Supplementary Materials: Noble Metal-Free Ceria-Zirconia Solid Solutions Templated by Tobacco Materials for Catalytic Oxidation of CO

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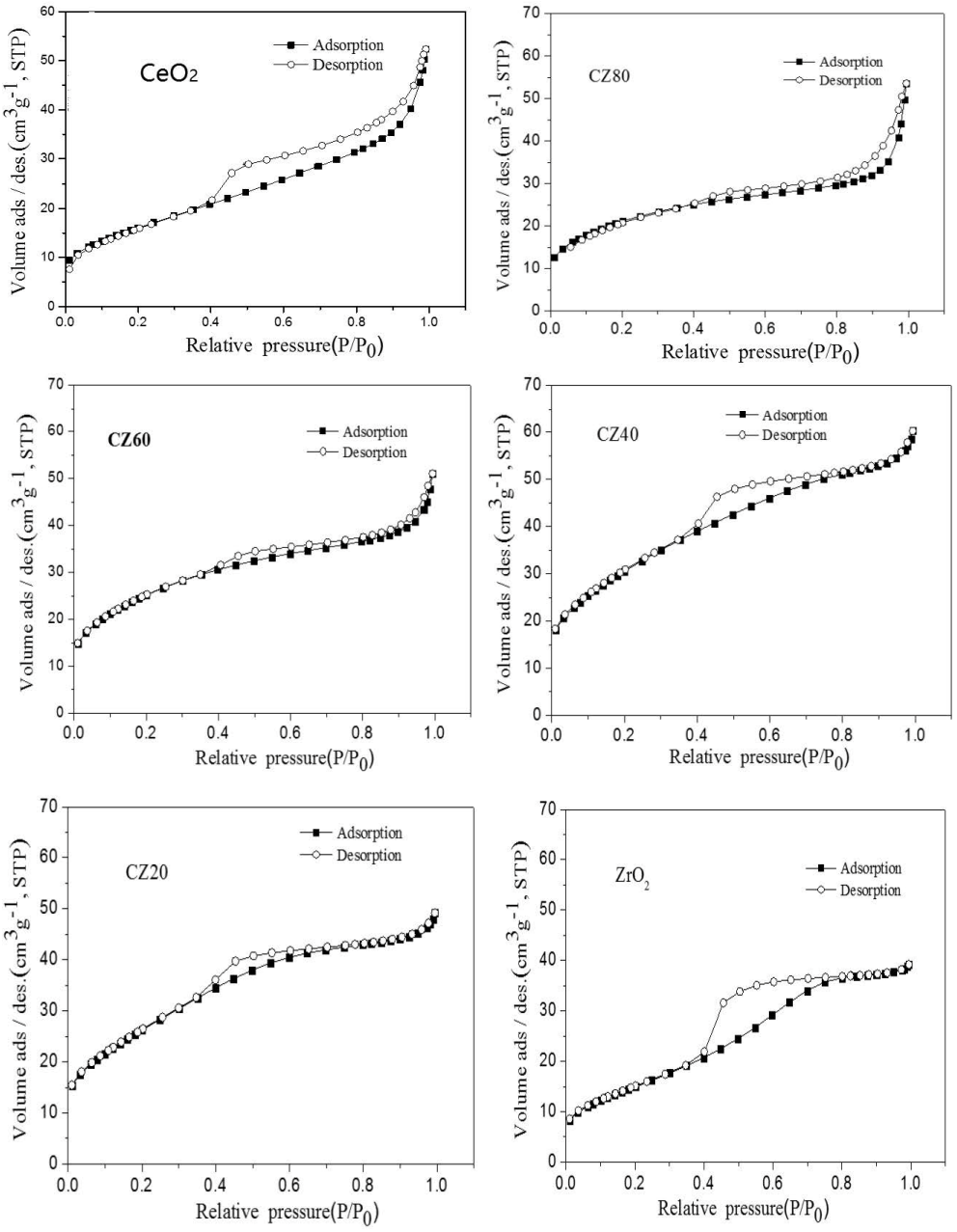

Figure S1. Nitrogen adsorption-desorption isotherms of the ceria-zirconia solid solutions without tobacco materials templates with different Ce/(Ce + Zr) molar ratios.

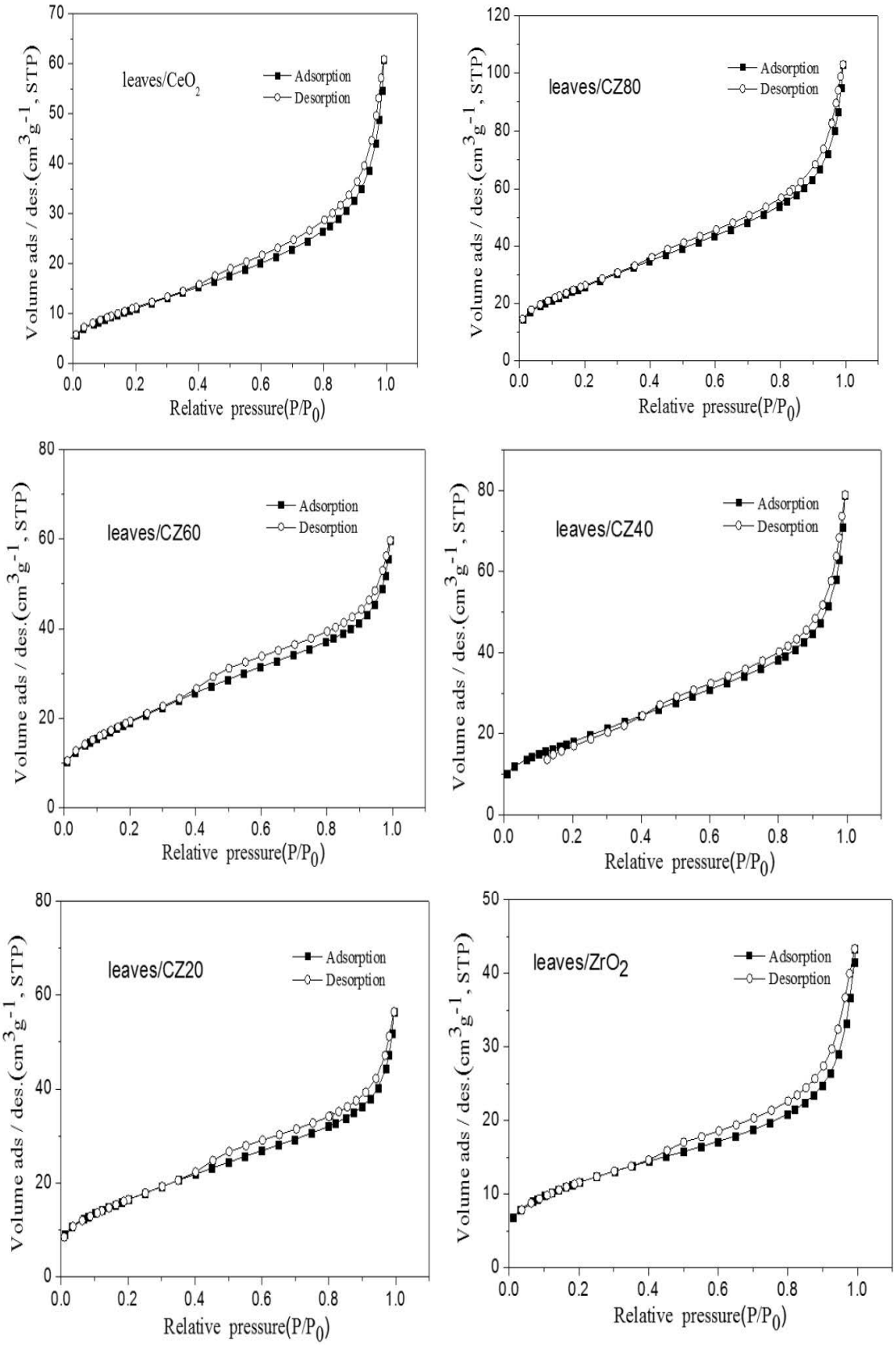

Figure S2. Nitrogen adsorption-desorption isotherms of the ceria-zirconia solid solutions with different Ce/(Ce + Zr) molar ratios using tobacco leaves as templates.

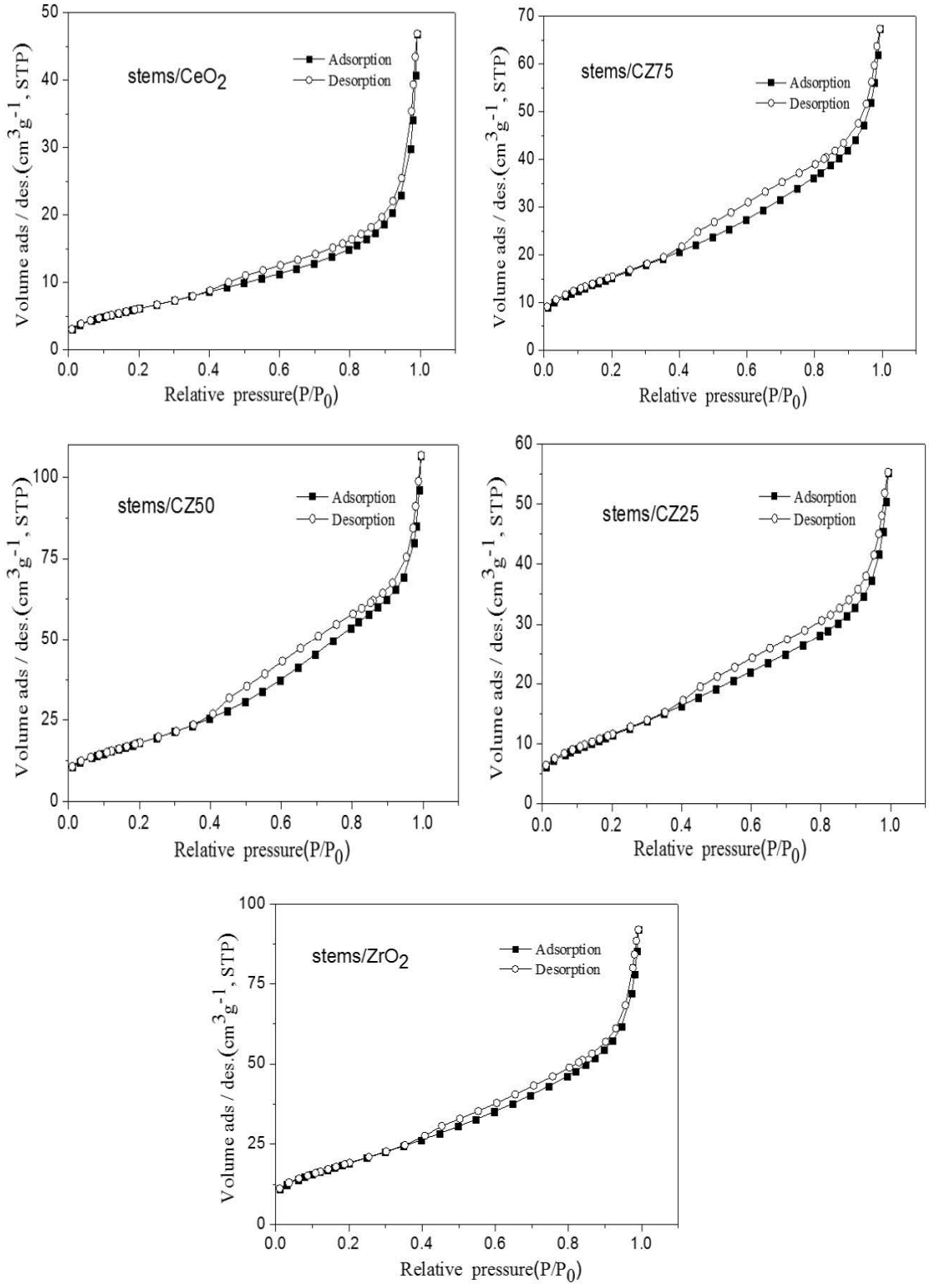

Figure S3. Nitrogen adsorption-desorption isotherms of the ceria-zirconia solid solutions with different Ce/(Ce + Zr) molar ratios using tobacco stem as templates.

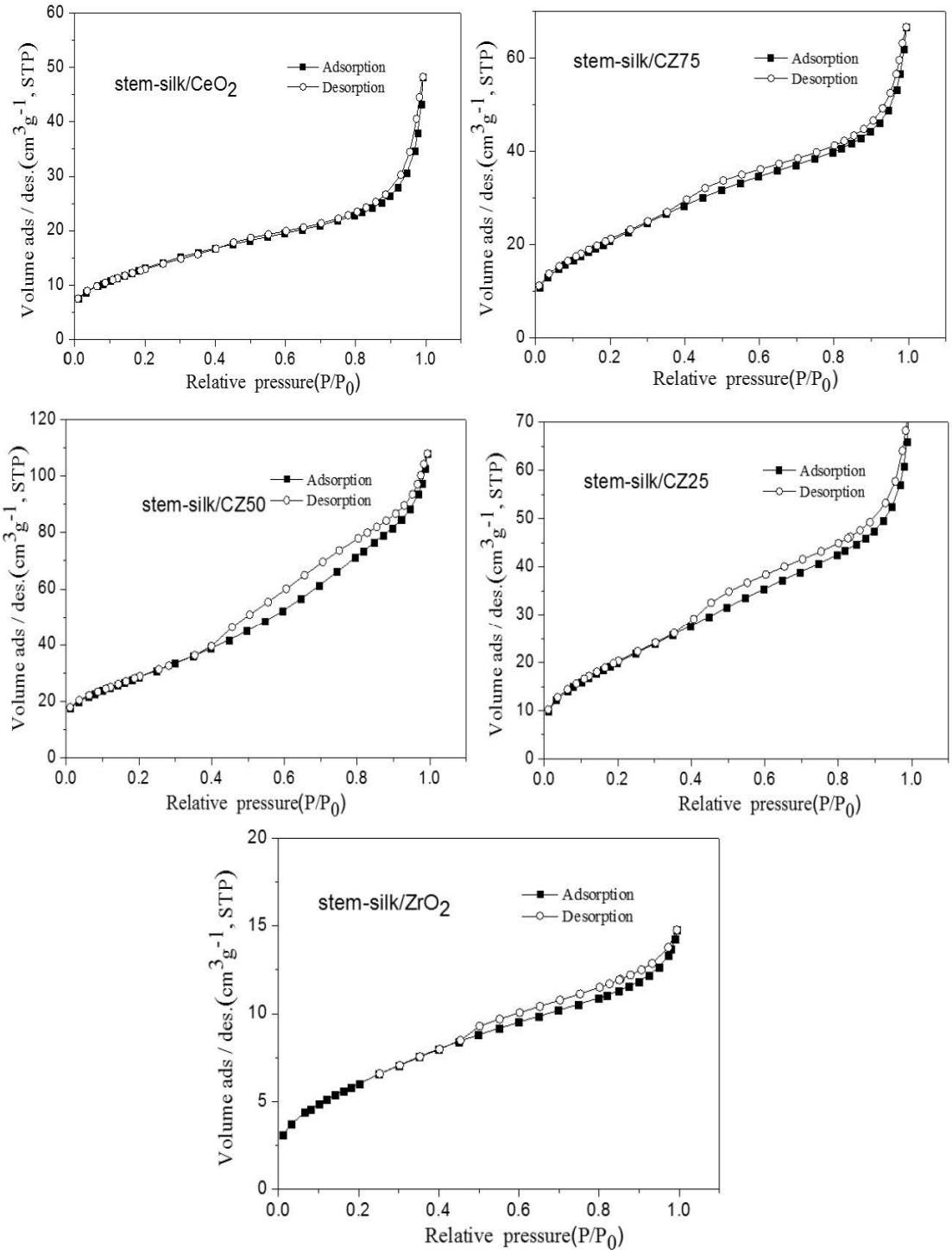

Figure S4. Nitrogen adsorption-desorption isotherms of the ceria-zirconia solid solutions with different Ce/Zr ratios using tobacco stem-silk as templates.

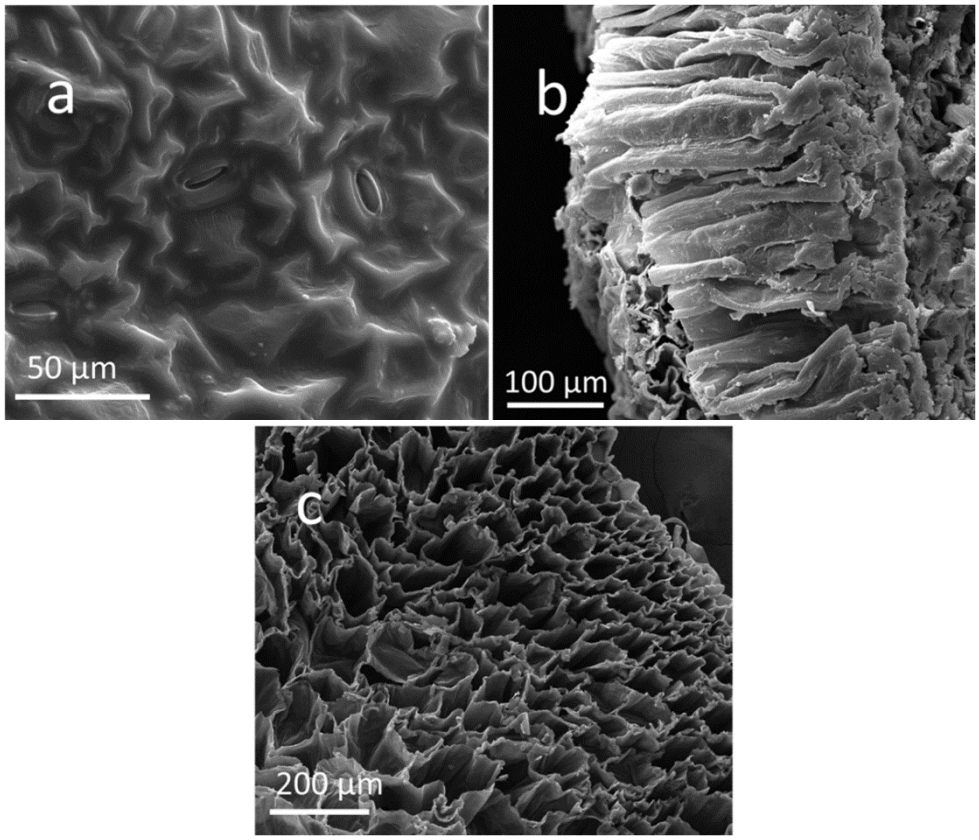

Figure S5. SEM (scanning electron microscopy) images of tobacco: leaves (**a**); stems (**b**); and stem-silk (**c**).

Table S1. Summary of T_{50} and T_{90} for the prepared ceria-zirconia solid solutions with different Ce/(Ce + Zr) molar ratios.

Samples	T_{50} (°C)	T_{90} (°C)	Samples	T_{50} (°C)	T_{90} (°C)
CeO_2	260	300	leaves/CeO_2	534	754
CZ80	275	338	leaves/CZ80	515	660
CZ60	288	354	leaves/CZ60	578	759
CZ40	284	360	leaves/CZ40	654	770
CZ20	300	370	leaves/CZ20	674	776
ZrO_2	430	-	leaves/ZrO_2	730	-
stems/CeO_2	312	375	stem-silk/CeO_2	258	292
stems/CZ75	315	380	stem-silk/CZ75	265	295
stems/CZ50	319	384	stem-silk/CZ50	153	197
stems/CZ25	325	385	stem-silk/CZ25	300	345
stems/ZrO_2	730	-	stem-silk/ZrO_2	730	-
Pt-stem-silk/CZ50	130	145	Ag-stem-silk/CZ50	160	172
Au-stem-silk/CZ50	145	220	-	-	-