

## Acetylene Hydrochlorination over bimetallic Ru-based catalysts

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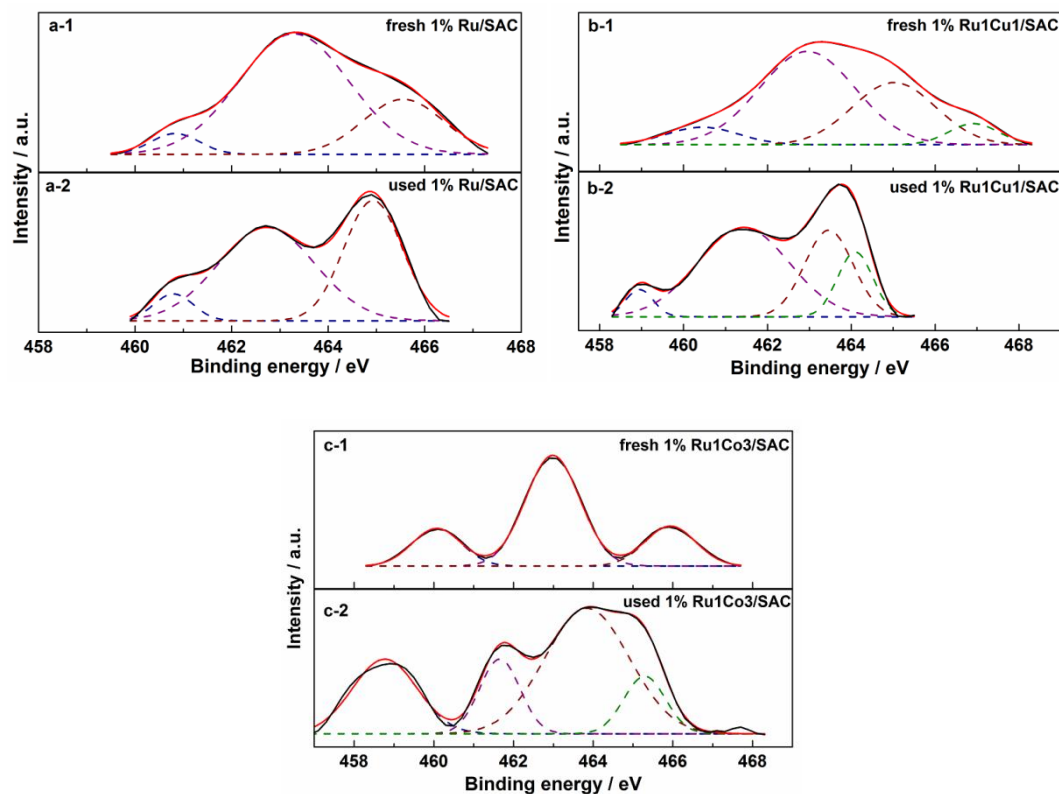


Fig.S1 XPS profiles of the 1%Ru-based catalysts.

Table S1 Weight loss of fresh and used 1%Ru/SAC catalysts under different temperature ranges

Temperature/°C	<150°C	150-370
Weight loss of fresh 1%Ru/SAC catalyst, (%)	3.28	2.57
Weight loss of used 1%Ru/SAC-12h catalyst, (%)	3.02	7.88
Weight loss of used 1%Ru/SAC-24h catalyst, (%)	3.41	8.27
Weight loss of used 1%Ru/SAC-36h catalyst, (%)	3.01	8.67
Weight loss of used 1%Ru/SAC-48h catalyst, (%)	3.70	8.80

Table S2 Weight loss of fresh and used 1%Ru1Cu1/SAC catalysts under different temperature ranges

Temperature/°C	<150°C	150-370
Weight loss of fresh 1%Ru1Cu1/SAC catalyst, (%)	2.40	1.95
Weight loss of used 1%Ru1Cu1/SAC-12h catalyst, (%)	1.39	8.01
Weight loss of used 1%Ru1Cu1/SAC-24h catalyst, (%)	2.31	8.82
Weight loss of used 1%Ru1Cu1/SAC-36h catalyst, (%)	1.15	9.55
Weight loss of used 1%Ru1Cu1/SAC-48h catalyst, (%)	1.97	9.55

Table S3 Weight loss of fresh and used 1%Ru1Co3/SAC catalysts under different temperature ranges

Temperature/°C	<200°C	200-325	325-400
Weight loss of fresh 1%Ru1Co3/SAC catalyst, (%)	4.05	11.83	0.31
Weight loss of used 1%Ru1Co3/SAC-12h catalyst, (%)	3.72	9.19	3.03
Weight loss of used 1%Ru1Co3/SAC-24h catalyst, (%)	6.48	10.25	3.56
Weight loss of used 1%Ru1Co3/SAC-36h catalyst, (%)	4.57	8.34	3.77
Weight loss of used 1%Ru1Co3/SAC-48h catalyst, (%)	5.89	8.24	4.19