

## 2018

- 1- J. Albalad, H. Xu, F. Gandara, M. Haouas, C. Martineau-Corcós, R. Mas-Balleste, S. A. Barnett, J. Juanhuix, I. Imaz, D. Maspoch "Single-Crystal-to-Single-Crystal Postsynthetic Modification of a Metal-Organic Framework via Ozonolysis." *J. Am. Chem. Soc.* 140 (2018) 2028-2031.
- 2- D. Amitouche, M. Haouas, T. Mazari, S. Mouanni, R. Canioni, C. Rabia, E. Cadot, C. Marchal-Roch "The primary stages of polyoxomolybdate catalyzed cyclohexanone oxidation by hydrogen peroxide as investigated by in situ NMR. Substrate activation and evolution of the working catalyst." *Appl. Catal. A-Gen.* 561 (2018) 104-116.
- 3- M. A. Andres, M. Benzaqui, C. Serre, N. Steunou, I. Gascon "Fabrication of ultrathin MIL-96(Al) films and study of CO<sub>2</sub> adsorption/desorption processes using quartz crystal microbalance." *J. Colloid Interface Sci.* 519 (2018) 88-96.
- 4- V. Benoit, N. Chanut, R. S. Pillai, M. Benzaqui, I. Beurroies, S. Devautour-Vinot, C. Serre, N. Steunou, G. Maurin, P. L. Llewellyn "A promising metal-organic framework (MOF), MIL-96(Al), for CO<sub>2</sub> separation under humid conditions." *J. Mater. Chem. A* 6 (2018) 2081-2090.
- 5- A. Boulmier, A. Vacher, D. J. Zang, S. Yang, A. Saad, J. Marrot, O. Oms, P. Mialane, I. Ledoux, L. Ruhlmann, D. Lorcy, A. Dolbecq "Anderson-Type Polyoxometalates Functionalized by Tetrathiafulvalene Groups: Synthesis, Electrochemical Studies, and NLO Properties." *Inorg. Chem.* 57 (2018) 3742-3752.
- 6- M. Castro, P. Losch, W. Park, M. Haouas, F. Taulelle, C. Loerbroeks, G. Brabants, E. Breynaert, C. E. A. Kirschhock, R. Ryoo, W. Schmidt "Unraveling Direct Formation of Hierarchical Zeolite Beta by Dynamic Light Scattering, Small Angle X-ray Scattering, and Liquid and Solid State NMR: Insights at the Supramolecular Level." *Chem. Mat.* 30 (2018) 2676-2686.
- 7- K. Dedecker, R. S. Pilla, F. Nouar, J. Pires, N. Steunou, E. Dumas, G. Maurin, C. Serre, M. L. Pinto "Metal-Organic Frameworks for Cultural Heritage Preservation: The Case of Acetic Acid Removal." *ACS Appl. Mater. Interfaces* 10 (2018) 13886-13894.
- 8- F. Dhifallah, M. S. Belkhiria, L. Parent, N. Leclerc, E. Cadot "A Series of Octahedral First-Row Transition-Metal Ion Complexes Templated by Wells-Dawson Polyoxometalates: Synthesis, Crystal Structure, Spectroscopic, and Thermal Characterizations, and Electrochemical Properties." *Inorg. Chem.* 57 (2018) 11909-11919.
- 9- H. El Moll, M. Cordier, G. Nocton, F. Massuyeau, C. Latouche, C. Martineau-Corcós, S. Perruchas "A Heptanuclear Copper Iodide Nanocluster." *Inorg. Chem.* 57 (2018) 11961-11969.
- 10- C. Falaise, K. Kozma, M. Nyman "Thorium Oxo-Clusters as Building Blocks for Open Frameworks." *Chem.-Eur. J.* 24 (2018) 14226-14232.
- 11- C. Falaise, M. A. Moussawi, S. Floquet, P. A. Abramov, M. N. Sokolov, M. Haouas, E. Cadot "Probing Dynamic Library of Metal-Oxo Building Blocks with gamma-Cyclodextrin." *J. Am. Chem. Soc.* 140 (2018) 11198-11201.
- 12- D. Fu, B. Fabre, G. Loget, C. Meriadec, S. Ababou-Girard, E. Cadot, N. Leclerc-Laronze, J. Marrot, Q. de Ponfilly "Polyoxothiometalate-Derivatized Silicon Photocathodes for Sunlight-Driven Hydrogen Evolution Reaction." *ACS Omega* 3 (2018) 13837-13849.
- 13- M. Gimenez-Marques, E. Bellido, T. Berthelot, T. Simon-Yarza, T. Hidalgo, R. Simon-Vazquez, A. Gonzalez-Fernandez, J. Avila, M. C. Asensio, R. Gref, P. Couvreur, C. Serre, P. Horcajada "GraftFast Surface Engineering to Improve MOF Nanoparticles Furtiveness." *Small* 14 (2018).
- 14- F. J. Goncalves, F. Kamal, A. Gaucher, R. Gil, F. Bourdreux, C. Martineau-Corcós, L. V. A. Gurgel, L. F. Gil, D. Prim "Synthesis, characterisation and application of pyridine-modified chitosan derivatives for the first non-racemic Cu-catalysed Henry reaction." *Carbohydr. Polym.* 181 (2018) 1206-1212.
- 15- M. Haouas "Nuclear Magnetic Resonance Spectroscopy for In Situ Monitoring of Porous Materials Formation under Hydrothermal Conditions." *Materials* 11 (2018).
- 16- B. Huitorel, H. El Moll, R. Utrera-Melero, M. Cordier, A. Fargues, A. Garcia, F. Massuyeau, C. Martineau-Corcós, F. Fayon, A. Rakhmatullin, S. Kahlal, J. Y. Saillard, T. Gacoin, S. Perruchas "Evaluation of Ligands Effect on the Photophysical Properties of Copper Iodide Clusters." *Inorg. Chem.* 57 (2018) 4328-4339.
- 17- A. A. Ivanov, C. Falaise, P. A. Abramov, M. A. Shestopalov, K. Kirakci, K. Lang, M. A. Moussawi, M. N. Sokolov, N. G. Naumov, S. Floquet, D. Landy, M. Haouas, K. A. Brylev, Y. V. Mironov, Y. Molard, S. Cordier, E. Cadot "Host-Guest Binding Hierarchy within Redox- and Luminescence-Responsive Supramolecular Self-Assembly Based on Chalcogenide Clusters and gamma-Cyclodextrin." *Chem.-Eur. J.* 24 (2018) 13467-13478.
- 18- M. Lepeltier, X. Sallenave, D. Tondelier, G. Sini, F. Goubard, D. Gigmes, B. Geffroy, F. Dumur "Triphenylamine/oxadiazole hybrids differing by the substitution pattern: Influence on the electroluminescence properties of yellow and green emitting diodes." *Synth. Met.* 240 (2018) 21-29.
- 19- C. Martineau-Corcós "NMR Crystallography: A tool for the characterization of microporous hybrid solids." *Curr. Opin. Colloid Interface Sci.* 33 (2018) 35-43.
- 20- S. A. Martynova, P. E. Plyusnin, T. I. Asanova, I. P. Asanov, D. P. Pishchur, S. V. Korenev, S. V. Kosheev, S. Floquet, E. Cadot, K. V. Yusenko "Exothermal effects in the thermal decomposition of IrCl<sub>6</sub> (2-)-containing salts with M(NH<sub>3</sub>)(5)Cl (2+) cations: M(NH<sub>3</sub>)(5)Cl IrCl<sub>6</sub> (M = Co, Cr, Ru, Rh, Ir)." *New J. Chem.* 42 (2018) 1762-1770.

- 21- M. A. Moreira, M. P. S. Santos, C. G. Silva, J. M. Loureiro, J. S. Chang, C. Serre, A. F. P. Ferreira, A. E. Rodrigues "Adsorption equilibrium of xylene isomers and ethylbenzene on MIL-125(Ti)-NH<sub>2</sub>: the temperature influence on the para-selectivity." *Adsorpt.-J. Int. Adsorpt. Soc.* 24 (2018) 715-724.
- 22- M. A. Moussawi, S. Floquet, P. A. Abramov, C. Vicent, M. Haouas, E. Cadot "pH-Controlled One Pot Syntheses of Giant Mo<sub>2</sub>O<sub>2</sub>S<sub>2</sub>-Containing Seleno-Tungstate Architectures." *Inorg. Chem.* 57 (2018) 56-63.
- 23- H. Nagashima, C. Martineau-Corcos, G. Tricot, J. Trebosc, F. Pourpoint, J. P. Amoureux, O. Lafon, Recent Developments in NMR Studies of Aluminophosphates. In *Annual Reports on Nmr Spectroscopy, Vol 94*, G. A. Webb, Ed. Elsevier Academic Press Inc: San Diego, 2018; Annual Reports on NMR Spectroscopy; Vol. 94, pp 113-185.
- 24- G. Paille, M. Gomez-Mingot, C. Roch-Marchal, B. Lassalle-Kaiser, P. Mialane, M. Fontecave, C. Mellot-Draznieks, A. Dolbecq "A Fully Noble Metal-Free Photosystem Based on Cobalt-Polyoxometalates Immobilized in a Porphyrinic Metal-Organic Framework for Water Oxidation." *J. Am. Chem. Soc.* 140 (2018) 3613-3618.
- 25- S. Rojas, T. Baati, L. Njim, L. Manchego, F. Neffati, N. Abdeljelil, S. Saguem, C. Serre, M. F. Najjar, A. Zakhama, P. Horcajada "Metal-Organic Frameworks as Efficient Oral Detoxifying Agents." *J. Am. Chem. Soc.* 140 (2018) 9581-9586.
- 26- S. Rojas, I. Colinet, D. Cunha, T. Hidalgo, F. Salles, C. Serre, N. Guillou, P. Horcajada "Toward Understanding Drug Incorporation and Delivery from Biocompatible Metal-Organic Frameworks in View of Cutaneous Administration." *ACS Omega* 3 (2018) 2994-3003.
- 27- P. Rouschmeyer, N. Guillou, C. Serre, G. Clavier, C. Allain, T. Devic "Coordination polymers built up from an s-tetrazine derived ligand and rare-earth ions: from a sequential dimensional expansion to organic-inorganic energy transfer." *Dalton Trans.* 47 (2018) 10715-10720.
- 28- A. Sabetghadam, X. L. Liu, M. Benzaqui, E. Gkaniatsou, A. Orsi, M. M. Lozinska, C. Sicard, T. Johnson, N. Steunou, P. A. Wright, C. Serre, J. Gascon, F. Kapteijn "Influence of Filler Pore Structure and Polymer on the Performance of MOF-Based Mixed-Matrix Membranes for CO<sub>2</sub> Capture." *Chem.-Eur. J.* 24 (2018) 7949-7956.
- 29- W. Salomon, A. Dolbecq, C. Roch-Marchal, G. Paille, R. Dessapt, P. Mialane, H. Serier-Brault "A Multifunctional Dual-Luminescent Polyoxometalate@Metal-Organic Framework EuW<sub>10</sub>@UiO-67 Composite as Chemical Probe and Temperature Sensor." *Front. Chem.* 6 (2018).
- 30- W. Salomon, E. Riviere, X. Lopez, N. Suaud, P. Mialane, M. Haouas, A. Saad, J. Marrot, A. Dolbecq "Bicapped Keggin polyoxomolybdates: discrete species and experimental and theoretical investigations on the electronic delocalization in a chain compound." *Dalton Trans.* 47 (2018) 10636-10645.
- 31- X. Unamuno, E. Imbuluzqueta, F. Salles, P. Horcajada, M. J. Blanco-Prieto "Biocompatible porous metal-organic framework nanoparticles based on Fe or Zr for gentamicin vectorization." *Eur. J. Pharm. Biopharm.* 132 (2018) 11-18.
- 32- O. Veselska, L. W. Cai, D. Podbevsek, G. Ledoux, N. Guillou, G. Pilet, A. Fateeva, A. Demessence "Structural Diversity of Coordination Polymers Based on a Heterotopic Ligand: Cu(II)-Carboxylate vs Cu(I)-Thiolate." *Inorg. Chem.* 57 (2018) 2736-2743.
- 33- H. Voisin, C. Aime, A. Vallee, T. Coradin, C. Roux "A flexible polymer-nanoparticle hybrid material containing triazole-based Fe(II) with spin crossover properties for magneto-optical applications." *Inorg. Chem. Front.* 5 (2018) 2140-2147.
- 34- G. A. Volpato, A. Bonetto, A. Marcomini, P. Mialane, M. Bonchio, M. Natali, A. Sartorel "Proton coupled electron transfer from Co<sub>3</sub>O<sub>4</sub> nanoparticles to photogenerated Ru(bpy)<sub>3</sub>(3+): base catalysis and buffer effect." *Sustain. Energ. Fuels* 2 (2018) 1951-1956.
- 35- S. Wang, J. S. Lee, M. Wahiduzzaman, J. Park, M. Muschi, C. Martineau-Corcos, A. Tissot, K. H. Cho, J. Marrot, W. Shepard, G. Maurin, J. S. Chang, C. Serre "A robust large-pore zirconium carboxylate metal-organic framework for energy-efficient water-sorption-driven refrigeration." *Nat. Energy* 3 (2018) 985-993.
- 36- S. J. Wang, T. Kitao, N. Guillou, M. Wahiduzzaman, C. Martineau-Corcos, F. Nouar, A. Tissot, L. Binet, N. Ramsahye, S. Devautour-Vinot, S. Kitagawa, S. Seki, Y. Tsutsui, V. Briois, N. Steunou, G. Maurin, T. Uemura, C. Serre "A phase transformable ultrastable titanium-carboxylate framework for photoconduction." *Nat. Commun.* 9 (2018).
- 37- Y. Q. Ye, C. Martineau-Corcos, F. Taulelle, Y. Nishiyama "Maximizing the sensitivity in C-13 cross-polarization magic-angle-spinning solid-state NMR measurements with flip-back pulses." *J. Magn. Reson.* 294 (2018) 122-127.
- 38- S. S. Zhang, R. J. Liu, S. W. Li, A. Dolbecq, P. Mialane, L. Suo, L. H. Bi, B. F. Zhang, T. B. Liu, C. X. Wu, L. K. Yan, Z. M. Su, G. J. Zhang, B. Keita "Simple and efficient polyoxomolybdate-mediated synthesis of novel graphene and metal nanohybrids for versatile applications." *J. Colloid Interface Sci.* 514 (2018) 507-516.