

Autor: María Alonso González
Título : Síntesis y Actividad Química de Complejos Fosfuro y Oxofosfinideno de Molibdeno y Wolframio
Fecha lectura: 11/01/2008

Publicaciones:

- 1.- “Chemistry of the phosphinidene oxide ligand”. M. Alonso, M. E. García, M. A. Ruiz, H. Hamidov y J. C. Jeffery. *J. Am. Chem. Soc.* **2004**, *126*, 13610.
- 2.- “Oxidation reactions of the phosphinidene oxide ligand”. M. Alonso, M. A. Alvarez, M. E. García, M. A. Ruiz, H. Hamidov y J. C. Jeffery. *J. Am. Chem. Soc.* **2005**, *127*, 15012.
- 3.- “Trapping of Hemiquinone Radicals at Mo and P sites by Phosphide-Bridged Dimolybdenum Species. Chemistry of Complexes $[\text{Mo}_2(\eta^5\text{-C}_5\text{H}_5)_2(\text{OC}_6\text{H}_4\text{OH})(\mu\text{-PR}_2)(\text{CO})_4]$ and $[\text{Mo}_2(\eta^5\text{-C}_5\text{H}_5)_2\{\mu\text{-PR}(\text{OC}_6\text{H}_4\text{OH})\}(\text{CO})_4]$ (R= Cy, Ph)”. C. M. Alvarez, M. A. Alvarez, M. Alonso, M. E. García, M. T. Rueda, M. A. Ruiz, P. Herson. *Inorg. Chem.* **2006**, *45*, 9593.
- 4.- “From coordinated oxophosphinidene to O,O,P-bound arylhypophosphite(2-) to build a singular $\text{Mo}_2\text{Sn}_2\text{O}_4\text{P}_2$ metallocycle.”. M. Alonso, M. A. Alvarez, M. E. García, M. A. Ruiz. *Inorg. Chem.* **2008**, *47*, 1252.
- 5.- “Chemistry of the Oxophosphinidene Ligand. 1. Electronic Structure of the Anionic Complexes $[\text{MCp}\{\text{P}(\text{O})\text{R}^*\}(\text{CO})_2]^-$ (M= Mo, W; $\text{R}^* = 2,4,6\text{-C}_6\text{H}_2^t\text{Bu}_3$) and their Reactions with H^+ and C-based Electrophiles”. M. Alonso, M. A. Alvarez, M. E. García, D. García-Vivó, M. A. Ruiz. *Inorg. Chem.* **2010**, *49*, 8962.
- 6.- “Chemistry of the Oxophosphinidene Ligand. 2. Reactivity of the Anionic Complexes $[\text{MCp}\{\text{P}(\text{O})\text{R}^*\}(\text{CO})_2]^-$ (M= Mo, W; $\text{R}^* = 2,4,6\text{-C}_6\text{H}_2^t\text{Bu}_3$) Toward Electrophiles Based on Elements Different from Carbon.”. M. Alonso, M. A. Alvarez, M. E. García, Miguel A. Ruiz, H. Hamidov, J. C. Jeffery. *Inorg. Chem.* **2010**, *49*, 11595.

Autor: Alba Díaz Rodríguez
Título: Estrategias quimioenzimáticas para la síntesis de nucleosidos. Estudio de su actividad biológica
Fecha lectura: 25/04/2008

Publicaciones:

- 1.- Díaz-Rodríguez, A.; Lavandera, I.; Fernández, S.; Ferrero, M.; Gotor, V. *Tetrahedron Lett.* **2005**, *46*, 5835-5838.
Enzymatic approach to *O*-crotonyl 2'-deoxynucleoside derivatives.
- 2.- Díaz-Rodríguez, A.; Fernández, S.; Sanghvi, Y. S.; Ferrero, M.; Gotor, V. *Org. Process Res. Dev.* **2006**, *10*, 581-587.
Novel Chemoenzymatic Protocol for the Synthesis of 3'-Dimethoxytrityl-2'-deoxynucleoside Derivatives as Building Blocks for Oligonucleotide Synthesis.
- 3.- García, J.; Díaz-Rodríguez, A.; Fernández, S.; Sanghvi, Y. S.; Ferrero, M.; Gotor, V. *J. Org. Chem.* **2006**, *71*, 9765-9771.
A New Concept for the Separation of Anomeric Mixture of -D-Nucleosides through Regioselective Enzymatic Acylation or Hydrolysis Processes.
- 4.- Díaz-Rodríguez, A.; Fernández, S.; Sanghvi, Y. S.; Theodorakis, E. A.; Gotor, V.; Ferrero, M. *Nucleic Acids Symp. Ser. 52* **2008**, 99-100.
Synthesis of 2',3'-Cyclohexene Bicyclic Nucleoside Analogues as Antiviral Compounds.
- 5.- Díaz-Rodríguez, A.; Sanghvi, Y. S.; Fernández, S.; Schinazi, R. F.; Theodorakis, E. A.; Ferrero, M.; Gotor, V. *Org. Biomol. Chem.* **2009**, *7*, 1415-1423.
Synthesis and Anti-HIV Activity of Conformationally Restricted Bicyclic Hexahydroisobenzofuran Nucleoside Analogs.

Autor: Verónica Recuero García
Título: Síntesis de productos farmacéuticos ópticamente activos mediante procesos quimioenzimáticos
Fecha lectura: 20/06/2008

Publicaciones:

1.- Chemoenzymatic preparation of enantiopure isomers of 4-aminochroman-3-ol and 1-amino-1,2,3,4-tetrahydronaphthalen-2-ol. V. Recuero, G. de Gonzalo, R. Brieva, V. Gotor. *Eur. J. Org. Chem.*, **2006**, 4224-4230.

2.- Enzymatic resolution of hindered cyanohydrins, key precursors of muscarinic receptor antagonists. V. Recuero, M. Ferrero, V. Gotor-Fernández, R. Brieva, V. Gotor. *Tetrahedron: Asymmetry*, **2007**, *18*, 994-1002.

3.- Highly enantioselective transformations on 3,4-dihydroxytetrahydrofuranes catalyzed by lipases. V. Recuero, R. Brieva, V. Gotor *Tetrahedron: Asymmetry*, **2008**, *19*, 1684-1688.

Autor: Gabriel García Fernández
Título: Reactividad de ligandos difosfina y difosfinometanuro funcionalizados en complejos de manganeso(I) y rutenio(II).
Fecha lectura: 10/10/2008

Publicaciones:

- 1.- Trapping highly electrophilic metalladiphosphanycarbenes
Ruiz, J.; Mosquera, M. E. G.; García, G.; Patrón, E.; Riera, V.; García-Granda, S.; Van der Maelen, F.
Angew. Chem. Int. Ed. **2003**, *42*, 4767
- 2.- Imidazoline-Functionalized Diphosphines: Models for N-Heterocyclic Carbene-Diphosphinocarbene Coupling
Ruiz, J.; Mosquera, M. E. G.; García, G.; Marquínez, F.; Riera, V.
Angew. Chem. Int. Ed. **2005**, *44*, 102
- 3.- Generation of N-Heterocyclic Carbenes by Metal-Mediated Coupling of Propargylamine and Isocyanides
Ruiz, J.; García, G.; Mosquera, M. E. G.; Perandones, B. F.; Gonzalo, M. P.; Vivanco, M.
J. Am. Chem. Soc. **2005**, *127*, 8584
- 4.- High Structural Control in Metal-Mediated Synthesis of New Functionalized Diphosphines
Mosquera, M. E. G.; Ruiz, J.; García, G.; Marquínez, F.
Chem. Eur. J. **2006**, *12*, 7706
- 5.- Synthesis of N-Heterocyclic Carbene Complexes of Manganese(I) by Coupling Isocyanide Ligands with Propargylamines and Propargylic Alcohols
Ruiz, J.; Perandones, B. F.; García, G.; Mosquera, M. E. G.
Organometallics **2007**, *26*, 5687