UC San Diego UC San Diego Previously Published Works

Title

Correction: Self-healing mixed matrix membranes containing metal-organic frameworks

Permalink

https://escholarship.org/uc/item/8b20d4tg

Authors

Mondal, Prantik Cohen, Seth M

Publication Date

2023-09-14

DOI

10.1039/d3sc90156d

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

Correction: Self-healing mixed matrix membranes containing metal–organic frameworks

Prantik Mondal and Seth M. Cohen *

Correction for 'Self-healing mixed matrix membranes containing metal-organic frameworks' by Mondal, P. *et al Chem Sci*, 2020, DOI: 10.1039/D2SC04345A. *Department of Chemistry and Biochemistry, University of California San Diego, La Jolla, CA 92093, USA. E-mail: scohen@ucsd.edu*

The authors regret that in the original article and supporting information, the chemical structure of the photo-initiator, 2,2-dimethoxy-2- phenylacetophenone (DMP) in Figure 1 and Figure S5 was incorrect. The correct versions of Figure 1 and Figure S5 are shown below.



Figure 1. Scheme for synthesizing **P1**-based MMMs with 30 wt% MOF_{*X*}-loading using thiol–ene 'photo-click' polymerization.



Figure S5. Scheme for synthesizing **P2**-based (control, not self-healing) MMMs with 30 wt% MOF-loading using thiol-ene 'photo-click' polymerization.

The authors also regret to note that there were errors in Section 2.4 of the supporting information describing the synthesis of UiO-66- NH_{2-170} . The correct version of the Section 2.4 is provided below.

2.4 Synthesis of UiO-66-NH₂₋₁₇₀

In an 8-dram scintillation glass vial with a Teflon-lined cap was placed zirconium(IV) chloride (0.061 g, 2.6 mmol), 2-aminoterephthalic acid (0.047 g, 2.6 mmol), 0.45 mL glacial acetic acid, and 15 mL DMF. The components were mixed and dissolved by sonicating the reaction mixture for 15 min. The vial was then placed into an isothermal oven and heated at 120 °C for 24 h. After cooling to room temperature, the particles were collected by centrifugation (fixed-angle rotor, 8000 rpm, 5 min), followed by washing with DMF (3×20 mL) and methanol (3×20 mL). The synthesis and workup procedure were repeated in parallel ten times (i.e, ten individual vials) and the products from all ten reactions were combined and re-suspended in the mixture of 50 mL of methanol, 50 mL of water, and 5 mL conc. HCl. The suspension was then heated to reflux (90 °C) for 18 h. Finally, the particles were again isolated by centrifugation (fixed-angle rotor, 8000 rpm, 5 min), washed with fresh methanol (200 mL), dried under vacuum overnight at 60 °C, and stored in a desiccator until further use.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.