



In Solution Sensitization of Er(III) Luminescence by the 4-Tetrathiafulvalene-2,6-pyridinedicarboxylic Acid Dimethyl Antenna Ligand

Submitted by Emmanuel Lemoine on Thu, 02/06/2014 - 11:11

Titre	In Solution Sensitization of Er(III) Luminescence by the 4-Tetrathiafulvalene-2,6-pyridinedicarboxylic Acid Dimethyl Antenna Ligand
Type de publication	Article de revue
Auteur	Pointillart, F. [1], Bourdolle, A. [2], Cauchy, Thomas [3], Maury, O. [4], Le Gal, Y. [5], Golhen, S. [6], Cador, O. [7], Ouahab, L. [8]
Editeur	American Chemical Society
Type	Article scientifique dans une revue à comité de lecture
Année	2012
Langue	Anglais
Date	01/2012
Numéro	2
Pagination	978-984
Volume	51
Titre de la revue	Inorganic Chemistry
ISSN	0020-1669
Mots-clés	charge-transfer [9], chromophores [10], energy-transfer [11], helical complexes [12], lanthanide building-blocks [13], luminescence [14], magnetic molecular materials [15], Near-infrared [16], State [17], TTF [18], ytterbium [19]
Résumé en anglais	In the [Er(hfac)(3)(L)](2) complex (1) (L = 4-tetrathiafulvalene-2,6-pyridinedicarboxylic acid dimethyl ester), the Er(III) ion is bonded to the tridentate coordination site. Electrochemical and photophysical measurements in solution reveal that the tetrathiafulvalene moiety is a versatile antenna for erbium luminescence sensitization at 6540 cm ⁻¹ upon excitation in the low-energy charge transfer transition (donor to acceptor charge transfer) at 16600 cm ⁻¹ assigned via time-dependent density functional theory calculations.
URL de la notice	http://okina.univ-angers.fr/publications/ua2669 [20]
DOI	10.1021/ic202045a [21]

Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=3440](http://okina.univ-angers.fr/publications?f[author]=3440)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=3441](http://okina.univ-angers.fr/publications?f[author]=3441)
- [3] <http://okina.univ-angers.fr/thomas.cauchy/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=3442](http://okina.univ-angers.fr/publications?f[author]=3442)
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=3443](http://okina.univ-angers.fr/publications?f[author]=3443)
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=3444](http://okina.univ-angers.fr/publications?f[author]=3444)

- [7] [http://okina.univ-angers.fr/publications?f\[author\]=3445](http://okina.univ-angers.fr/publications?f[author]=3445)
- [8] [http://okina.univ-angers.fr/publications?f\[author\]=3384](http://okina.univ-angers.fr/publications?f[author]=3384)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=5424](http://okina.univ-angers.fr/publications?f[keyword]=5424)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=5322](http://okina.univ-angers.fr/publications?f[keyword]=5322)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=5462](http://okina.univ-angers.fr/publications?f[keyword]=5462)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=5461](http://okina.univ-angers.fr/publications?f[keyword]=5461)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=5459](http://okina.univ-angers.fr/publications?f[keyword]=5459)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=5460](http://okina.univ-angers.fr/publications?f[keyword]=5460)
- [15] [http://okina.univ-angers.fr/publications?f\[keyword\]=5458](http://okina.univ-angers.fr/publications?f[keyword]=5458)
- [16] [http://okina.univ-angers.fr/publications?f\[keyword\]=4471](http://okina.univ-angers.fr/publications?f[keyword]=4471)
- [17] [http://okina.univ-angers.fr/publications?f\[keyword\]=4446](http://okina.univ-angers.fr/publications?f[keyword]=4446)
- [18] [http://okina.univ-angers.fr/publications?f\[keyword\]=5426](http://okina.univ-angers.fr/publications?f[keyword]=5426)
- [19] [http://okina.univ-angers.fr/publications?f\[keyword\]=5463](http://okina.univ-angers.fr/publications?f[keyword]=5463)
- [20] <http://okina.univ-angers.fr/publications/ua2669>
- [21] <http://dx.doi.org/10.1021/ic202045a>

Publié sur *Okina* (<http://okina.univ-angers.fr>)