

Interaction of CO₂ with Oxygen Adatoms on Rutile

TiO₂(110)

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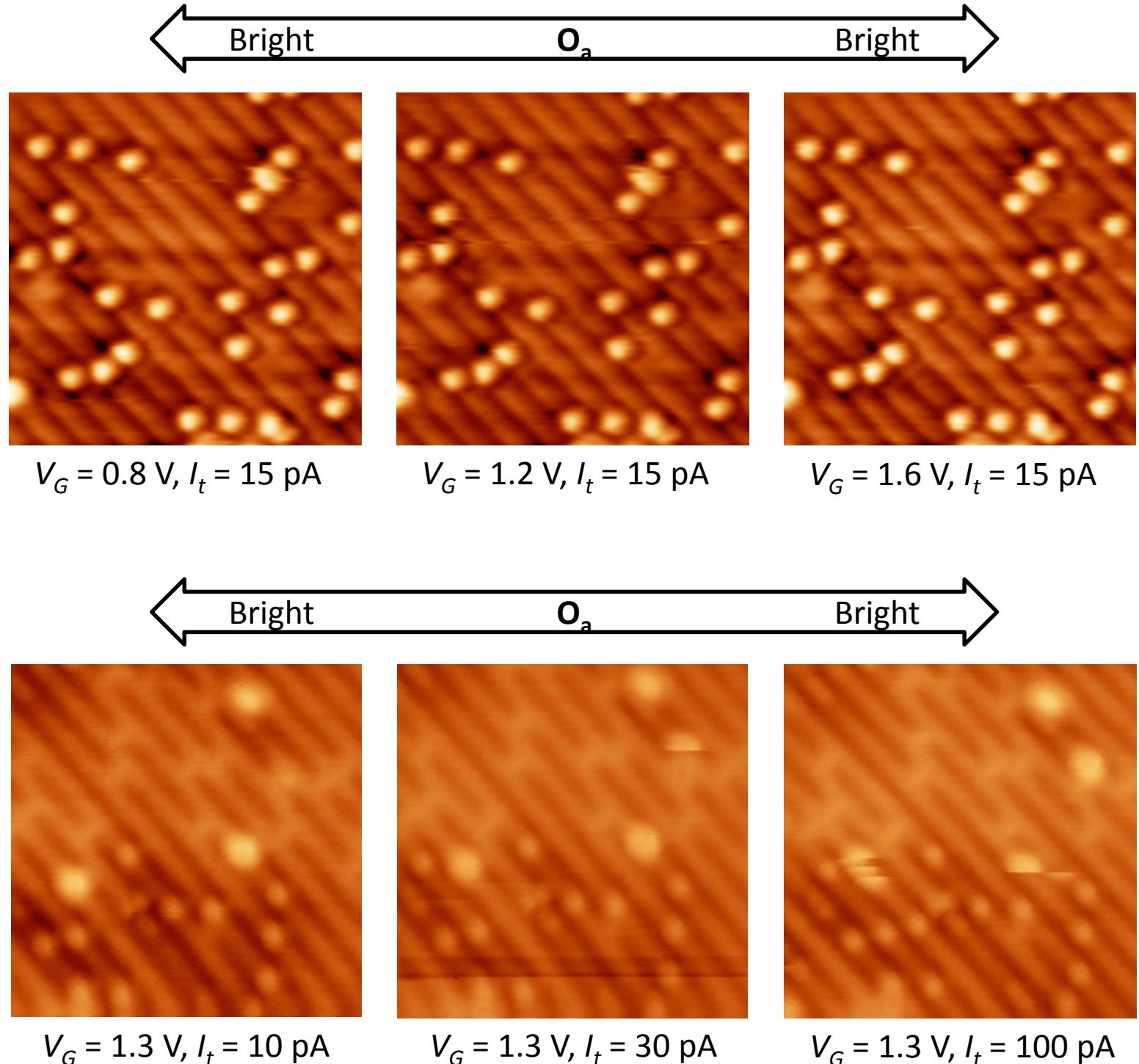


Figure S1. STM images ($8 \times 8 \text{ nm}^2$) illustrating the regular bright appearance of oxygen adatoms on $\text{TiO}_2(110)$ at different tunneling voltages and currents.

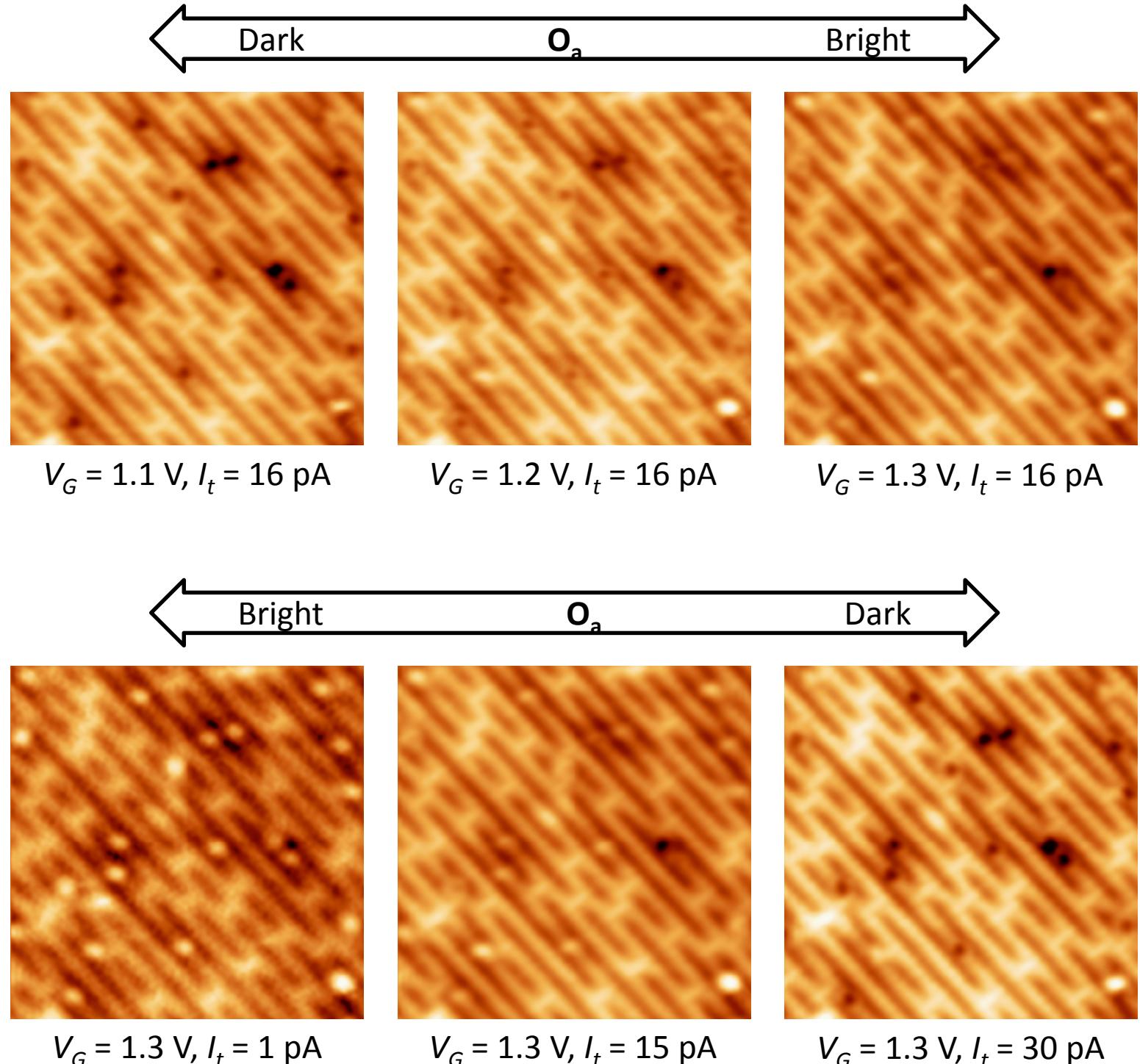


Figure S2. STM images ($10 \times 10 \text{ nm}^2$) illustrating the unusual dark appearance of oxygen adatoms on $\text{TiO}_2(110)$ at low tunneling voltages and high currents after exposing the STM tip to CO_2 .

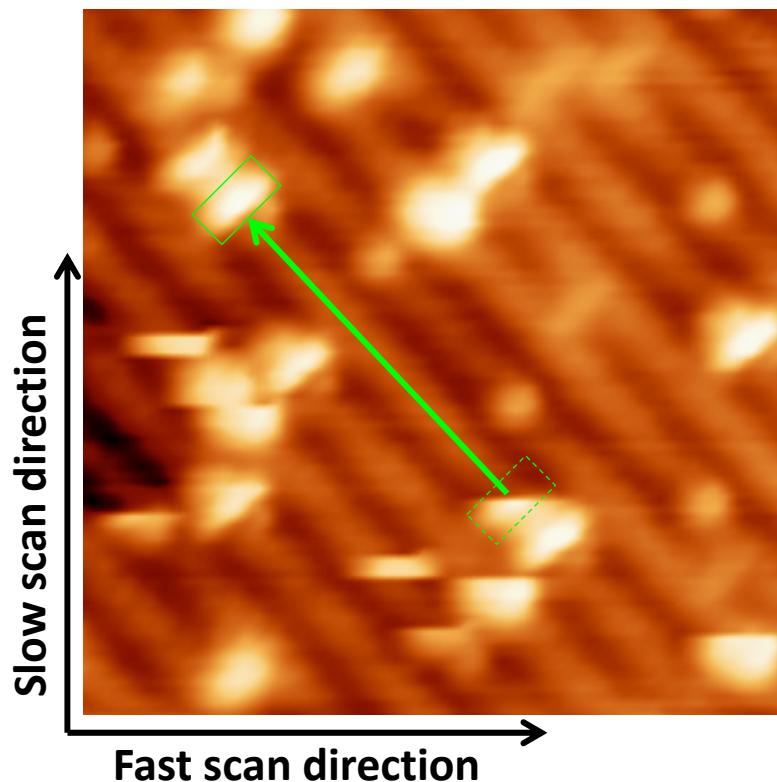


Figure S3. STM image illustrating tip-induced diffusion of CO₂ at 20 pA tunneling current (1.4 V, 6.5 \times 6.5 nm²). The CO₂ molecule diffused from bottom right to top left as indicated by the arrow.