

## Metal Organic Framework UiO-66 and UiO-66-NH<sub>2</sub> Based Adsorbents for Bilirubin Removal Used in Hemoperfusion

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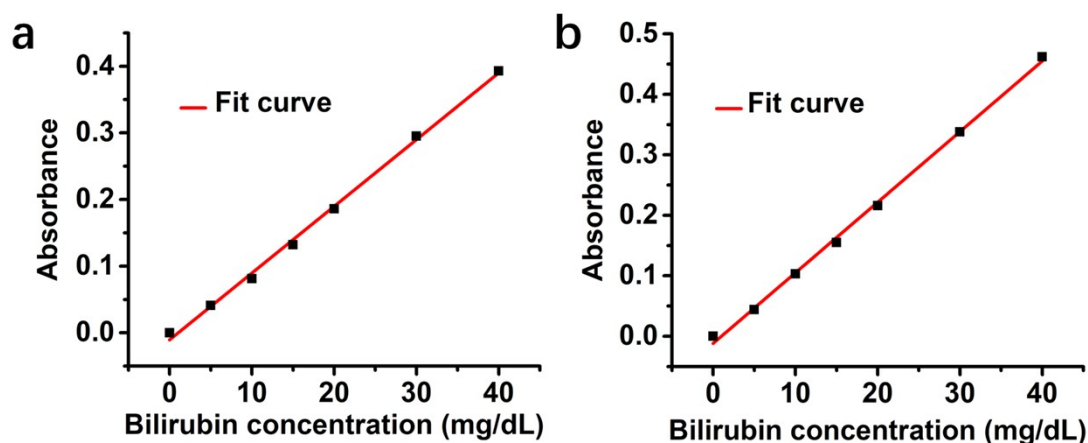


Figure S1 (a) Absorbance at 438 nm of bilirubin aqueous solution with different concentrations and its linear fitting standard curve. (b) Absorbance at 452 nm of bilirubin loaded BSA solution and its linear fitting standard curve. with different bilirubin concentrations.

**Table S1 equilibrium adsorption capacity at different initial concentrations of bilirubin in aqueous solution**

| Samples                      | Initial concentration of bilirubin in aqueous solution |          |          |          |          |          |
|------------------------------|--|----------|----------|----------|----------|----------|
|                              | 5 mg/dL  | 10 mg/dL | 15 mg/dL | 20 mg/dL | 30 mg/dL | 40 mg/dL |
| UiO-66-NH <sub>2</sub> -1    | 10.4923  | 19.8403  | 30.1863  | 42.5283  | 71.2043  | 102.5416 |
| UiO-66-NH <sub>2</sub> -1.45 | 10.4923  | 24.4977  | 35.5090  | 45.5223  | 75.1963  | 104.5376 |
| UiO-66-NH <sub>2</sub> -1.9  | 10.8250  | 26.1610  | 39.5010  | 51.8430  | 80.1863  | 110.8583 |

|          |         |         |         |         |         |          |
|----------|---------|---------|---------|---------|---------|----------|
| UiO-66-1 | 11.1577 | 27.4917 | 43.4930 | 59.8270 | 91.8297 | 124.4977 |
|----------|---------|---------|---------|---------|---------|----------|

**Table S2 equilibrium adsorption capacity at different initial concentrations of bilirubin in plasma**

| Samples                      | Initial concentration of bilirubin in plasma |          |          |          |          |          |
|------------------------------|--|----------|----------|----------|----------|----------|
|                              | 5 mg/dL                                      | 10 mg/dL | 15 mg/dL | 20 mg/dL | 30 mg/dL | 40 mg/dL |
| UiO-66-NH <sub>2</sub> -1    | 6.3203                                       | 12.3977  | 18.1328  | 23.6203  | 33.2467  | 41.7109  |
| UiO-66-NH <sub>2</sub> -1.45 | 10.2915                                      | 20.3236  | 30.0175  | 39.0408  | 56.7236  | 71.9517  |
| UiO-66-NH <sub>2</sub> -1.9  | 11.3021                                      | 22.1952  | 32.7536  | 42.9792  | 63.1139  | 81.1282  |
| UiO-66-1                     | 9.1811                                       | 18.1514  | 26.9275  | 35.5877  | 52.7448  | 69.0840  |