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The effect of high power ultrasound on an aqueous suspension of graphite

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Figure 1: Decrease of the particle size by ultrasonic treatment on graphite powder

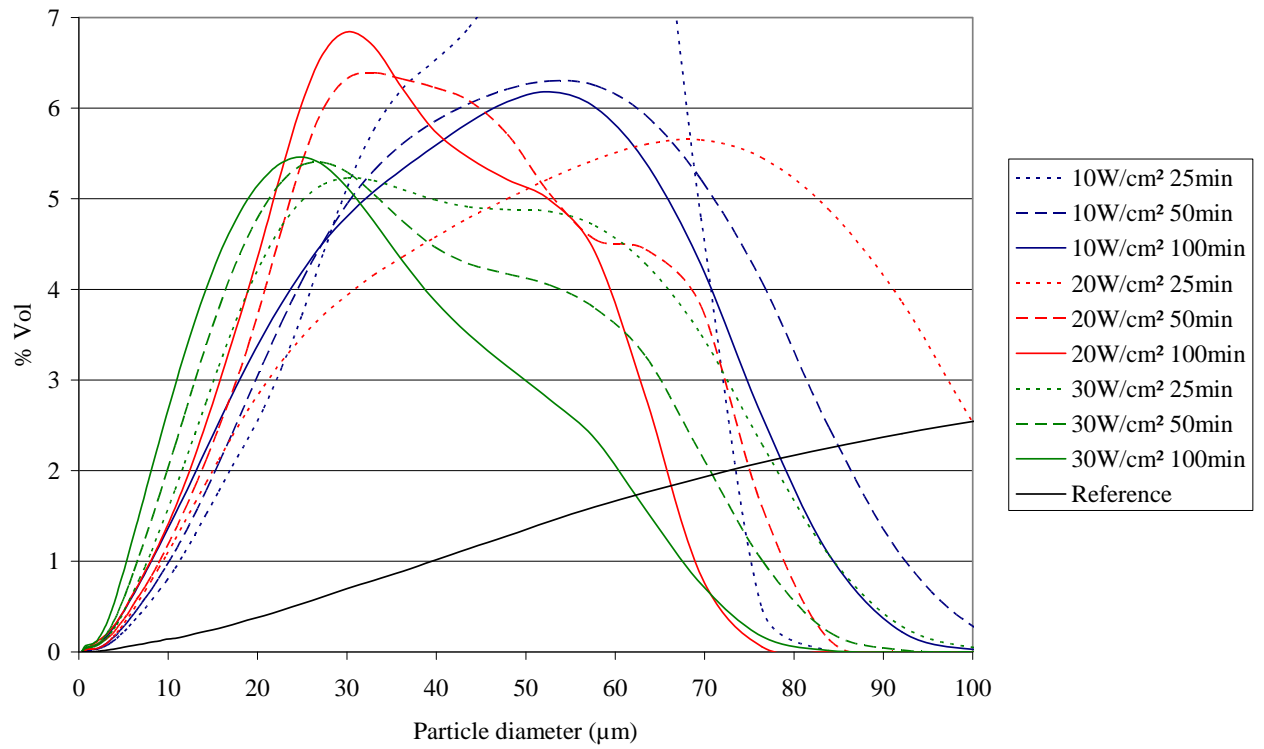


Figure 2: Particle size vs. energy density

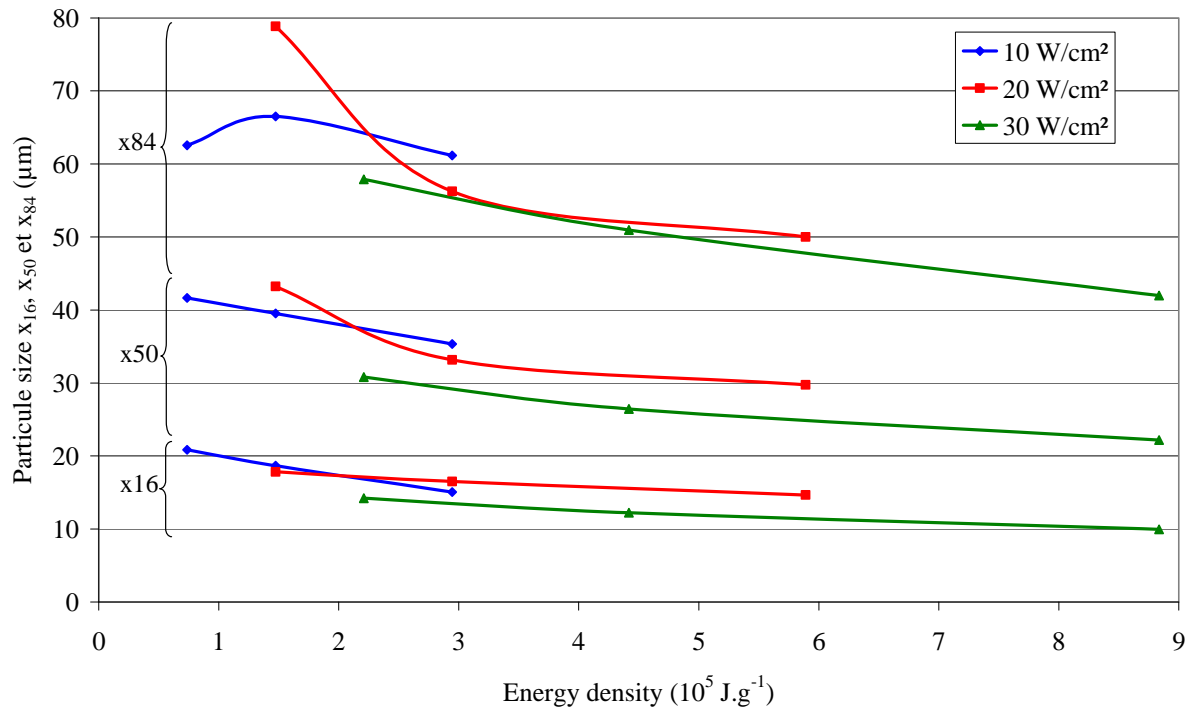


Figure 3: HRTEM photographs showing the graphite crystallites before and after ultrasound treatment (with probe A)

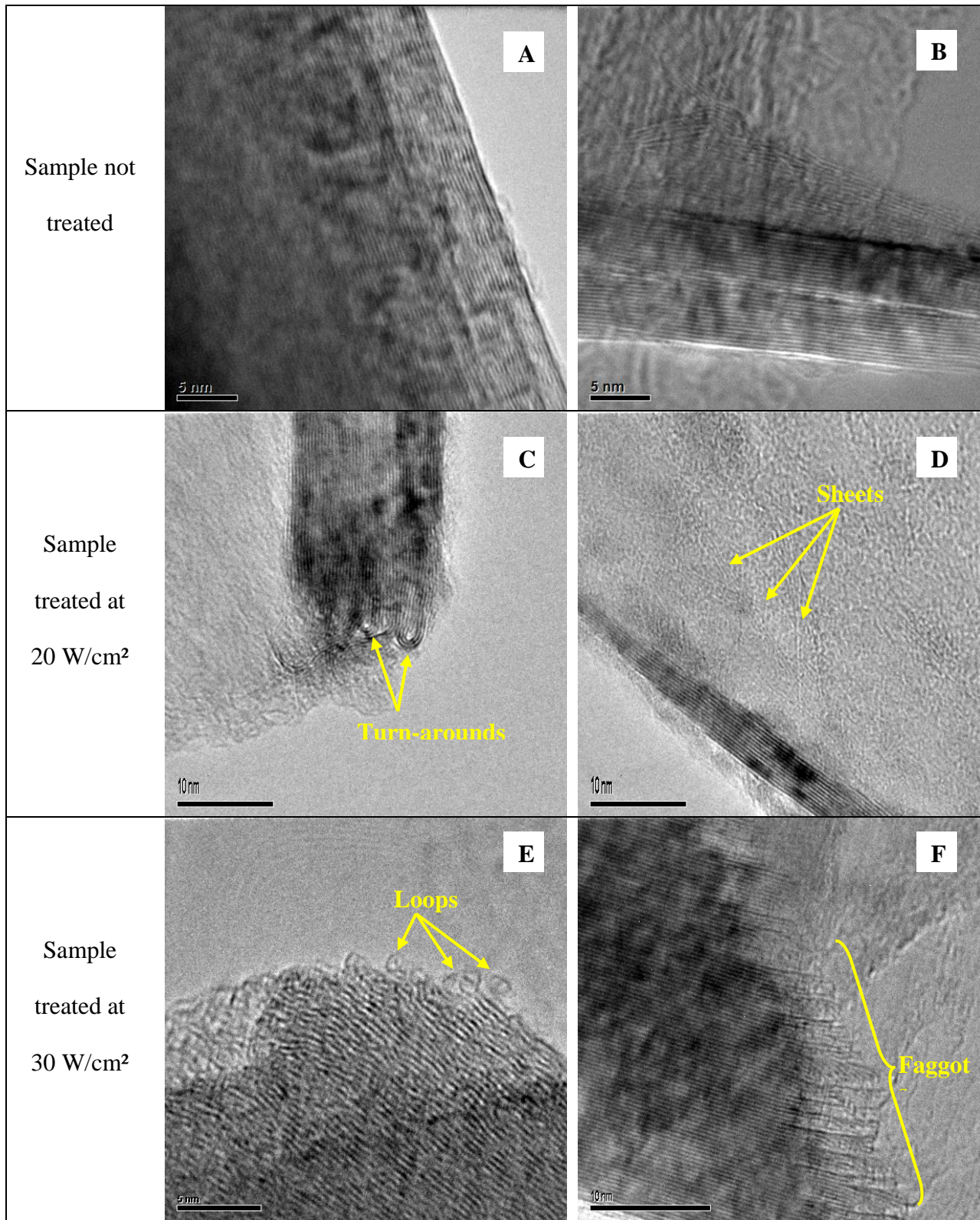


Figure 4: pH and H₂O₂ curves during graphite sonolysis (powder A, probe A, m = 1 g,

V = 1 L, T = 20 °C, Argon saturated, I = 20 W/cm²)

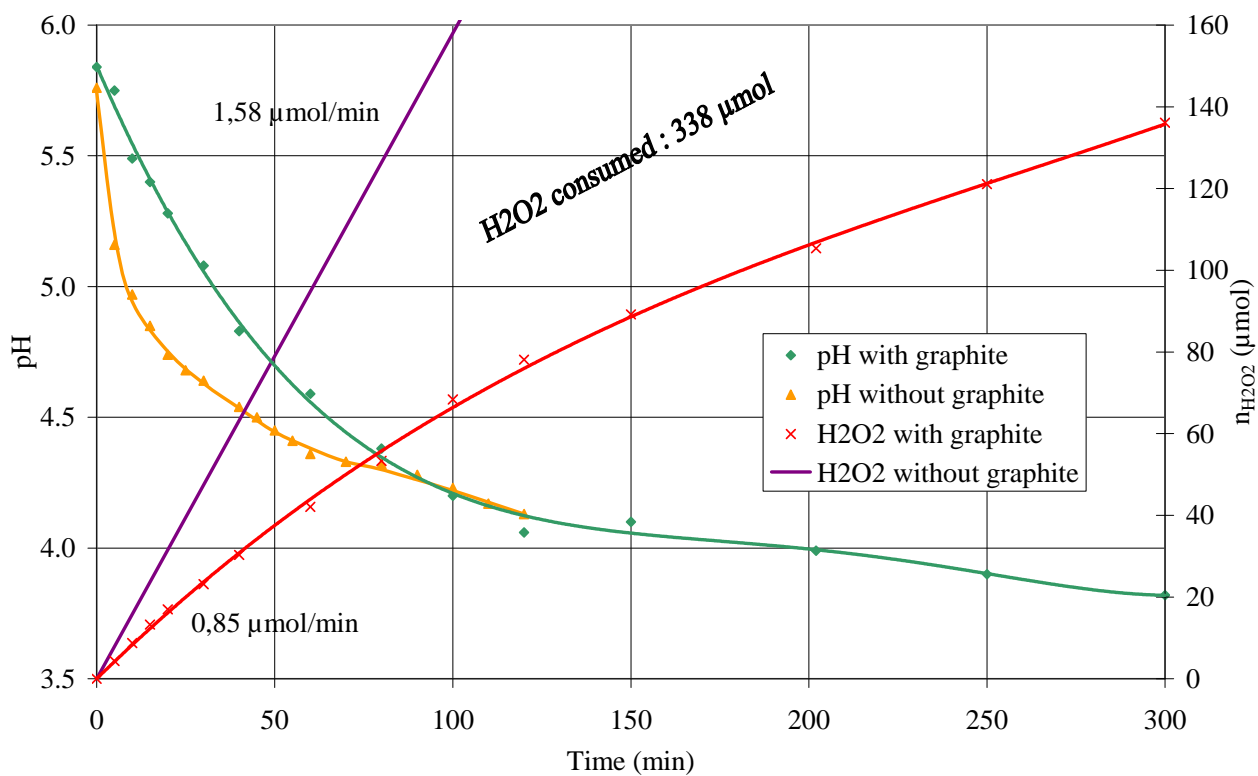


Figure 5: Mass spectrum in the range [68-102] in APCI+ Fourier Transform mode

eau sonifée HR #10 RT: 0.09 AV: 1 NL: 3.41E6
T: FTMS + p APCI corona Full ms [50.00-214.00]

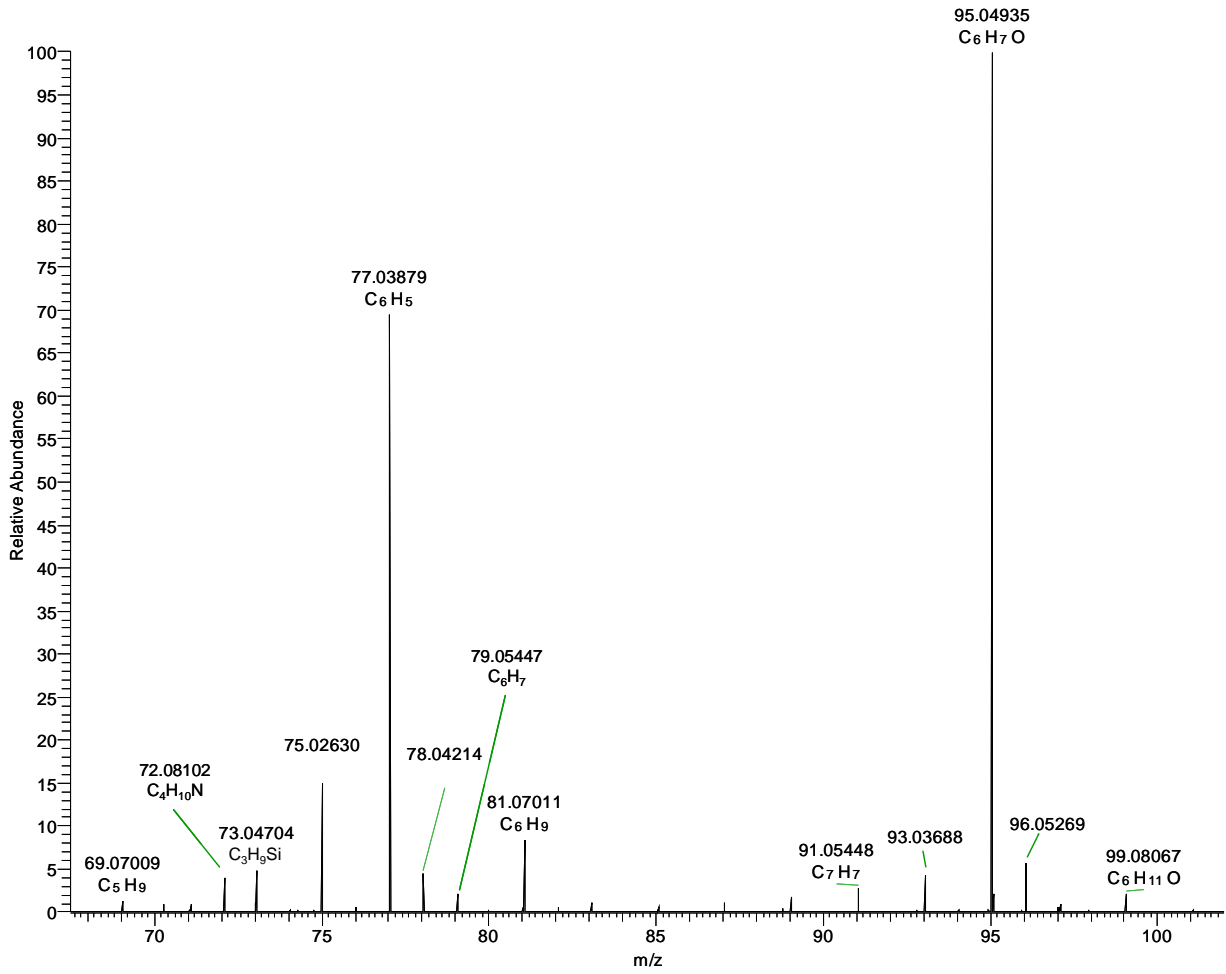


Figure 6: Scheme of the graphite degradation by ultrasound treatment in water

