



Topological and packing mode modification for solid-state emission enhancement of bis(perfluorostyryl)furan derivatives

Submitted by Pierre Frère on Mon, 08/08/2016 - 11:43

Titre	Topological and packing mode modification for solid-state emission enhancement of bis(perfluorostyryl)furan derivatives
Type de publication	Article de revue
Auteur	Faurie, Alexandre [1], Mallet, Charlotte [2], Allain, Magali [3], Skene, William G [4], Frère, Pierre [5]
Editeur	Royal Society of Chemistry
Type	Article scientifique dans une revue à comité de lecture
Année	2016
Langue	Anglais
Date	Jan-01-2016
Numéro	8
Pagination	6728-6734
Volume	40
Titre de la revue	New J. Chem.
ISSN	1144-0546
Résumé en anglais	An unsymmetric bis(perfluorostyryl)furan with a cyanovinyl unit was prepared (F1). Its crystallographic structure was resolved along with its cyano vinylene (1) and unsubstituted (2) aldehyde precursors. F1 was found to form ribbons involving C-H...F interactions, while also having multiple intermolecular contacts, including C-F...F π and π - π interactions. These contacts also occurred when F1 aggregated in 9 : 1 water/THF mixtures. When the supramolecular contacts are engaged, the emission intensity of F1 increases, with absolute emission yields of 9 and 25% occurring in aggregates and powder, respectively.
URL de la notice	http://okina.univ-angers.fr/publications/ua14851 [6]
DOI	10.1039/C5NJ03561A [7]
Titre abrégé	New J. Chem.

Liens

- [1] <http://okina.univ-angers.fr/alfaurie/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=2799](http://okina.univ-angers.fr/publications?f[author]=2799)
- [3] <http://okina.univ-angers.fr/magali.allain/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=18237](http://okina.univ-angers.fr/publications?f[author]=18237)
- [5] <http://okina.univ-angers.fr/pierre.frere/publications>
- [6] <http://okina.univ-angers.fr/publications/ua14851>
- [7] <http://dx.doi.org/10.1039/C5NJ03561A>

