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## Potassium-promoted Ru-MCM-41 catalyst via in situ loading for

## effective low-temperature ammonia decomposition

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Fig. S1 Ammonia decomposition to hydrogen performance test setup



Fig. S2 TEM images of K-nRu-MCM-41 catalysts, (a) to (f) represent catalysts with n from 0 to 5, respectively



Figure S3 Particle size distribution of MCM-41 (a), 4Ru-MCM-41 (b) and K-4Ru-MCM-41 (c) catalysts