

Figure S1. XRD patterns of Na-Mt(a), and MMT-12-2-12·2CH₃CO₃⁻ (A), MMT-12-2-12·2C₆H₅COO⁻ (B), MMT-12-2-12·2Br⁻ (C) under different CEC [0.4 CEC (b, i, p), 0.8 CEC (c, j, q), 1.2 CEC (d, k, r), 1.6 CEC (e, l, s), 2.0 CEC (f, m, t), 2.4 CEC (g, n, u), 2.8 CEC (h, o, v)] modification conditions

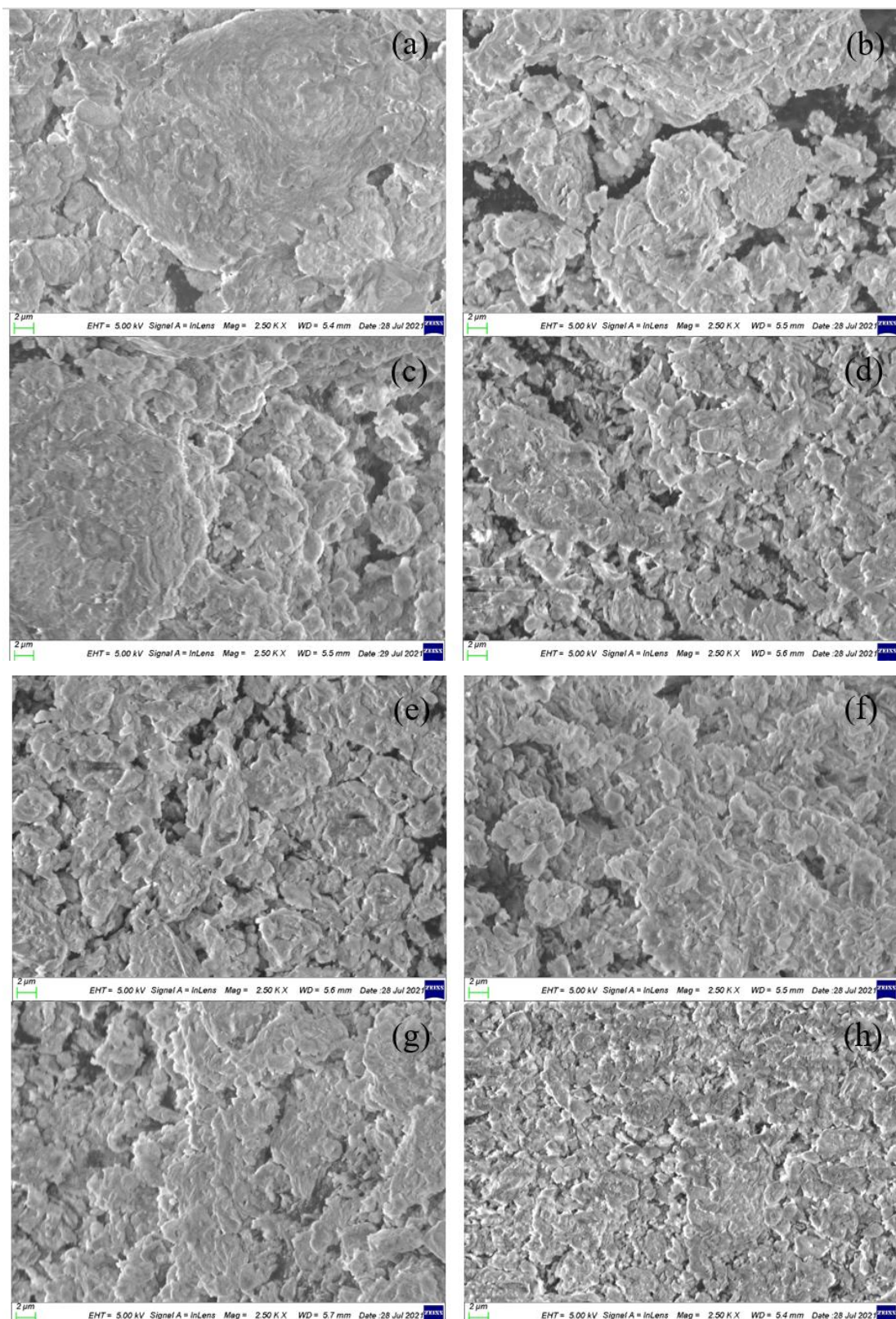


Figure S2. SEM images of Na-Mt (a), and MMT-12-2-12·2CH₃CO₃⁻ under different CEC modification conditions (b: 0.4 CEC, c: 0.8 CEC, d: 1.2 CEC, e: 1.6 CEC, f: 2.0 CEC, g: 2.4 CEC, h: 2.8 CEC)

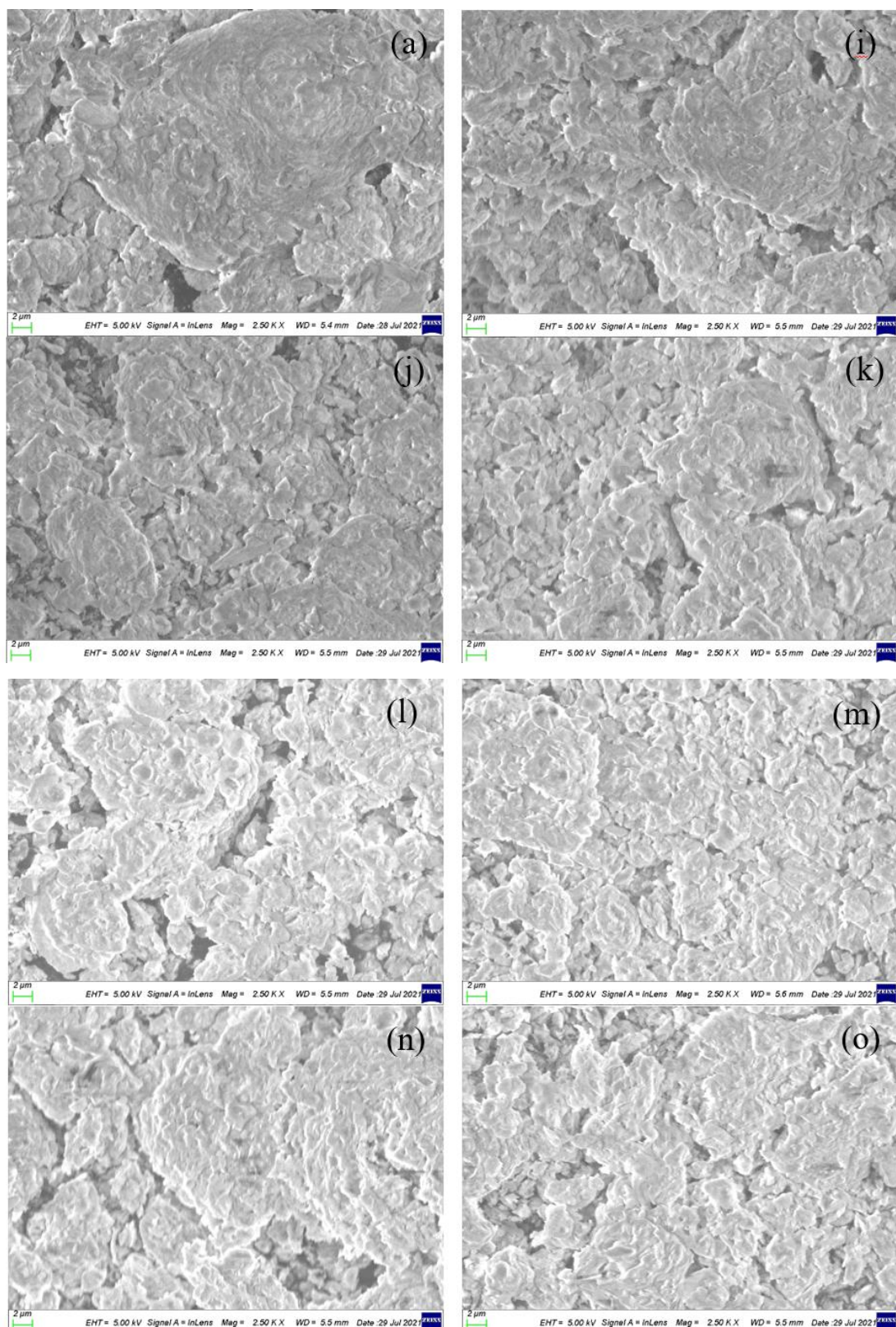


Figure S3. SEM images of Na-Mt (a), and MMT-12-2-12-2C₆H₅COO⁻ under different CEC modification conditions (i: 0.4 CEC, j: 0.8 CEC, k: 1.2 CEC, l: 1.6 CEC, m: 2.0 CEC, n: 2.4 CEC, o: 2.8 CEC)

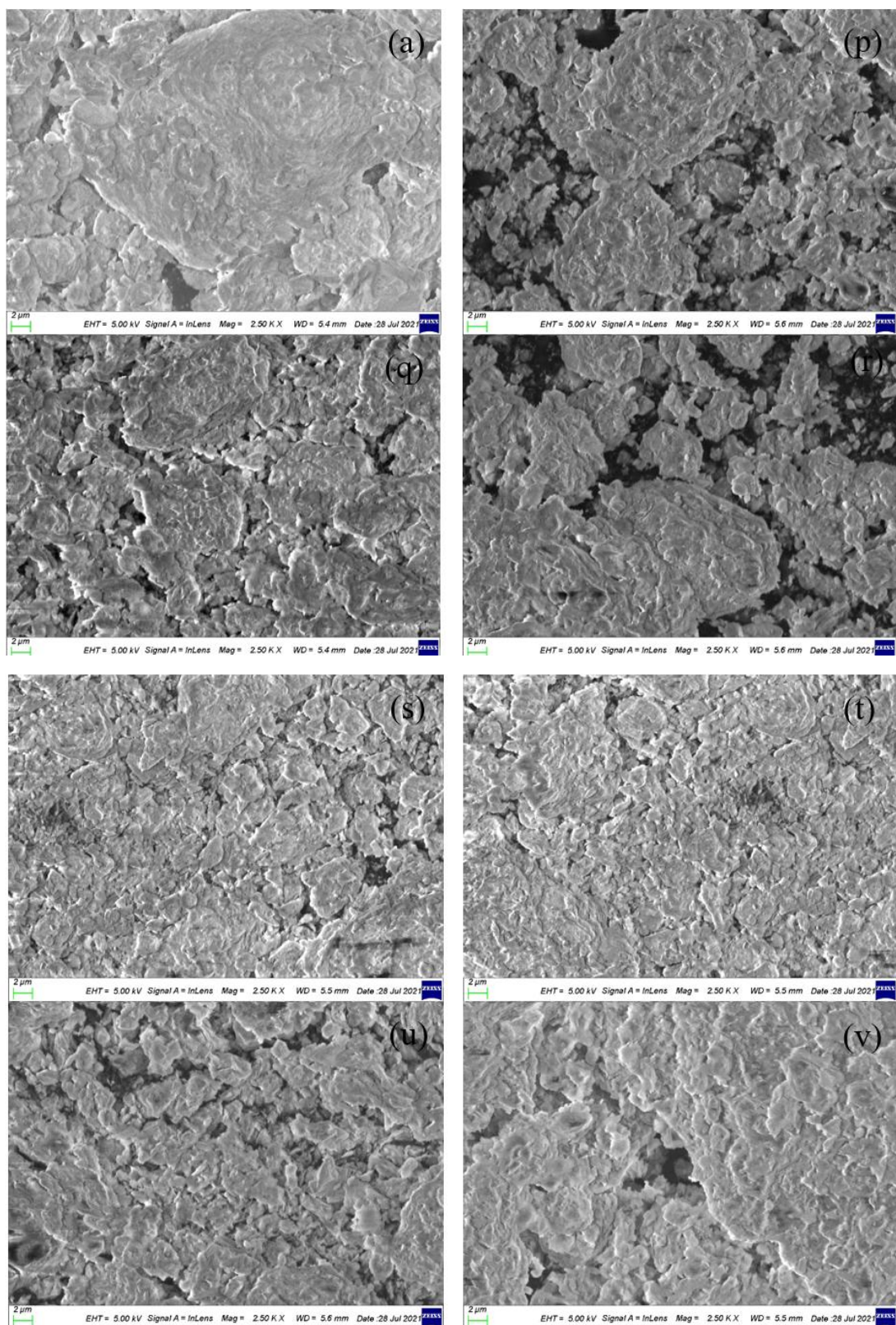


Figure S4. SEM images of Na-Mt (a), and MMT-12-2-12-2Br under different CEC modification conditions (p: 0.4 CEC, q: 0.8 CEC, r: 1.2 CEC, s: 1.6 CEC, t: 2.0 CEC, u: 2.4 CEC, v: 2.8 CEC)