

XPS and Raman study of the active-sites on Molybdenum disulfide nanopetals for Photocatalytic removal of Rhodamine B and Doxycycline Hydrochloride

Xuefeng Ai, Hougang Fan*, Yijun Wang, Yumeng Guo, Xiaoyan Liu, LiliYang, Huilian Liu and
Jinghai Yang*

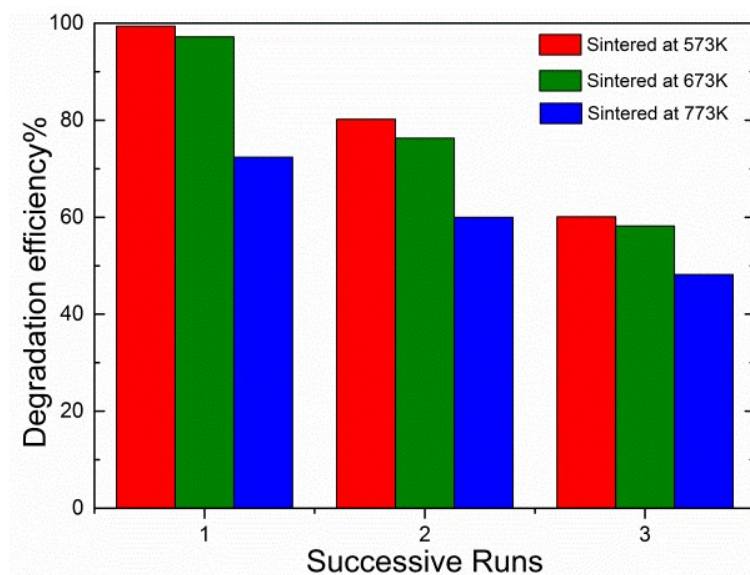


Figure S1. Photocatalytic degradation of RhB for three cycles.

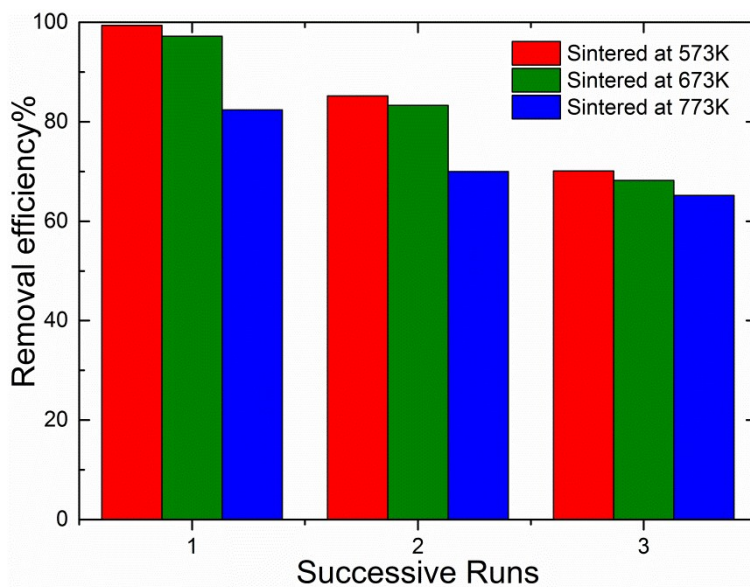


Figure S2. Photocatalytic removal of DCHC for three cycles.

Corresponding author: Hougang Fan and Jinghai Yang, Email: fanhougang@jlnu.edu.cn,
jhyang1@jlnu.edu.cn.

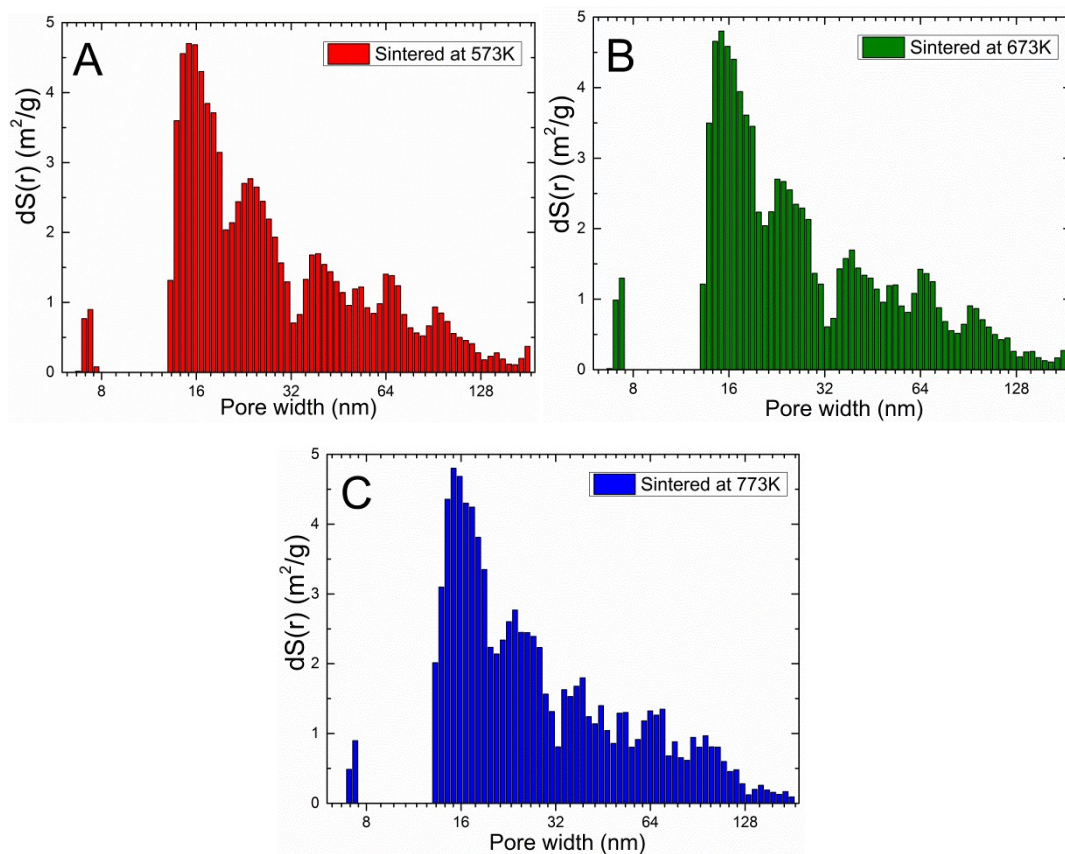


Figure S3. Pore diameter distribution of different MoS₂ nanopetals

Table S1. BET specific surface area of different samples.

| Sample | Pore volume (cm ³ /g) | BET specic surface(m ² /g) | Half pore width(nm) | Fitting error |
|------------------|-------------------------------------|--|------------------------|------------------|
| sintered at 573K | 0.845 | 141.974 | 66.883 | 1.353 % |
| sintered at 673K | 0.839 | 140.112 | 68.256 | 1.412 % |
| sintered at 773K | 0.840 | 140.534 | 69.923 | 1.580 % |

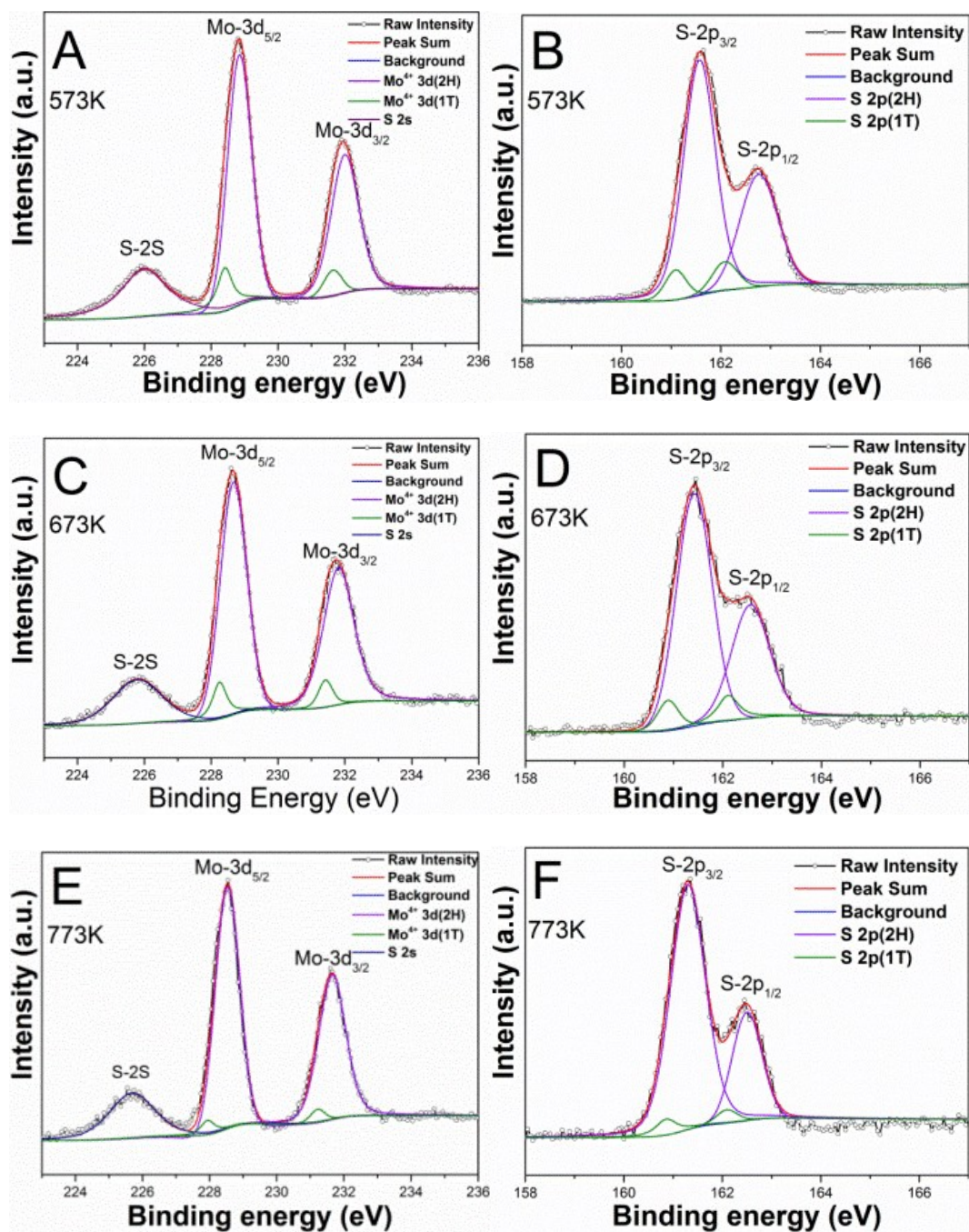


Figure S4. High-resolution XPS spectra of Mo-3d (A, C, E) and S-2p (B, D, F)