Electronic Supplementary Information

Energy efficient and intermittently variable ammonia synthesis over mesoporous carbon-supported Cs-Ru nanocatalysts

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**Figure S11.** TPR-MS profiles \(m/z = 18\) of freshly prepared Cs-Ru catalysts.

**Figure S12.** HRTEM images and Ru particle size distributions of the used catalysts. (a) 2.5Cs-10Ru/MPC-AC, (b) 2.5Cs-10Ru/MPC-15, (c) 2.5Cs-10Ru/MPC-18, and (d) 2.5Cs-10Ru/MPC-21.

**Figure S13.** Wide-angle XRD patterns of used catalysts. (a) 2.5Cs-10Ru/AC, (b) 2.5Cs-10Ru/MPC-15, 2.5Cs-10Ru/MPC-18, and (d) 2.5Cs-10Ru/MPC-21.

**Figure S14.** Rate of ammonia synthesis as a function of reaction temperature over the 10Ru/MPC-18 and 2.5Cs/MPC-18 catalysts at an SV value of 9000 h⁻¹.
Table S1. TPR-MS data of the prepared Cs-Ru catalysts.

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