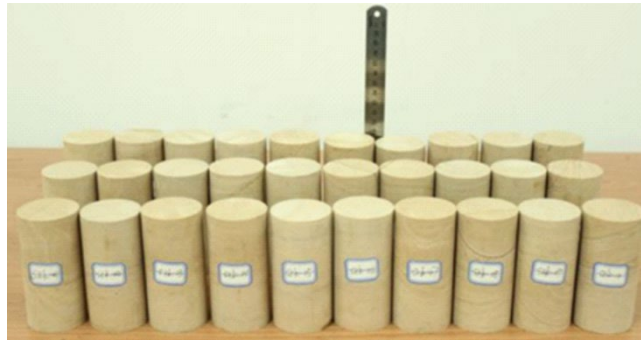


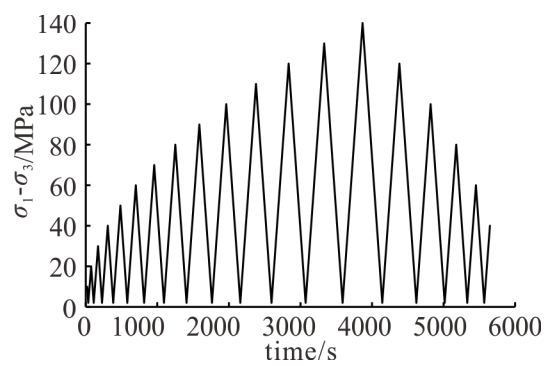
Supplementary Figure S1 Relationships between dissipated energy and elastic strain energy of rock



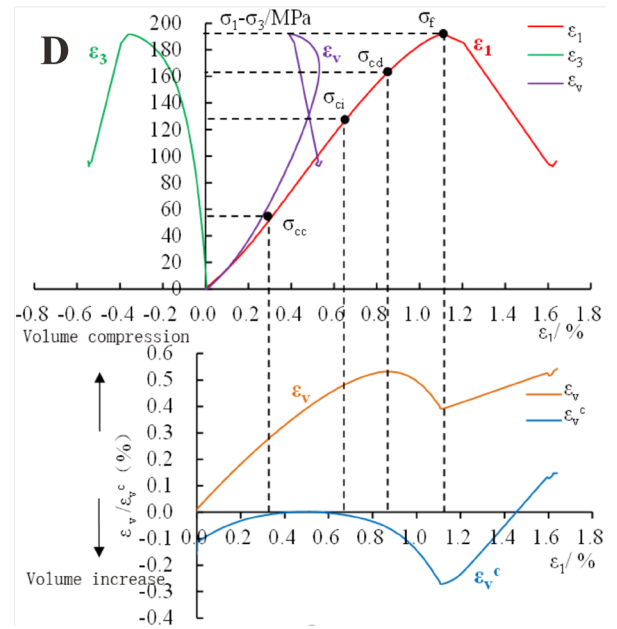
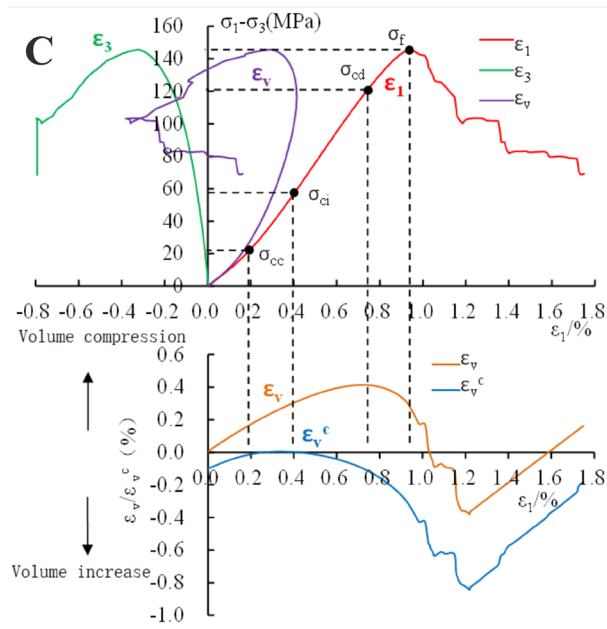
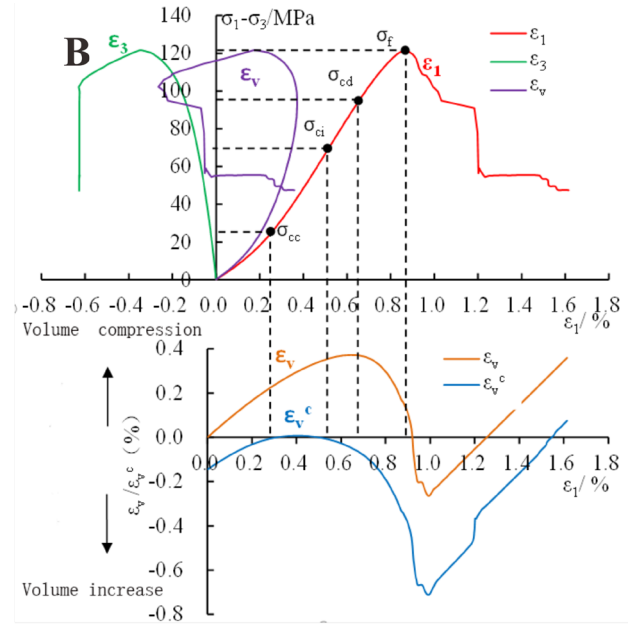
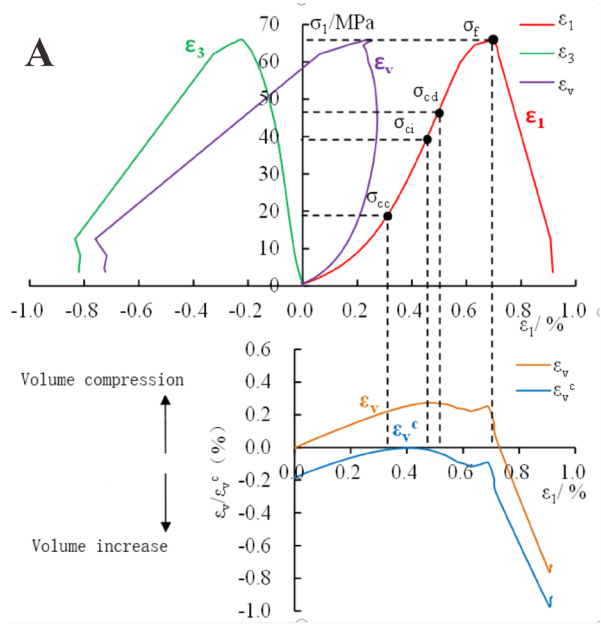
Supplementary Figure S2 Specimens of yellow sandstone



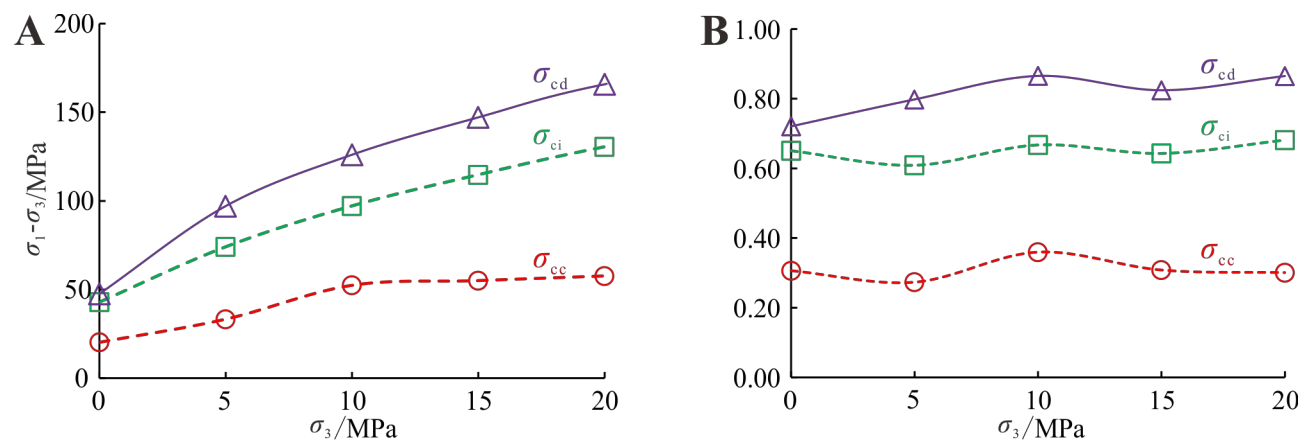
Supplementary Figure S3 The servo-controlled rheology testing machine



Supplementary Figure S4 Schematic diagrams of the stress path



Supplementary Figure S5 Stress-strain curves and characteristic stress of sandstone. (A) $\sigma_3=0$ MPa. (B) $\sigma_3=5$ MPa. (C) $\sigma_3=10$ MPa. (D) $\sigma_3=20$ MPa



Supplementary Figure S6 Characteristic stress of sandstone under different confining pressure. **(A)** Characteristic stress. **(B)** Normalized characteristic stress