



Bipyridinium-carboxylate ligands towards functional porous coordination polymers

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| Auteur | Dul, Marie-Claire [1], Toma, Oksana [2], Okomba, Jean-Michel Tossoukpé [3], Pineau, Thomas [4], Allain, Magali [5], Mercier, Nicolas [6] |
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| Mots-clés | bipyridinium [7], molecular recognition [8], photochromism [9], porous coordination polymers [10] |
| Résumé en anglais | Porous coordination polymers or metal–organic frameworks have focused attention going from synthetic strategy to applications in heterogeneous catalysis, molecular recognition and gas storage. Our approach consists in combining the coordination versatility of carboxylate functions to electro-active viologen derivatives (N,N'-disubstituted 4,4'-bipyridinium salts) with general formula (OOC ₆ H ₄) ₂ (4,4'-bipy) in order to synthesized new porous coordination polymers for gas storage and redox mediators with optical and magnetic properties. In addition to act as charge-separated organic linkers, these pyridinium-carboxylate ligands will i) afford a cationic surface to enhance the interactions with guests and ii) exhibit reversible redox states involving monocationic radicals with good stability and large absorptions coefficients in the visible range. |
| URL de la notice | http://okina.univ-angers.fr/publications/ua10805 [11] |

Liens

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