

Fig. S1 Different reaction pathways (a) Distal, (b) Alternating, (c) Enzymatic pathway with corresponding limiting potential on Ag site for eNRR mechanism on  $\text{Ag}_3\text{PO}_4$  unit cell

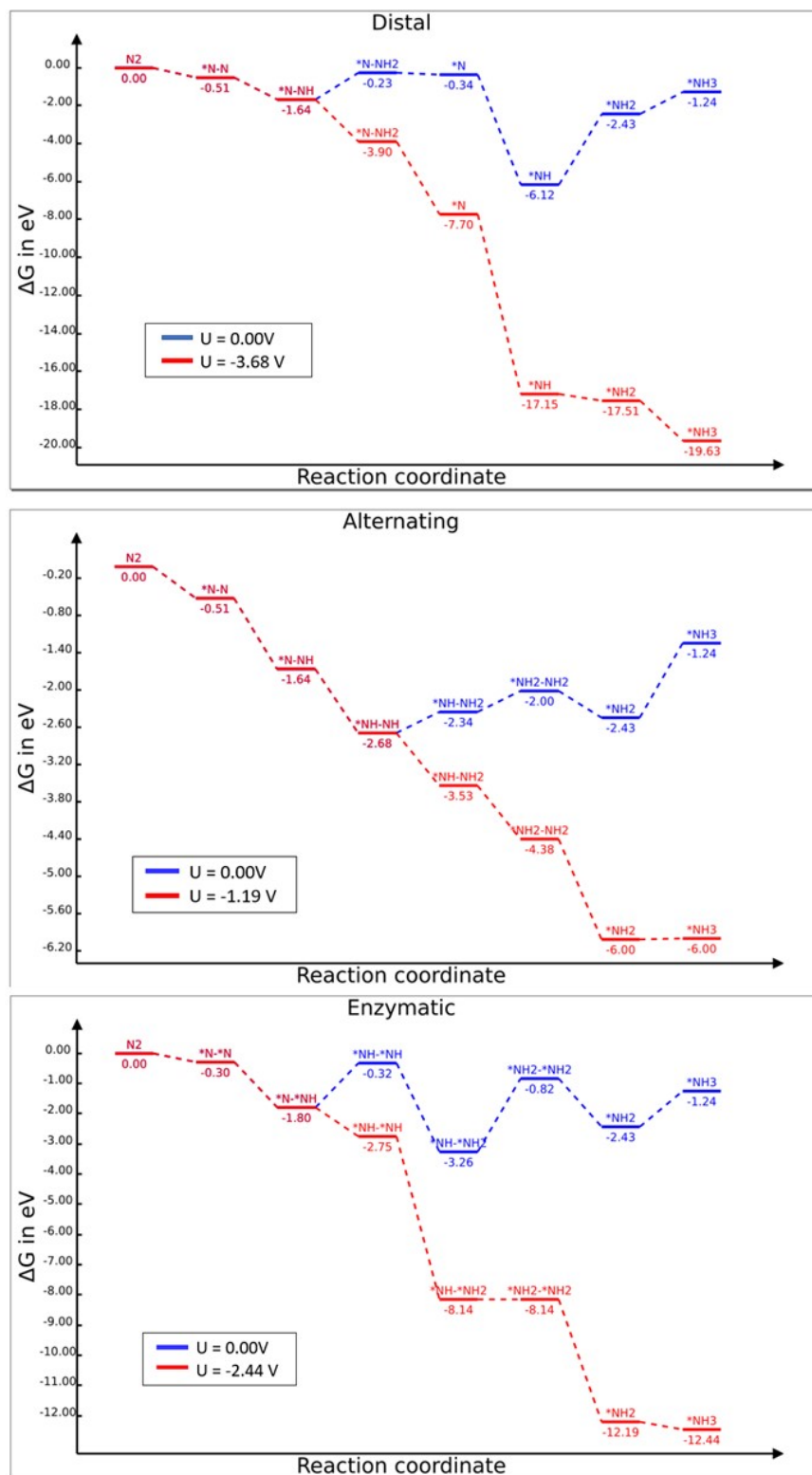


Fig. S2 Different reaction pathways (a) Distal, (b) Alternating, (c) Enzymatic pathway with corresponding limiting potential on O site for eNRR mechanism on Ag<sub>3</sub>PO<sub>4</sub> unit cell

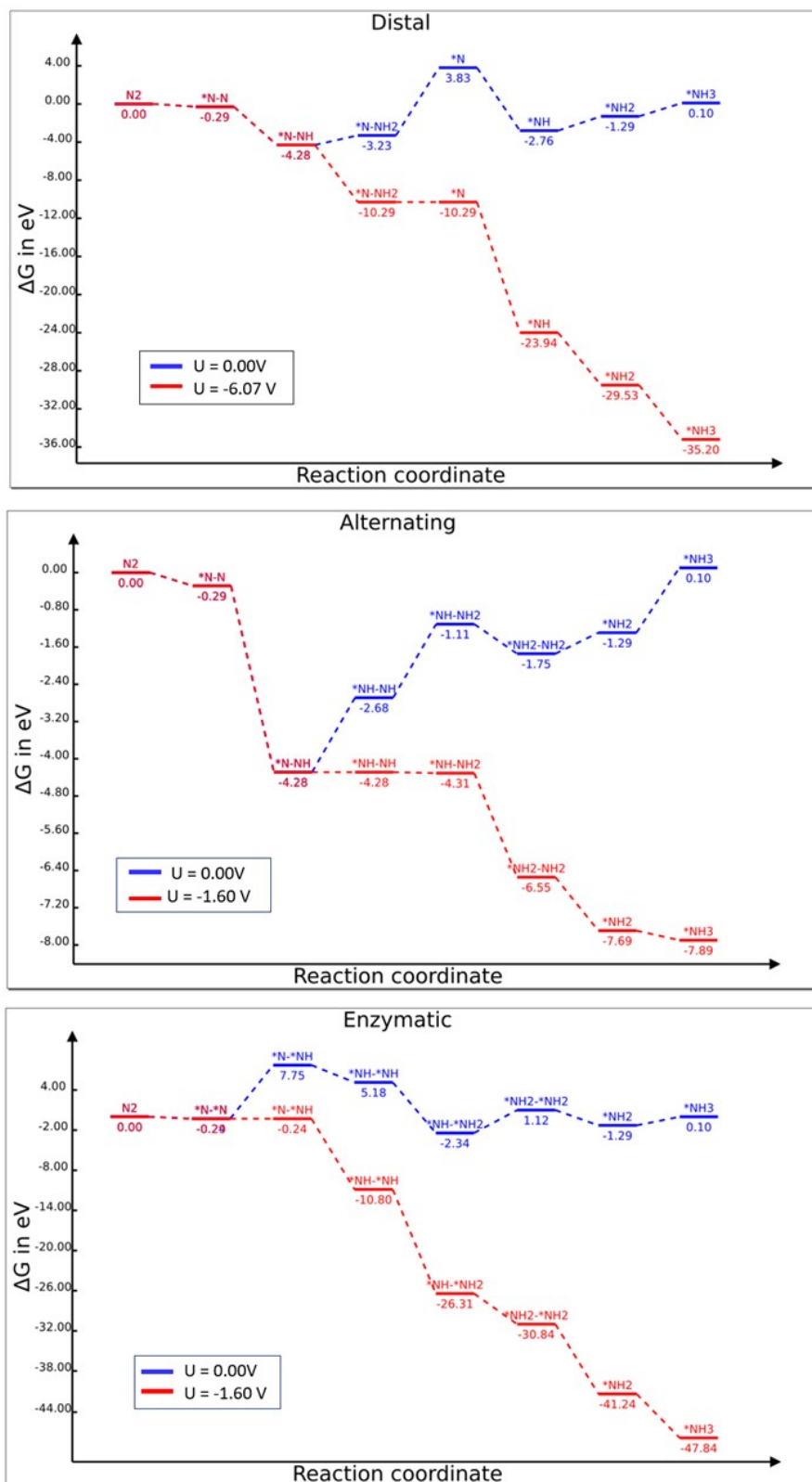


Fig. S3 Different reaction pathways (a) Distal, (b) Alternating, (c) Enzymatic pathway with corresponding limiting potential on P site for eNRR mechanism on Ag<sub>3</sub>PO<sub>4</sub> unit cell