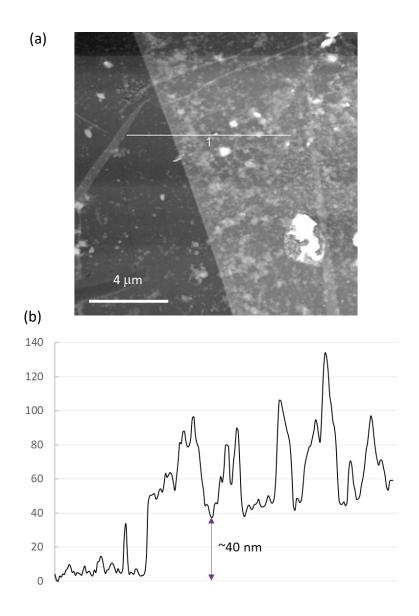
SUPPLEMENTARY INFORMATION

Redox-active, luminescent coordination nanosheet capsules containing magnetite

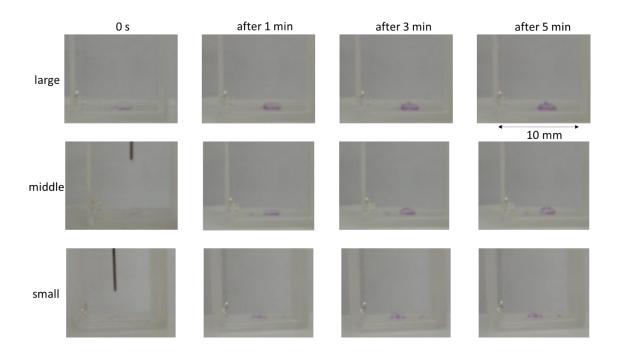
Ryo Arai¹, Mengjuan Li^{1,2}, Ryojun Toyoda¹, Hiroaki Maeda^{1,3}, and Hiroshi

Nishihara^{1,3*}

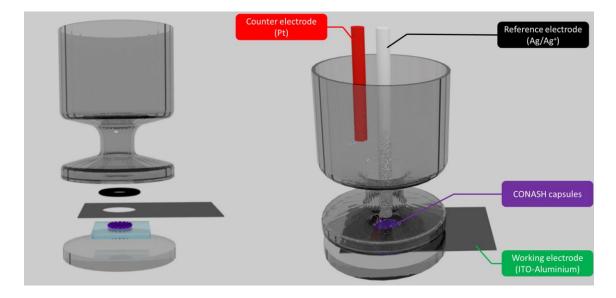
¹ Department of Chemistry, School of Science, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan. ² College of Textile Science and Engineering, Jiangnan University, Wuxi, Jiangsu, China. ³ Research Center for Science and Technology, Tokyo University of Science, 2641 Yamazaki, Noda, Chiba, 278-8510 Japan. *e-mail nisihara@rs.tus.ac.jp



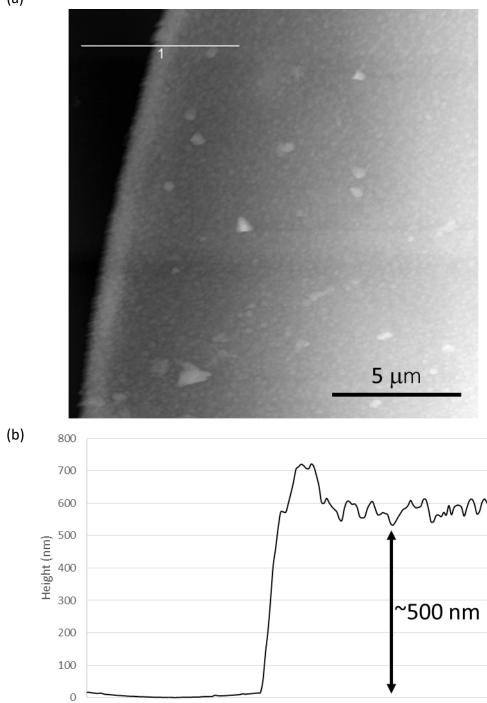
Supplementary Figure 1 AFM analysis of a Fe(tpy)₂ CONASH capsule fabricated by the dropping method. (a) A topological image. (b) The height profile along line 1.



Supplementary Figure 2| Photographs of CONASH capsules formed after dropping a DCM solution of ligand 1 in an aqueous solution of Fe(BF₄)₂ and SDS.

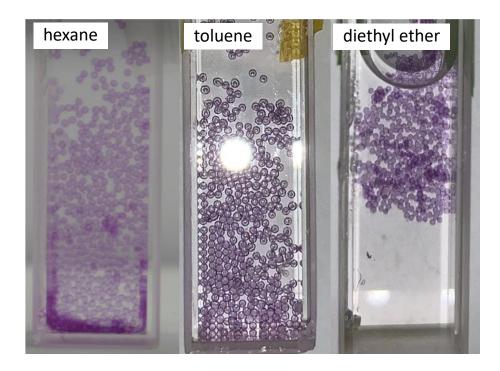


Supplementary Figure 3 | Setup of electrochemical measurement of CONASH capsules.

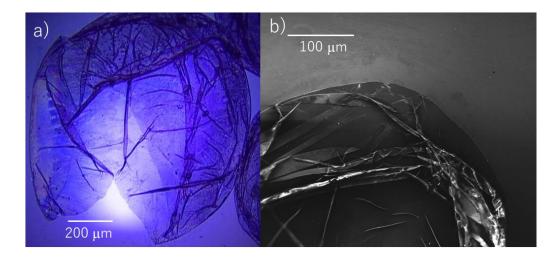


Supplementary Figure 4 AFM analysis of a Fe(tpy)₂ CONASH capsule fabricated by the syringe pump method. (a) A topological image. (b) The height profile along line 1.

(a)



Supplementary Figure 5| Images of Fe(tpy)₂ CONASH capsules collected in hexane, toluene and diethyl ether.



Supplementary Figure 6 An optical microscope image of a $Fe(tpy)_2$ CONASH capsule on a glass plate (a), and a SEM image of a $Fe(tpy)_2$ CONASH capsule on silicon fabricated by the syringe pump method (b).