Supplementary information 1

Synthesis, characterization, and application of mixed-addenda silicovanadotungastate polyoxometalate integrated into nanoporous MIL-101(Cr) for the quick removal of organic dyes from water

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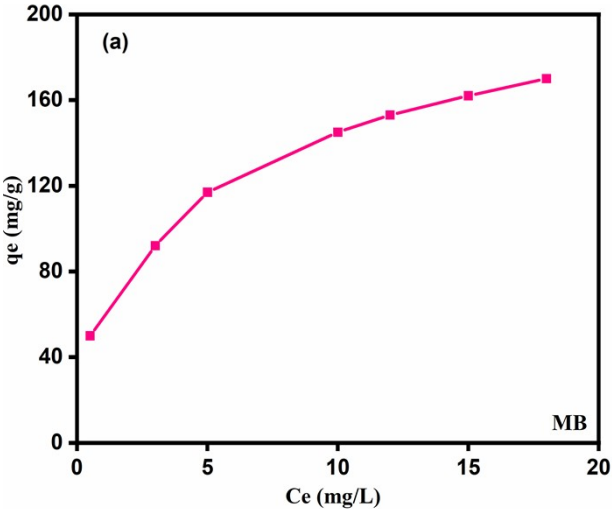
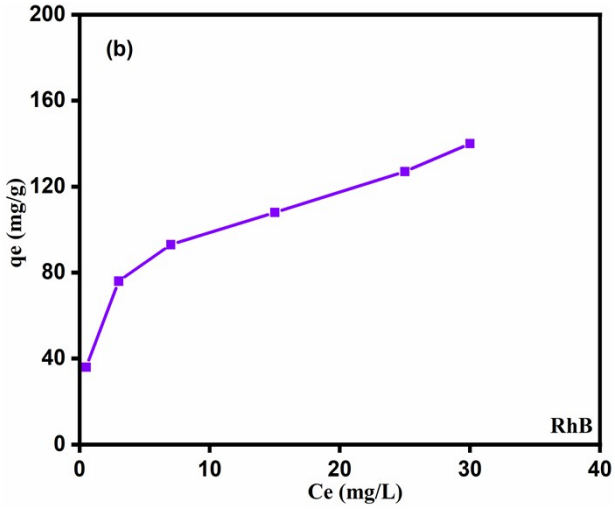
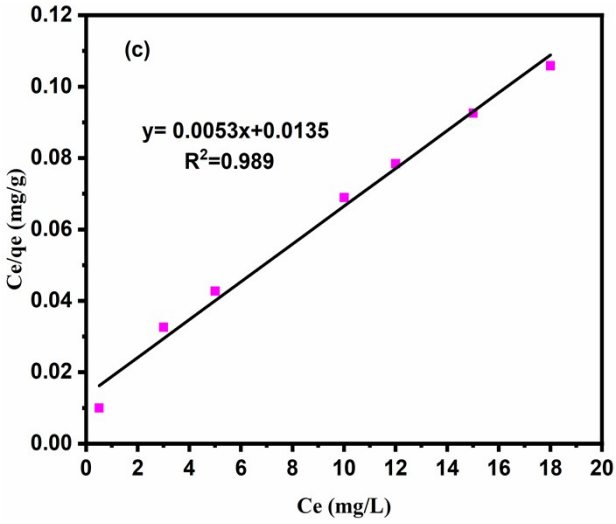
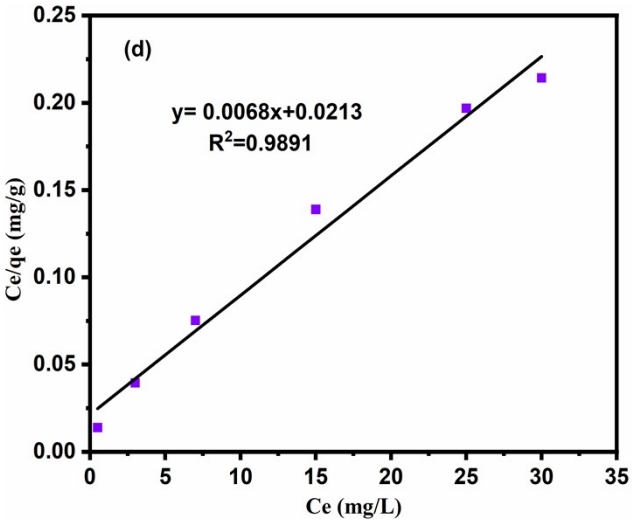

(a)
MB
qe (mg/g)
Ce (mg/L)
0
40
80
120
160
200
0
5
10
15
20


(b)
RhB
qe (mg/g)
Ce (mg/L)
0
40
80
120
160
200
0
10
20
30
40


(c)
y= 0.0053x+0.0135
R2=0.989
Ce/qe (mg/g)
Ce (mg/L)
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0
2
4
6
8
10
12
14
16
18
20


(d)
y= 0.0068x+0.0213
R2=0.9891
Ce/qe (mg/g)
Ce (mg/L)
0.00
0.05
0.10
0.15
0.20
0.25
0
5
10
15
20
25
30
35

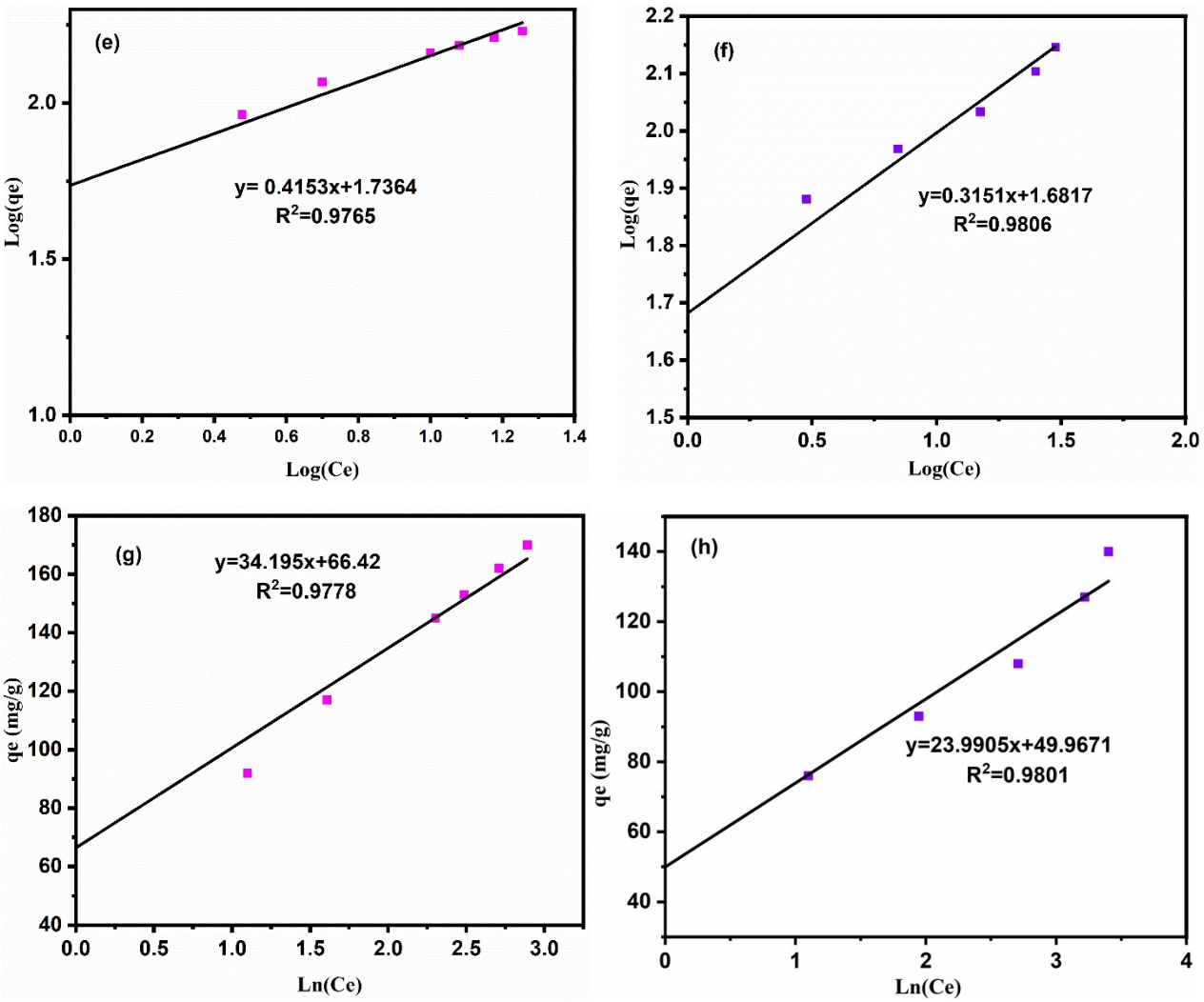


Fig.S1. Adsorption isotherms for dyes on SiW_9V_3@MIL-101(Cr) at different concentrations (a) MB, (b) RhB, (c) and (d) Langmuir adsorption isotherms, (e) and (f) Freundlich adsorption isotherms and (g) and (h) Temkin adsorption isotherms.

Supplementary information 2

Synthesis, characterization, and application of mixed-addenda silicovanadotungastate polyoxometalate integrated into nanoporous MIL-101(Cr) for the quick removal of organic dyes from water

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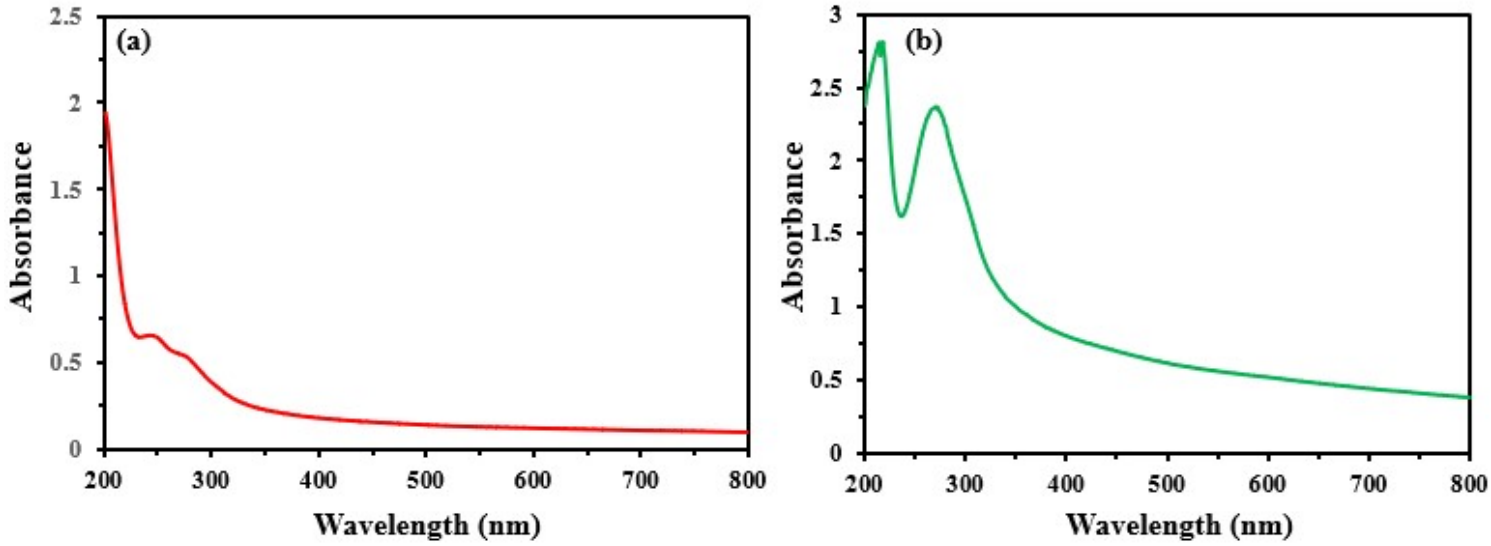

Fig.S1. UV-vis spectra of pure a) SiW_9V_3 and b) MIL-101(Cr)

Fig.S2. Adsorption isotherms for dyes on SiW_9V_3@MIL-101(Cr) at different concentrations (a) MB, (b) RhB, (c) and (d) Langmuir adsorption isotherms, (e) and (f) Freundlich adsorption isotherms and (g) and (h) Temkin adsorption isotherms.