

Supplementary Material

Insights into the Microstructural Evolution Occurring during Pyrolysis of Metal-Modified Ceramers Studied through Selective SiO₂ Removal

Aitana Tamayo ^{1,*}, Juan Rubio ¹, Fausto Rubio ¹ and M^a Angeles Rodriguez ²

¹ Department. of Physical Chemistry of Surfaces and Processes, Institute of Ceramics and Glass, CSIC. Kelsen 5, 28049 Madrid, Spain; jrubio@icv.csic.es (J.R.); frubio@icv.csic.es (F.R.)

² Department. Of Environmental Sciences, Faculty of Sciences, University of Extremadura, Avda. Elvas s/n, 06071 Badajoz, Spain; marodgon@unex.es

* Correspondence: aitanath@icv.csic.es; Tel.: +34-91-735-5840

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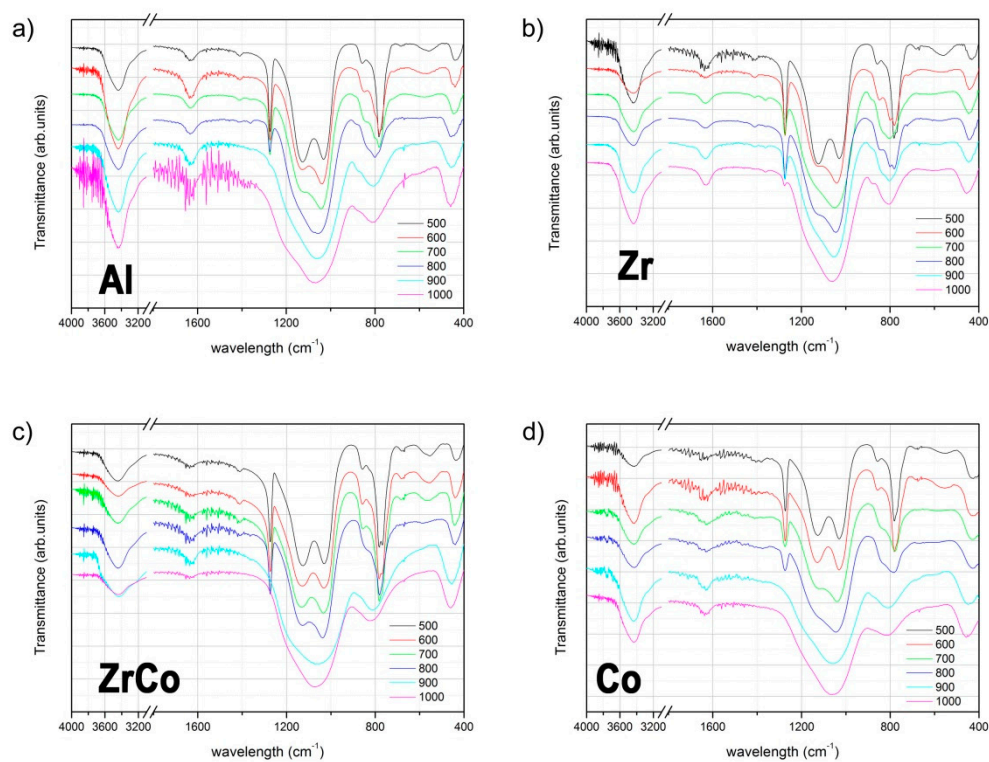


Figure S1. Infrared spectra of the samples pyrolyzed at different temperatures and containing the heteroatoms: (a) Aluminum; (b) Zirconium; (c) Zirconium plus Cobalt; (d) Cobalt.

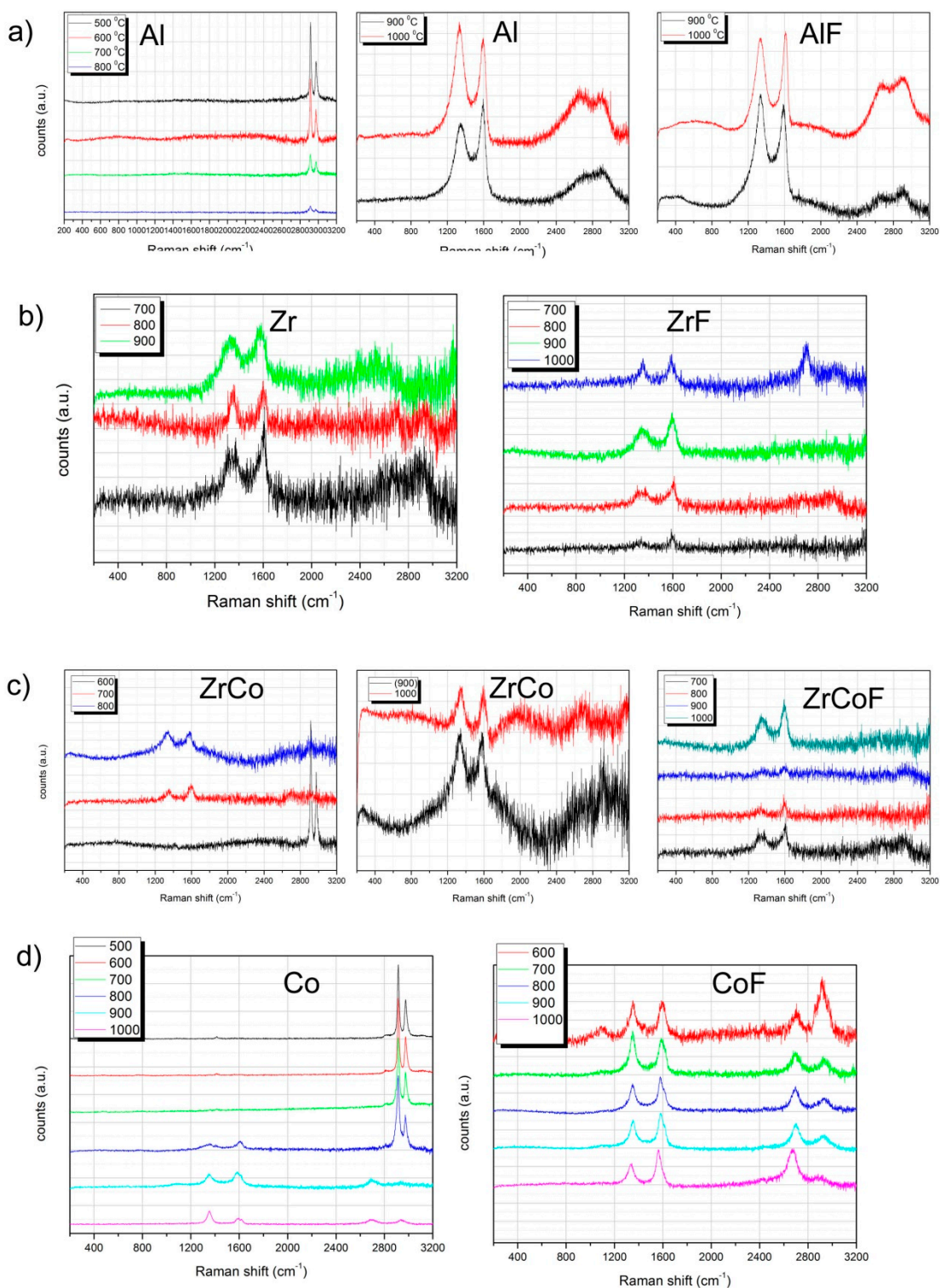


Figure S2. Raman spectra of the pyrolyzed and HF-etched samples and containing the heteroatoms: (a) Aluminum; (b) Zirconium; (c) Zirconium plus Cobalt; (d) Cobalt.

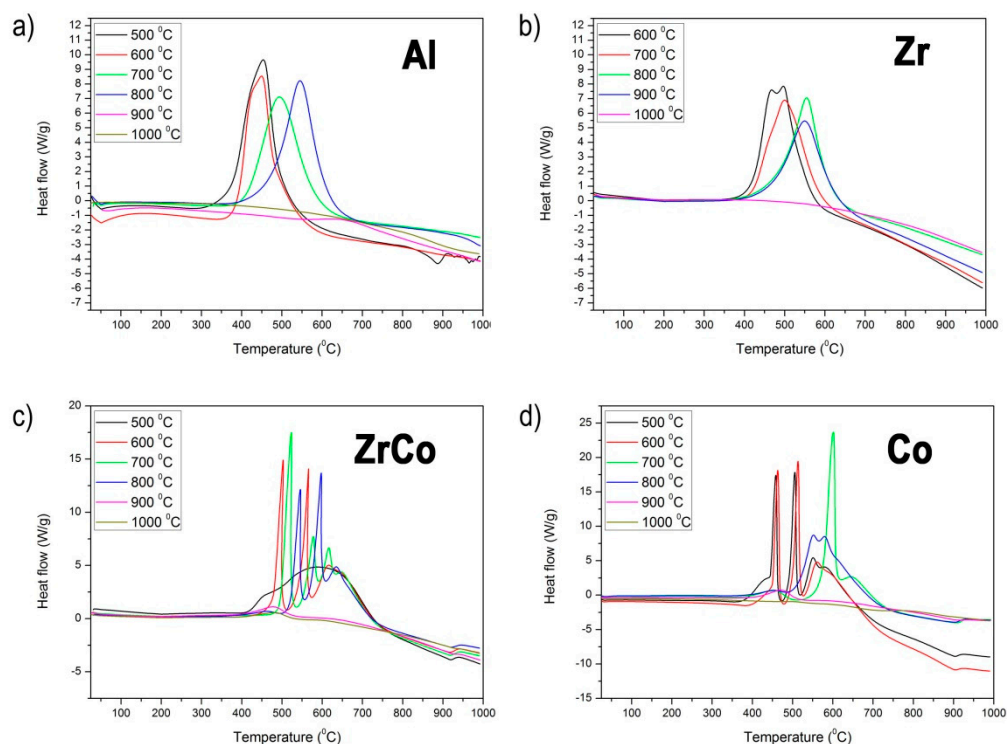


Figure S3. Differential scanning calorimetry curves of the pyrolyzed materials and containing the heteroatoms: (a) Aluminum; (b) Zirconium; (c) Zirconium plus Cobalt; (d) Cobalt.

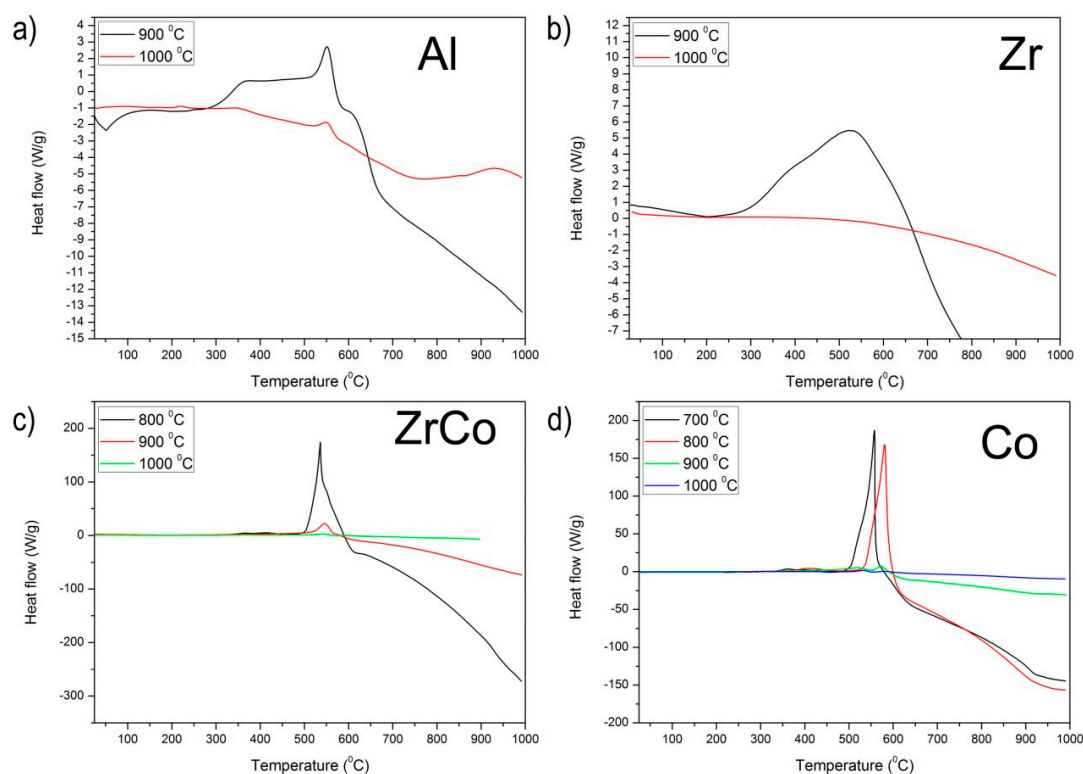


Figure S4. Differential scanning calorimetry curves of the HF-etched samples and containing the heteroatoms: (a) Aluminum; (b) Zirconium; (c) Zirconium plus Cobalt; (d) Cobalt.

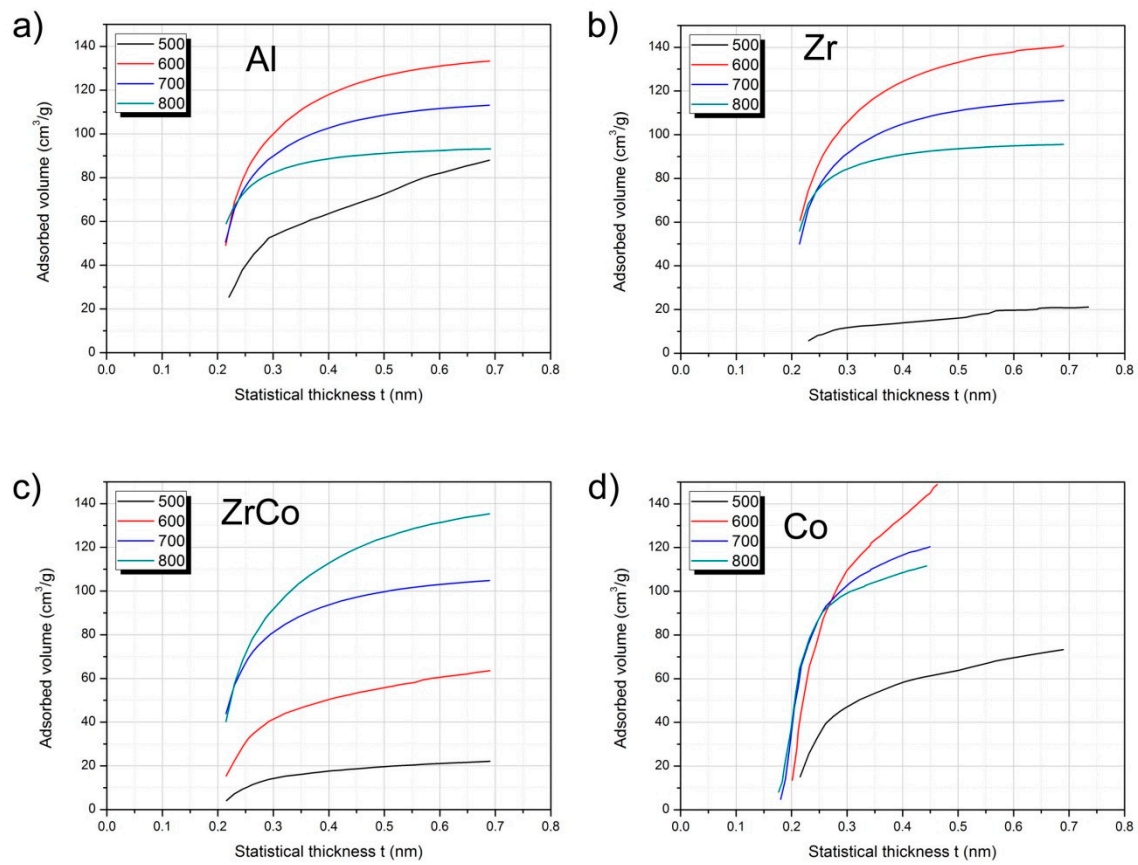


Figure S5. t -plots obtained from the nitrogen adsorption isotherms of the pyrolyzed materials and containing the heteroatoms: (a) Aluminum; (b) Zirconium; (c) Zirconium plus Cobalt; (d) Cobalt.

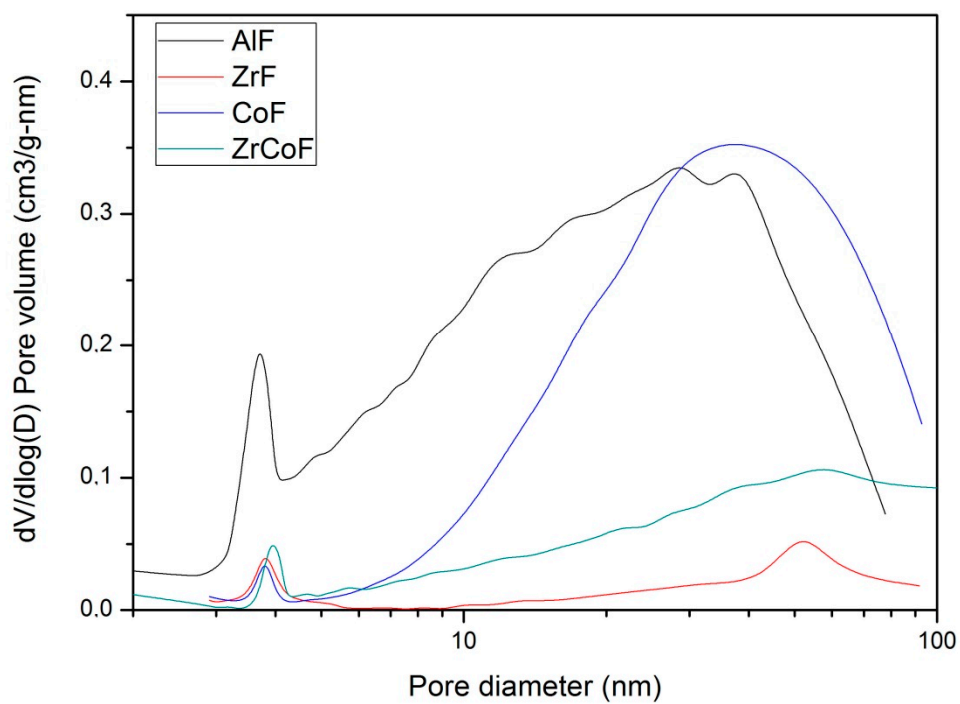


Figure S6. BJH Pore size distributions of the HF-etched samples.

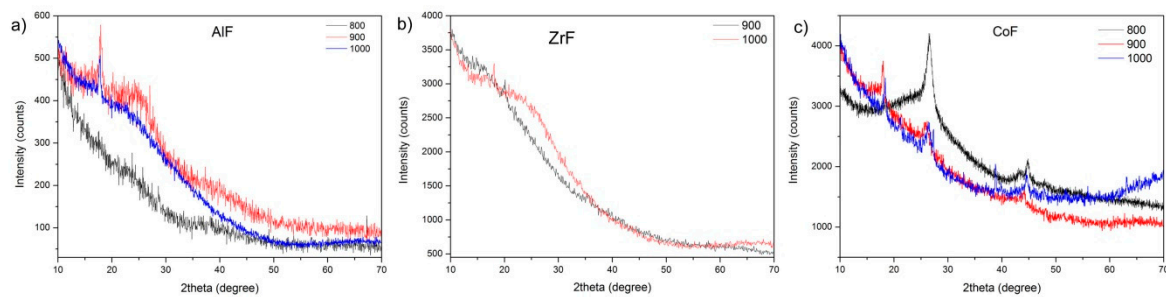


Figure S7. XRD patterns of the HF-etched materials and containing the heteroatoms: (a) Aluminum; (b) Zirconium; (c) Cobalt.