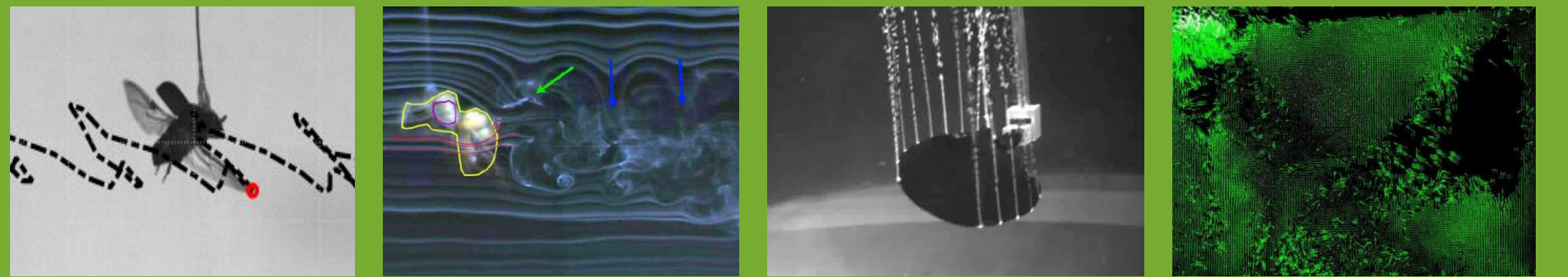


Research on the flight characteristics of beetles and the design of bionic aircraft

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Introduction



Insect flight observation Smoke line experiment Dynamic scaling model Particle Image Velocimetry

Qualitative methods

Quantitative analysis

Research methods of insect flight mechanism

Research status of insect-like aircraft

Motor drive mode

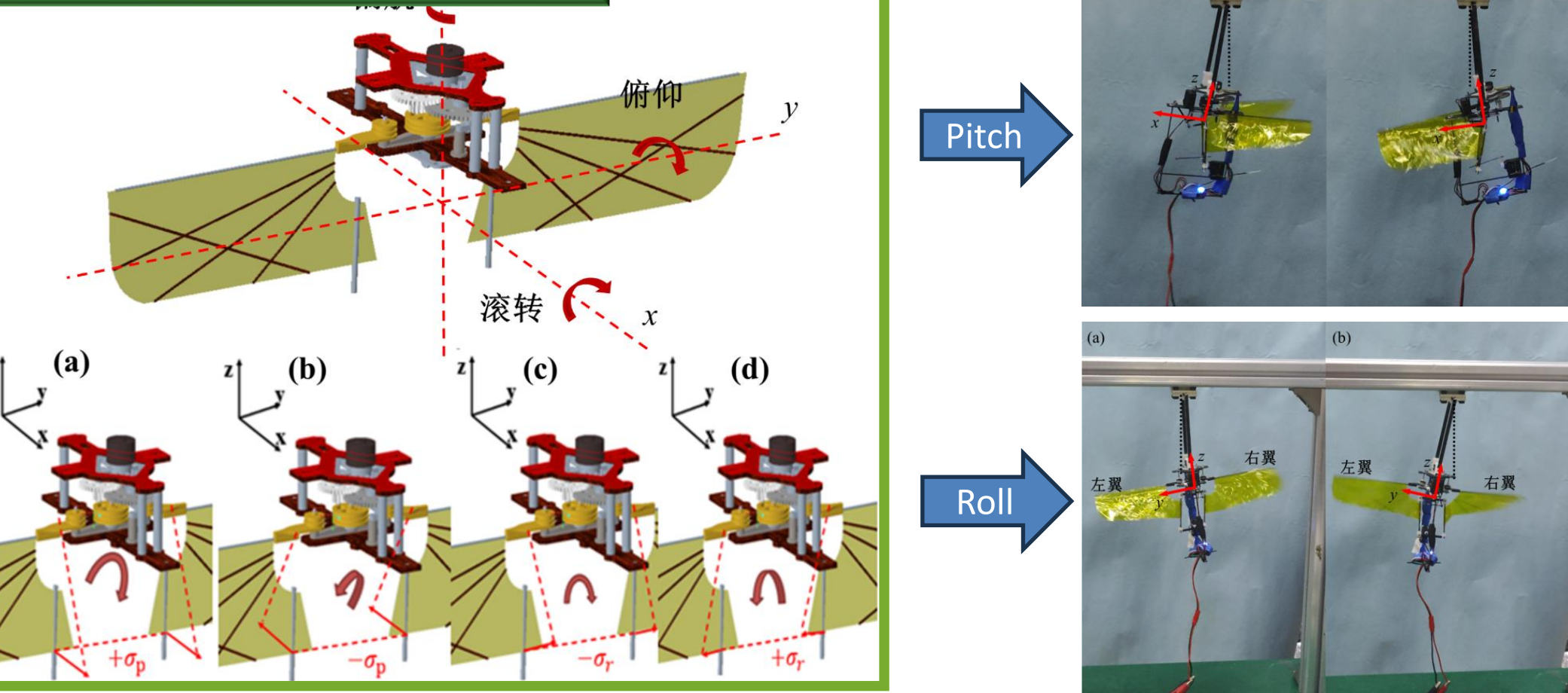


Non-motor drive mode

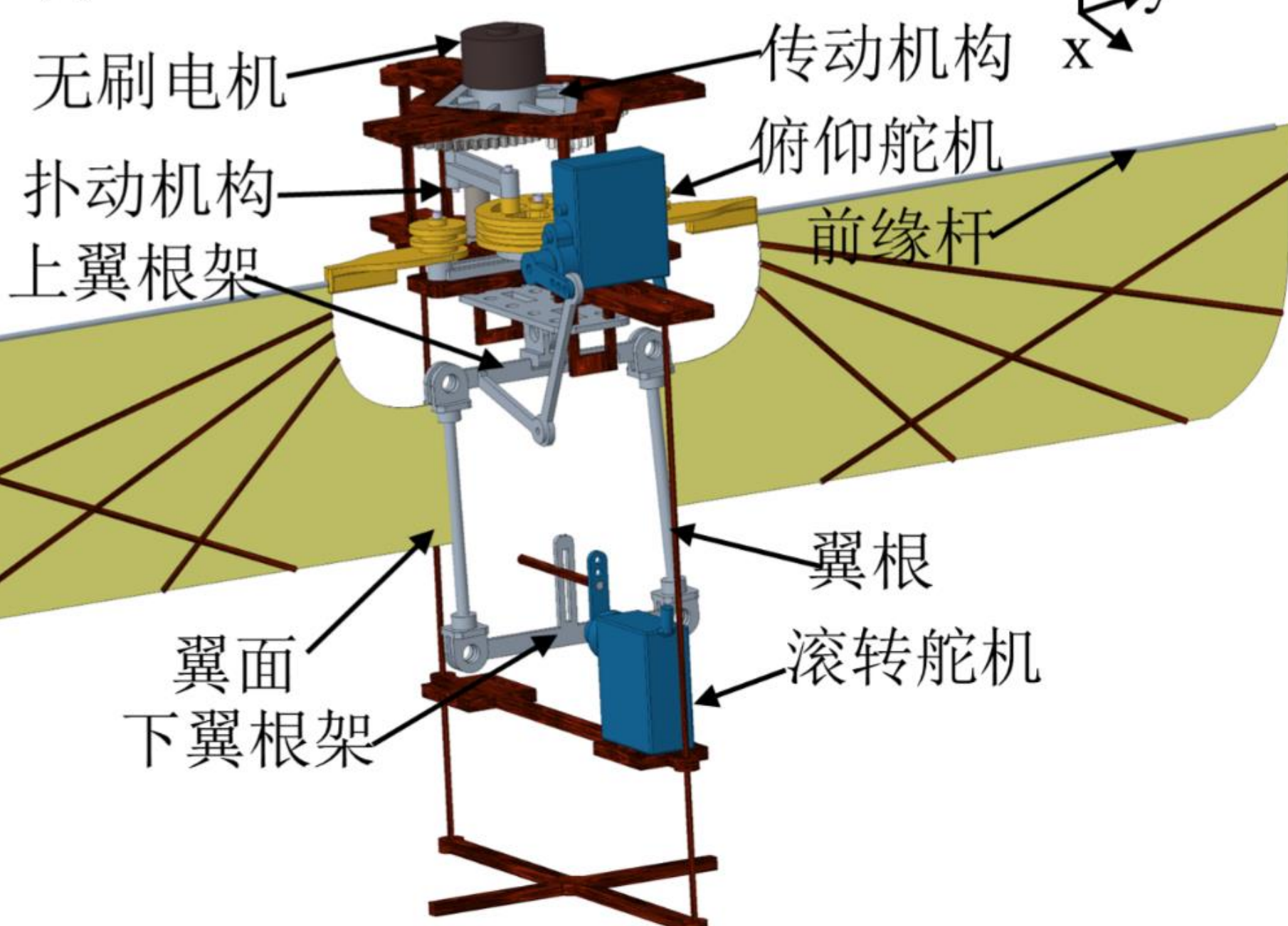


Research content 2

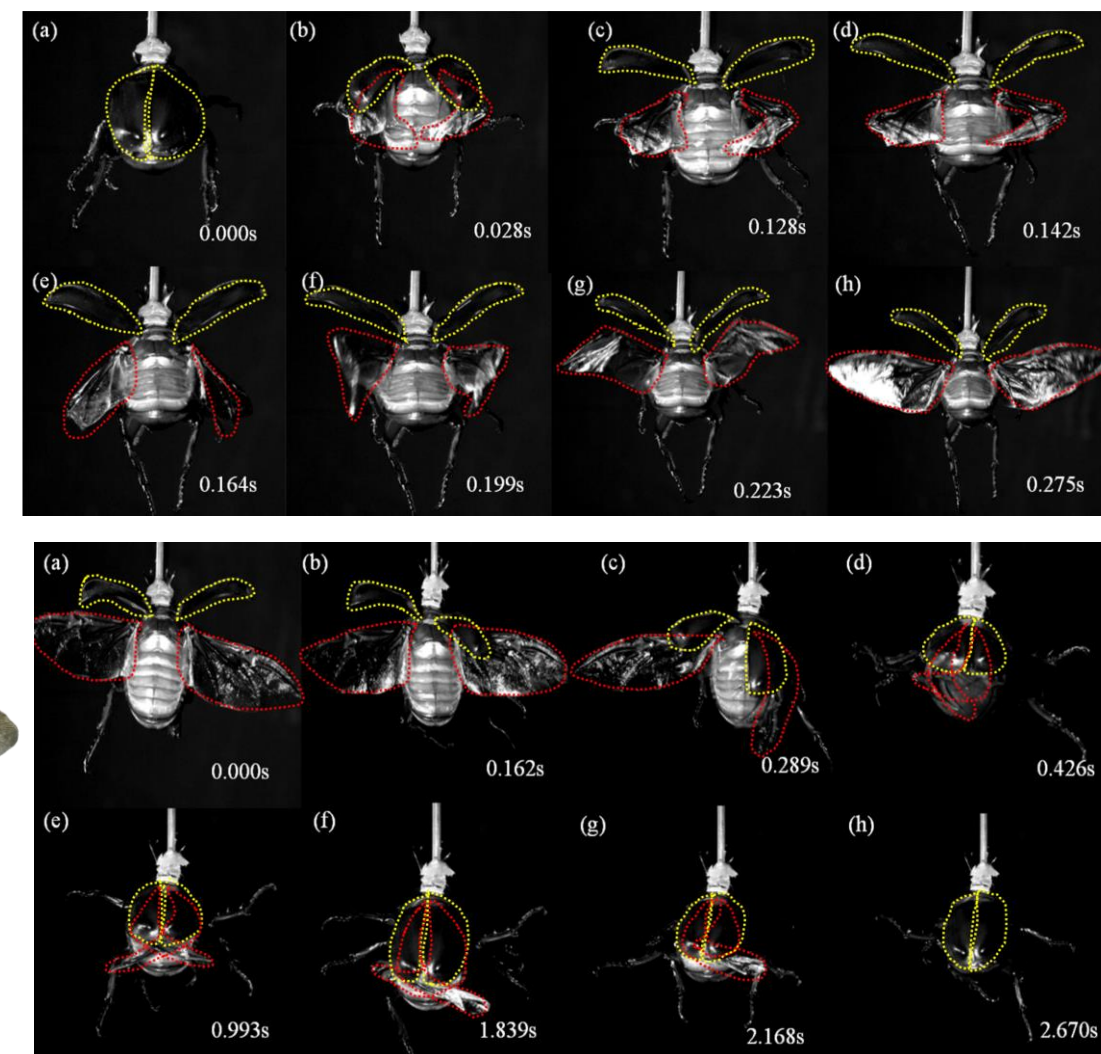
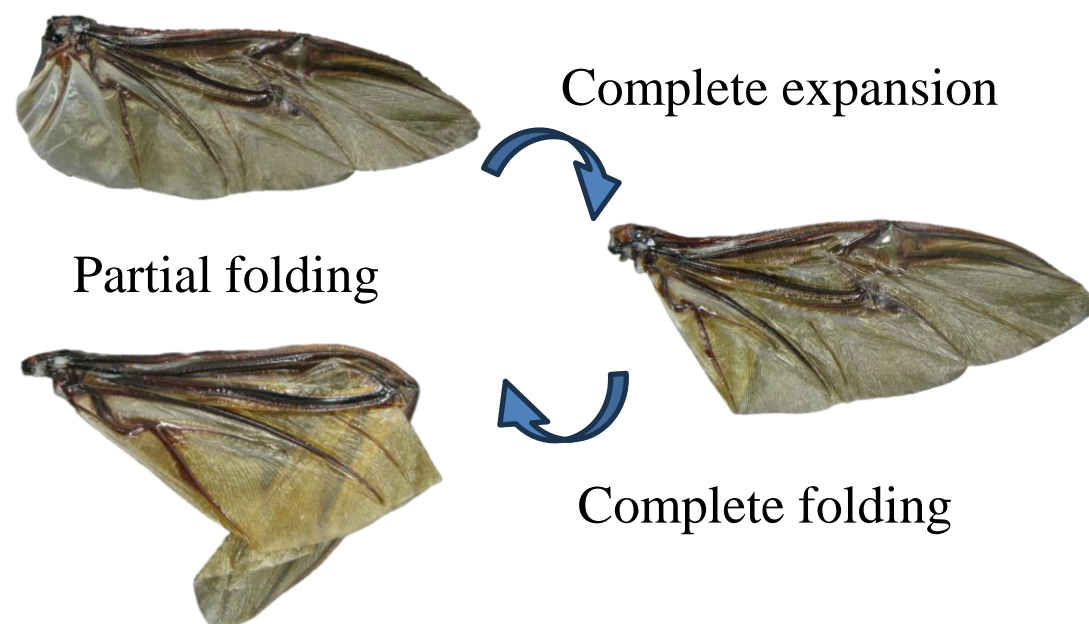
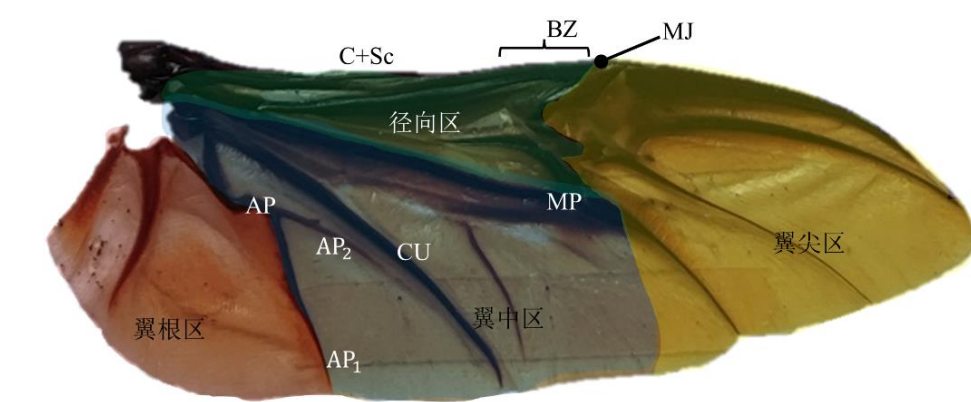
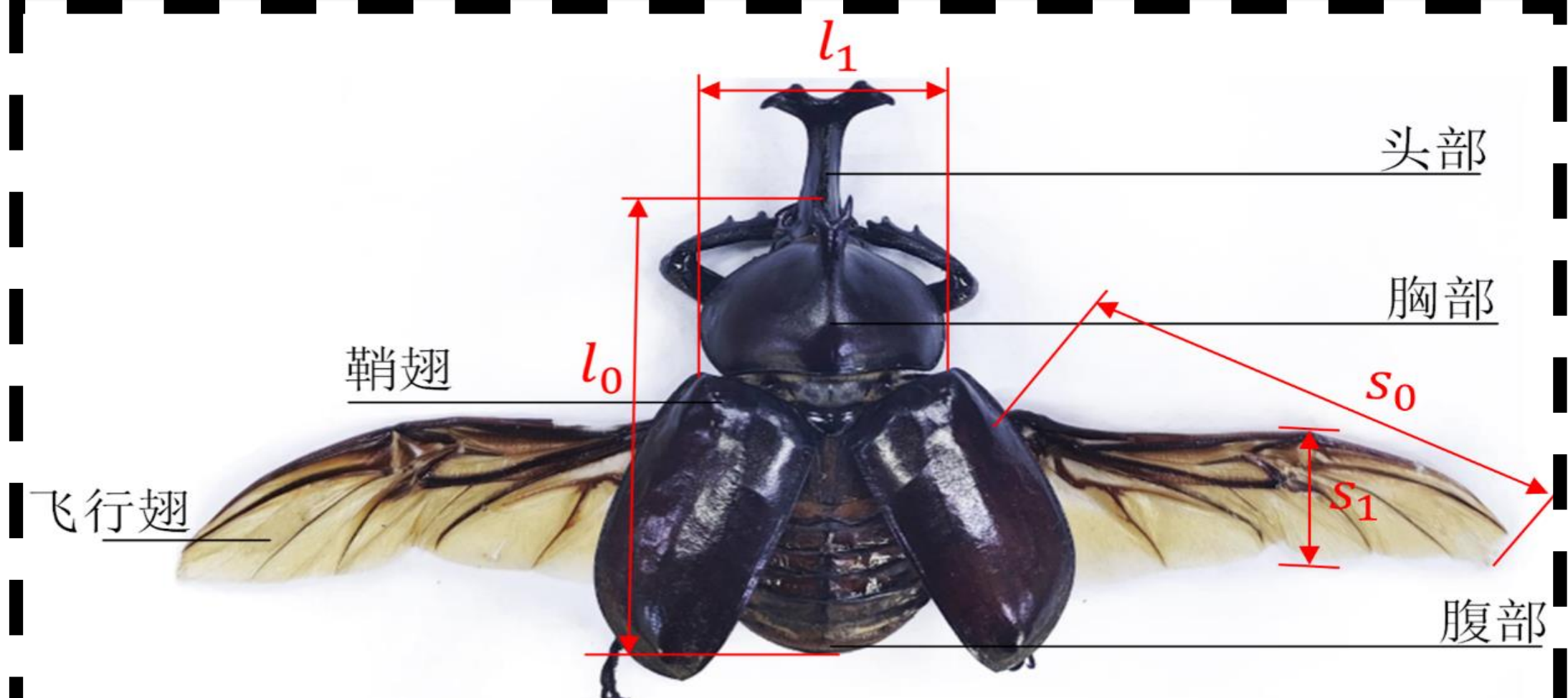
Attitude adjustment mechanism



(a)

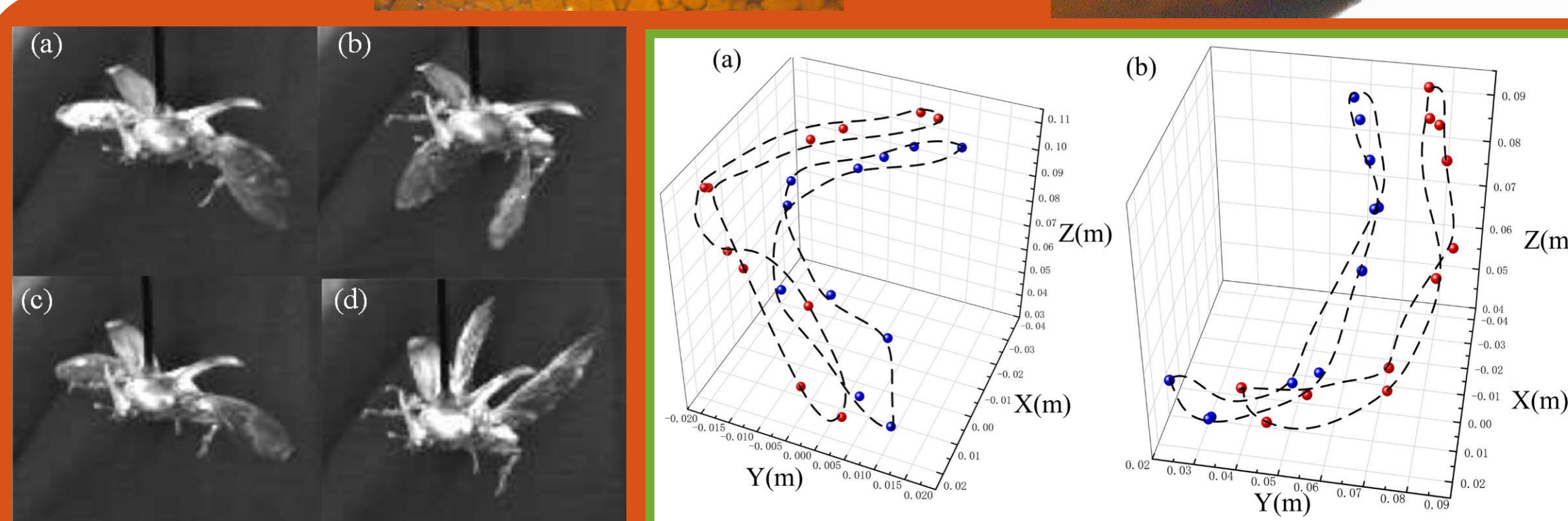
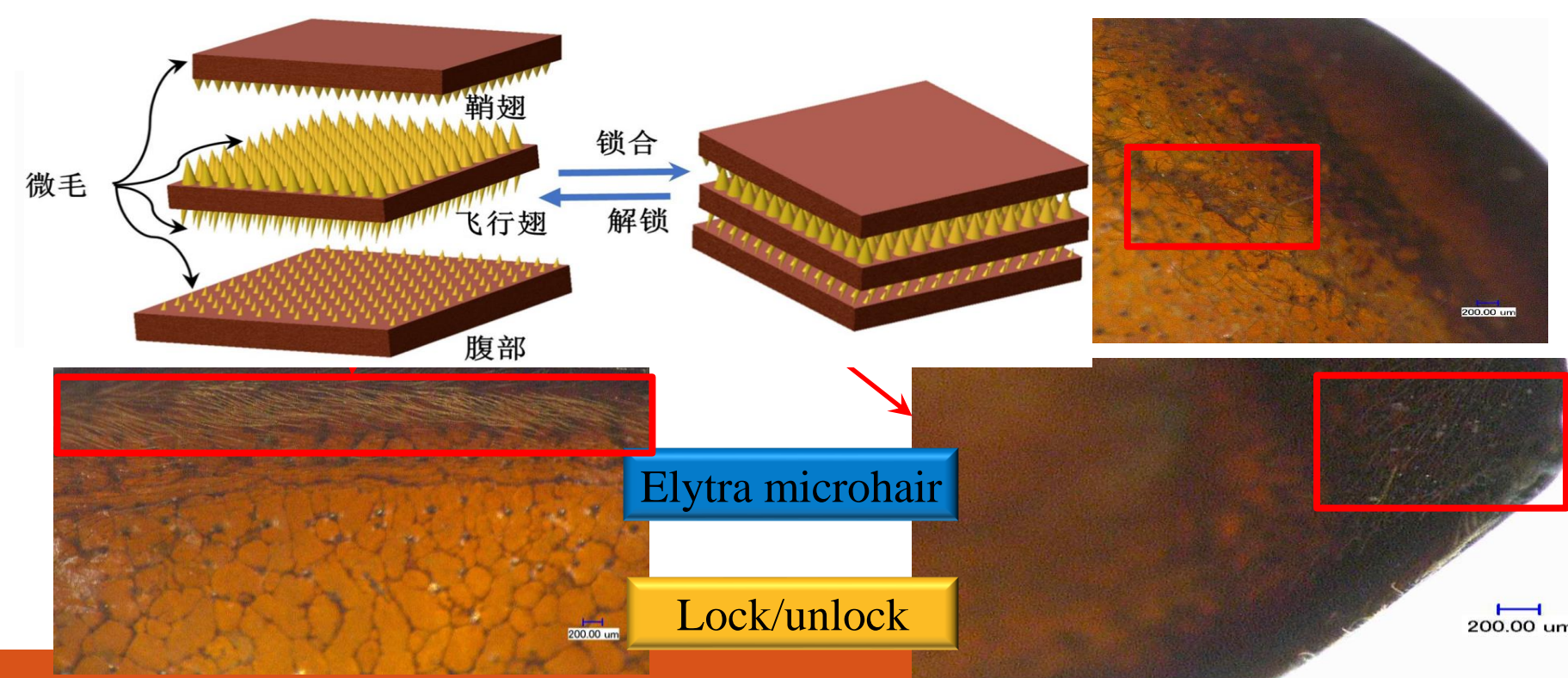


Research content 1



Analysis of flight motion of beetles

Design of the beetle flapper



Kinematics of beetle wings

Important parameters of insect flapping wing flight

