

Supporting Information

Micron- and nano-sized FAU-type zeolites from fly ash for antibacterial applications

Lubomira Tosheva,^{,†} Ava Brockbank,[†] Boriana Mihailova,[‡] Justyna Sutula,[†] Joachim Ludwig,[‡] Herman Potgieter,[†] and Joanna Verran[†]*

[†]Faculty of Science and Engineering, Manchester Metropolitan University, Chester Street, Manchester, M1 5GD, United Kingdom

[‡]Mineralogisch-Petrographisches Institut, Universität Hamburg, Grindelallee 48, D-20146 Hamburg, Germany

*CORRESPONDING AUTHOR, E-mail: l.tosheva@mmu.ac.uk (L Tosheva)

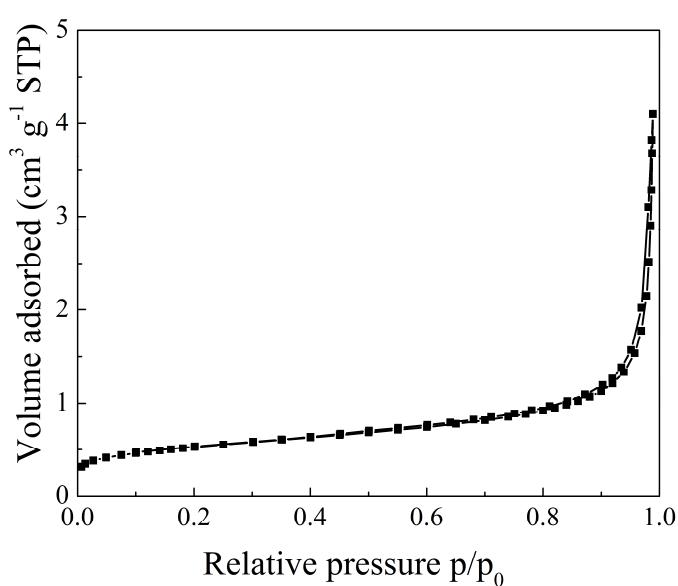


Figure S1. Nitrogen adsorption-desorption isotherm at -196 °C of fly ash.

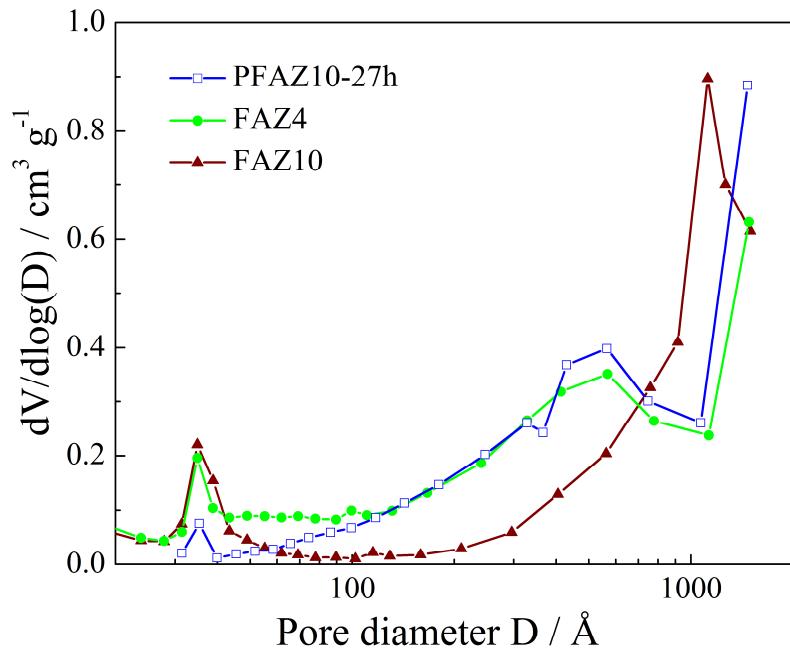


Figure S2. BJH desorption pore-size distribution plots of PFAZ10-27h, FAZ4 and FAZ10 samples.

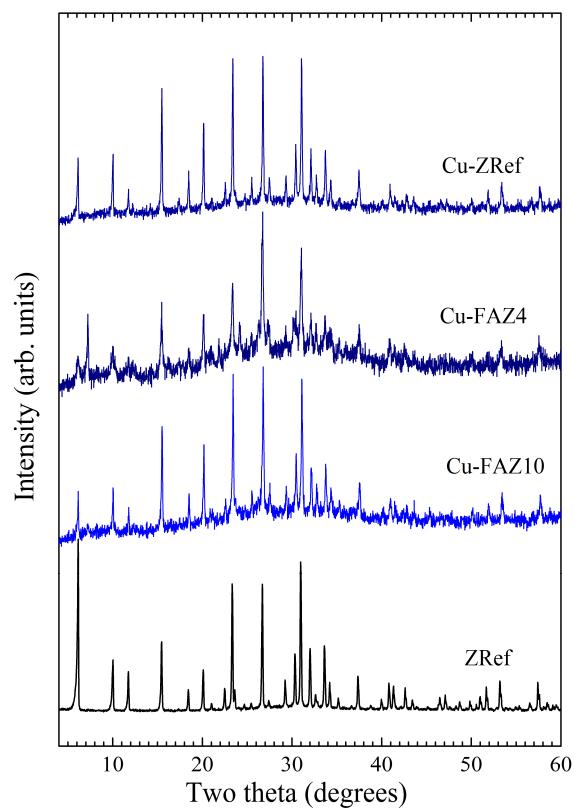


Figure S3. XRD patterns of ZRef, Cu-FAZ and Cu-ZRef samples. The XRD patterns were measured with a Philips X’Pert diffractometer (Bragg-Brentano geometry), using Cu K α radiation, a step size of 0.02 ° and an accumulation time of 2 s per step.

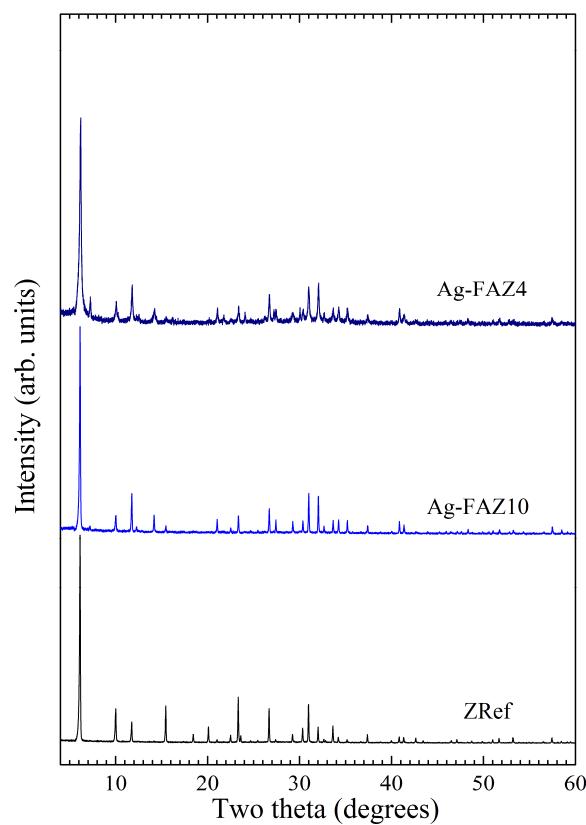


Figure S4. XRD patterns of ZRef, Ag-FAZ10 and Ag-FAZ4 samples. The XRD patterns were collected with a Stoe Automated Diffractometer – Multi-Purpose (STADI-MP), using Cu K α radiation, a step size of 0.005 ° and an accumulation time of 2 s per step.