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Tailoring Surface Reactivity of Metal Oxides

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Titanium oxide is receiving continued attention because of its importance as catalyst support, as a material to harvest solar energy for chemical transformations, and as a model metal oxide. In this talk, I will focus on the structure and defects (extrinsic and intrinsic) of less-studied TiO_2 surfaces; i.e., rutile (011)-2x1 and anatase (101), and their influence on surface reactivity.