Fig. S3 the data of $-\ln(I/I_0)$ vs NO flows for the active clusters in the reactions between Au_n^- (n = 1-20) and NO at 150K (shown in Fig S1). The linear fitting of each set of data was carried out according to the equation $-\ln(I/I_0)=k[NO]t$. The slopes from these fitting processes corresponded to the kt. Since the reaction time t is identical for all Au_n^- in one measurement, the slopes were in proportional to the relative kinetic rates k in the initial reaction steps of Au_n^-.