Table S1

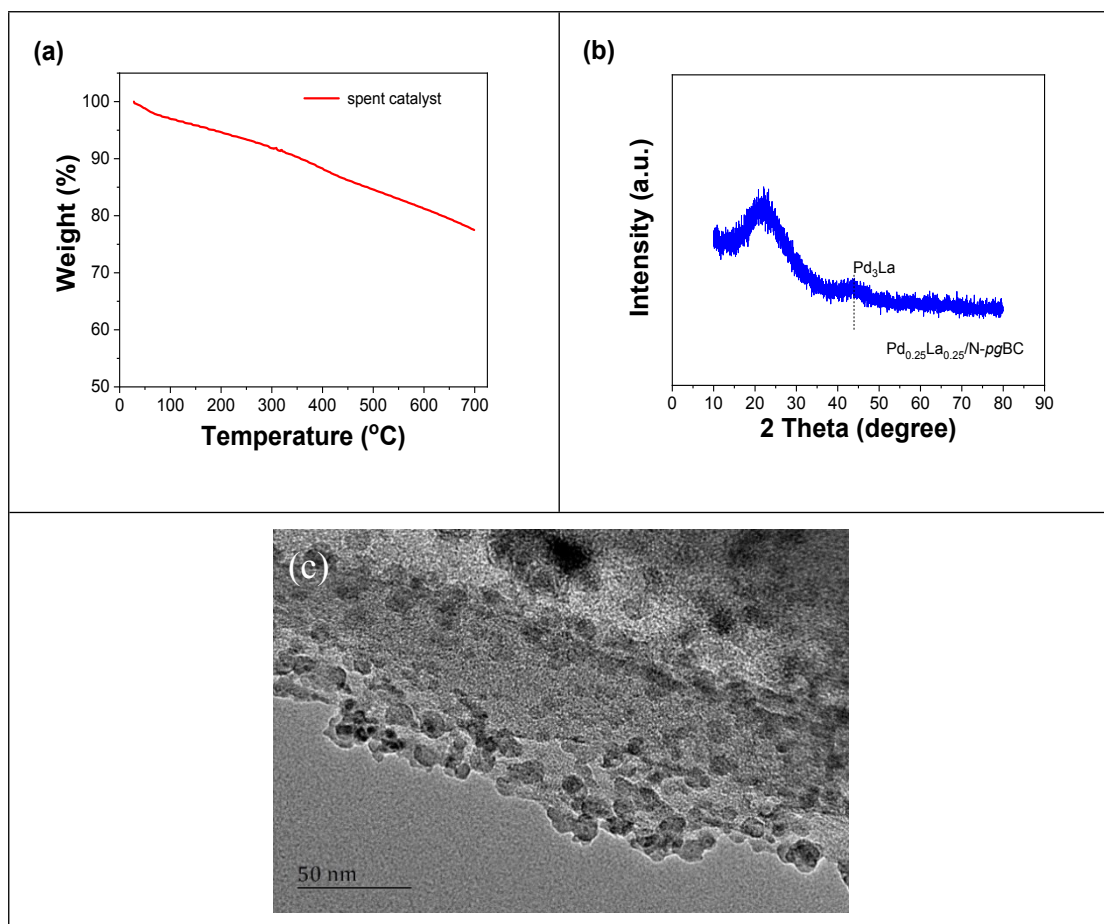| Entry	Catalyst	Pd loading, %	T (°C)	Conversion, %	Selectivity, %	Reference
1	Pd/Al_2O_3	3	130	100	26	Huang et.al [1]
2	$Pd/Ni(OH)_2$		105	80	80	Hu et.al [2]
3	Pd/ZnO SAC	1	80	>99	80	Zhou et.al [3]
4	Pd_4S		50	100	60	Liu et.al [4]
5	Pd_2F/ fiberglass		370	51	100	Gulyaeva et.al [5]
6	PdP_2/TiO_2	2	225	>99	82	Liu et.al [6]
7	$AgPd/SiO_2$	0.5	240-280	> 99	60-90	Pei et.al [7]
8	PdZn		60	>90	100	Shao et.al [8]
9	Pd/Cu(111)		225	100	85	Liu et.al [6]
10	Pd-Ag/Mg-Ti	1	70	>99	>99	Liu et.al [9]
11	PdLa/N-pgBC	0.25(Pd/La=1)	240	100	>94.2	This work

Fig. S1. TG(a), XRD(b), and TEM images(c) of the spent catalyst.

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