

Supplementary Material for

# Influence of Rapid Heat Treatment on the Photocatalytic Activity and Stability of Strontium Titanates against a Broad Range of Pollutants

Mahsa Abedi <sup>1</sup>, Ákos Szamosvölgyi <sup>1</sup>, András Sápi <sup>1</sup>, Ákos Kukovecz <sup>1</sup>, Zoltán Kónya <sup>1</sup>, Tamás Gyulavári <sup>1,\*</sup> and Zsolt Pap <sup>1,2,3,\*</sup>

<sup>1</sup> Department of Applied and Environmental Chemistry, University of Szeged, Rerrich Béla Sq. 1, 6720 Szeged, Hungary

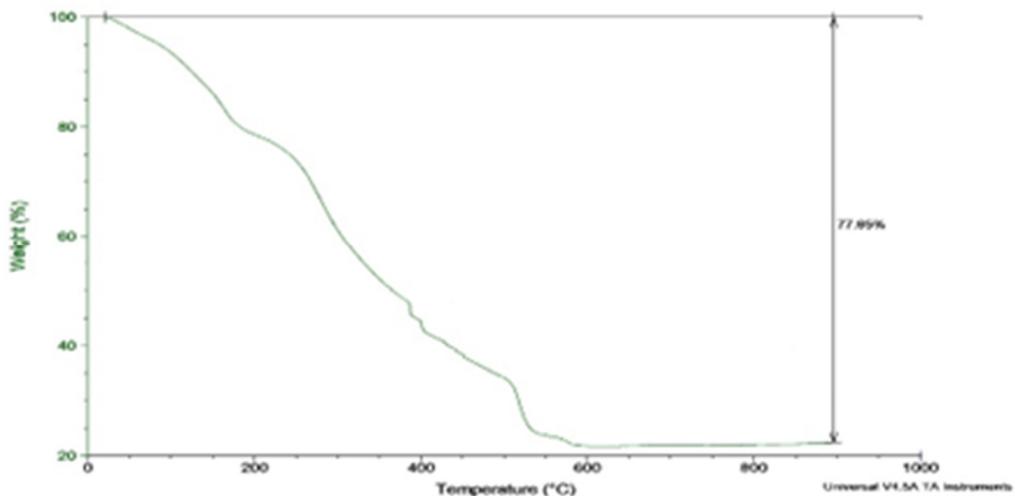
<sup>2</sup> Nanostructured Materials and Bio-Nano-Interfaces Center, Interdisciplinary Research Institute on Bio-Nano-Sciences, Babes-Bolyai University, Treboniu Laurian Str. 42, 400271 Cluj-Napoca, Romania

<sup>3</sup> Institute of Research-Development-Innovation in Applied Natural Sciences, Babes-Bolyai University, Fântânele Str. 30, 400294 Cluj-Napoca, Romania

\* Correspondence: gyulavarit@chem.u-szeged.hu (T.G.); pzsolt@chem.u-szeged.hu (Z.P.); Tel.: +36-62-544-626 (T.G.); +36-62-543-795 (Z.P.)

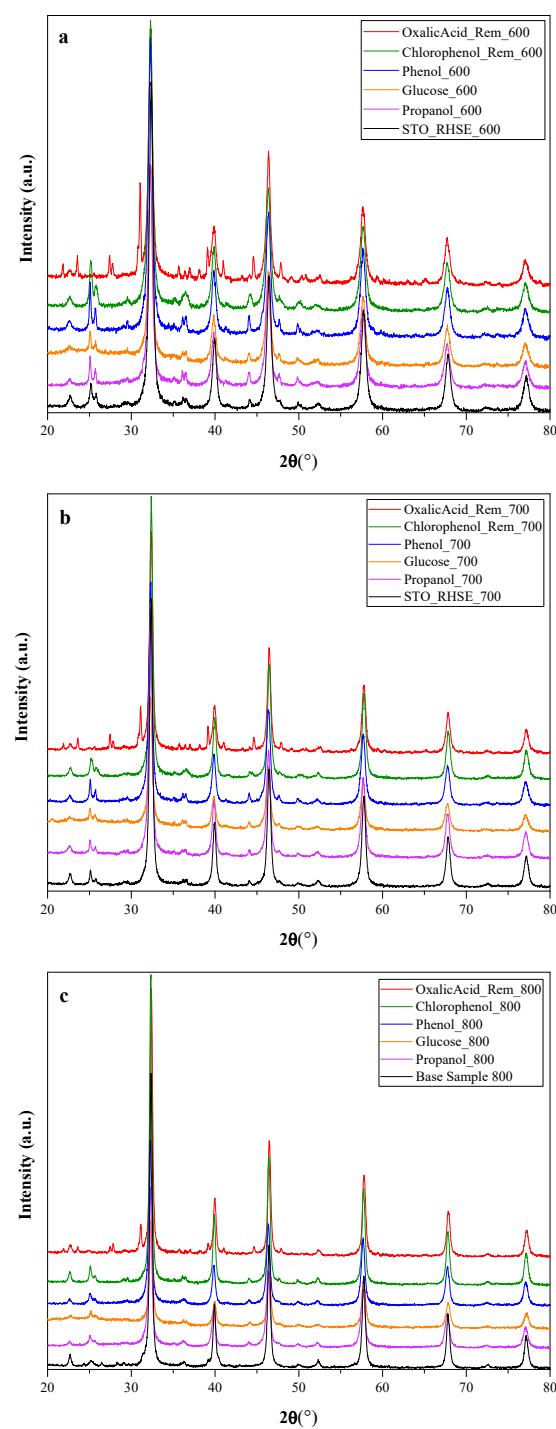
## Figure S1

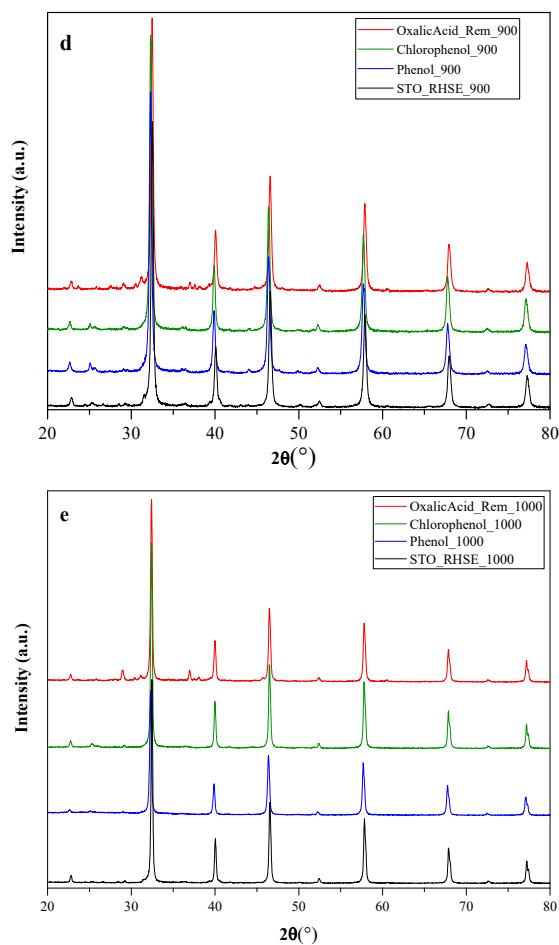
TG curve of the xerogel obtained by the modified Pechini method.



## Figure S2

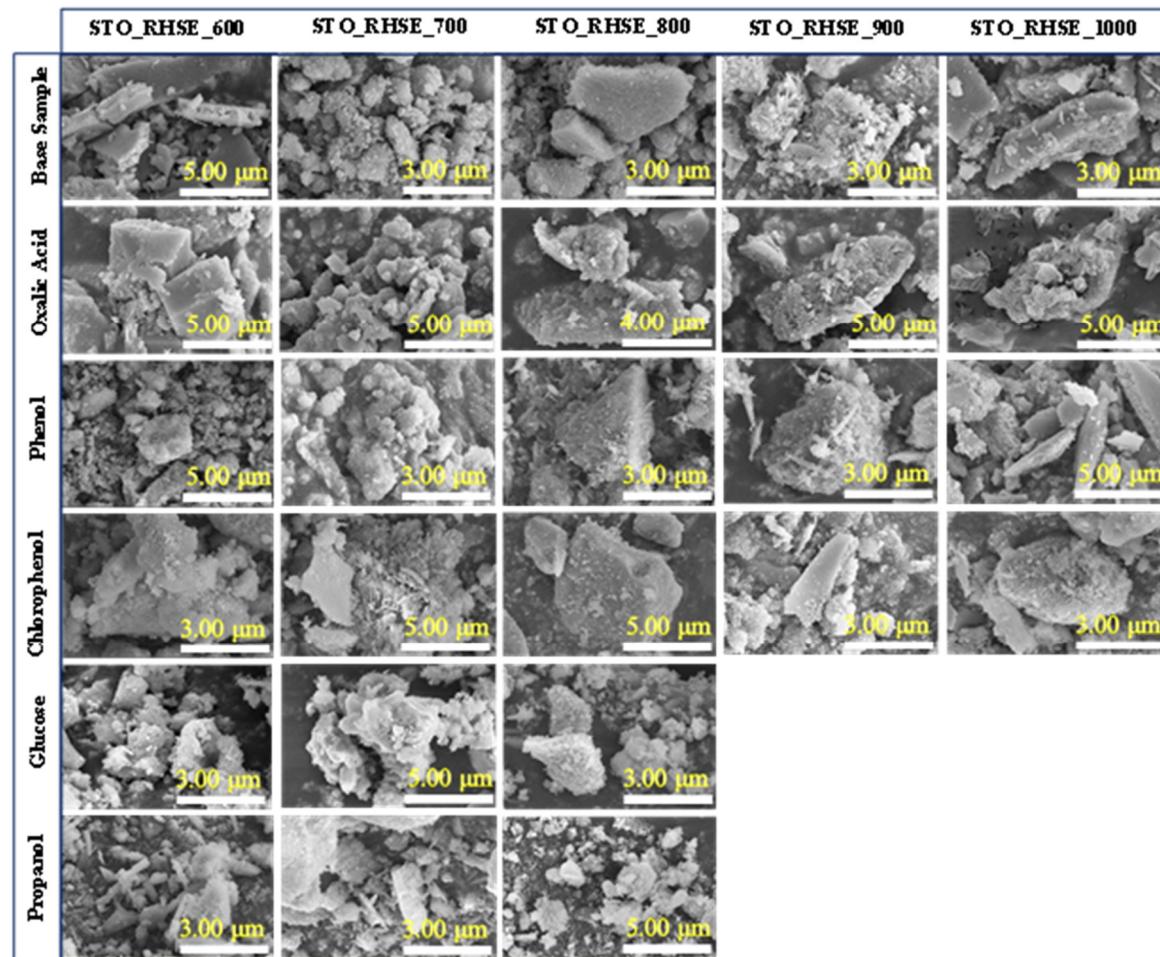
XRD patterns of STO\_RHSE\_600 (a), STO\_RHSE\_700 (b), STO\_RHSE\_800 (c), STO\_RHSE\_900 (d), and STO\_RHSE\_1000 (e) before and after their exposure to the pollutants with various functional groups.





**Figure S3**

SEM micrographs of the catalysts after exposure to compounds with various functional groups.



**Figure S4**

IR spectra of catalysts after their exposure to phenol (a), chlorophenol (b), oxalic acid (c), glucose (d), and propanol (e).

