**Supporting information**

 **Investigation of structural and optical properties of pure and metal ion-doped TiO2 mesoporous prepared by evaporation induced self-assembly method**

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 **Table S1** Expemintal details for synthesis of transition metals doped OMP

|  |  |  |
| --- | --- | --- |
| Samples  |  precursor  | Amount (g) |
| OMT  | Ti(OBu)4 | 3.4 |
| Fe-OMT  | Fe(Nt)3 | 0.1 |
| Mn-OMT  | Mn(Nt)2   | 0.062 |
| Ni-OMT  | Ni(Nt)2   | 0.073 |

|  |  |  |
| --- | --- | --- |
| Element | Weight% | Atomic% |
| O K | 21.39 | 44.89 |
| Ti K | 78.61 | 55.11 |
| Total | 100 |  |

**a**

|  |  |  |
| --- | --- | --- |
| Element | Weight% | Atomic% |
| O K | 35.54 | 60.33 |
| Ti K | 62.67 | 35.76 |
| Fe K | 3.79 | 3.91 |
| Total | 100 |  |

**b**

**d**

**c**

|  |  |  |
| --- | --- | --- |
| Element | Weight% | Atomic% |
| O K | 40.44 | 66.97 |
| Ti K | 55.87 | 29.70 |
| Mn K | 3.68 | 3.33 |
| Total | 100 |  |

|  |  |  |
| --- | --- | --- |
| Element | Weight% | Atomic% |
| O K | 39.51 | 61.15 |
| Ti K | 56.68 | 30.49 |
| Ni K | 3.81 | 3.36 |
| Total | 100 |  |

**Figure S1.** EDX images of pure OMT (a), Fe/OMT (b), Mn/OMT (c), and Ni/OMT (d) materials prepared from EISA route.

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**Figure S2.** Comparative XPS surface spectra of pure and TM-OMT fabricated by EISA approaches.

**Table S2.** The loading weight (g) of TM in TM-TiO2 mesoporous samples.

|  |  |  |  |
| --- | --- | --- | --- |
|  Sample |  Fe |  Mn |  Ni |
|  Theory values |  0.068 |  0.062  |  0.0621 |
|  ICP values |  0.058 |  0.0544 |  0.0413 |