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Supplementary Materials

Constructing Interconnected Hollow Mesopore Sn-Si Mixed Oxide Microspheres by Aerosol-Assisted Alkali Treatment with Enhanced Catalytic Performance in Baeyer-Villiger Oxidation

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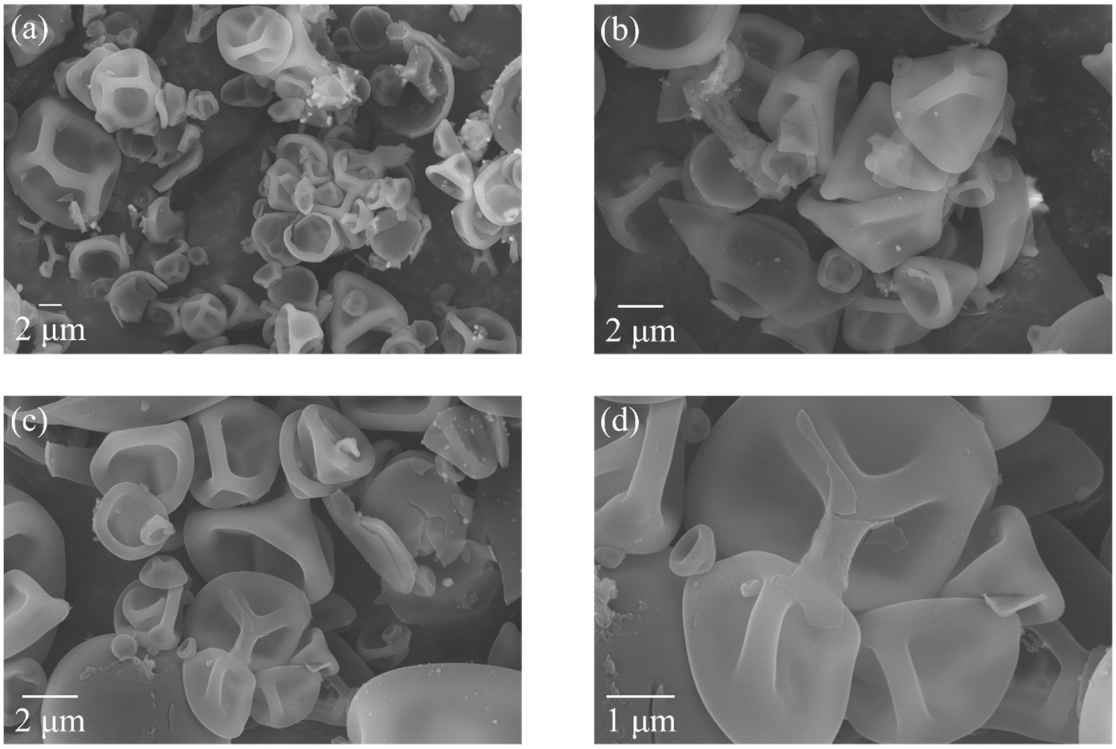

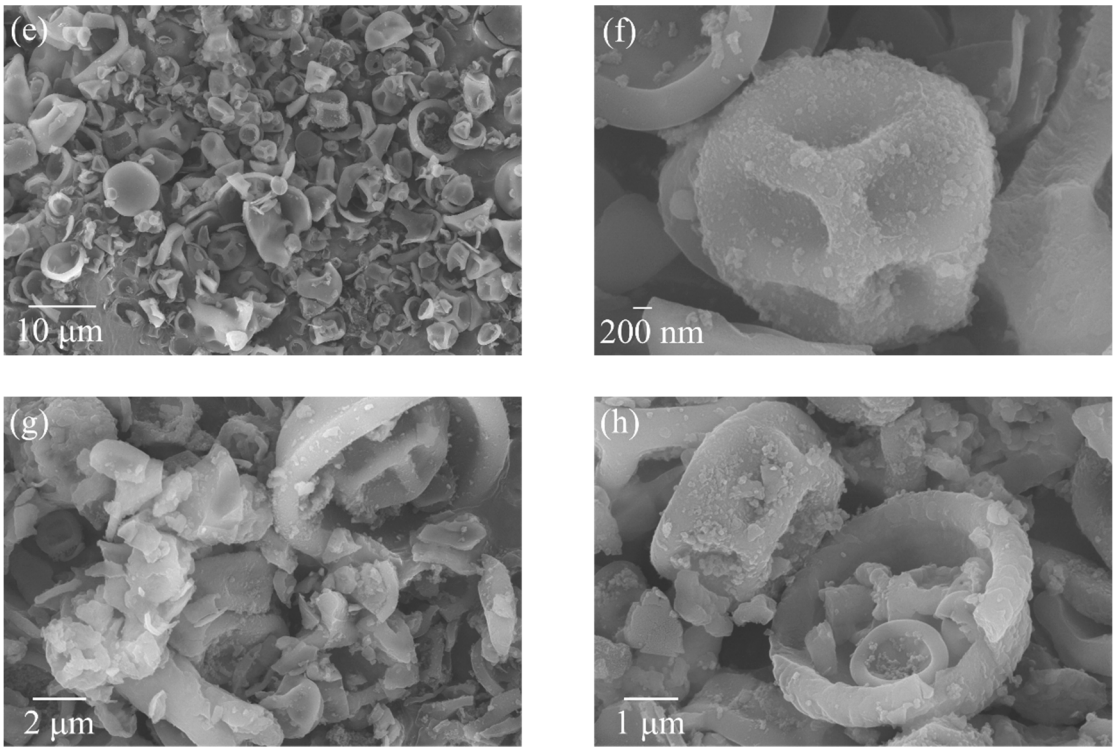

Figure S1. SEM imagine of Sn-Si-30-y-C series samples: (a,b) Sn-Si-30-0.05-C, (c,d) Sn-Si-30-0.1-C, (e,f) Sn-Si-30-0.3-C, (g,h) Sn-Si-30-0.5-C.

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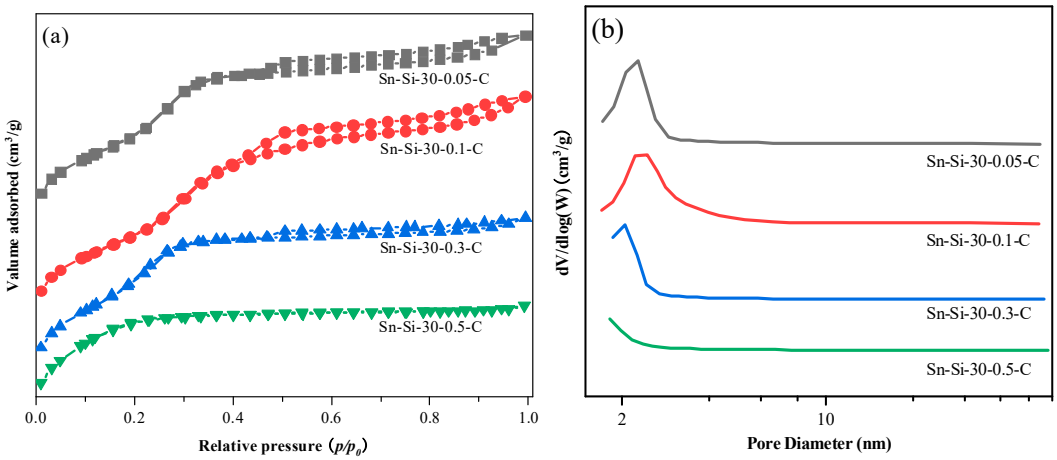

Figure S2. (a) N_2 adsorption-desorption isotherms and (b) BJH pore size distribution of the Sn-Si-30-y-C series samples.

Table S1. The textural properties of the Sn-Si-30-y-C series samples.

Entry	sample	S_{BET} [a] (m^2/g)	V_{total} [b] (cm^3/g)	V_{meso} [c] (cm^3/g)	V_{meso}/V_{total} %
1	Sn-Si-30-0.05-C	1124	0.75	0.63	84
2	Sn-Si-30-0.1-C	1187	0.87	0.79	90
3	Sn-Si-30-0.3-C	1037	0.65	0.42	65
4	Sn-Si-30-0.5-C	911	0.48	0.16	33

[a] BET surface area; [b] p/p_0; [c] mesoporous volume, $V_{meso}=V_{total}-V_{micro}$;.

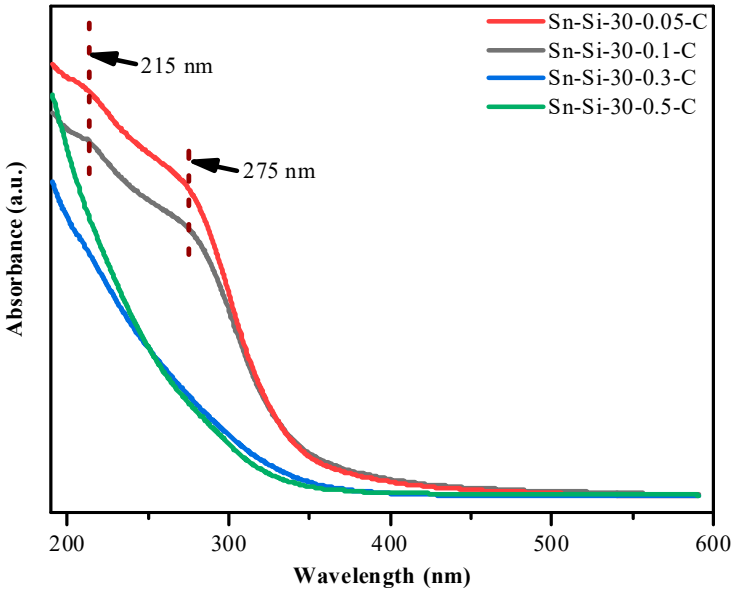

Figure S3. UV-Vis spectra of the Sn-Si-30-y-C series samples.

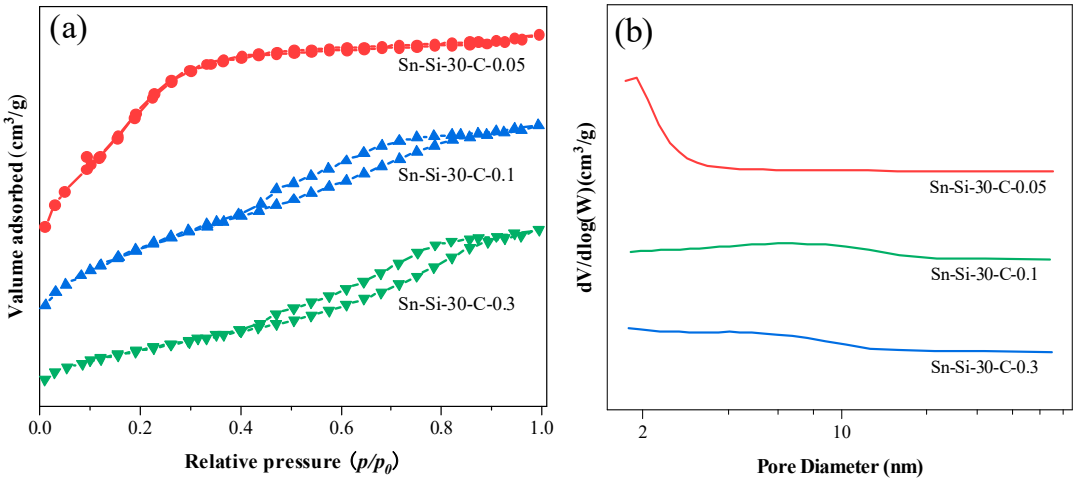

Figure S4. (a) N_2 adsorption-desorption isotherms and (b) BJH pore size distribution of the Sn-Si-30-y-C series samples.

Table S2. The textural properties of the Sn-Si-30-C-y series materials.

Entry	sample	S_{BET} [a] (m^2/g)	V_{total} [b] (cm^3/g)	V_{meso} [c] (cm^3/g)	V_{meso}/V_{total} %
1	Sn-Si-30-C-0.05	1083	0.58	0.39	67
2	Sn-Si-30-C-0.1	549	0.47	0.38	80
3	Sn-Si-30-C-0.3	298	0.36	0.32	89

[a] BET surface area; [b] p/p_0; [c] mesoporous volume, $V_{meso}=V_{total}-V_{micro}$;

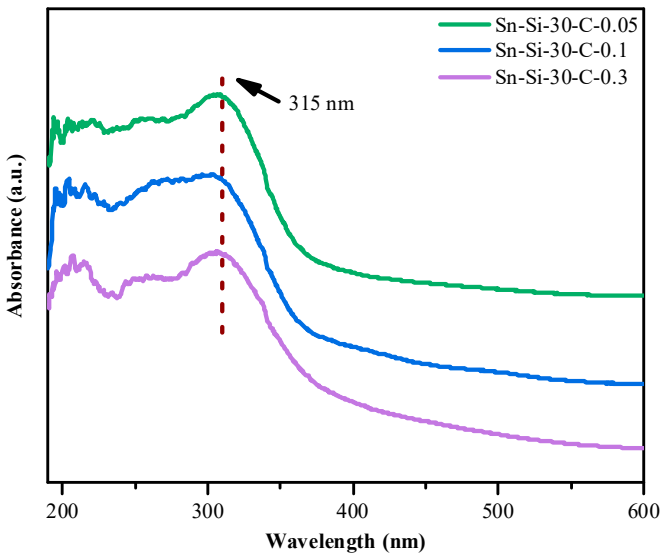

Figure S5. UV-Vis spectra of the Sn-Si-30-y-C series samples.

Table S3. The textural properties of the Sn-Si-90-0.1-C and Sn-Si-90-0.1-C-5.

Entry	sample	S_{BET} (m^2/g)	V_{total} (cm^3/g)	V_{meso} (cm^3/g)	V_{meso}/V_{total} %
1	Sn-Si-90-0.1-C	1508	0.89	0.73	83
4	Sn-Si-90-0.1-C-5	1000	0.51	0.36	71