyl]diphosphene  
Caminade A.M., Couret C., Escudé J., Koenig M.  
*J. Chem. Soc. Chem. Commun.* **1984**, 1622
- 6- Ozonides de phosphite source d'oxygène singulet: rendement, mécanisme  
Caminade A.M., El Khatib F., Koenig M., Aubry J.M.  
*Can. J. Chem.* **1985**, 63, 3203
- 7- Ozonolyse d'oléfines perfluorées  
Caminade A.M., Le Blanc M., El Khatib F., Koenig M.  
*Tetrahedron Lett.* **1985**, 26, 2889
- 8- Nouveaux trioxophosphétanes générateurs d'oxygène singulet à basse température  
El Khatib F., Tachon C., Caminade A.M., Koenig M.  
*Tetrahedron Lett.* **1985**, 26, 3007
- 9- Ozonation of fluoroalkenes  
Caminade A.M., Le Blanc M., Koenig M.  
*Ozone, Science and Engineering*, **1986**, 8, 27
- 10- Oxydation et isomérisation de diphosphène  
Caminade A.M., El Khatib F., Adès C., Verrier M., Paillous N., Koenig M.  
*Phosphorus and Sulfur*, **1986**, 26, 91
- 11- First example of prototropism in iminobis(phosphines) induced by phosphorus alkylation  
Caminade A.M., Ocando E., Majoral J.P., Cristante M., Bertrand G.  
*Inorg. Chem.* **1986**, 25, 712
- 12-  $\text{HFe}(\text{CO})_4^-$  a versatile reagent toward chlorophosphines. Facile synthesis of new transition metal complexes  
Mathieu R., Caminade A.M., Majoral J.P., Attali S., Sanchez M  
*Organometallics*, **1986**, 5, 1914
- 13- Synthesis and X-ray structure of the first cluster stabilized phosphaaallene  $[\mu^3-\eta^2 \text{tBuP}(\text{C}=\text{CH}(\text{C}_6\text{H}_5))] \text{FeCo}_2(\text{CO})_9$   
Mathieu R., Caminade A.M., Majoral J.P., Daran J.C.  
*J. Am. Chem. Soc.* **1986**, 108, 8007
- 14- Ozonation, an efficient method for the oxydation of halophosphines  
Caminade A.M., El Khatib F., Baceiredo A., Koenig M.  
*Phosphorus and Sulfur*, **1987**, 29, 365
- 15-  $\text{HFe}(\text{CO})_4^-$  a versatile reagent toward dichlorophosphines, phosphonium salts, phosphaaalkenes and diphosphenes  
Majoral J.P., Mathieu R., Caminade A.M., Attali S., Sanchez M  
*Phosphorus and Sulfur*, **1987**, 30, 443
- x- Hydrogen Migration and Reductive Elimination of Alkyne in  $\text{Fe}(\text{CO})_4 \text{P}(\text{tBu})(\text{C}\equiv\text{CPh})\text{H}$  Induced by the Action of  $\text{Co}_2(\text{CO})_8$   
Mathieu R., Caminade A.M., Majoral J.P.  
*Phosphorus and Sulfur*, **1987**, 30, 786
- 16- Reactivity of  $\text{HFe}(\text{CO})_4^-$  toward phosphaaalkenes: a simple route to new P-functionalized diphosphiranes  
Caminade A.M., Majoral J.P., Mathieu R., Yeung Lam Ko Y.Y.C  
*J. Chem. Soc. Chem. Commun.* **1987**, 639
- 17- Hydride transfer reactions from  $[\text{PPh}_4][\text{HFe}(\text{CO})_4]^-$  III. Synthesis of a stable anionic phosphido complex  $[\text{PPh}_4][(\text{CO})_4\text{Fe}_2\text{PHNMe}_2]$   
Caminade A.M., Majoral J.P., Igau A., Mathieu R.  
*New J. Chem.* **1987**, 11, 457
- 18- Reaction of  $[\text{PPh}_4][\text{HFe}(\text{CO})_4]^-$  with dichlorophosphines: a new entry to classical and non classical functionalized phosphorus complexes  
Caminade A.M., Majoral J.P., Sanchez M., Mathieu R., Attali S., Grand A.  
*Organometallics*, **1987**, 6, 1459
- 19- Unprecedented rearrangement of a diphosphene  $\eta^1\eta^2$ -bonded to iron. Synthesis and X-ray structure of  $\text{Fe}_4$  complexes containing either a  $\mu_4$  spiro phosphorus atom or a 1,1,2-trimetalla diphosphorus ligand  $\text{P}=\text{P}$   
Attali S., Dahan F., Mathieu R., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **1988**, 110, 1990
- 20- Synthesis of the first example of a 1,3,4,6 tetraphospha-hexatriene complex  
Galindo A., Caminade A.M., Dahan F., Majoral J.P., Mathieu R.  
*J. Chem. Soc. Chem. Commun.* **1988**, 574
- 21- Synthesis and study of the thermal rearrangement of  $(\text{CO})_4\text{Fe}[\text{P}(\text{R})(\text{H})(\text{C}\equiv\text{CR}')] \text{Co}_2(\text{CO})_6$  complexes ( $\text{R} = \text{N}(\text{iPr})_2$ ,  $\text{NMe}_2$  or  $\text{Me}$ ,  $\text{R}' = \text{Ph}$ ;  $\text{R} = \text{N}(\text{iPr})_2$ ,  $\text{R}' = \text{tBu}$ )  
Galindo A., Mathieu R., Caminade A.M., Majoral J.P.  
*Organometallics*, **1988**, 7, 2198
- 22- Facile synthesis of new classes of free and complexed polyazaphosphorus macrocycles  
Majoral J.P., Badri M., Caminade A.M., Delmas M., Gaset A.  
*Inorg. Chem.* **1988**, 27, 3873
- 23- Versatile behavior of hydridomonometallic or heterobimetallic carbonyl anions toward dichloro phosphines and 1,1 dichlorodiphosphines  
Westermann H., Nieger M., Niecke E., Majoral J.P., Caminade A.M., Mathieu R., Irmer E.  
*Organometallics*, **1989**, 8, 244
- 24- Unexpected synthesis of a 1,2  $\lambda^3$  azaphosphiridine  
Dufour N., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **1989**, 30, 4813
- 25- Phosphorus dienic like systems  
Caminade A.M., Roques C., Dufour N., Colombo D., Gonce F., Majoral J.P.  
*Tetrahedron Lett.* **1989**, 30, 6869
- 26- Hydrozirconation of phosphaaalkenes and phosphaaimines. Evidence for the formation of P-C-Zr and P-N-Zr three-membered rings  
Majoral J.P., Dufour N., Meyer F., Caminade A.M., Choukroun R., Gervais D.  
*J. Chem. Soc. Chem. Commun.* **1990**, 507
- 27- Polyazaphosphorus macrocycles  
Majoral J.P., Badri M., Caminade A.M., Gorgues A., Delmas M., Gaset A.  
*Phosphorus, Sulfur and Silicon*, **1990**, 49-50, 413
- 28- Synthesis, X-ray structures and reactivity of the first bis(amino) metallastibanes and bis(amino)metallabismuthanes  
Caminade A.M., Veith M., Huch V., Malisch W.  
*Organometallics*, **1990**, 9, 1798
- 29- Polyazaphosphorus macrocycles. Synthetic approaches to symmetric or dissymmetric 18-, 20-, 22-, 30-membered rings  
Badri M., Majoral J.P., Caminade A.M., Delmas M., Gaset A., Gorgues A., Jaud J.  
*J. Am. Chem. Soc.* **1990**, 112, 5618
- 30- New routes to phosphorus three- and four-membered rings  
Caminade A.M., Majoral J.P.  
*Rev. Het. Chem.* **1990**, 3, 24
- 31- First phosphorus macrocycles incorporating tetrathiafulvalene (TTF) moieties  
Badri M., Majoral J.P., Gonce F., Caminade A.M., Sallé M., Gorgues A.  
*Tetrahedron Lett.* **1990**, 31, 6343
- 32- Conjugated linear phosphaaalkenes derivatives. Synthesis, reactivity.  
Caminade A.M., Dufour N., Gonce F., Colombo D., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **1990**, 51, 321

- 33- Polyazatetraphosphorus P-C and P-N-N macrocycles  
Gonce F., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **1991**, 32, 203
- 34- X-ray structure analysis and reactivity of the zirconium phosphirane  $\text{Cp}_2\text{Zr}(\text{Cl})\text{N}(\text{SiMe}_3)\text{P}(\text{H})\text{N}(\text{SiMe}_3)_2$   
Dufour N., Majoral J.P., Caminade A.M., Choukroun R., Dromzée Y.  
*Organometallics* **1991**, 10, 45
- 35- Reactivity of polyazadiphosphorus macrocycles  
Majoral J.P., Badri M., Caminade A.M., Delmas M., Gaset A.  
*Inorg. Chem.* **1991**, 30, 344
- 36- Polyazaphosphorus macrocycles: synthesis, reactivity, complexation  
Majoral J.P., Badri M., Caminade A.M.  
*Heteroatom Chem.* **1991**, 2, 45
- 37- Synthesis of di-, tri- and polyphosphane and phosphene transition-metal complexes  
Caminade A.M., Majoral J.P., Mathieu R.  
*Chem. Rev.* **1991**, 91, 575-612
- 38- Functionalized macrocycles incorporating P-N and P-O bonds. Strategies of synthesis.  
Colombo D., Caminade A.M., Majoral J.P.  
*Inorg. Chem.* **1991**, 30, 3365
- 39- Attempted synthesis of phosphorus cryptands  
Badri M., Caminade A.M., Majoral J.P., Gorgues A.  
*Phosphorus, Sulfur and Silicon* **1991**, 56, 123
- 40- Phosphorus-containing macrocycles. A game of building blocks.  
Majoral J.P., Caminade A.M.  
*The chemistry of inorganic ring systems. Studies in Inorganic Chemistry*, Vol. 14, Chapter 12, p 209, (1992). R. Steudel Ed. Elsevier Science Publ. B.V.
- 41- Hydro and carbozirconation of multiple bonded low coordinated phosphorus species.  
Dufour N., Caminade A.M., Basso-Bert M., Igau A., Majoral J.P.  
*Organometallics* **1992**, 11, 1131
- 42- Synthesis and X-ray structure of the first unsymmetric macrocycle containing three inequivalent phosphorus atoms.  
Gonce F., Caminade A.M., Jaud J., Vignaux P., Majoral J.P.  
*Bull. Soc. Chim. Fr.* **1992**, 129, 237
- 43- Thiophene-containing macrocycles derived from [2+2] cyclizations.  
Oussaid B., Garrigues B., Caminade A.M., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **1992**, 73, 41
- 44- Design of new tools for macrocyclic synthesis. Applications for the preparation of polyphosphorus macrocycles  
Gonce F., Caminade A.M., Boutonnet F., Majoral J.P.  
*J. Org. Chem.* **1992**, 57, 970
- 45- Pyrrole-containing macrocycles derived from [2+2], [3+3], [4+4] cyclocondensations.  
Oussaid B., Garrigues B., Caminade A.M.  
*Phosphorus, Sulfur and Silicon* **1993**, 77, 322
- 46- Synthesis of main group elements containing macrocycles  
Caminade A.M., Colombo-Khater D., Mitjaville J., Galliot C., Mas P., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **1993**, 75, 67
- 47- Phosphorus containing metallamacrocycles  
Colombo-Khater D., Caminade A.M., Delavaux-Nicot B., Majoral J.P.  
*Organometallics* **1993**, 12, 2861
- 48- Phosphoryl containing macrocycles. First examples of [3+3] and [4+4] cyclocondensation compounds derived from pyrroles 2,5-dicarboxaldehydes and phosphodihydrazides  
Oussaid B., Garrigues B., Jaud J., Caminade A.M., Majoral J.P.  
*J. Org. Chem.* **1993**, 58, 4500
- 49- Synthesis, first X-ray structure determination and reactivity of a stable bis(N-methyleneamine) type compound:  $[\text{H}_2\text{C}=\text{N}-\text{N}(\text{Me})_2\text{P}(\text{S})(\text{Ph})]$   
Galliot C., Caminade A.M., Dahan F., Majoral J.P.  
*Angew. Chem.* **1993**, 105, 1508. *Angew. Chem. Int. Ed. Engl.* **1993**, 32, 1477.
- 50- Synthesis of di or trisubstituted phosphonic and phosphono thioic di or trihydrazides.  
Colombo-Khater D., He Z., Caminade A.M., Dahan F., Majoral J.P.  
*Synthesis* **1993**, 1145.
- 51- New synthetic strategies for phosphorus containing cryptands and the first phosphorus spherand type compound  
Mitjaville J., Caminade A.M., Mathieu R., Majoral J.P.  
*J. Am. Chem. Soc.* **1994**, 116, 5007
- 52- Synthesis of phosphorus containing macrocycles and cryptands  
Caminade A.M., Majoral J.P.  
*Chem. Rev.* **1994**, 94, 1183
- 53- A general synthetic strategy for neutral phosphorus containing dendrimers.  
Launay N., Caminade A.M., Lahana R., Majoral J.P.  
*Angew. Chem.* **1994**, 106, 1682-1684. *Angew. Chem. Int. Ed. Engl.* **1994**, 33, 1589-1592
- 54- Facile syntheses of phosphorus containing multisite receptors  
Mitjaville J., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **1994**, 35, 6865
- 55- Unusual phosphorus tripodal nickel complex and related linear trinickel complex: Synthesis and X-ray structures  
Colombo-Khater D., Caminade A.M., Kraemer, R., Raynaud B., Jaud J., Majoral J.P.  
*Bull. Soc. Chim. Fr.* **1994**, 131, 733
- 56- Synthesis and macrocyclisation of some bis[formyl (or heteroaryl)]silanes  
Launay N., Denat F., Caminade A.M., Majoral J.P., Dubac J.  
*Bull. Soc. Chim. Fr.* **1994**, 131, 758
- 57- New and efficient syntheses of symmetrical phosphorus containing cryptands  
Mitjaville J., Caminade A.M., Majoral J.P.  
*J. Chem. Soc. Chem. Commun.* **1994**, 2161
- 58- Elucidation of small ring and macrocycle structures using  $^{31}\text{P}$  NMR.  
Majoral J.P., Caminade A.M., Igau A.  
*Phosphorus-31 NMR spectral properties in compounds characterization and structural analysis*. L.D. Quin and J.G. Verkade Eds. VCH Publishers, Inc. (USA) **1994**, ch. 5, 57
- 59- Phosphorus containing N-methylene amine type compounds: synthesis, structure and reactivity  
Galliot C., Caminade A.M., Dahan F., Majoral J.P., Schoeller, W.  
*Inorg. Chem.* **1994**, 33, 6351
- 60- Phosphorylated hydrazines and aldehydes as precursors of phosphorus containing multimacrocycles  
Mitjaville J., Caminade A.M., Daran J.C., Donnadiou B., Majoral J.P.  
*J. Am. Chem. Soc.* **1995**, 117, 1712
- 61- Main Group Elements-Based Dendrimers  
Caminade A.M., Majoral J.P.  
*Main Group Chemistry News* **1995**, 3, 14
- 62- Synthesis and Reactivity of Unusual Phosphorus Dendrimers. An useful divergent growth approach up to the seventh generation  
Launay N., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **1995**, 117, 3282
- 63- Molecular modeling, a tool for predicting structural effects on the macrocyclization reaction between bis(vinyl or allyl) dialdehydes and phosphodihydrazides  
Galliot C., Caminade A.M., Majoral J.P., M. Kuznikowski, M. Zablocka, K.M. Pietrusiewicz  
*Chem. Ber.* **1995**, 128, 443
- 64- Polyaminophosphines containing dendrimers. Syntheses and characterizations.  
Galliot C., Prévoté D., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **1995**, 117, 5470
- 65- Tricoordinated phosphorus-containing macrocycles: new synthetic strategies  
Prévoté D., Galliot C., Caminade A.M., Majoral J.P.  
*Heteroatom Chem.* **1995**, 6, 313
- 66- Synthesis of di- or tetra-functionalized phosphorus macrocycles  
Mitjaville J., Caminade A.M., Majoral J.P.  
*Synthesis* **1995**, 952

- 67- Dendrimer surface chemistry. An easy access to poly phosphines and their gold complexes  
Slany M., Bardají M., Casanove M.J., Caminade A.M., Majoral J.P., Chaudret B.  
*J. Am. Chem. Soc.* **1995**, *117*, 9764
- 68- Synthesis of small phosphorus dendrimers from (S)P[N(Me)-NH<sub>2</sub>]<sub>3</sub>  
Launay N., Galliot C., Caminade A.M., Majoral J.P.  
*Bull. Soc. Chim. Fr.* **1995**, *132*, 1149
- 69- Hexamethylhydrazinoclotriphosphazene N<sub>3</sub>P<sub>3</sub>(NMeNH<sub>2</sub>)<sub>6</sub> : starting reagent for the synthesis of multifunctionalized species, macrocycles and small dendrimers  
Kraemer R., Galliot C., Mitjaville J., Caminade A.M., Majoral J.P.  
*Heteroatom. Chem.* **1996**, *7*, 149
- 70- Phosphorus dendrimers: a new class of macromolecules  
Caminade A.M., Slany M., Launay N., Lartigue M.L., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **1996**, *109-110*, 517
- 71- Phosphorus-containing multimacrocycles and cryptands  
Caminade A.M., Mitjaville J., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **1996**, *111*, 61
- 72- Phosphorus containing dendrimers. Easy access to new multi-difunctionalized macromolecules  
Launay N., Slany M., Caminade A.M., Majoral J.P.  
*J. Org. Chem.* **1996**, *61*, 3799
- 73- Complexation properties of polyazaphosphorus macrocycles  
Caminade A.M., Kraemer R., Majoral J.P.  
*Inorg. Chim. Acta* **1996**, *246*, 47
- 74- Arbres moléculaires (dendrimères) phosphorés: une future forêt d'applications  
Majoral J.P., Caminade A.M.  
*Actu. Chim.* **1996**, 13
- 75- Phosphorus containing dendrimers. Synthesis of multi-tri or tetra-functionalized macromolecules  
Lartigue M.L., Slany M., Caminade A.M., Majoral J.P.  
*Chem. Eur. J.* **1996**, *2*, 1417-1426
- 76- Phosphorhydrazide macrocycles and cryptands  
Caminade A.M., Majoral J.P.  
*Synlett* **1996**, 1019
- 77- Specific functionalization on the surface of dendrimers  
Slany M., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **1996**, *37*, 9053
- 78- Phosphorus containing dendrimers as multidentate ligands: Pd, Pt and Rh complexes  
Bardají M., Kustos M., Caminade A.M., Majoral J.P., Chaudret B.  
*Organometallics* **1997**, *16*, 403
- 79- Chemioselective polyalkylation of new phosphorus containing dendrimers  
Larré C., Caminade A.M., Majoral J.P.  
*Angew. Chem. Int. Ed. Engl.* **1997**, *36*, 596-599; *Angew. Chem.* **1997**, *109*, 613-617
- 80- Versatile complexation ability of very large phosphino-terminated dendrimers  
Slany M., Bardají M., Caminade A.M., Chaudret B., Majoral J.P.  
*Inorg. Chem.* **1997**, *36*, 1939
- 81- Synthesis of bowl-shaped dendrimers from generation 1 to generation 8  
Launay N., Caminade A.M., Majoral J.P.  
*J. Organomet. Chem.* **1997**, *529*, 51-58
- 82- Three-dimensional bimacrocyclic phosphorus compounds: phosphorus cryptands  
Caminade A.M., Kraemer R., Majoral J.P.  
*New J. Chem.* **1997**, *21*, 627
- 83- Ruthenium hydride and dihydrogen complexes of dendrimeric multidentate ligands  
Bardají M., Caminade A.M., Majoral J.P., Chaudret B.  
*Organometallics* **1997**, *16*, 3489
- 84- Phosphate, phosphite, ylides and phosphonate terminated dendrimers  
Prévôté D., Caminade A.M., Majoral J.P.  
*J. Org. Chem.* **1997**, *62*, 4834
- 85- Chiroptical properties of dendrimers with stereogenic end groups  
Lartigue M.L., Caminade A.M., Majoral J.P.  
*Tetrahedron Asym.* **1997**, *8*, 2697
- 86- Regioselective stepwise growth of dendrimer units in the internal voids of a main dendrimer  
Galliot C., Larré C., Caminade A.M., Majoral J.P.  
*Science* **1997**, *277*, 1981-1984
- 87- Application of the Horner-Wadsworth-Emmons reaction to the functionalization of dendrimers: Synthesis of amino acid terminated dendrimers  
Prévôté D., Le Roy-Gourvenec S., Caminade A.M., Masson S., Majoral J.P.  
*Synthesis* **1997**, 1199
- 88- Unexpected very large dipole moments of phosphorus containing dendrimers  
Lartigue M.L., Donnadiou B., Galliot C., Caminade A.M., Majoral J.P., Fayet J.P.  
*Macromolecules* **1997**, *30*, 7335
- 89- Phosphorus containing dendrimers: synthesis and surface functionalization  
Majoral J.P., Caminade A.M., Kraemer R.  
*Anal. Quim. Int. Ed.* **1997**, *93*, 415
- 90- Complexation properties of bowl-shaped dendrimers  
Bardají M., Slany M., Lartigue M.L., Caminade A.M., Chaudret B., Majoral J.P.  
*Main Group Chemistry* **1997**, *2*, 133
- 91- First "layer-block" dendrimer built with a regular alternation of two types of repeat units up to the fourth generation  
Lartigue M.L., Launay N., Donnadiou B., Caminade A.M., Majoral J.P.  
*Bull. Soc. Chim. Fr.* **1997**, *134*, 981
- 92- Synthesis and Reactivity of Dendrimers Based on Phosphoryl (P=O) Groups  
Lartigue M.L., Caminade A.M., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **1997**, *123*, 21
- 93- Phosphorus containing dendrimers: chemoselective functionalization of internal voids  
Larré C., Donnadiou B., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **1998**, *120*, 4029
- 94- Qu'est-ce qu'un dendrimère?  
Majoral J.P., Caminade A.M.  
*Les dendrimères*, Eds. Club ECRIN, Paris, **1998**, Introduction p 19
- 95- Dendrimères phosphorés  
Caminade A.M., Laurent R., Majoral J.P.  
*Les dendrimères*, Eds. Club ECRIN, Paris **1998** Chap. 1, p 25
- 96- Dendrimères constitués d'autres hétéroéléments: Germanium ou bore  
Caminade A.M., Laurent R., Kraemer R., Majoral J.P.  
*Les dendrimères*, Eds. Club ECRIN, Paris **1998** Chap. 2, p 75
- 97- Dendrimères siliciés  
Caminade A.M., Laurent R., et Majoral J.P.  
*Les dendrimères*, Eds. Club ECRIN, Paris **1998** Chap. 3, p 87
- 98- Divergent approaches to phosphorus-containing dendrimers and their functionalization  
Majoral J.P., Caminade A.M.  
*Topics in Current Chemistry* **1998**, *197*, 79
- 99- Infrared spectra of a series of generations (from 1 to 11) of organoelement dendrimers.  
Vandukov A.E., Shagidullin R.R., Kovalenko V.I., Caminade A.M., Majoral J.P.  
*Structure and dynamics of molecular systems*. MarSTU Publ. Yoshkar-Ola, Kazan, Moscou, **1998**, *3*, 64
- 100- Regioselective gold complexation within the cascade structure of phosphorus containing dendrimers  
Larré C., Donnadiou B., Caminade A.M., Majoral J.P.  
*Chem. Eur. J.* **1998**, *4*, 2031-2036

- 101-The major contribution of phosphorus to the elaboration, the reactivity, and the characterization of giant molecular trees (dendrimers)  
Caminade A.M., Majoral J.P.  
*Eur. Chem. Chron.* **1998**, 3, 9
- 102-Phosphine-terminated dendrimers: synthesis and complexation properties  
Caminade A.M., Laurent R., Chaudret B., Majoral J.P.  
*Coord. Chem. Rev.* **1998**, 178-180, 793
- 103-Phosphorus containing dendrimers: chemistry on the surface and within the cascade structure  
Majoral J.P., Caminade A.M., Laurent R.  
*Bull. Pol. Acad. Sci.* **1998**, 46, 319
- 104-Chemistry within mega molecules: regiospecific functionalization after construction of phosphorus dendrimers  
Larré C., Bressolles D., Turrin C., Donnadiou B., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **1998**, 120, 13070
- 105-Tailored modification of quartz surfaces by covalent immobilization of small molecules ( $\square$ -aminopropyl triethoxysilane), monodisperse macromolecules (dendrimers) and polystyrene/acrolein/divinylbenzene) microspheres with narrow diameter distribution  
Miksa B., Slomkowski S., Chehimi M.M., Delamar M., Majoral J.P., Caminade A.M.  
*Colloid Polym. Sci.* **1999**, 277, 58
- 106-Dendrimers containing heteroatoms (Si, P, B, Ge, or Bi)  
Majoral J.P., Caminade A.M.  
*Chem. Rev.* **1999**, 99, 845-880
- 107-N-thiophosphorylated and N-phosphorylated iminophosphoranes ( $R_3P=N-P(X)R'_2$ ; X = O, S) as models for dendrimers: synthesis, reactivity and crystal structures  
Larré C., Donnadiou B., Caminade A.M., Majoral J.P.  
*Eur. J. Inorg. Chem.* **1999**, 601
- 108-Dendrimers containing zwitterionic [phosphonium anionic zirconocene (IV)] complexes  
Cadierno V., Igau A., Donnadiou B., Caminade A.M., Majoral J.P.  
*Organometallics* **1999**, 18, 1580
- 109-Grafting of tetraazamacrocycles on the surface of phosphorus-containing dendrimers  
Prévôté D., Donnadiou B., Moreno-Manas M., Caminade A.M., Majoral J.P.  
*Eur. J. Org. Chem.* **1999**, 1701
- 110-Inorganic-organic systems with tailored properties controlled on molecular, macromolecular, and microscopic level  
Slomkowski S., Miksa B., Chehimi M.M., Delamar M., Cabet-Deliry E., Majoral J.P., Caminade A.M.  
*React. Funct. Polym.* **1999**, 41, 45
- 111-Phosphorus-containing dendrimers  
Majoral J.P., Caminade A.M., Laurent R.  
*Phosphorus Research Bulletin* **1999**, 10, 679
- 112-Multidendritic systems incorporating phosphazene units  
Maraval V., Laurent R., Caminade A.M., Majoral J.P.  
*Phosphorus Research Bulletin* **1999**, 10, 742
- 113-Strategies for the synthesis of linear, hyperbranched polymers and dendrimers incorporating P=N bonds  
Merino S., Brauge L., Caminade A.M., Majoral J.P., Taton D., Gnanou Y.  
*Phosphorus Research Bulletin* **1999**, 10, 748
- 114-Chemistry within the cascade structure of dendrimers incorporating P=N bonds  
Turrin C.O., Larré C., Caminade A.M., Majoral J.P.  
*Phosphorus Research Bulletin* **1999**, 10, 777
- 115-Chemistry in the internal voids of dendrimers  
Majoral J.P., Larré C., Laurent R., Caminade A.M.  
*Coord. Chem. Rev.* **1999**, 190-192, 3
- 116-Preparation of water-soluble cationic phosphorus-containing dendrimers as DNA transfecting agents  
Loup C., Zanta M.A., Caminade A.M., Majoral J.P., Meunier B.  
*Chem. Eur. J.* **1999**, 5, 3644-3650
- 117-Characterization of dendrimers by X-ray photoelectron spectroscopy  
Demathieu C., Chehimi M.M., Lipskier J.F., Caminade A.M., Majoral J.P.  
*Applied Spectr.* **1999**, 53, 1277
- 118-Electrogenerated poly(dendrimers) containing conjugated poly(thiophene) chains  
Sebastian R.M., Caminade A.M., Majoral J.P., Levillain E., Huchet L., Roncali J.  
*Chem. Commun.* **2000**, 507
- 119-Rapid synthesis of phosphorus-containing dendrimers with controlled molecular architectures: first examples of surface-block, layer-block, and segment-block dendrimers issued from the same dendron  
Maraval V., Laurent R., Donnadiou B., Mauzac M., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **2000**, 122, 2499
- 120-Chlorine free synthesis of organophosphorus compounds based on the functionalization of white phosphorus ( $P_4$ )  
Abdreimova R.R., Akbayeva D.N., Polimbetova G.S., Caminade A.M., Majoral, J.P.  
*Phosphorus, Sulfur and Silicon* **2000**, 156, 239
- 121-Naked  $Au_{55}$  clusters. Dramatic effect of a thiol-terminated dendrimer  
Schmid G., Meyer-Zaika W., Pugin R., Sawitowski T., Majoral J.P., Caminade A.M., Turrin C.O.  
*Chem. Eur. J.* **2000**, 6, 1693
- 122-Synthesis of mono-, di-, tri-, and tetra-phosphines. Attempted application to the obtaining of hyperbranched polymers and dendrimers built with phosphines at each branching points.  
Huc V., Balueva A., Sebastian R.M., Caminade A.M., Majoral J.P.  
*Synthesis* **2000**, 726
- 123-Macrocycles à atomes de phosphore et de bore hypervalents. Détermination de leur taille par spectrométrie de masse  
Richelme S., Claparols C., Leroy E., Caminade A.M., Munoz A.  
*Phosphorus, Sulfur and Silicon* **2000**, 161, 143
- 124-Choice of strategies for the divergent synthesis of phosphorus-containing dendrons, depending on the function located at the core  
Maraval V., Prévôté-Pinet D., Laurent R., Caminade A.M., Majoral J.P.  
*New J. Chem.* **2000**, 24, 561
- 125-Dendrimers with N,N-disubstituted hydrazines as end groups, useful precursors for the synthesis of water-soluble dendrimers capped with carbohydrate, carboxylic or boronic acid derivatives  
Sebastian R.M., Magro G., Caminade A.M., Majoral J.P.  
*Tetrahedron* **2000**, 56, 6269
- 126-Phosphorus-containing dendrimers and their transition metal complexes as efficient recoverable multicenters homogeneous catalysts in organic synthesis  
Maraval V., Laurent R., Caminade A.M., Majoral J.P.  
*Organometallics* **2000**, 19, 4025
- 127-Phosphorus-containing dendrimers with ferrocenyl units at the core, within the branches and on the periphery  
Turrin C.O., Chiffre J., de Montauzon D., Daran J.C., Caminade A.M., Manoury E., Balavoine G., Majoral J.P.  
*Macromolecules* **2000**, 33, 7328-7336
- 128-Michael type addition of amines to the vinyl core of dendrons. Application to the synthesis of multidendritic systems  
Maraval V., Laurent R., Merino S., Caminade A.M., Majoral J.P.  
*Eur. J. Org. Chem.* **2000**, 3555
- 129-MALDI TOF mass spectrometry for the characterization of phosphorus-containing dendrimers. Scope and limitations.  
Blais J.C., Turrin C.O., Caminade A.M., Majoral J.P.  
*Anal. Chem.* **2000**, 72, 5097-5105
- 130-New mesostructured hybrid materials made from assemblies of dendrimers and titanium (IV) oxo-organo clusters  
Boggiano M.K., Soler-Illia G.J.A.A., Rozes L., Sanchez C., Turrin C.O., Caminade A.M., Majoral J.P.  
*Angew. Chem.* **2000**, 112, 4419-4424; *Angew. Chem. Int. Ed.* **2000**, 39, 4249-4254



- 131-Organic-inorganic hybrid materials incorporating phosphorus-containing dendrimers  
Turrin C.O., Maraval V., Caminade A.M., Majoral J.P., Mehdi A., Reyé C.  
*Chem. Mat.* **2000**, *12*, 3848-3856
- 132-Hybrid nanostructured materials obtained from Ti-oxo nanobuilding blocks  
Sanchez C, Soler-Illia G.J.A.A., Rozes L., Caminade A.M., Turrin C.O., Majoral J.P.,  
*Mat. Res. Soc. Symp. Proc.* **2000**, *628*, CC6.2.1-CC6.2.6  
- Les dendrimères  
Majoral J.P., Caminade A.M., Mordenti L.  
*CNRS info* **2000**, *383*, 7-10
- 133-Immobilization of redox-active ligands onto an electrode: the dendrimer way  
Le Derf F., Levillain E., Gorgues A., Sallé M., Sebastian R.M. Caminade A.M., Majoral J.P.  
*Angew. Chem. Int. Ed.* **2001**, *40*, 224-227; *Angew. Chem.* **2001**, *113*, 230-233
- 134-Very large neutral and polyanionic Fe/Au clusters-containing dendrimers  
Benito M., Rossell O., Seco M., Segalés G., Maraval V., Laurent R., Caminade A.M., Majoral J.P.  
*J. Organomet. Chem.* **2001**, *622*, 33-37
- 135-New chiral phosphorus-containing dendrimers with ferrocenes on the periphery  
Turrin C.O., Chiffre J., Daran J.C., de Montauzon D., Caminade A.M., Manoury E., Balavoine G., Majoral J.P.  
*Tetrahedron* **2001**, *57*, 2521
- 136-Synthesis and applications of water-soluble dendrimers  
Majoral J.P., Caminade A.M., Sebastian R.M., Magro G., Loup C., Turrin C.O., Laurent R.  
*Polym. Mat. Sci. Eng.* **2001**, *84*, 166-167
- 137-Applications of dendritic molecules in material sciences  
Caminade A.M., Majoral J.P., Turrin C.O., Maraval V., Sebastian R.M., Sutra P.  
*Polym. Mat. Sci. Eng.* **2001**, *84*, 302-303
- 138-Phosphorus dendrimers as new tools to deliver active substances  
Göller R., Vors J.P., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **2001**, *42*, 3587-3590
- 139-Varying topology of dendrimers. A new approach toward the synthesis of di-block dendrimers  
Maraval V., Sebastian R.M., Ben F., Laurent R., Caminade A.M., Majoral J.P.  
*Eur. J. Inorg. Chem.* **2001**, 1681-1691
- 140-TSC and broadband dielectric spectroscopic study of  $\beta$  relaxation in phosphorus-containing dendrimers  
Dantras E., Lacabanne C., Caminade A.M., Majoral J.P.  
*Macromolecules* **2001**, *34*, 3808-3811
- 141-First divergent strategy using two AB<sub>2</sub> unprotected monomers for the rapid synthesis of dendrimers  
Brauge L., Magro G., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **2001**, *123*, 6698-6699  
correction: *J. Am. Chem. Soc.* **2001**, *123*, 8446
- 142-Organophosphorus dendrimers as new gelators for hydrogels  
Marmillon C., Gauffre F., Gulik-Krzywicki T., Loup C., Caminade A.M., Majoral J.P., Vors J.P., Rump E.  
*Angew. Chem. Int. Ed.* **2001**, *40*, 2626-2629; *Angew. Chem.* **2001**, *113*, 2696-2699
- 143-Synthesis and characterisation of linear, hyperbranched and dendrimer-like polymers constituted of the same repeating unit  
Merino S., Brauge L., Caminade A.M., Majoral J.P., Taton D., Gnanou Y.  
*Chem. Eur. J.* **2001**, *7*, 3095-3105
- 144-Segmental mobility in phosphorus-containing dendrimers. Studies by fluorescent spectroscopy  
Brauge L., Caminade A.M., Majoral J.P., Slomkowski S., Wolszczak M.  
*Macromolecules* **2001**, *34*, 5599-5606
- 145-Linear, hyperbranched, and dendrimer-like polymers containing phosphorus. Synthesis and properties  
Majoral J.P., Caminade A.M., Merino S., Brauge L., Taton D., Gnanou Y.  
*Macromol. Symp.* **2001**, *174*, 301-306
- 146-Gold-containing dendrimers: a new class of macromolecules  
Rossell O., Seco M., Caminade A.M., Majoral, J.P.  
*Gold Bulletin* **2001**, *34*, 88-94
- 147-The vibrational spectra of elementoorganic starburst dendrimers  
Kovalenko V.I., Furer V.L., Vandyukov A.E., Shagidullin R.R., Majoral J.P., Caminade A.M.  
*J. Mol. Struct.* **2002**, *604*, 45-56
- 148-Synthesis of dendrimers with phosphine end groups at each generation  
Balueva A., Merino S., Caminade A.M., Majoral J.P.  
*J. Organomet. Chem.* **2002**, *643-644*, 112-124
- 149-Dielectric study of local relaxations in dendritic macromolecules  
Dantras E., Caminade A.M., Majoral J.P., Lacabanne C.  
*J. Phys. D: Appl. Phys.* **2002**, *35*, 5-8
- 150-Enthalpy relaxation in phosphorus-containing dendrimers  
Dantras E., Dandurand J., Lacabanne C., Caminade A.M., Majoral J.P.  
*Macromolecules* **2002**, *35*, 2090-2094
- 151-Synthesis and reactivity of small phosphorus-containing dendritic wedges (dendrons)  
Brauge L., Maraval V., Laurent R., Caminade A.M., Majoral J.P.  
*ARKIVOC* (on line) **2002** (V) 151-160
- 152-Behavior of an optically active ferrocene chiral shell located within phosphorus-containing dendrimers  
Turrin C.O., Chiffre J., de Montauzon D., Balavoine G., Manoury E., Caminade A.M., Majoral J.P.  
*Organometallics* **2002**, *21*, 1891-1897
- 153-Synthesis and photochemical behavior of phosphorus dendrimers containing azobenzene units within the branches and/or on the surface  
Sebastian R.M., Blais J.C., Caminade A.M., Majoral J.P.  
*Chem. Eur. J.* **2002**, *8*, 2172-2183
- 154-Phosphorus-containing dendrimers: towards applications  
Majoral J.P., Caminade A.M., Laurent R., Turrin C.O.  
*Phosphorus, Sulfur and Silicon* **2002**, *177*, 1481-1484
- 155-Phosphorus-containing dendrimers: synthesis and properties  
Caminade A.M., Majoral J.P., Maraval V., Sebastian R.M.  
*Phosphorus, Sulfur and Silicon* **2002**, *177*, 1493-1497
- 156-Organometallic derivatives of phosphorus-containing dendrimers. Synthesis, properties and applications in catalysis  
Caminade A.M., Maraval V., Laurent R., Majoral J.P.  
*Current Org. Chem.* **2002**, *6*, 739-774
- 157-Phosphorus-containing dendrimers. From material science to biology  
Majoral J.P., Caminade A.M., Laurent R., Sutra P.  
*Heteroatom Chem.* **2002**, *13*, 474-485
- 158-Phosphorus-containing dendrimers bearing galactosylceramide analogs: Self-assembly properties  
Blanzat M., Turrin C.O., Perez E., Rico-Lattes I., Caminade A.M., Majoral J.P.  
*Chem. Commun.* **2002**, 1864-1865
- 159-New phosphorus-containing dendrimers with ferrocenyl units at each layer  
Turrin C.O., Chiffre J., Daran J.C., de Montauzon D., Balavoine G., Manoury E., Caminade A.M., Majoral J.P.  
*Compt. Rend. Chimie* **2002**, *5*, 309-318
- 160-Third-order nonlinear optical properties and two-photon absorption in branched oligothiénylenevinylenes  
Fuks-Janczarek I., Nunzi J.M., Sahraoui B., Kityk I.V., Berdowski J., Caminade A.M., Majoral J.P., Martineau A.C., P. Frere, J. Roncali  
*Optics Communications* **2002**, *209*, 461-466
- 161-Iminophosphine palladium complexes in catalytic Stille coupling reactions: from monomers to dendrimers.  
Koprowski M., Sebastian R.M., Maraval V., Zablocka M., Cadierno-Menendez V., Donnadiou B., Igau A., Caminade A.M., Majoral J.P.  
*Organometallics* **2002**, *21*, 4680-4687

- 162-Calculation of IR spectra of elementoorganic dendrimers  
Furer V.L., Kovalenko V.I., Vandyukov A.E., Majoral J.P., Caminade A.M.  
*Spectrochim. Acta Part A* **2002**, 58, 2905-2912
- 163-Inorganic-organic hyperbranched polymers designed for layer-by-layer self assembly  
Peleshanko S., Majoral J.P., Caminade A.M., Knoll W., Tsukruk V.V.  
*Polym. Prep.* **2002**, 43, 421
- 164-The specific contribution of phosphorus in dendrimer chemistry  
Majoral J.P., Caminade A.M., Maraval V.  
*Chem. Commun.* **2002**, 2929-2942
- 165-Use of functional dendritic macromolecules for the design of metal oxo based hybrid materials  
Bouchara A., Rozes L., Soler-Illia G.J.A.A., Sanchez C., Turrin C.O., Caminade A.M., Majoral J.P.  
*J. Sol-Gel Sci Tech.* **2003**, 26, 629-633
- 166-What to do with phosphorus in dendrimer chemistry  
Majoral J.P., Caminade A.M.  
*Topics Curr. Chem.* **2003**, 223, 111-159
- 167-The vibrational analysis of the starting "monomer" and first generation of the starburst elementoorganic dendrimer  
Furer V.L., Kovalenko V.I., Vandyukov A.E., Majoral J.P., Caminade A.M.  
*Vibrational Spectroscopy* **2003**, 31, 71-79
- 168-1,2,3,4-Heterohexatrienes as New Tools for Michael-type Additions Usable for the Synthesis of Phosphorus Dendrimers  
Maraval V., Laurent R., Donnadiou B., Caminade A.M., Majoral J.P.  
*Synthesis* **2003**, 389-396
- 169-An original oligoliner inorganic core for construction of dendrimeric species: the first linear multiphosphazene having five different types of side groups.  
Magro G., Donnadiou B., Caminade A.M., Majoral J.P.  
*Chem. Eur. J.* **2003**, 9, 2151-2159
- 170-Dendrimer design. How to circumvent the dilemma of a reduction of steps or an increase of function multiplicity?  
Maraval V., Caminade A.M., Majoral J.P., Blais J.C.  
*Angew. Chem. Int. Ed.* **2003**, 42, 1822-1826; *Angew. Chem.* **2003**, 115, 1866-1870
- 171-Surface, core, and structure modifications of phosphorus-containing dendrimers. Influence on the thermal stability.  
Turrin C.O., Maraval V., Leclaire J., Dantras E., Lacabanne C., Caminade A.M., Majoral J.P.  
*Tetrahedron* **2003**, 59, 3965-3973
- 172-"Lego" chemistry for the rapid synthesis of dendrimers  
Maraval V., Pyzowski J., Caminade A.M., Majoral J.P.  
*J. Org. Chem.* **2003**, 68, 6043-6046
- 173-Fluorinated dendrimers  
Caminade A.M., Turrin C.O., Sutra P., Majoral J.P.  
*Curr. Opin. Colloid Interface Sci.* **2003**, 8, 282-295
- 174-Pseudo-halogen behaviour of thiophosphoryl azides as tool for the functionalization of phosphorus macrocycles.  
Magro G., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett* **2003**, 44, 7007-7010
- 175-Dendrimeric coating of glass slides for sensitive DNA microarrays analysis  
Le Berre V., Trevisiol E., Dagkessamanskaia A., Sokol S., Caminade A.M., Majoral J.P., Meunier B., François J.  
*Nucleic Acids Res.* **2003**, 31, e88.1-e88.8
- 176-Water-soluble polycationic dendrimers with a phosphoramidothioate backbone: preliminary studies of cytotoxicity and oligonucleotide/plasmid delivery in human cell culture  
Maszewska M., Leclaire J., Cieslak M., Nawrot B., Okruszek A., Caminade A.M., Majoral J.P.  
*Oligonucleotides* **2003**, 13, 193-207
- 177-Phosphorus dendrimers: from synthesis to applications  
Caminade A.M., Maraval V., Laurent R., Turrin C.O., Sutra P., Leclaire J., Griffe L., Marchand P., Baudoin-Dehoux C., Rebout C., Majoral J.P.  
*Compt. Rend. Chimie* **2003**, 6, 791-801
- 178-Dendrilsides, dendrichips: a simple chemical functionalization of glass slides with phosphorus dendrimers as an effective mean for the preparation of biochips  
Trévisiol E., Leberre-Anton V., Leclaire J., Pratviel G., Caminade A.M., Majoral J.P., François J.M., Meunier B.  
*New J. Chem.* **2003**, 27, 1713-1719
- 179-Nanometric sponges made of water-soluble hydrophobic dendrimers  
Leclaire J., Coppel Y., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **2004**, 126, 2304-2305
- 180-A new way for the internal functionalization of dendrimers  
Severac M., Leclaire J., Sutra P., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **2004**, 45, 3019-3022
- 181-Metalla-phosphorus dendrimers: synthesis and properties  
Majoral J.P., Caminade A.M., Laurent R.  
*Polym. Prep.* **2004**, 45, 364
- 182-Synthesis, reactivity, properties and applications of dendrimers built from cyclophosphazene cores  
Caminade A.M., Majoral J.P.  
Phosphazenes: a worldwide insight, M. Gleria, R. de Jaeger, Eds. NOVA Science Publishers, New-York, **2004**, Chapter 30, 713-737
- 183-Thioacylation reactions for the surface functionalization of phosphorus-containing dendrimers  
Marchand P., Griffe L., Caminade A.M., Majoral J.P., Destarac M., Leising F.  
*Organic Letters* **2004**, 6, 1309-1312
- 184-Les dendrimères en biologie: quelques exemples d'applications  
Majoral J.P., Caminade A.M.  
*Bull. GFP* **2004**, 97, 20-23
- 185-TSC and Broadband Dielectric Spectroscopy Studies of alpha relaxation on phosphorus-containing dendrimers"  
Dantras E., Dandurand J., Lacabanne C., Caminade A.M., Majoral J.P.  
*Macromolecules* **2004**, 37, 2812-2816
- 186-Cationic phosphorous-containing dendrimers reduce prion replication both in cell cultures and in mice infected with scrapie  
Solassol J., Crozet C., Perrier V., Leclaire J., Béranger F., Caminade A.M., Meunier B., Dormon D., Majoral J.P., Lehmann S.  
*J. Gen. Virol.* **2004**, 85, 1791-1799
- 187-Fourier-transform infrared and Raman difference spectroscopy studies of the phosphorus-containing dendrimers  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A* **2004**, 60, 1649-1657
- 188-Nanomaterials based on phosphorus dendrimers  
Caminade A.M., Majoral J.P.  
*Accounts Chem. Res.* **2004**, 37, 341-348
- 189-Does charge carriers dimensionality increase in mixed valence salts of tetrathiafulvalene-terminated dendrimers?  
Kanibolotsky A., Roquet S., Cariou M., Leriche P. Turrin C.O., de Bettignies R., Caminade A.M., Majoral J.P., Khodorkhovskiy V., Gorgues A.  
*Organic Lett.* **2004**, 6, 2109-2112
- 190-Synthesis, core and surface reactivity of phosphorus dendrons  
Sebastian R.M., Griffe L., Turrin C.O., Donnadiou B., Caminade A.M., Majoral J.P.  
*Eur. J. Inorg. Chem.* **2004**, 2459-2466
- 191-Giant Dendrimer-Like Particles from Nanolatexes  
Larpent C., Geniès C., De Sousa Delgado A.P., Caminade A.M., Majoral J.P., Sassi J.F., Leising F.  
*Chem. Commun* **2004**, 1816-1817.
- 192-Elementoorganic dendrimer characterization by Raman spectroscopy  
Furer V.L., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Polymer*, **2004**, 45, 5889-5895.
- 193-Synthesis of hybrid dendrimer-star polymers by the RAFT process  
Darcos V., Taton D., Gnanou Y., Marchand P., Caminade A.M., Majoral J.P., Destarac M., Leising F.  
*Chem. Commun* **2004**, 2110-2111



- 194-Self-assembly of water-soluble dendrimers into thermoreversible hydrogels and macroscopic fibers  
El Ghzaoui A., Gauffre F., Caminade A.M., Majoral J.P., Lannibois-Drean H.  
*Langmuir* **2004**, *20*, 9348-9353
- 195-Synthesis, reactivity, properties and applications of dendrimers built from cyclophosphazene cores  
Caminade A.M., Majoral J.P.  
Applicative aspects of cyclophosphazenes, M. Gleria, R. de Jaeger, Eds. NOVA Science Publishers, New-York, **2004**, Chapter 3, 45-69
- 196-The behaviour of Au<sub>55</sub> nanoclusters on and in thiol-terminated dendrimer monolayers  
Schmid G., Emmrich E., Majoral J.P., Caminade A.M.  
*Small* **2005**, *1*, 73-75
- 197-Formation of dendrimer nanotubes by layer-by-layer deposition  
Kim D.H., Karan P., Göring P., Leclaire J., Caminade A.M., Majoral J.P., Gösele U., Steinhart M., Knoll W.  
*Small* **2005**, *1*, 99-102
- 198-New carboxylate functionalized phosphodi- and trihydrazones as versatile chelating agents of metallic ions in organic solvents and in water  
El Khatib F., Launay N., He Z.L., Caminade A.M., Majoral J.P.  
*Phosphorus, Sulfur, Silicon* **2005**, *180*, 321-330
- 199-Synthesis and characterization of phosphorus dendrimers constituted of conjugated long branches  
Magro G., Marchand P., Sebastian R.M., Guyard-Duhayon C., Caminade A.M., Majoral J.P.  
*Eur. J. Org. Chem.* **2005**, 1340-1347
- 200-Water-soluble phosphorus-containing dendrimers  
Caminade A.M., Majoral J.P.  
*Prog. Polym. Sci.* **2005**, *30*, 491-505
- 201-Accelerated methods of synthesis of phosphorus-containing dendrimers  
Maraval V., Laurent R., Marchand P., Caminade A.M., Majoral J.P.  
*J. Organomet. Chem.* **2005**, *690*, 2458-2471
- 202-Assembly and mechanical properties of phosphorus dendrimer/polyelectrolyte multilayer microcapsules  
Kim B.S., Lebedeva O.V., Kim D.H., Caminade A.M., Majoral J.P., Knoll W., Vinogradova O.I.  
*Langmuir* **2005**, *21*, 7200-7206
- 203-Resonating piezoelectric membranes for microelectromechanically-based bioassay: detection of streptavidin-gold nanoparticles interaction with biotinylated DNA  
Nicu L., Guirardel M., Chambosse F., Rougerie P., Hinh S., Trevisiol E., François J.M., Majoral J.P., Caminade A.M., Cattan E., Bergaud C.  
*Sensors and Actuators B: Chemical* **2005**, *110*, 125-136
- 204-Phosphorus dendrimers possessing metallic groups in their internal structure (core or branches): syntheses and properties  
Caminade A.M., Majoral J.P.  
*Coord. Chem. Rev.* **2005**, *249*, 1917-1926
- 205-A third generation chiral phosphorus-containing dendrimer as ligand in Pd-catalyzed asymmetric allylic alkylation  
Laurent R., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **2005**, *46*, 6503-6506
- 206-Phosphorus dendrimers for the controlled elaboration of organic-inorganic materials  
Caminade A.M., Majoral J.P.  
*J. Mat. Chem.* **2005**, *15*, 3643-3649
- 207-Organometallic derivatives at the core of phosphorus-containing dendrimers  
Turrin C.O., Donnadiou B., Caminade A.M., Majoral J.P.  
*Z. Anorg. Allg. Chem.* **2005**, *631*, 2881-2887
- 208-Octasubstituted metal-free phthalocyanine as core of phosphorus dendrimers: a probe for the properties of the internal structure  
Leclaire J., Dagiral R., Fery-Forgues S., Coppel Y., Donnadiou B., Caminade A.M., Majoral J.P.  
*J. Am. Chem. Soc.* **2005**, *127*, 15762-15770
- 209-Phosphorus dendrimers: nano objects for nanosciences  
Majoral J.P., Turrin C.O., Laurent R., Caminade A.M.  
*Macromol. Symp.* **2005**, *229*, 1-7
- 210-Dendritic cationic assemblies: in vitro anti-HIV activity of phosphorus-containing dendrimers bearing Gal $\beta$ 1cer analogues  
Blanzat M., Turrin C.O., Aubertin A.M., Vidal C., Caminade A.M., Majoral J.P., Rico-Lattes I., Lattes A.  
*ChemBioChem* **2005**, *6*, 2207-2213
- 211-Characterization of dendrimers  
Caminade A.M., Laurent R., Majoral J.P.  
*Adv. Drug. Deliv. Rev.* **2005**, *57*, 2130-2146
- 212-Microstructured liposome array  
Chaize B., Nguyen M., Ruyschaert T., le Berre V., Caminade A.M., Majoral J.P., Pratviel G., Meunier B., Winterhalter M., Fournier D.  
*Bioconjugate Chem.* **2006**, *17*, 245-247
- 213-A modular approach to two-photon absorbing organic nanodots: brilliant dendrimers as an alternative to semiconductor quantum dots?  
Mongin O., Rama Krishna T., Werts M.H.V., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*Chem. Commun.* **2006**, 915-917
- 214-Alkyne metathesis: towards simplicity and efficiency  
Maraval V., Lepetit C., Caminade A.M., Majoral J.P., Chauvin  
*Tetrahedron Lett.* **2006**, *47*, 2155-2159
- 215-Phosphorus-containing dendrons: synthesis, reactivity, properties, and use as building blocks for various dendritic architectures  
Caminade A.M., Maraval A., Majoral J.P.  
*Eur. J. Inorg. Chem.* **2006**, 887-901
- 216-DFT study and IR spectra of the phosphorus-containing G1 generation dendrimer  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2006**, *785*, 133-138
- 217-Functionalized phosphorus derivatives of Salpen-like compounds: synthesis and preliminary complexation studies  
Maraval A., Magro G., Maraval V., Vendier L., Caminade A.M., Majoral J.P.  
*J. Organomet. Chem.* **2006**, *691*, 1333-1340
- 218-DFT study and vibrational spectra of the phosphorus-containing G<sub>0</sub> generation dendrimer  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibrational Spectroscopy* **2006**, *40*, 155-160
- 219-Metalla groups linked to the surface of phosphorus-containing dendrimers  
Majoral J.P., Caminade A.M., Laurent R.  
*ACS Symp. Series n°928 Metal-containing and metallosupramolecular polymers and materials* Chap. 17, 230-243  
U.S. Schubert, G.R. Newkome, I. Manners Eds (**2006**)
- 220-First example of dendrons as topological amplifiers  
Turrin C.O., Maraval A., Magro G., Maraval V., Caminade A.M., Majoral J.P.  
*Eur. J. Inorg. Chem.* **2006**, 2556-2560
- 221-Water-soluble dendrimeric two-photon markers for in vivo imaging  
Krishna T.R., Parent M., Werts M.H.V., Moreaux L., Gmouh S., Charpak S., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*Angew. Chem.* **2006**, *118*, 4761-4764; *Angew. Chem. Int. Ed.* **2006**, *45*, 4645-4648
- 222-DFT calculation of molecular structure and vibrational spectra of the phosphorus-containing G<sub>1</sub> generation dendrimer with terminal aldehyde groups  
Furer V.L., Vandyukov A., Majoral J.P., Caminade A.M., Kovalenko V.  
*Chem. Phys.* **2006**, *326*, 417-424
- 223-Effect of dendrimer generation on the assembly and mechanical properties of DNA/phosphorus dendrimer multilayer microcapsules  
Kim B.S., Lebedeva O.V., Koynov K., Gong H., Caminade A.M., Majoral J.P., Vinogradova O.I.  
*Macromolecules* **2006**, *39*, 5479-5483

- 224-Uses of dendrimers for DNA microarrays  
Caminade A.M., Padié C., Laurent R., Maraval A., Majoral J.P.  
*Sensors* **2006**, *6*, 901-914
- 225-Phosphorus dendritic architectures: polyanionic and polycationic derivatives  
Caminade A.M., Turrin C.O., Laurent R., Rebout C., Majoral J.P.  
*Polymer Int.* **2006**, *55*, 155-1160
- 226-DFT calculations of structure and IR spectra of the phosphorus-containing G<sub>0</sub> generation dendron  
Furer V.L., Vandyukova I.I., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim Acta A* **2006**, *65*, 358-365
- 227-Simultaneous Excitation of Propagating and Localized Surface Plasmon Resonance in Nanoporous Gold Membranes  
Yu F., Ahl S., Caminade A.M., Majoral J.P., Knoll W., Erlebacher J.  
*Anal. Chem.* **2006**, *78*, 7346-7350
- 228-Hybrid organic-inorganic nanostructures fabricated from layer-by-layer self-assembled multilayers of hyperbranched polyglycerol and phosphorus dendrimers  
Kim D.H., Lee O.J., Li X., Barriau E., Caminade A.M., Majoral J.P., Frey H., Knoll W.  
*J. Nanosci. Nanotech.* **2006**, *6*, 3871-3876
- 229-Design of phosphorylated dendritic architectures to promote human monocyte activation  
Poupot M., Griffe L., Marchand P., Maraval A., Rolland O., Martinet L., L'Faïhi-Olive F.E., Turrin C.O., Caminade A.M., Fournié J.J., Majoral J.P., Poupot R.  
*FASEB J.* **2006**, *20*, 2339-2351
- 230-Synthesis of phosphorus dendrimers bearing chromophoric end groups; towards organic blue light-emitting diodes  
Brauge L., Vériot G., Franc G., Deloncle R., Caminade A.M., Majoral J.P.  
*Tetrahedron* **2006**, *62*, 11891-11899
- 231-DFT study and IR spectra of hexaphenoxycyclotriphosphazene G<sub>0</sub> generation phosphorus dendrimer  
Furer V.L., Vandyukova I.I., Padié C., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Chem. Phys.* **2006**, *330*, 349-354
- 232-Synthetic pathways towards phosphorus dendrimers and dendritic architectures  
Caminade A.M., Turrin C.O., Laurent R., Maraval A., Majoral J.P.  
*Current Org. Chem.* **2006**, *10*, 2333-2355
- 233-Design of tailored multi-charged phosphorus surface-block dendrimers  
Maraval V., Maraval A., Spataro G., Caminade A.M., Majoral J.P., Kim D.H., Knoll W.  
*New J. Chem.* **2006**, *30*, 1731-1736
- 234-Exaltation of copper catalytic properties in O- and N- arylation and vinylation reactions using phosphorus dendrimers as ligands  
Ouali A., Laurent R., Caminade A.M., Majoral J.P., Taillefer M.  
*J. Am. Chem. Soc.* **2006**, *128*, 15990-15991
- 235-Reduced number of steps for the synthesis of dense and highly functionalized dendrimers  
Servin P., Rebout C., Laurent R., Peruzzini M., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **2007**, *48*, 579-583
- 236-New phosphorus dendrimers with chiral ferrocenyl phosphine-thioether ligands on the periphery for asymmetric catalysis  
Routaboul L., Vincendeau S., Turrin C.O., Caminade A.M., Majoral J.P., Daran J.C., Manoury E.  
*J. Organomet. Chem.* **2007**, *692*, 1064-1073
- 237-DFT analysis of structure and IR spectra of phosphorus G<sub>1</sub> generation dendron  
Furer V.L., Vandukova I.I., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim Acta A* **2007**, *66*, 745-753
- 238-Spectral additive properties of phosphorus-containing dendrimers  
Furer V.L., Vandukova I.I., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibrational Spectroscopy* **2007**, *43*, 351-357
- 239-Decorating step-by-step and independently the surface and the core of dendrons  
Angurell I., Turrin C.O., Laurent R., Maraval V., Servin P., Rossell O., Seco M., Caminade A.M., Majoral J.P.  
*J. Organomet. Chem.* **2007**, *692*, 1928-1939
- 240-Multiplication of Human Natural Killer Cells by Nanosized Phosphonate-Capped Dendrimers  
Griffe L., Poupot M., Marchand P., Maraval A., Turrin C.O., Rolland O., Métivier P., Bacquet G., Fournié J.J., Caminade A.M., Poupot R., Majoral J.P.  
*Angew. Chem.* **2007**, *119*, 2575-2578; *Angew. Chem. Int. Ed.* **2007**, *46*, 2523-2526
- 241-FTIR spectroscopy studies of dendrimers built from cyclophosphazene core  
Furer V.L., Vandukova I.I., Padié C., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibrational Spectroscopy* **2007**, *44*, 89-93
- 242-Synthesis and characterization of diaminodithio- and aminotrithio-phosphoric acid esters  
Marchand P., Meffre A., Donnadiou B., Taton D., Gnanou Y., Destarac M., Leising F., Caminade A.M., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **2007**, *182*, 1233-1244
- 243-Metallated phthalocyanines as core of dendrimers. Synthesis and spectroscopic studies  
Leclaire J., Dagiral R., Pla-Quintana A., Caminade A.M., Majoral J.P.  
*Eur. J. Inorg. Chem.* **2007**, 2890-2896
- 244-Influence of cationic phosphorus dendrimers on the surfactant-induced synthesis of mesostructured porous silica  
Reinert P., Chane-Ching J.Y., Bull L., Dagiral R., Batail P., Laurent R., Caminade A.M., Majoral J.P.  
*New J. Chem.* **2007**, *31*, 1259-1263
- 245-Organic nanodots for multiphotonics: synthesis and photophysical studies  
Mongin O., Pla-Quintana A., Terenziani F., Drouin D., Le Droumaguet C., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*New J. Chem.* **2007**, *31*, 1354-1367
- 246-Synthesis and application of phosphorus dendrimers immobilized azabis(oxazolines)  
Gissibl A., Padié C., Hager M., Jaroschick F., Rasappan R., Cuevas-Yanez E., Turrin C.O., Caminade A.M., Majoral J.P., Reiser O.  
*Org. Lett.* **2007**, *9*, 2895-2898
- 247-EPR study of the interactions between dendrimers and peptides involved in Alzheimer's and prion diseases  
Klajnert B., Cangiotti M., Calici S., Majoral J.P., Caminade A.M., Cladera J., Bryszewska M., Ottaviani M.F.  
*Macromol. Biosci.* **2007**, *7*, 1065-1074
- 248-Step-by-step synthesis of multifunctionalized linear oligophosphazenes; X-ray crystal structures of compounds issued from the first steps  
Magro G., Donnadiou B., Spataro G., Caminade A.M., Majoral J.P.  
*Polyhedron* **2007**, *26*, 3885-3892
- 249-Graded-Bandgap Quantum-Dot- Modified Nanotubes: A Sensitive Biosensor for Enhanced Detection of DNA Hybridization  
Feng C.L., Zhong X.H., Steinhart M., Caminade A.M., Majoral J.P., Knoll W.  
*Adv. Mater.* **2007**, *19*, 1933-1936
- 250-Influence of phosphorus dendrimers on the aggregation of the prion peptide PrP 185-208  
Klajnert B., Cortijo-Arellano M., Cladera J., Majoral J.P., Caminade A.M., Bryszewska M.  
*Biochem. Biophys. Res. Comm.* **2007**, *364*, 20-25
- 251-Synthesis and properties of dendrimers possessing the same fluorophore(s) located either peripherally or off-centre  
Franc G.; Mazères S., Turrin C.O., Vendier L., Duhayon C., Caminade A.M., Majoral J.P.  
*J. Org. Chem.* **2007**, *72*, 8707-8715

- 252-Nanosopic Building Blocks from Polymers, Metals, and Semiconductors  
Knoll W., Cameron P., Caminade A.M., Feng C.L., Kim D.H., Kreiter M., Majoral J.P., Müllen K., Rocholz H., Shumaker-Parry J., Steinhart M., Zhong X.  
*Proc. SPIE* **2007**, 6768, 67680T
- 253-Phosphorus-containing dendrimers. Syntheses, reactivity, and uses  
Caminade A.M., Majoral J.P.  
*Inorganic Polymers* R. De Jaeger, M. Gleria Eds, Nova Sciences, **2007**, Chapter 18, pp 809-854
- 254-Dendrimeric phosphines in asymmetric catalysis  
Caminade A.M., Servin P., Laurent R., Majoral J.P.  
*Chem. Soc. Rev.* **2008**, 37, 56-67
- 255-Bioactive Multilayer Thin Films of Charged N,N-Disubstituted Hydrazine Phosphorus Dendrimers Fabricated by Layer-by-Layer Self-Assembly  
Hernandez-Lopez J.L., Khor H.L., Caminade A.M., Majoral J.P., Mittler S., Knoll W., Kim D.H.  
*Thin Solid Films* **2008**, 516, 1256-1264
- 256-Palladium(0) nanoparticles stabilized by phosphorus containing dendrimers coordinating 15-membered triolefinic macrocycles in periphery  
Badetti E., Caminade A.M., Majoral J.P., Moreno-Manas M., Sebastian R.M.  
*Langmuir* **2008**, 24, 2090-2101
- 257-DFT study of the structure and ir spectra of G<sub>1</sub> model compound built from cyclotriphosphazene core  
Furer V.L., Vandukova I.I., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2008**, 875, 587-593
- 258-Characterization of two series of nitrogen-containing dendrimers by natural abundance <sup>15</sup>N NMR  
Deloncle R., Coppel Y., Rebout C., Majoral J.P., Caminade A.M.  
*Mag. Res. Chem.* **2008**, 46, 493-496
- 259-Synthesis of dendrimers terminated by bis(diphenylphosphinomethyl) amino ligands and use of their Palladium complexes for catalyzing C-C cross-coupling reactions  
Servin P., Laurent R., Romerosa A., Peruzzini M., Majoral J.P., Caminade A.M.  
*Organometallics* **2008**, 27, 2066-2073
- 260-Synthesis and comparative characteristics of phosphorus-containing dendrimers with phenoxy or deuterophenoxy terminal groups.  
Padié C., Turrin C.O., Caminade A.M., Majoral J.P., Furer V.L., Vandukova I.I., Kovalenko V.I.  
*Rossiiskii Khimicheskii Zhurnal* **2008**, 52, 100-106.
- 261-Functional quantum-dot/dendrimer nanotubes for sensitive detection of DNA hybridization  
Feng C.L., Zhong X.H., Steinhart M., Caminade A.M., Majoral J.P., Knoll W.  
*Small* **2008**, 4, 566-571
- 262-Molecular structure and IR spectra of G'<sub>1</sub> generation phosphorus dendrimer built from cyclophosphazene core with terminal phenoxy groups by DFT calculations  
Furer V.L., Vandyukova I.I., Padié C., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct* **2008**, 886, 1-8
- 263-Tailored control and optimization of the number of phosphonic acid termini on phosphorus-containing dendrimers for the *ex-vivo* activation of human monocytes.  
Rolland O., Griffe L., Poupot M., Maraval A., Ouali A., Coppel Y., Fournié J.J., Bacquet G., Turrin C.O., Caminade A.M., Majoral J.P., Poupot R.  
*Chem. Eur. J.* **2008**, 14, 4836-4850
- 264-Synthèse de dendrimères phosphorés à extrémités phénoxy ou phénoxy deutérié et caractérisation comparative  
Padié C., Turrin C.O., Caminade A.M., Majoral J.P., Furer V.L., Vandukova I.I., Kovalenko V.I.  
*J. Chim. Russe* **2008**, 52, 92-97.
- 265-Stabilization of nanoparticles by macromolecules combining phosphorus dendrimers and 15-membered triolefinic azamacrocycles.  
Franc G., Badetti E., Moreno-Manas M., Majoral J.P., Sebastian R.M., Caminade A.M.  
*Polym. Prep.* **2008**, 49, 808
- 266-Dendrimers and DNA: combinations of two special topologies for nanomaterials and biology  
Caminade A.M., Turrin C.O., Majoral J.P.  
*Chem. Eur. J.* **2008**, 14, 7422-7432
- 267-Optical properties of hybrid dendritic-mesoporous titania nanocomposites films  
Martinez-Ferrero E., Franc G., Mazères S., Turrin C.O., Caminade A.M., Majoral J.P., Sanchez C.  
*Chem. Eur. J.* **2008**, 14, 7658-7669
- 268-Brilliant organic nanodots: novel nano-objects for bionanophotonics  
Mongin O., Rouxel C., Robin A.C., Pla-Quintana A., Rama Krishna T., Recher G., Tiaho F., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*Proc. SPIE-Int. Soc. Opt. Eng.* **2008**, 7040, 704006
- 269-FTIR and FT Raman spectra and DFT vibrational analysis of phosphorus-containing dendrons  
Furer V.L., Vandyukova I.I., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A* **2008**, 71, 1110-1118
- 270-Cationic and fluorescent "Janus" dendrimers  
Fuchs S., Pla-Quintana A., Mazères S., Caminade A.M., Majoral J.P.  
*Org. Lett.* **2008**, 10, 4751-4754
- 271-Synthesis and comparative characteristic of organophosphorus dendrimers with phenoxy and deuterophenoxy end groups.  
Padié C., Turrin C.O., Caminade A.M., Majoral J.P., Furer V.L., Vandukova I.I., Kovalenko V.I.  
*Russ. J. Gen. Chem.* **2008**, 78, 2257-2264
- 272-IR spectroscopy investigation using DFT analysis on the structure of P1 phosphorus dendrimer built from octasubstituted metal-free phthalocyanine core  
Furer V.L., Vandyukova I.I., Pla-Quintana A., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A* **2009**, 72, 636-642
- 273-IR spectroscopy and DFT study of phosphorus-containing G2 generation dendrimer  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2009**, 919, 366-372
- 274-Polycationic phosphorus dendrimers: synthesis, characterization, study of cytotoxicity, complexation of DNA, and transfection experiments  
Padié C., Maszewska M., Majchrzak K., Nawrot B., Caminade A.M., Majoral J.P.  
*New. J. Chem.* **2009**, 33, 318-326
- 275-Dendrimers and macrocycles: reciprocal influence on the properties.  
Caminade A.M., Wei Y., Majoral J.P.  
*Comptes-Rendus Chimie* **2009**, 12, 105-120.
- 276-Anti-inflammatory and immuno-suppressive activation of human monocytes by a bio-active dendrimer  
Fruchon S., Poupot M., Martinet L., Turrin C.O., Majoral J.P., Fournié J.J., Caminade A.M., Poupot R.  
*J. Leukocyte Biol.* **2009**, 85, 553-562
- 277-First phosphorous D-xylose derived glycodendrimers  
Hadad C., Majoral J.P., Muzart J., Caminade A.M., Bouquillon S.  
*Tetrahedron Lett.* **2009**, 50, 1902-1905
- 278-DFT study of structure, IR and Raman spectra of phosphorus-containing P'0 and P'4 dendrimers built from octasubstituted metal-free phthalocyanine core  
Furer V.L., Vandyukova I.I., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Chem. Phys.* **2009**, 358, 177-183

- 279-Efficient synthesis of phosphorus-containing dendrimers capped with isosteric functions of amino-bis(methylene) phosphonic acids  
Rolland O., Turrin C.O., Bacquet G., Poupot R., Poupot M., Caminade A.M., Majoral J.P.  
*Tetrahedron Lett.* **2009**, *50*, 2078-2082
- 280-Localized surface plasmon resonance coupling in Au nanoparticles/phosphorus dendrimer multilayer thin films fabricated by layer-by-layer self-assembly method  
Zhao W.B., Park J., Caminade A.M., Jeong S.J., Jang Y.H., Kim S.O., Majoral J.P., Cho J., Kim D.H.  
*J. Mat. Chem.* **2009**, *19*, 2006-2012
- 281-Interactions between dendrimers and heparin and their implications to anti-prion activity of dendrimers  
Klajnert B., Cangiotti M., Calici S., Ionov M., Majoral J.P., Caminade A.M., Cladera J., Bryszewska M., Ottaviani M.F.  
*New. J. Chem.* **2009**, *33*, 1087-1093
- 282-From phosphorus-containing macrocycles to phosphorus-containing dendrimers  
Caminade A.M., Majoral J.P.  
*Top. Heterocycl. Chem.* **2009**, *20*, 275-309
- 283-Grafting of water-soluble phosphines to dendrimers and their use in catalysis: positive dendritic effects in aqueous media  
Servin P., Laurent R., Gonsalvi L., Tristany M., Peruzzini M., Majoral J.P., Caminade A.M.  
*Dalton Trans.* **2009**, 4432-4434
- 284-Synthesis and characterization of controlled dendritic architectures by association of two phosphorus dendrons through a metallic centre.  
Maraval V., Laurent R., Donnadiou B., Caminade A.M., Majoral J.P.  
*Phosphorus, Sulfur and Silicon* **2009**, *184*, 1612-1620
- 285-Dendrimers ended by non-symmetrical azadiphosphonate groups: synthesis and immunological properties  
Marchand P., Griffe L., Poupot M., Turrin C.O., Bacquet G., Fournié J.J., Majoral J.P., Poupot R., Caminade A.M.  
*Bioorg. Med. Chem. Lett.* **2009**, *19*, 3963-3966
- 286-Design of Phosphonium ended Dendrimers bearing functionalized amines  
Lacour M.A., Zablocka M., Caminade A.M., Taillefer M., Majoral J.P.  
*Tetrahedron Lett.* **2009**, *50*, 4870-4873
- 287-Dft analysis of vibrational spectra of phosphorus-containing dendrons built from cyclotriphosphazene core  
Furer V.L., Vandyukova I.I., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2009**, *932*, 97-104
- 288-Phosphonate terminated PPH dendrimers: influence of pendant alkyl chains on the in vitro anti-HIV-1 properties.  
Pérez-Anes A., Spataro G., Coppel Y., Moog C., Blanzat M., Turrin C.O., Caminade A.M., Rico-Lattes I., Majoral J.P.  
*Org. Biomol. Chem.* **2009**, *7*, 3491-3498
- 289-Gem-bisphosphonate-ended group dendrimers: design and gadolinium complexing properties  
Franc G., Turrin C.O., Cavero E., Costes J.P., Duhayon C., Caminade A.M., Majoral J.P.  
*Eur. J. Org. Chem.* **2009**, 4290-4299
- 290-Customized multiphotonics nanotools for bioapplications: soft organic nanodots as an eco-friendly alternative to quantum dots  
Mongin O., Rouxel C., Vabre J.M., Mir Y., Pla-Quintana A., Wei Y., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*SPIE* **2009**, *7403*, 740303-1 - 740303-12
- 291-Dendrimers and nanomedicine: Multivalency in action  
Rolland O., Turrin C.O., Caminade A.M., Majoral J.P.  
*New. J. Chem.* **2009**, *33*, 1809-1824
- 292-Multi-charged and/or water-soluble fluorescent dendrimers. Properties and uses.  
Caminade A.M., Hameau A., Majoral J.P.  
*Chem. Eur. J.* **2009**, *15*, 9270-9285
- 293-Regulatory activity of azabisphosphonate-capped dendrimers on human CD4<sup>+</sup> T cell proliferation for ex-vivo expansion of NK cells from PBMCs and immunotherapy  
Portevin D., Poupot M., Rolland O., Turrin C.O., Fournié J.J., Majoral J.P., Caminade A.M., Poupot R.  
*J. Trans. Med.* **2009**, *7*:82
- 294-Comparative IR spectroscopic study of phosphorus-containing dendrimers built of thiophosphoryl, cyclophosphazene and phthalocyanine cores  
Furer V.L., Vandyukov A.E., Vandyukova I.I., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibrational Spectroscopy* **2009**, *51*, 326-332
- 295-Cooperative two-photon absorption enhancement via through-space interactions in covalent multichromophoric nanoassemblies  
Terenziani F., Parthasarathy V., Pla-Quintana A., Maishal T., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*Angew. Chem. Int. Ed.* **2009**, *48*, 8691-8694; *Angew. Chem.* **2009**, *121*, 8847-8850
- 296-Dendritic structures within dendritic structures: dendrimer-induced formation and self-assembly of nanoparticle networks  
Franc G., Badetti E., Collière V., Majoral J.P., Sebastian R.M., Caminade A.M.  
*Nanoscale* **2009**, *1*, 233-237
- 297-The detection of DNA hybridization on phosphorus dendrimer multilayer films by surface plasmon field enhanced fluorescence spectroscopy  
Yu Y., Feng C., Caminade A.M., Majoral J.P., Knoll W.  
*Langmuir* **2009**, *25*, 13680-13684
- 298-NaOH-promoted hydrogen transfer: does NaOH or traces of transition metals catalyze the reaction?  
Ouali A., Majoral J.P., Caminade A.M., Taillefer M.  
*ChemCatChem* **2009**, *1*, 504-509
- 299-Designing dendrimers for ocular drug delivery  
Spataro G., Malecaze F., Turrin C.O., Soler V., Duhayon C., Elena P.P., Majoral J.P., Caminade A.M.  
*Eur. J. Med. Chem.* **2010**, *45*, 326-334
- 300-Multivalent cationic GalCer analogs derived from first generation dendrimeric phosphonic acids  
Pérez-Anes A., Stefaniu C., Moog C., Majoral J.P., Blanzat M., Turrin C.O., Caminade A.M., Rico-Lattes I.  
*Bioorg. Med. Chem.* **2010**, *18*, 242-248
- 301-Sensitive sensors based on phosphorus dendrimers  
Caminade A.M., Delavaux-Nicot B., Laurent R., Majoral J.P.  
*Current Org. Chem.* **2010**, *14*, 500-515
- 302-Selective Encapsulation of Dye Molecules in Microcapsules by DNA Hybridization  
Feng C.L., Caminade A.M., Majoral J.P., Zhang D.  
*J. Mat. Chem.* **2010**, *20*, 1438-1441
- 303-An efficient synthesis combining phosphorus dendrimers and 15-membered triolefinic azamacrocycles: towards the stabilization of platinum nanoparticles  
Franc G., Badetti E., Duhayon C., Coppel Y., Turrin C.O., Majoral J.P., Sebastian R.M., Caminade A.M.  
*New. J. Chem.* **2010**, *34*, 547-555
- 304-Stimuli-responsive dendritic structures: the case of light-driven azobenzene-containing dendrimers and dendrons  
Deloncle R., Caminade A.M.  
*J. Photochem. Photobiol. C* **2010**, *11*, 25-45
- 305-Vibrational Spectroscopy studies of dendrimers built from cyclophosphazene core with terminal oxybenzaldehyde groups  
Furer V.L., Vandukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2010**, *971*, 62-70
- 306-Synthesis of a fluorescent cationic phosphorus dendrimer and preliminary biological studies of its interaction with DNA.  
Kazmierczak-Baranska J., Pietkiewicz A., Janicka M., Wei Y., Turrin C.O., Majoral J.P., Nawrot B., Caminade A.M.  
*Nucleosides, Nucleotides and Nucleic Acids* **2010**, *29*, 155-167
- 307-Design of Bisphosphonate-terminated Dendrimers  
Cavero E., Zablocka M., Caminade A.M., Majoral J.P.  
*Eur. J. Org. Chem.* **2010**, 2759-2767

- 308- Raman spectroscopy study of phosphorus-containing dendrimers built from thiophosphoryl core  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A* **2010**, *76*, 276-282
- 309- Dendrimers and nanotubes: a fruitful association  
Caminade A.M., Majoral J.P.  
*Chem. Soc. Rev.* **2010**, *39*, 2034-2047
- 310- Phosphorus Dendrimers and Dendrons Functionalized with the Cage Ligand Tris(1,2-dimethylhydrazino)diphosphane.  
Rodriguez L.I., Zablocka M., Caminade A.M., Seco M., Rossell O., Majoral J.P.  
*Heteroatom Chem.* **2010**, *21*, 290-297
- 311- Polyelectrolyte Layer-by-Layer Deposition in Cylindrical Nanopores  
Lau K.H.A., Lazzara T., Abou-Kandil A., Caminade A.M., Majoral J.P., Knoll W.  
*ACS Nano* **2010**, *4*, 3909-3920
- 312- Biological properties of phosphorus dendrimers  
Caminade A.M., Turrin C.O., Majoral J.P.  
*New. J. Chem.* **2010**, *34*, 1512-1524
- 313- DFT calculations of structure and vibrational spectra of dendron built of cyclotriphosphazene core with terminal carbamate and ester groups  
Furer V.L., Vandyukova I.I., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibr. Spect.* **2010**, *54*, 21-29
- 314- Synthesis and characterization of phosphorus-containing dendrimers bearing rhodamine derivatives as terminal groups  
Wei Y., Laurent R., Majoral J.P., Caminade A.M.  
*Arkivoc* **2010**, *X*, 318-327
- 315- Phosphorus dendrimers as viewed by <sup>31</sup>P NMR spectroscopy; synthesis and characterization.  
Caminade A.M., Laurent R., Turrin C.O., Rebout C., Delavaux-Nicot B., Ouali A., Zablocka M., Majoral J.P.  
*Comp. Rend. Chimie* **2010**, *13*, 1006-1027
- 316- THF-induced stiffening of polyelectrolyte/phosphorous dendrimer multilayer microcapsules  
Kim B.S., Lebedeva O.V., Park M.K., Knoll W., Caminade A.M., Majoral J.P., Vinogradova O.I.  
*Polymer* **2010**, *51*, 4525-4529
- 317- Cooperative TPA enhancement via through-space interactions in organic nanodots built from dipolar chromophores  
Robin A.C., Parthasarathy V., Pla-Quintana A., Mongin O., Terenziani F., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*SPIE*, **2010**, 7774, 77740N-77740N-8
- 318- DNA hybridization induced selective encapsulation of small dye molecules in dendrimer based microcapsules  
Feng C.L., Caminade A.M., Majoral J.P., Gu J., Zhu S., Su H., Hu X., Zhang D.  
*Analyst* **2010**, *135*, 2939-2944
- 319- « Cage-like » phosphines. Design and catalytic properties  
Zablocka M., Hameau A., Caminade A.M., Majoral J.P.  
*Adv. Synth. Catal.* **2010**, *352*, 2341-2358
- 320- Time evolution of the aggregation process of peptides involved in neurodegenerative diseases and preventing aggregation effect of phosphorus dendrimers studied by EPR  
Ottaviani M.F., Mazzeo R., Cangiotti M., Fiorani L., Majoral J.P., Caminade A.M., Pedziwiatr E., Bryszewska M., Klajnert B.  
*Biomacromol.* **2010**, *11*, 3014-3021
- 321- DFT study of structure, IR and Raman spectra of the first generation dendron built from cyclotriphosphazene core  
V.L. Furer, I.I. Vandyukova, A.E. Vandyukov, S. Fuchs, J.P. Majoral, A.M. Caminade, V.I. Kovalenko  
*J. Mol. Struct.*, **2011**, *987*, 144-151
- 322- Une thématique en plein essor: les dendrimères  
Majoral J.P., Caminade A.M.  
*Actu. Chim.* **2011**, *338-339*, 90-95
- 323- Macrocylic core phosphorus dendrimers covered on the surface by N,P ligands  
Sebastian R., Badetti E., Franc G., Majoral J.P., Caminade A.M., Moreno-Mañas M.  
*Eur. J. Org. Chem.* **2011**, 1256-1265
- 324- Fluorescent core-shell star polymers based bioassays for ultrasensitive DNA detection by surface plasmon fluorescence spectroscopy  
Feng C.L., Yin M., Zhang D., Zhu S., Caminade A.M., Majoral J.P., Müllen K.  
*Macromol. Rapid Comm.* **2011**, *32*, 679-683
- 325- 15-Membered azamacrocycles as core and end groups of phosphorus dendrimers  
Badetti E., Franc G., Majoral J.P., Caminade A.M., Sebastian R.M.  
*Synthesis* **2011**, 1427-1434
- 326- A phosphorus-based dendrimer targets inflammation and osteoclastogenesis in experimental arthritis  
Hayder M., Poupot M., Baron M., Nigon D., Turrin C.O., Caminade A.M., Majoral J.P., Eisenberg R.A., Fournié J.J., Cantagrel A., Poupot R., Davignon J.L.  
*Science Transl. Med.* **2011**, *3*, 81ra35
- 327- Fluorescent Phosphorus Dendrimers and their Role in Supra-Molecular Interactions  
Caminade A.M., Hameau A., Turrin C.O., Ianchuk M., Delavaux-Nicot B., Majoral J.P.  
*Phosphorus Sulfur and Silicon* **2011**, *186*, 860-868
- 328- Phosphorus Dendrimers: Efficient Tools for « Greener » Catalyst Design  
Laurent R., Servin P., Ouali A., Keller M., Travers L., Majoral J.P., Caminade A.M.  
*Phosphorus Sulfur and Silicon* **2011**, *186*, 869-877
- 329- Vibrational spectra study of fluorescent dendrimers built from the cyclotriphosphazene core with terminal dansyl and carbamate groups  
Furer V.L., Vandyukova I.I., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A* **2011**, *79*, 462-470
- 330- Nanostructuring polymeric materials by templating strategies  
Knoll W., Caminade A.M., Char K., Duran H., Feng C.L., Gitsas A., Kim D.H., Lau A., Lazzara T.D., Majoral J.P., Steinhart M., Yameen B., Zhong X.H.  
*Small* **2011**, *7*, 1384-1391
- 331- Specific sorption properties of phosphorus-containing dendrimers  
Gerasimov A.V., Ziganshin M.A., Vandyukov A.E., Kovalenko V.I., Gorbachuk V.V., Caminade A.M., Majoral J.P.  
*J. Colloid Interface Sci.* **2011**, *360*, 204-210
- 332- Phosphorus-containing dendrimers: uses as catalysts, for materials, and in biology  
Caminade A.M., Majoral J.P.  
*Catalysis by Metal complexes Vol. 37. Phosphorus Compounds: Advanced tools in Catalysis and Material Sciences*, M. Peruzzini and L. Gonsalvi Eds. *Chap. 11*, 24 juin **2011**, Springer, 265-303 ISBN: 978-90-481-3816-6
- 333- Hierarchically porous nanostructures through phosphonate-metal alkoxide condensation and growth using functionalized dendrimeric building blocks  
Brahmi Y., Katir N., Hameau A., Essoumhi A., Essassi E.M., Caminade A.M., Bousmina M., Majoral J.P., El Kadib A.  
*Chem. Commun.* **2011**, *47*, 8626-8629
- 334- Fourth generation phosphorus-containing dendrimers: prospective drug and gene delivery carrier  
Shcharbin D., Dzmitruk V., Shakhbazov A., Goncharova N., Seviaryn I., Kosmacheva S., Potapnev M., Pedziwiatr-Werbicka E., Bryszewska M., Talabaev M., Chernov A., Kulchitsky V., Caminade A.M., Majoral J.P.  
*Pharmaceutics*, **2011**, *3*, 458-473
- 335- Dendrimers. Towards Catalytic, Material and Biomedical Uses  
Caminade A.M., Turrin C.O., Laurent R., Ouali A., Delavaux-Nicot B., Eds. 21 chapters, 528 pages, John Wiley & Sons, Chichester (UK), **2011** ISBN: 978-0-470-74881-7
- 336- Preface  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses*. Wiley, Chichester, UK, **2011**
- 337- Syntheses of Dendrimers and Dendrons,  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses*. Wiley, Chichester, UK, *Chap. 1*, **2011**, pp 3-33

- 338-Methods of Characterization of Dendrimers  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 2, **2011**, pp 35-66
- 339-Luminescent Dendrimers  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 3, **2011**, pp 67-98
- 340-Stimuli-Responsive Dendrimers  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 4, **2011**, pp 99-124
- 341-Liquid Crystalline Dendrimers  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 5, **2011**, pp 125-140
- 342-Dendrimers and Nanoparticles  
Turrin C.O., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 6, **2011**, pp 141-161
- 343-Terminal Groups of Dendrimers as Catalysts for Homogeneous Catalysis  
Ouali A., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 7, **2011**, pp 165-182
- 344-Catalytic Sites inside the Dendrimeric Structure for Homogeneous Catalysis  
Ouali A., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 8, **2011**, pp 183-195
- 345-Dendrimers as Homogeneous Enantioselective Catalysts  
Ouali A., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 9, **2011**, pp 197-213
- 346-Catalysis with Dendrimers in Particular Media  
Laurent R., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 10, **2011**, pp 215-238
- 347-Heterogeneous Catalysis with Dendrimers  
Laurent R., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 11, **2011**, pp 239-265
- 348-Dendrimers inside Materials  
Laurent R., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 12, **2011**, pp 269-311
- 349-Self-Assembly of Dendrimers in Layers  
Delavaux-Nicot B., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 13, **2011**, pp 313-359
- 350-Dendrimers as Chemical Sensors  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 14, **2011**, pp 361-374
- 351-Dendrimers as Biological Sensors  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 15, **2011**, pp 375-392
- 352-Dendrimers for imaging  
Turrin C.O., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 16, **2011**, pp 395-412
- 353-Dendrimers as Transfection Agents  
Turrin C.O., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 17, **2011**, pp 413-435
- 354-Dendrimer Conjugates for Drug Delivery  
Turrin C.O., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 18, **2011**, pp 437-463
- 355-Encapsulation of Drugs inside Dendrimers  
Turrin C.O., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 19, **2011**, pp 465-484
- 356-Unexpected Biological Applications of Dendrimers and Specific Activities Related to Multivalency  
Turrin C.O., Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 20, **2011**, pp 485-509
- 357-General Conclusions and Perspectives  
Caminade A.M.  
*Dendrimers. Towards Catalytic, Material and Biomedical Uses.*  
Wiley, Chichester, UK, Chap. 21, **2011**, pp 511-514
- 358-DFT Study of Structure, IR and Raman Spectra of the Fluorescent "Janus" Dendron Built from Cyclotriphosphazene Core  
Furer V.L., Vandyukova I.I., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2011**, 1005, 25-30
- 359-Synthesis of dye / fluorescent functionalized dendrons based on cyclotriphosphazene  
Hameau A., Fuchs S., Laurent R., Majoral J.P., Caminade A.M.  
*Beilstein J. Org. Chem.* **2011**, 7, 1577-1583
- 360-Phosphorus-Containing Dendritic Architectures: Synthesis and Applications  
Caminade A.M., Majoral J.P.  
*Designing Dendrimers*, S. Campagna, P. Ceroni, F. Puntoriero Eds, 13 Dec. **2011**, Wiley, 529-562, ISBN-13: 978-0470433553
- 361-Molecular and Macromolecular Engineering with Viologens as Building Blocks. Rational Design of Phosphorus-Viologen Dendritic Structures  
Katir N., Majoral J.P., El Kadib A., Caminade A.M., Bousmina M.  
*Eur. J. Org. Chem.* **2012**, 269-273
- 362-"Janus" dendrimers. Syntheses and properties  
Caminade A.M., Laurent R., Delavaux-Nicot B., Majoral J.P.  
*New J. Chem.* **2012**, 36, 217-226
- 363-Synthesis of dendritic  $\beta$ -diketones and application in copper-catalyzed diarylether formation  
Keller M., Ianchuk M., Ladeira S., Taillefer M., Caminade A.M., Majoral J.P., Ouali A.  
*Eur. J. Org. Chem.* **2012**, 1056-1062
- 364-Photo-physical and structural interactions between viologen phosphorus-based dendrimers and human serum albumin  
Ciepluch K., Katir N., El Kadib A., Weber M., Caminade A.M., Bousmina M., Majoral J.P., Bryszewska M.  
*J. Luminescence*, **2012**, 132, 1553-1563
- 365-DFT study of structure, IR and RAMAN spectra of the first generation dendron built from cyclotriphosphazene core with terminal carbamate and ester groups.  
Furer V.L., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A*, **2012**, 91, 97-105
- 366-Biological Properties of New Viologen-Phosphorus Dendrimers  
Ciepluch K., Katir N., El Kadib A., Felczak A., Zawadzka K., Weber M., Klajnert B., Lisowska K., Caminade A.M., Bousmina M., Majoral J.P., Bryszewska M.  
*Mol. Pharmaceutics* **2012**, 9, 448-457
- 367-Phosphorus Dendrimers Affect Alzheimer's (A $\beta$ 1-28) Peptide and MAP-Tau Protein Aggregation  
Wasiak T., Ionov M., Nieznanski K., Nieznanska H., Klementieva O., Granell M., Cladera J., Majoral J.P., Caminade A.M., Klajnert B.  
*Mol. Pharmaceutics* **2012**, 9, 458-469
- 368-Low generation PEGylated phosphorus-containing dendrons with phosphonate anchors  
Barrière C., Latour V., Fau P., Caminade A.M., Turrin C.O.  
*Tetrahedron Lett.* **2012**, 53, 1908-1911
- 369-Phosphorus-containing dendrimers against  $\alpha$ -synuclein fibril formation  
Milowska K., Gabryelak T., Bryszewska M., Caminade A.M., Majoral J.P.  
*Int. J. Biol. Macromol.* **2012**, 50, 1138-1143



- 370-Application of the Kabachnik-Fields and Moedritzer-Irani procedures for the preparation of PEG-terminated amino-bis(methylene phosphonates) and amino-bis(methylene-phosphonic acids)  
Turrin C.O., Hameau A., Caminade A.M.  
*Synthesis* **2012**, 44, 1628-1630
- 371-Frequency and route of administration in the treatment of experimental arthritis by phosphorus-based dendrimer  
Hayder M., Poupot M., Baron M., Olivier Turrin C.O., Caminade A.M., Majoral J.P., Eisenberg R.A., Fournié J.J., Cantagrel A., Poupot R., Davignon J.L.  
*Ann. Rheum. Dis.* **2012**, 71 (Suppl 1) A8
- 372-Organocatalysis with dendrimers  
Caminade A.M., Ouali A., Keller M., Majoral J.P.  
*Chem. Soc. Rev.* **2012**, 41, 4113-4125
- 373-Probing single molecule interactions using bio-functionalized dendritips  
Jauvert E., Dague E., Séverac M., Ressler L., Caminade A.M., Majoral J.P., Trévisiol E.  
*Sensors & Actuators: B. Chemical* **2012**, 168, 436-441
- 374-Phosphorus-containing dendritic architectures  
Caminade A.M., Majoral J.P.  
*Polymer Science: A Comprehensive Reference* K. Matyjaszewski, M. Möller Eds, Elsevier Amsterdam, Chap. 24, 11 juin **2012**, vol. 5, 689-722. ISBN-10: 0444533494, ISBN-13: 978-0444533494
- 375-Number of terminal groups *versus* generation of the dendrimer, which criteria influence the catalytic properties?  
Servin P., Laurent R., Dib H., Gonsalvi L., Peruzzini M., Majoral J.P., Caminade A.M.  
*Tetrahedron Lett.* **2012**, 53, 3876-3879
- 376-DFT study of structure, IR and Raman spectra of the first generation dendrimer built from cyclotriphosphazene core with terminal 4-oxyphenethylamino groups  
Furer V.L., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2012**, 1026, 17-22
- 377-Biological properties of phosphorus dendrimers  
Caminade A.M., Majoral J.P.  
*Dendrimer-based Drug Delivery Systems: from Theory to Practice* Y Cheng, Ed. Wiley series in drug discovery and development, Hoboken, USA, Chap. 4, **2012**. pp 139-155 ISBN-13: 978-0470460054
- 378-Dendritic Phosphoramidite Ligands for Rh-catalyzed [2+2+2] Cycloaddition Reactions: Unprecedented Enhancement of Enantiodiscrimination  
Garcia L., Roglans A., Laurent R., Majoral J.P., Pla-Quintana A., Caminade A.M.  
*Chem. Commun.* **2012**, 48, 9248-9250
- 379-Synthesis and characterization of water-soluble ferrocene-dendrimers  
de Jong E.R., Manoury E., Daran J.C., Turrin C.O., Chiffre J., Sournia-Saquet A., Knoll W., Majoral J.P., Caminade A.M.  
*J. Organomet. Chem.* **2012**, 718, 22-30
- 380-An efficient and recyclable dendritic catalyst able to dramatically reduce palladium leaching in Suzuki couplings  
Keller M., Hameau A., Spataro G., Ladeira S., Caminade A.M., Majoral J.P., Ouali A.  
*Green Chemistry* **2012**, 14, 2807-2815
- 381-Validation of a Generation 4 Phosphorus-Containing Polycationic Dendrimer for Gene Delivery against HIV-1  
Briz V., Serramia M.J., Madrid R., Hameau A., Caminade A.M., Majoral J.P., Munoz-Fernandez M.A.  
*Current Med. Chem.* **2012**, 19, 5044-5051
- 382-Organophosphorus chemistry for the synthesis of dendrimers  
Caminade A.M., Laurent R., Zablocka M., Majoral J.P.  
*Molecules*, **2012**, 17, 13605-13621
- 383-Cytotoxicity and genotoxicity of cationic phosphorus-containing dendrimers. Cyto- and genotoxicity of dendrimers.  
Gomulak P., Klajnert B., Bryszewska M., Majoral J.P., Caminade A.M., Blasiak J.  
*Current Med. Chem.*, **2012**, 19, 6233-6240
- 384-From graftable biphotonic chromophores to water-soluble organic nanodot for biophotonics. Importance of environmental effects.  
Rouxel C., Charlot M., Mongin O., Rama Krishna T., Caminade A.M., Majoral J.P., Blanchard-Desce M.  
*Chem. Eur. J.* **2012**, 18, 16450-16462
- 385-Effect of viologen-phosphorus dendrimers on acetylcholinesterase and butyrylcholinesterase activities  
Ciepluch K., Weber M., Katir N., Caminade A.M., El Kadib A., Klajnert B., Majoral J.P., Bryszewska M.  
*Int. J. Bio. Macromol.*, **2013**, 54, 119-124
- 386-Low temperature synthesis of ordered mesoporous stable Anatase nanocrystals: the phosphorus dendrimer approach  
Brahmi Y., Katir N., Ianchuk M., Collière V., Essassi E.M., Ouali A., Caminade A.M., Bousmina M., Majoral J.P., El Kadib A.  
*Nanoscale*, **2013**, 5, 2850-2856 (DOI: 10.1039/C3NR00058C)
- 387-Pyrene-tagged dendritic catalysts non-covalently grafted onto magnetic Co/C nanoparticles: an efficient and recyclable system for drug synthesis  
Keller M., Collière V., Reiser O., Caminade A.M., Majoral J.P., Ouali A.  
*Angew. Chem. Int. Ed.* **2013**, 52, 3626-3629; *Angew. Chem.* **2013**, 125, 3714-3717
- 388-Original Multivalent Copper(II)-conjugated Phosphorus-dendrimers and Corresponding Mononuclear copper(II) Complexes with Anti-tumoral Activities  
El Brahmi N., El Kazzouli S., Mignani S.M., Essassi E.M., Aubert G., Laurent R., Caminade A.M., Bousmina M.M., Cresteil T., Majoral J.P.,  
*Mol. Pharm.* **2013**, 10, 1459-1464 DOI: 10.1021/mp4000184
- 389-Modification of Glass Surfaces by Phosphorus Dendrimer Layers for Bio-Sensors.  
Caminade A.M., Majoral J.P.  
*Handbook on Biofunctional Surfaces* Chapter 6, pp 179-214, 13 mai **2013** W. Knoll Ed., CRC Press, Taylor & Francis, Boca Raton, Florida USA ISBN-13: 978-9814316637
- 390-Mannodendrimers targeting the C-type lectin DC-SIGN prevent lung acute inflammation  
Blattes E., Vercellone A., Eutamène H., Turrin C.O., Théodorou V., Neyrolles O., Majoral J.P., Caminade A.M., Prandi J., Nigou J., Puzo G.  
*Proc. Nat. Acad. Sci. USA* **2013**, 110, 8795-8800
- 391-Vibrational Spectra Study of Phosphorus Dendrimer Containing Azobenzene Units on the Surface  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2013**, 1046, 30-38
- 392-Dendrimers or nanoparticles as supports for the design of efficient and recoverable organocatalysts?  
Keller M., Perrier A., Linhardt R., Travers L., Wittmann S., Caminade A.M., Majoral J.P., Reiser O., Ouali A.  
*Adv. Synth. Catal.* **2013**, 355, 1748-1754
- 393-Characterization of Dendrimers and Their Interactions with Biomolecules for Medical use by Means of Electron Magnetic Resonance  
Ottaviani M.F., Appelhans D., Javier de la Mata F., García-Gallego S., Fattori A., Coppola C., Cangiotti M., Fiorani L., Majoral J.P., Caminade A.M., Bryszewska M., Smith D.K., Garti N., Klajnert B.  
In *Dendrimers in Biomedical Applications*, B. Klajnert, L. Peng, V. Cena, Eds. **2013**, 115-133. RSC, DOI:10.1039/9781849737296-00115
- 394-Multiscale modeling of dendrimers and dendrons for drug and nucleic acid delivery  
Posocco P., Laurini E., Dal Col V., Marson D., Peng L., Smith D.K., Klajnert B., Bryszewska M., Caminade A.M., Majoral J.P., Fermeglia M., Karatasos K., Pricl S.  
In *Dendrimers in Biomedical Applications*, B. Klajnert, L. Peng, V. Cena, Eds. **2013**, 148-166. RSC, DOI:10.1039/9781849737296-00148

- 395-DFT study of Raman spectra of phosphorus-containing dendrimers built from thiophosphoryl core  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibr. Spectr.*, **2013**, *68*, 61-70
- 396-Vibrational Spectra Study of Phosphorus Dendrimer Containing Azobenzene, Ammonium and Carbamate Groups  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Chem. Phys.*, **2013**, *421*, 57-67
- 397-Structural and spectroscopic properties of the second generation phosphorus-viologen "molecular asterisk"  
Furer V.L., Vandyukov A.E., Katir N., Majoral J.P., El Kadib A., Caminade A.M., M. Bousmina M., Kovalenko V.I.  
*Spectrochim. Acta A*, **2013**, *115*, 183-190
- 398-Synthesis and structural characterization of a dendrimer model compound based on a cyclotriphosphazene core with TEMPO radicals as substituents  
Badetti E., Lloveras V., Wurst K., Sebastián R.M., Caminade A.M., Majoral J.P., Veciana J., Vidal-Gancedo J.  
*Org. Lett.* **2013**, *15*, 3490-3493
- 399-Efficient and recyclable rare earth-based catalysts for Friedel-Crafts acylation under classical or microwave heating: dendrimers show the way  
Perrier A., Keller M., Caminade A.M., Majoral J.P., Ouali A.  
*Green Chem.* **2013**, *15*, 2075-2080
- 400-An azabisphosphonate-capped poly(phosphorhydrazone) dendrimer for the treatment of Endotoxin-induced Uveitis  
Fruchon S., Caminade A.M., Abadie C., Davignon J.L., Combette J.M., Turrin C.O., Poupot R.  
*Molecules* **2013**, *18*, 9305-9316
- 401-Diversified strategies for the synthesis of bifunctional dendrimeric structures  
Riegert D., Pla-Quintana A., Fuchs S., Laurent R., Turrin C.O., Duhayon C., Majoral J.P., Chaumonnot A., Caminade A.M.  
*Eur. J. Org. Chem.* **2013**, 5414-5422
- 402-Mechanism of Cationic Phosphorus Dendrimers Toxicity Against Murine Neural Cell Lines  
Lazniewska J., Milowska K., Zablocka M., Mignani S., Caminade A.M., Majoral J.P., Bryszewska M., Gabryelak T.  
*Mol. Pharm.* **2013**, *10*, 3484-3496
- 403-DFT study of Raman spectra of phosphorus-containing dendrons built from cyclotriphosphazene core  
Furer V.L., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.*, **2013**, *1051*, 197-204
- 404-Biological properties of water-soluble phosphorhydrazone dendrimers  
Caminade A.M., Turrin C.O., Majoral J.P.  
*Braz. J. Pharm. Sci.* **2013**, *49*, 33-44
- 405-PPH dendrimers grafted on silica nanoparticles: surface chemistry, characterization, silver colloids hosting and antibacterial activity.  
Hameau A., Collières V., Grimoud J., Fau P., Roques C., Caminade A.M., Turrin C.O.  
*RSC Advances* **2013**, *3*, 19015-19026
- 406-Promising low-toxicity of viologen-phosphorus dendrimers against embryonic mouse hippocampal cells  
Lazniewska J., Janaszewska A., Milowska K., Caminade A.M., Mignani S., Katir N., El Kadib A., Bryszewska M., Majoral J.P., Gabryelak T., Klajnert-Maculewicz B.  
*Molecules*, **2013**, *18*, 12222-122240
- 407-Positively charged phosphorus dendrimers. An overview of their properties  
Caminade A.M., Majoral J.P.  
*New J. Chem.* **2013**, *37*, 3358-3373
- 408-Janus carbosilane/phosphorhydrazone dendrimers synthesized by the "click" Staudinger reaction  
Gottis S., Rodriguez L.I., Laurent R., Angurell I., Seco M., Rossell O., Majoral J.P., Caminade A.M.  
*Tetrahedron Lett.* **2013**, *54*, 6864-6867
- 409-Doxycycline-regulated GDNF expression promotes axonal regeneration and functional recovery in transected peripheral nerve.  
Shakhbazau A., Mohanty C., Shcharbin D., Bryszewska M., Caminade A.M., Majoral J.-P., Alant J., Midha R.  
*J. Control. Release*, **2013**, *172*, 841-851.
- 410-Editorial  
Caminade A.M.  
*Inorg. Chim. Acta.* **2014**, *409*, 1
- 411-Poly(phosphorhydrazone) metallodendrimers. A review.  
Caminade A.M., Laurent R., Ouali A., Majoral J.P.  
*Inorg. Chim. Acta.* **2014**, *409*, 68-88
- 412-Bifunctional metallodendrimers based on AB<sub>5</sub> derivatives of cyclotriphosphazene as core and P,N ligands as terminal functions  
Tristany M., Laurent R., Dib H., Gonsalvi L., Peruzzini M., Majoral J.P., Caminade A.M.  
*Inorg. Chim. Acta.* **2014**, *409*, 121-126
- 413-DFT study of Raman spectra of phosphorus-containing dendrons built from cyclotriphosphazene core with terminal carbamate and ester groups  
Furer V.L., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta.* **2014**, *120*, 195-200
- 414-Comparative DFT study of Raman spectra of phosphorus-containing dendrimers built from thiophosphoryl, cyclotriphosphazene and phthalocyanine cores  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibr. Spectr.* **2014**, *70*, 78-88
- 415-Efficient and eco-compatible transition metal-free Oppenauer-type oxidation of alcohols  
Ballester J., Caminade A.M., Majoral J.P., Taillefer M., Ouali A.  
*Catal. Comm.* **2014**, *47*, 58-62
- 416-DFT study of Raman spectra of hexakis(4-N'-(di(4-oxophenethylamino)-(thio)phosphonyl)-N'-methyl-diazobenzene)cyclotriphosphazene  
Furer V.L., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta Part A*, **2014**, *128*, 212-217.
- 417-HIV-antigens charged on phosphorus dendrimers as tools for tolerogenic Dendritic Cells-based immunotherapy  
Vacas Cordoba E., Bastida H., Pion M., Hameau A., Ionov M., Bryszewska M., Caminade A.M., Majoral J.P., Munoz Fernandez M.A.  
*Current Med. Chem.* **2014**, *21*, 1898-1909
- 418-DFT study of the IR and Raman spectra of a fluorescent dendron built from cyclotriphosphazene core  
Furer V., Vandyukov A.E., Fuchs S., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibr. Spectr.* **2014**, *73*, 28-36
- 419-Modulation of pro-inflammatory activation of monocytes and dendritic cells by aza-bis-phosphonate dendrimer as an experimental therapeutic agent.  
Degboé Y., Fruchon S., Baron M., Nigon D., Turrin C.-O., Caminade A.-M., Poupot R., Cantagrel A., Davignon J.-L.  
*Arthritis Research & Therapy* **2014**, *16*:R98
- 420-Dendrimers for drug delivery  
Caminade A.M., Turrin C.O.  
*J. Mat. Chem. B* **2014**, *2*, 4055-4066
- 421-Multiplurifunctionalized phosphorus dendrimers: selective functionalization of P(X)Cl<sub>2</sub> terminal groups  
Caminade A.M., Majoral J.P.  
*Phosphorus, Sulfur and Rel. El.* **2014**, *189*, 1132-1143
- 422-In vitro PAMAM, Phosphorus and Viologen-Phosphorus Dendrimers Prevent Rotenone-Induced Cell Damage  
Milowska K., Szwed A., Zablocka M., Caminade A.M., Majoral J.P., Mignani S., Gabryelak T., Bryszewska M.  
*Int. J. Pharm.* **2014**, *474*, 42-49

- 423-Comparative EPR Studies of Cu (II)-conjugated Phosphorous-Dendrimers in the Absence and Presence of Normal and Cancer Cells  
Ottaviani M.F., El Brahmī N., Cangiotti M., Coppola C., Buccella F., Cresteil T., Mignani S., Caminade A.M., Costes J.P., Majoral J.P.  
*RSC Advances* **2014**, *4*, 36573-36583
- 424-DFT study of structure, IR and Raman spectra of phosphorus-containing dendron with azide functional group  
Furer V., Vandyukov A.E., Majoral J.P., Caminade A.M., Gottis S., Laurent R., Kovalenko V.I.  
*Vibr. Spect.* **2014**, *75*, 1-10
- 425-Radical Dendrimers: A Family of Five Generations of Phosphorus Dendrimers Functionalized with TEMPO Radicals  
Badetti E., Lloveras V., Muñoz J.L., Sebastian R., Caminade A.M., Majoral J.P., Veciana J., Vidal-Gancedo J.  
*Macromolecules* **2014**, *47*, 7717-7724 (DOI: 10.1021/ma502062q)
- 426-Supermolecular columnar liquid-crystalline phosphorus dendrimers decorated with sulfonamide derivatives  
Hincapié C.A., Sebastian R.M., Barbera J., Serrano J.L., Sierra T., Majoral J.P., Caminade A.M.  
*Chem. Eur. J.* **2014**, *20*, 17047-17058 (DOI: 10.1002/chem.201402539)
- 427-Spectroscopic and molecular structure investigation of the phosphorus-containing G<sub>2</sub> dendrimer with terminal aldehyde groups using DFT methods  
Furer V., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A* **2015**, *137*, 220-226
- 428-Redox Control of a Dendritic Homogeneous Catalyst  
Neumann P., Dib H., Caminade A.M., Hey-Hawkins E.  
*Angew. Chem. Int. Ed.* **2015**, *54*, 311-314. DOI: 10.1002/anie.201408314; *Angew. Chem.* **2015**, *127*, 316-319
- 429-DFT study of structure, IR and Raman spectra of dendrimer with P=N-P=S linkages and its complexation with gold  
Furer V., Vandyukov A.E., Majoral J.P., Caminade A.M., Gottis S., Laurent R., Kovalenko V.I.  
*J. Mol. Struct.* **2015**, *1084*, 103-113
- 430-Que faire avec des dendrimères phosphorés?  
Ouali A., Turrin C.O., Majoral J.P., Caminade A.M.  
*Actu. Chim.* **2015**, *392*, VI-VII
- 431-Theoretical and experimental characterization of amino-PEG-phosphonate-terminated PolyPhosphorHydrazone dendrimers. Influence of size and PEG capping on cytotoxicity profiles.  
Hameau A., Fruchon S., Bijani C., Barducci A., Blanzat M., Poupot R., Pavan G., Caminade A.M., Turrin C.O.  
*J. Polym. Sci. A* **2015**, *53*, 761-774 (DOI: 10.1002/pola.27501)
- 432-Investigations in dendrimer space reveal solid and liquid tumor growth-inhibition by original phosphorus-based dendrimers and corresponding monomers and dendrons with ethacrynic acid motifs  
El Brahmī N., Mignani S.M., Caron J., El Kazzouli S., Bousmina M.M., Caminade A.M., Cresteil T., Majoral J.P.  
*Nanoscale* **2015**, *7*, 3915-3922 (DOI: 10.1039/C4NR05983B)
- 433-Hybrid materials built from (phosphorus) dendrimers  
Caminade A.M., Delavaux-Nicot B., Majoral J.P.  
In *Chemistry of Organo-Hybrids: Synthesis and Characterization of Functional Nano-Objects. E. Lacôte, B. Charleux, C. Copéret Eds*  
Wiley, **2015**, chap. 13, 503-525
- 434-Use of a fluorescent aminodeoxylactitol to measure the stability of anti-HIV catanionic dendrimers by spectrofluorimetry.  
Perez-Anes A., Mazères S., Caminade A.M., Blanzat M., Turrin C.O.  
*Tetrahedron Lett.* **2015**, *56*, 1566-1569
- 435-Comparative DFT study of structure, reactivity and IR spectra of phosphorus-containing dendrons with P=N-P=S linkages, vinyl and azide functional groups  
Furer V.L., Vandyukov A.E., Majoral J.P., Caminade A.M., Gottis S., Laurent R., Kovalenko V.I.  
*J. Mol. Struct.*, **2015**, *1091*, 6-15
- 436-Synthesis, Characterization and Biological Properties of New Hybrid Carbosilane-Viologen-Phosphorus Dendrimers  
Moreno S., Szwed A., El Brahmī N., Milowska K., Kurowska J., Fuentes-Paniagua E., Pedziwiatr-Werbicka E., Gabryelak T., Katir N., de la Mata F.J., Muñoz-Fernández M.A., Gómez R., Caminade A.M., Majoral J.P., Bryszewska M.  
*RSC Advances*, **2015**, *5*, 25942-25958
- 437-Synthesis of original onion peel nanodendritic structures with sequential functional phosphorus diversity  
Katir N., El Brahmī N., El Kadib A., Mignani S., Caminade A.M., Bousmina M., Majoral J.P.  
*Chem. Eur. J.* **2015**, *21*, 6400-6408 (hot paper)
- 438-Ruthenium Complexes with Dendritic Ferrocenyl Phosphanes: Synthesis, Characterization, and Application in the Catalytic Redox Isomerization of Allylic Alcohols  
Neumann P., Dib H., Sourmia-Saquet A., Grell T., Handke M., Caminade A.M., Hey-Hawkins E.  
*Chem. Eur. J.* **2015**, *21*, 6590-6604
- 439-Phosphorus dendrimers as supports of transition metal catalysts.  
Caminade A.M., Ouali A., Laurent R., Majoral J.P.  
*Inorg. Chim. Acta* **2015**, *431*, 3-20 (doi:10.1016/j.ica.2014.10.035)
- 440-Repeated intravenous injections in non-human primates demonstrate preclinical safety of an anti-inflammatory phosphorous-based dendrimer  
Fruchon S., Mouriot S., Thiollier T., Grandin C., Caminade A.M., Turrin C.O., Contamin H., Poupot R.  
*Nanotoxicology* **2015**, *9*, 433-441 (doi: 10.3109/17435390.2014.940406)
- 441-Cationic phosphorus dendrimers and therapy for Alzheimer's disease  
Wasiak T., Marcinkowska M., Pieszynski I., Zablocka M., Caminade A.M., Majoral J.P., Klajnert-Maculewicz B.  
*New J. Chem.* **2015**, *39*, 4852-4859 (DOI: 10.1039/C5NJ00309A)
- 442-Dendrimers and hyperbranched polymers (Editorial)  
Caminade A.M., Yan D., Smith D.K.  
*Chem. Soc. Rev.* **2015**, *44*, 3870-3873 (DOI: 10.1039/C5CS90049B)
- 443-The dendritic effect illustrated with phosphorus dendrimers  
Caminade A.M., Ouali A., Laurent R., Turrin C.O., Majoral J.P.  
*Chem. Soc. Rev.* **2015**, *44*, 3890-3899 (DOI: 10.1039/C4CS00261J)
- 444-Raman spectroscopy studies of phosphorus dendrimers with phenoxy and deuterophenoxy terminal groups  
Furer V.L., Vandyukov A.E., Padie C., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Vibr. Spect.*, **2015**, *80*, 17-23
- 445-The key role of the scaffold on the efficiency of dendrimer nanodrugs  
Caminade A.M., Fruchon S., Turrin C.O., Poupot M., Ouali A., Maraval A., Garzoni M., Maly M., Furer V., Kovalenko V., Majoral J.P., Pavan G.M., Poupot R.  
*Nature Comm.* **2015**, *6*, 7722 (DOI: 10.1038/ncomms8722)
- 446-Thiophosphate/phosphonate-containing cross-linked PEGs and their use for the stabilization of silver nanoparticles.  
Hameau A., Collière V., Glaria A., Fau P., Caminade A.M., Turrin C.O.  
*Heteroatom. Chem.* **2015**, *26*, 299-306 (DOI: 10.1002/hc.21260)
- 447-Synthesis and characterization of bifunctional dendrimers: preliminary use for the coating of gold surfaces and the proliferation of human osteoblasts (HOB)  
de Jong E.R., Deloch N., Knoll W., Turrin C.O., Majoral J.P., Caminade A.M., Köper I.  
*New J. Chem.* **2015**, *39*, 7194-7205
- 448-(+)-Cinchonine decorated dendrimers as recoverable organocatalysts  
Rull J., Casals M., Sebastián R., Vallribera A., Majoral J.P., Caminade A.M.  
*ChemCatChem*. **2015**, *7*, 2698-2704

- 449-Interaction studies reveal specific recognition of an anti-inflammatory polyphosphorhydrazone dendrimer by human monocytes  
Le Dall J., Fruchon S., Garzoni M., Pavan G.M., Caminade A.M., Turrin C.O., Blanzat M., Poupot R.  
*Nanoscale* **2015**, *7*, 17672-17684
- 450-Phosphorus-based dendrimer ABP treats neuroinflammation by promoting IL-10-producing CD4<sup>+</sup> T cells  
Hayder M., Varilh M., Turrin C.O., Saoudi A., Caminade A.M., Poupot R., Liblau R.  
*Biomacromolecules* **2015**, *16*, 3425-3433
- 451-Influence of structural parameters on the self-association properties of anti-HIV cationic dendrimers  
Perez-Anes A., Rodrigues F., Caminade A.M., Stefanu C., Tiersch B., Turrin C.O., Blanzat, M.  
*ChemPhysChem* **2015**, *16*, 3433-3437 DOI: 10.1002/cphc.201500484
- 452-A phosphorous-based dendrimer with anti-inflammatory properties towards microglia  
Fruchon S., Caminade A. M., Turrin, C., Poupot, R.  
*Glia*, **2015**, *63*, E329
- 453-L'alliance de la lumière et de la chimie pour la fluorescence en biologie  
Caminade A.M.  
*La lettre de l'Académie des Sciences* **2015**, *35-36*, 59-63
- 454-Perspectives in Coordination Chemistry on the Occasion of the 40th anniversary of the LCC-CNRS, Toulouse, France  
Caminade A.M., Bousseksou A.  
*Coord. Chem. Rev.* **2016**, *308*, 57-58
- 455-Coordination chemistry with phosphorus dendrimers. Applications as catalysts, for materials, and in biology.  
Caminade A.M., Ouali A., Laurent R., Turrin C.O., Majoral J.P.  
*Coord. Chem. Rev.* **2016**, *308*, 478-497, doi:10.1016/j.ccr.2015.06.007
- 456-The specific functionalization of cyclotriphosphazene for the synthesis of smart dendrimers  
Caminade A.M., Hameau A., Majoral J.P.  
*Dalton Trans.* **2016**, *45*, 1810-1822
- 457-Removal of chromate from aqueous solutions by dendrimers-clay nanocomposites  
Beraa A., Hajjaji M., Laurent R., Delavaux-Nicot B., Caminade A.M.  
*Desalination and Water Treatment* **2016**, *57*, 14290-14303 DOI:10.1080/19443994.2015.1062429
- 458- FT-Raman, FT-IR spectroscopic and DFT studies of hexaphenoxycyclotriphosphazene  
Furer V.L., Vandyukov A.E., Padie C., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2016**, *1115*, 124-135
- 459-Synthesis and characterization of dendritic structures incorporating phosphorus, sulfur, and silicon  
Padié C., Hameau A., Duhayon C., Majoral J.P., Caminade A.M.  
*Phosphorus Sulfur Silicon Relat. Elem.* **2016**, *191*, 411-416
- 460-Bifunctional phosphorus dendrimers and their properties.  
Caminade A.M., Majoral J.P.  
*Molecules* **2016**, *21*, 538 doi:10.3390/molecules21040538
- 461-Structure, IR and Raman spectra of phosphotrihydrazide studied by DFT  
Furer V., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*Spectrochim. Acta A*, **2016**, *166*, 19-24
- 462-Thiazoyl Phosphines. Design, Reactivity, Complexation  
Zablocka M., Oshovsky G., Duhayon C., Ladeira S., Caminade A.M., Mignani S., Majoral J.P.  
*Dalton Trans.* **2016**, *45*, 9695-9703
- 463-Recoverable dendritic phase-transfer catalysts containing (+)-cinchonine-derived ammonium salts  
J. Rull, J. J. Jara, R. M. Sebastián, A. Vallibera, C. Nájera, J. P. Majoral, A. M. Caminade  
*ChemCatChem* **2016**, *8*, 2049-2056
- 464-Silica functionalized by bifunctional dendrimers: hybrid nanomaterials for trapping CO<sub>2</sub>  
Riegert D., Bareille L., Laurent R., Majoral J.P., Caminade A.M., Chaumonnot A.  
*Eur. J. Inorg. Chem.* **2016**, 3103-3110
- 465-Solventless synthesis of Ru(0) composites stabilized with PPH dendrons and their use in catalysis.  
García-Peña N.C., Caminade A.M., Ouali A., Redón R., Turrin C.O.  
*RSC Adv.* **2016**, *6*, 64557-64567
- 466-A Novel Class of Ethacrynic Acid Derivatives as Promising Druggable Potent Generation of Anticancer Agents with Established Mechanism of Action  
El Brahmi N., Mignani S. M., El Kazzouli S., Eloy L., Courillaud D., Caron J., Bousmina M. Caminade A.M., Cresteil T., Majoral J.P.  
*Eur. J. Med. Chem.* **2016**, *122*, 656-673
- 467-Ordered layered dendrimers constructed from two known dendrimer families. Inheritance and emergence of properties  
Dib H., Rebout C., Laurent R., Mallet-Ladeira S., Sourmia-Saquet A., Sarosi M., Hey-Hawkins E., Majoral J.P., Delavaux-Nicot B., Caminade A.M.  
*Chem. Eur. J.* **2016**, *22*, 10736-10742
- 468-Anti-inflammatory dendrimers  
Turrin C.O., Caminade A.M.  
In *Dendrimers in nanomedicine*, D. Felder-Flesh Ed., Pan Stanford, 11 July **2016**, Chapter 6, 229-271 ISBN 9789814745499
- 469-Influence of PPH dendrimers' surface functions on the activation of human monocytes. Study of their interactions with pure lipid model systems  
Ielasi F., Le Dall J., Perez Anes A., Fruchon S., Caminade A.M., Poupot R., Turrin C.O., Blanzat M.  
*Phys. Chem. Chem. Phys.* **2016**, *18*, 21871-21880
- 470-Poly(phosphorhydrazone) dendrimers: yin and yang of monocyte activation for human NK cell amplification applied to immunotherapy against Multiple Myeloma  
Poupot M., Turrin C.O., Caminade A.M., Fournie J.J., Attal M., Poupot R., Fruchon S.  
*Nanomedicine: Nanotechnology, Biology, and Medicine*, **2016**, *12*, 2321-2330
- 471-Well-defined poly(vinylidene fluoride) (PVDF) based-dendrimers synthesized by click chemistry: enhanced crystallinity of PVDF and increased hydrophobicity of PVDF films  
Folgado E., Guerre M., Bijani C., Ladmira V., Caminade A.M., Ameduri B., Ouali A.  
*Polymer Chem.*, **2016**, *7*, 5625-5629
- 472-Smart Inorganic Polymers (Editorial)  
Caminade A.M., Hey-Hawkins E., Manners I.  
*Chem. Soc. Rev.* **2016**, *45*, 5144-5146
- 473-Inorganic dendrimers. Recent advances for catalysis, nanomaterials, and nanomedicine  
Caminade A.M.  
*Chem. Soc. Rev.* **2016**, *45*, 5174-5186
- 474-Phosphorus dendrimers: hyperbranched macromolecules for nanosciences  
Caminade A.M.  
*Polymat Contributions* **2016**, *1*, 1-4
- 475-Layer-by-Layer Self-Assembly of Bisdendrons: An Unprecedented Route to Multilayer Thin Films  
Lee O.J., Maraval V., Caminade A.M., Chung K., Lau K.H.A., Shin K., Majoral J.P., Knoll W., Kim D.H.  
*Macromol. Res.*, **2016**, *24*, 851-855
- 476-Cyclotriphosphazene, an old compound applied to the synthesis of smart dendrimers with tailored properties  
Caminade A.M., Ouali A., Hameau A., Laurent R., Rebout C., Delavaux-Nicot B., Turrin C.O., Moineau Chane-Ching K., Majoral J.P.  
*Pure Appl. Chem.* **2016**, *88*, 919-929
- 477-Vibrational spectra and DFT studies of conjugation in poly(phosphorhydrazone) dendrimers  
Furer V.L., Vandyukov A., Majoral J.P., Caminade A.M., Kovalenko V.  
*Vibr. Spect.* **2017**, *88*, 14-26

- 478-Dendrimers-containing organoclays: Characterisation and interaction with methylene blue  
Beraa A., Hajjaji M., Laurent R., Caminade A.M.  
*Applied Clay Science* **2017**, *136*, 142-151
- 479-Symmetrical and unsymmetrical incorporation of active biological monomers on the surface of phosphorus dendrimers  
El Brahmī N., El Kazzouli S., Mignani S., Laurent R., Ladeira S., Caminade A.M., Bousmina M., Majoral J.P.  
*Tetrahedron* **2017**, *73*, 1331-1341
- 480-Catalysis within dendrimers  
Caminade A.M., Ouali A., Laurent R., Majoral J.P.  
Chapter 8, pp 173-207  
In *Effects of Nanocconfinement on Catalysis. R. Poli Ed. Springer* **2017**
- 481-Anticancer copper(II) phosphorus dendrimers are potent proapoptotic Bax activators  
Mignani S. M., El Brahmī N., Eloy L., Poupon J., Nicolas V., Steinmetz A., El Kazzouli S., Bousmina M., Blanchard-Desce M., Caminade A.M., Majoral J.P., Creteil T.  
*Eur. J. Med. Chem.* **2017**, *132*, 142-156
- 482-DFT study of structure, IR and Raman spectra of the first generation dendrimer built from cyclotriphosphazene core with terminal pyrazine groups  
Furer V., Vandyukov A., Tripathi V., Majoral J.P., Caminade A.M., Kovalenko V.  
*Vibr. Spect.* **2017**, *92*, 54-61
- 483-DFT study of IR and Raman spectra of phosphotrihydrazone dendrimer with terminal phenolic groups  
Furer V., Vandyukov A.E., Majoral J.P., Caminade A.M., Kovalenko V.I.  
*J. Mol. Struct.* **2017**, *1144*, 466-472
- 484-Versatile reactivity of cyclic 1,2-dimethylhydrazinodiphosphines  
Oshovskiy G., Zablocka M., Duhayon C., Majoral J.P., Caminade A.M.  
*ZAAC* **2017**, *643*, 903-908
- 485-BF<sub>2</sub> complexes of 1,3-diketones on the surface of phosphorus dendrimers. Synthesis and study of the photoluminescence properties.  
Rouxel C., Mongin O., Hameau A., Ouali A., Blanchard-Desce M., Majoral J.P., Caminade A.M.  
*Can. J. Chem.* **2017**, *95*, 948-953
- 486-Phosphorus dendrimers for nanomedicine  
Caminade A.M.  
*Chem Comm.* **2017**, *53*, 9830-9838 (feature article et cover page)
- 487-Vibrational spectroscopic study on polycationic phosphorus dendrimers  
Furer V., Vandyukov A. E., Tripathi V., Majoral J.P., Caminade A.M., Kovalenko V.  
*Vibrational Spectroscopy* **2017**, *93*, 65-77
- 488-Original Multivalent Gold (III) and Dual Gold(III)-Cu(II) Conjugated Phosphorus Dendrimers as Potent Antitumoral and Antimicrobial Agents  
Mignani S.; El Brahmī N., El Kazzouli S., Laurent R., Ladeira S., Caminade A.M., Pedziwiatr-Werbicka E., Szewczyk E., Bryszewska M., Bousmina M., Creteil T., Majoral J.P.  
*Molecular Pharmaceutics* **2017**, *14*, 4087-4097
- 489-Physico-chemical properties of β-diketone phosphorus-containing dendrimers  
Starova V., Ianchuk M., Zaporozhets O., Caminade A.M.  
*French-Ukrainian Journal of Chemistry* **2017**, *5*, 128-135
- 490-Dual properties of water-soluble Ru-PTA complexes of dendrimers: catalysis and interaction with DNA  
Servin P., Laurent R., Tristany M., Romerosa A., Peruzzini M., Garcia-Maroto F., Majoral J.P., Caminade A.M.  
*Inorg. Chim. Acta* **2018**, *470*, 106-112
- 491-Interactions gold/phosphorus dendrimers. Versatile ways to hybrid organic-metallic macromolecules  
Majoral J.P., Zablocka M., Caminade A.M., Balczewski P., Shi X., Mignani S.  
*Coord. Chem. Rev.* **2018**, *358*, 80-91
- 492-Dendrimers in combination with natural products and analogues as anti-cancer agents  
Mignani S., Rodrigues J., Tomas H., Zablocka M., Shi X., Caminade A.M., Majoral J.P.  
*Chem. Soc. Rev.* **2018**, *47*, 514-532, doi:10.1039/C7CS00550D
- 493-Vibrational spectroscopic study of cationic phosphorus dendrimers with aminoethylpiperidine terminal groups  
Furer V., Vandyukov A. E., Tripathi V., Majoral J.P., Caminade A.M., Kovalenko V.  
*Spectrochimica Acta A.* **2018**, *194*, 211-221
- 494-Cyclotriphosphazene core-based dendrimers for biomedical applications: An update on recent advances  
Wang L., Yang Y., Shi X., Mignani S., Caminade A.M. Majoral J.P.  
*Chem. Mater. B.* **2018**, *6*, 884-895
- 495-Synthesis and study of the vibrational spectra of a first generation phosphorus-containing dendrimer with pyridyl functional groups  
Furer V., Vandyukov A. E., Tripathi V., Majoral J.P., Caminade A.M., Kovalenko V.  
*J. Mol. Struct.* **2018**, *1162*, 1-9
- 496-Enhanced delivery of therapeutic siRNA into glioblastoma cells using dendrimer-entrapped gold nanoparticles conjugated with beta-cyclodextrin  
Qiu J., Kong L., Cao X., Li A., Wei P., Wang L., Mignani S., Caminade A.M., Majoral J.P., Shi X.  
*Nanomaterials* **2018**, *8*, 131; doi:10.3390/nano8030131
- 497-Which dendrimer to attain the desired properties? Focus on phosphorhydrazone dendrimers.  
Caminade A.M., Majoral J.P.  
*Molecules*, **2018**, *23*, 622; doi:10.3390/molecules23030622
- 498-Three-dimensional directionality is a pivotal structural feature for the bioactivity of azabisphosphonate-capped Poly(Phosphorhydrazone) nanodrug dendrimers  
Hayder M., Garzoni M., Bochicchio D., Caminade A.M., Couderc F., Ong-Meang V., Davignon J.L., Turrin C.O., Pavan G. M., Poupot R.  
*Biomacromolecules* **2018**, *19*, 712-720
- 499-Engineering CNDP's of dendrimers containing phosphorous interior compositions to produce new emerging properties.  
Caminade A.M., Majoral J.P.  
*J. Nanopart. Res.* **2018**, *20*, 74. <https://doi.org/10.1007/s11051-018-4170-1>
- 500-Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties**  
Caminade A.M., C.O Turrin, Majoral J.P. (Eds).  
Pan Stanford Publishing, 26 April 2018, pp 1-372, ISBN-13: 978-9814774338, ISBN-10: 9814774332
- 501-Preface  
Caminade A.M., C.O Turrin, Majoral J.P.  
in *Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties*, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 502-Syntheses of Phosphorus Dendrimers (Chapter 1)  
Majoral J.P., Laurent R., Caminade A.M.  
in *Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties*, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 503-Methods for Characterizing (Phosphorus) Dendrimers (Chapter 2)  
Caminade A.M., Laurent R.  
in *Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties*, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 504-EPR characterization of phosphorous dendrimers as drugs for cancer and neurodegenerative diseases (Chapter 3)  
Ottaviani M.F., Cangiotti M., Klajnert-Maculewicz B., Caminade A.M., Majoral J.P.  
in *Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties*, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**

- 505-Fluorescent (Phosphorus) Dendrimers and their Use for Biology (Chapter 4)  
Caminade A.M., Hameau A.  
*in* Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 506-Biomaterials Made of Phosphorus Dendrimers: Towards Diagnosis Tools (Chapter 5)  
Caminade A.M., Delavaux-Nicot B.  
*in* Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 507-Phosphorus Dendrimers as Vectors for Gene Therapy in Cancer (Chapter 8)  
Shcharbin D., Shcharbina N., Pedziwiatr-Werbicka E., de la Mata J., Gomez-Ramirez R., Mignani S., Kulchitsky V.A., Muñoz-Fernández M.A., Caminade A.M., Majoral J.P., Bryszewska M.  
*in* Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 508-Rational Design of Mannodendrimers Targeting Human C-type Lectin Receptors to Prevent Lung Inflammation (Chapter 10)  
Nigou J., Prandi J., Blattes E., Silva-Gomes S., Caminade A.M., Vercellone A., Puzo G.  
*in* Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing, **2018**
- 509-Phosphorus-Containing Dendrimers against Diseases of the Central Nervous System (CNS) (Chapter 11)  
Caminade A.M., C.O Turrin, Majoral J.P.  
*in* Phosphorous Dendrimers in Biology and Nanomedicine: Syntheses, Characterization, and Properties, Caminade A.M., C.O Turrin, Majoral J.P. (Eds), Pan Stanford Publishing **2018**
- 510-Synthesis of dissymmetric phosphorus dendrimers using an unusual protecting group  
Apartsin E., Venyaminova A.G., Mignani S., Caminade A.M., Majoral J.P.  
*New J. Chem.* **2018**, *42*, 8985-8991
- 511-Vibrational spectroscopic investigation of the gold complexation within the cascade structure of phosphorus-containing dendrimer  
Furer V., Vanduykov A.E., Majoral J.P., Caminade A.M., Gottis S., Laurent R., Kovalenko V.I.  
*Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, **2018**, *203*, 118-126
- 512-New ways to treat tuberculosis using dendrimers as nanocarriers  
Mignani S., Tripathi R.P., Chen L., Caminade A.M., Shi X., Majoral J.P.  
*Pharmaceutics* **2018**, *10*, 0105;  
doi:10.3390/pharmaceutics10030105
- 513-Hydrogels of phosphorus dendrimers for biomedical applications: gelation studies and nucleic acid loading  
Apartsin E.K., Grigoryeva A.E., Malrin-Fournol A., Ryabchikova E.I., Venyaminova A.G., Mignani S., Caminade A.M., Majoral J.P.  
*Pharmaceutics* **2018**, *10*, 120;  
doi:10.3390/pharmaceutics10030120
- 514-Doxorubicin-Conjugated PAMAM Dendrimers for pH-Responsive Drug Release and Folic Acid-Targeted Cancer Therapy  
Zhang M., Zhu J., Zheng Y., Guo R., Wang S., Mignani S., Caminade A.M., Majoral J.P., Shi X.  
*Pharmaceutics*, **2018**, *10*, 162;  
doi:10.3390/pharmaceutics10030162
- 515-Multiplexing technology for *in vitro* diagnosis of pathogens: the key contribution of phosphorus dendrimers  
Majoral J.P., François J.M., Fabre R., Senescau A., Caminade A.M.  
*Science China Mater.* In press 2018
- 516-Recent therapeutic applications of the theranostic principle with dendrimers in oncology  
Mignani S., Rodrigues J., Tomas H., Caminade A.M., Laurent R., Shi X., Majoral J.P.  
*Science China Mater.* In press 2018
- 517-Adsorption abilities of sodic- and dendrimers-modified stevensite  
Hajjaji M., Beraa A., Coppel Y., Laurent R., Caminade A.M.  
*Clay Minerals*, In press 2018 DOI: 10.1180/clm.2018.39.
- 518-Synthesis of Inorganic Dendrimers  
Caminade A.M.  
*In Smart Inorganic Polymers: Emerging and Potential Applications*, Hey-Hawkins E., Hissler M. (Eds.), Chapter 5, Wiley, ISBN 978-3-527-34484-0 accepted July 2018
- 519-Inorganic Dendrimers and Their Applications  
Caminade A.M.  
*In Smart Inorganic Polymers: Emerging and Potential Applications*, Hey-Hawkins E., Hissler M. (Eds.), Chapter 10, Wiley, ISBN 978-3-527-34484-0 accepted July 2018



## Patents of Anne-Marie Caminade

- 1 - Procédé de préparation de céramiques en nitrure de bore et de leurs précurseurs ainsi mis en oeuvre.  
Majoral J.P., Brodie N., Caminade A.M.  
French Patent FR 199100822, 2 July 1991
- 2 - Manufacture of boron nitride ceramics, and the silylhydrazine and borazine intermediate products formed.  
Majoral J.P., Brodie N., Caminade A.M.  
European Patent EP 0521772, 30 June 1992
- 3 - Nouveaux dendrimères fonctionnels à terminaisons phosphorées et leur procédé de préparation.  
Caminade A.M., Majoral J.P., Slany M.  
French Patent FR 199506281, 19 May 1995
- 4 - Synthèse de dendrimères phosphorés  
Larré C., Caminade A.M., Majoral J.P., Henriot E.B.  
Enveloppe Soleau L96041 23 July 1996
- 5 - Nouvelles compositions pesticides et/ou régulatrices de croissance  
Vors J.P., Zerrouk R., Gauffre Guirardel F., Caminade A.M., Majoral J.P.  
French Patent FR 199902975, 8 March 1999
- 6 - Dendrimères phosphorés et leurs applications comme agents de transfection  
Majoral J.P., Meunier B., Caminade A.M., Loup C., Zanta-Boussif M.A.  
French Patent FR 199914864, 25 November 1999
- 7 - Pesticide and/or plant growth regulating compositions  
Caminade A.M., Gauffre-Guirardel F., Majoral J.P., Marmillon C., Rump E., Vors J.P., Zerouk R.  
World Patent WO 200053009, 7 March 2000
- 8 - Phosphorus-containing dendrimers as transfection agent  
Majoral J.P., Meunier B., Caminade A.M., Loup C., Zanta-Boussif M.A.  
World Patent WO 200138335, 23 November 2000
- 9 - Matériaux minéraux de haute porosité et procédé de préparation de ces matériaux  
Chane-Ching J.Y., Reinert P., Bull L., Caminade A.M.  
French Patent FR 200116883, 26 December 2001
- 10 - Utilisation de dendrimères phosphorés comme médicaments  
Majoral J.P., Caminade A.M., Leclaire J., Loup C., Solassol J., Lehmann S., Meunier B.  
French Patent FR 200200675, 21 January 2002
- 11 - Supports solides fonctionnalisés par des dendrimères phosphorés, leurs procédés de préparation et applications  
Trevisiol E., Leclaire J., Pratviel G., Caminade A.M., François J., Majoral J.P., Meunier B.  
French Patent FR 200205049, 23 April 2002
- 12 - Procédé de synthèse de polymères à blocs par polymérisation radicalaire contrôlée par de nouveaux agents de contrôle dithiophosphoroesters  
Destarac M., Leising F., Taton D., Dureault A., Gnanou Y., Majoral J.P., Marchand P., Caminade A.M.  
French Patent, FR 200207022, 7 June 2002
- 13 - High porosity materials and method for preparing same  
Chane-Ching J.Y., Reinert P., Bull L., Caminade A.M.  
World Patent WO 2003055827, 24 December 2002
- 14 - Use of phosphorus dendrimers as medicaments  
Majoral J.P., Caminade A.M., Leclaire J., Loup C., Solassol J., Lehmann S., Meunier B.,  
World Patent WO 2003061673, 17 January 2003
- 15 - Procédé de synthèse de copolymers ramifiés par polymérisation radicalaire contrôlée  
Destarac M., Leising F., Taton D., Dureault A., Gnanou Y., Majoral J.P., Marchand P., Caminade A.M.  
US Patent, US 20030443259, 28 January 2003
- 16 - Solid support carrying functionalized dendrimer, useful for immobilization or synthesis of e.g. nucleic acids or proteins, particularly as biochip for studying interactions  
Trevisiol E., Leclaire J., Pratviel G., Caminade A.M., François J., Majoral J.P., Meunier B.,  
World Patent WO 2003091304, 17 April 2003
- 17 - Method of preparing polymers, especially block copolymers by controlled radical polymerization using specified dithiophosphoroether control agents  
Destarac M., Leising F., Taton D., Dureault A., Gnanou Y., Majoral J.P., Marchand P., Caminade A.M.  
World Patent WO 2003104288, 6 June 2003
- 18 - Nouveaux dendrimères à terminaisons monophosphoniques, leur procédé de préparation et leur utilisation  
Caminade A.M., Majoral J.P., Griffe L., Turrin C.O., Metivier P.  
French Patent FR 200313751, 24 November 2003
- 19 - Nouveaux dendrimères à terminaisons bisphosphoniques et dérivés, leur procédé de préparation et leur utilisation  
Caminade A.M., Majoral J.P., Griffe L., Turrin C.O., Metivier P.  
French Patent FR 200313752, 24 November 2003
- 20 - Method for synthesis of branched copolymers by controlled radical polymerisation  
Destarac M., Leising F., Taton D., Dureault A., Gnanou Y., Majoral J.P., Marchand P., Caminade A.M.  
World Patent, WO 2004078793, 27 January 2004
- 21 - Utilisation de dendrimères pour stimuler la croissance cellulaire  
Majoral J.P., Caminade A.M., Fournié J.J., Griffe L., Poupot Marsan M., Poupot R., Turrin C.O.  
French Patent, FR 200408426, 30 July 2004
- 22 - Novel dendritic polymers having biphosphonic terminations, derivatives thereof, method for preparing them, and their use  
Caminade A.M., Majoral J.P., Griffe L., Turrin C.O., Metivier P.  
World Patent WO 2005052031, 23 November 2004
- 23 - Novel dendritic polymers having monophosphonic terminations, method for preparing them, and their use  
Caminade A.M., Majoral J.P., Griffe L., Turrin C.O., Metivier P.  
World Patent WO 2005052032, 23 November 2004
- 24 - Use of dendrimers to stimulate cell growth  
Majoral J.P., Caminade A.M., Fournié J.J., Griffe L., Poupot Marsan M., Poupot R., Turrin C.O.  
World Patent WO 2006024769, 29 July 2005
- 25 - Composés fluorescents dendrimériques et utilisation de tels composés dans le cadre des procédés ou dispositifs multiphotoniques  
Blanchard-Desce M., Werts M.H.V., Mongin O., Majoral J.P., Caminade A.M., Thatavarthy R.M.  
French Patent FR 200600339, 13 January 2006
- 26 - Dendrimeric fluorescent compounds and use of such compounds in multi-photon devices or processes  
Blanchard-Desce M., Werts M.H.V., Mongin O., Majoral J.P., Caminade A.M., Thatavarthy R.M.  
World Patent WO 2007080176, 10 January 2007
- 27 - Phosphorylated dendrimers as anti-inflammatory drugs  
Poupot M., Poupot R., Fournié J.J., Portevin D., Fruchon S., Davignon J.L., Turrin C.O., Caminade A.M., Majoral J.P., Rolland O.  
US 20080525416, 1 august 2008
- 28 - Procédé de catalyse de réactions de transfert d'hydrogène  
Taillefer M., Ouali A., Caminade A.M., Majoral J.P.  
French Patent FR 2947263, 24 June 2009
- 29 - Phosphorylated dendrimers as anti-inflammatory drugs  
Poupot M., Poupot R., Fournié J.J., Portevin D., Fruchon S., Davignon J.L., Turrin C.O., Caminade A.M., Majoral J.P., Rolland O.  
WO 2010013086, 4 February 2010
- 30 - Dendrimères à terminaison saccharide à visée anti-inflammatoire  
Prandi J., Puzo G., Turrin C.O., Blattes E., Vercellone A., Nigou J., Majoral J.P., Caminade A.M.  
French Patent FR 2964107, 31 August 2010
- 31 - Process for the catalysis of hydrogen transfer reactions  
Taillefer M., Ouali A., Caminade A.M., Majoral J.P.  
WO 2010149934, 29 December 2010
- 32 - Dendrimers with a saccharide ending for anti-inflammatory purposes  
Prandi J., Puzo G., Turrin C.O., Blattes E., Vercellone A., Nigou J., Majoral J.P., Caminade A.M.  
WO 2012089945, 5 July 2012