Supplementary Information for

Twinning Impact on the Structure and Hypotheses on the Growth Mechanism of Kermesite: Insights from Yunnan, China

Hong Yu[1,2,*], Denghong Wang[1], Zeying Zhu[1], Wenyuan Li[3], Dong Wang[1], Zhenyu Chen[1], Yike Li[1], Changhui Ke[1],

[1] Ministry of Natural Resources (MNR) Key Laboratory of Metallogeny and Mineral Assessment, Institute of Mineral Resources, Chinese Academy of Geological Sciences (CAGS), Beijing 100037, China 1; Hong Yu (coime_yh@hotmail.com), Denghong Wang (wangdenghong@vip.sina.com), Zeying Zhu (zhuzeying_nju@163.com), Dong Wang (wdong14@126.com), Zhenyu Chen (czy7803@163.com), Yike Li (like430@cags.ac.cn), Changhui Ke (kechanghuicags@126.com)

[2] China University of Geosciences (Beijing), Xueyuan Road 29, Beijing 100083, China 2; Hong Yu (coime_yh@hotmail.com)

[3] Key Laboratory for the Study of Focused Magmatism and Giant Ore Deposits, Ministry of Land and Resources, Xi'an Center of China Geological Survey, Xi'an 710054, P.R. China 3; Wenyuan Li (xalwenyuan@126.com)

* Correspondence: Hong Yu, coime_yh@hotmail.com

This file includes:

Figure S1-S2

SAED indexing is generated using SingleCrystal software[1].

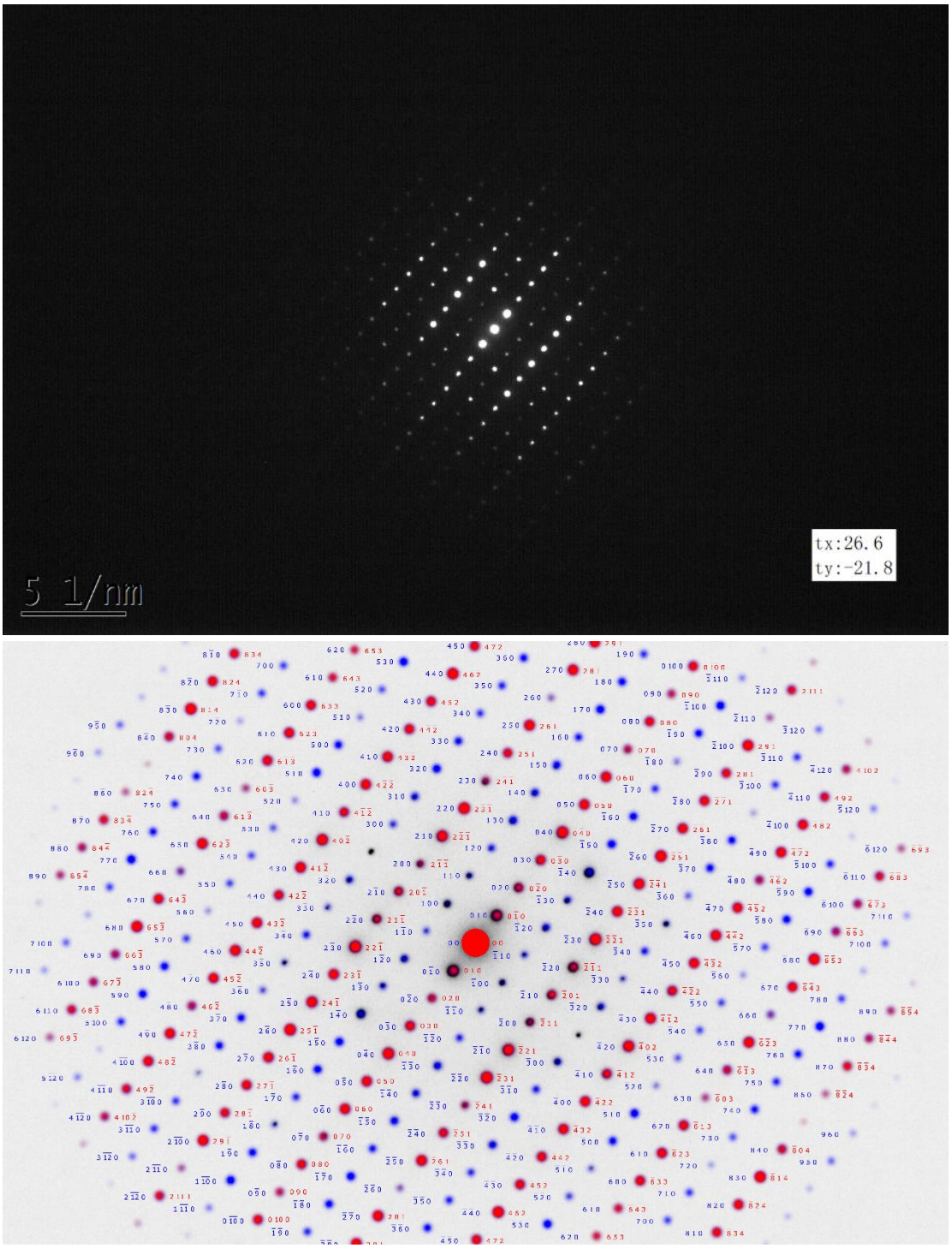

Figure S1 SAED indexing corresponding to Figure 4g or Figure 5a(1). The blue spots represent the matrix, while the red spots represent the twins of kermesite.

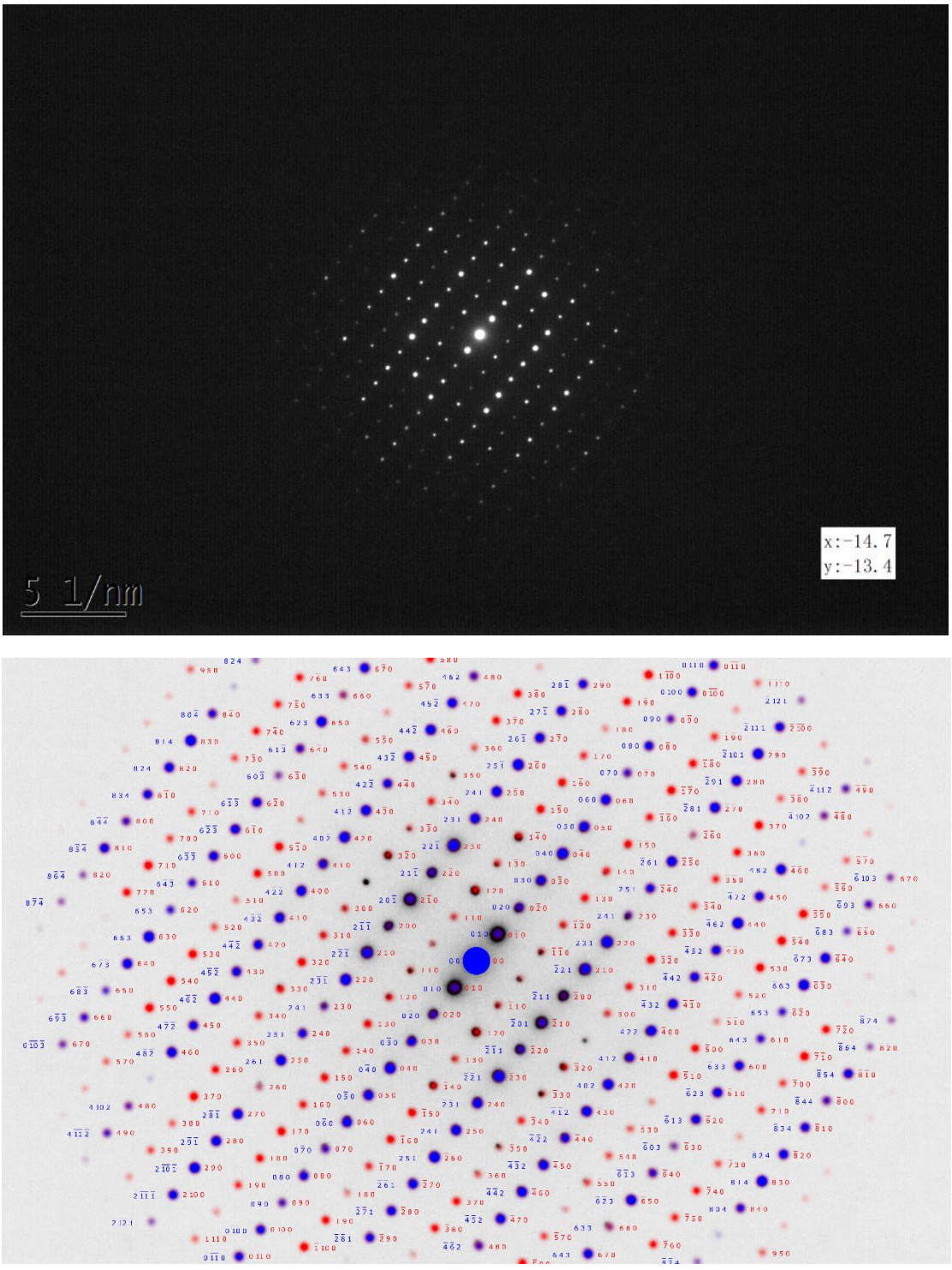

Figure S2 SAED indexing corresponding to Figure 4h or Figure 5a(6). The blue spots represent the matrix, while the red spots represent the twins of kermesite.

References:

1. Palmer, D. SingleCrystal 4: real-time multi-phase diffraction simulation. *J Appl Crystallogr* **2020**, 53, 860, doi:10.1107/S1600576720006378.