

Figure S1 Surface morphology of AZ31B magnesium alloy coupons after 7-day incubation with carbon source addition of 0% (a, a₁), 1% (b, b₁), 10% (c, c₁) and 100% (d, d₁)

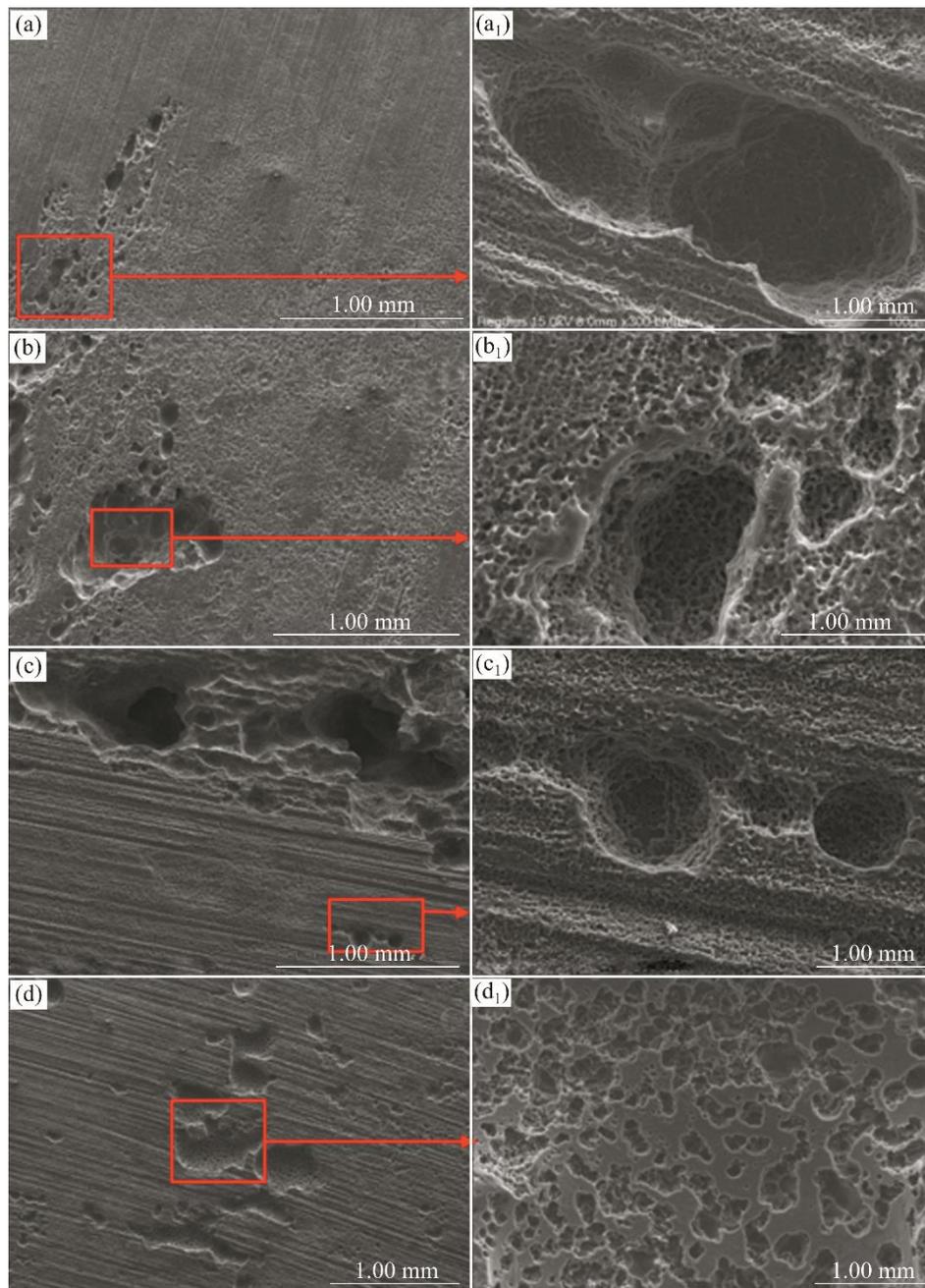


Figure S2 Surface morphology of AZ31B magnesium alloy coupons after 7-day incubation with carbon source addition of 0% (a, a₁), 1% (b, b₁), 10% (c, c₁) and 100% (d, d₁) after removing the corrosion products

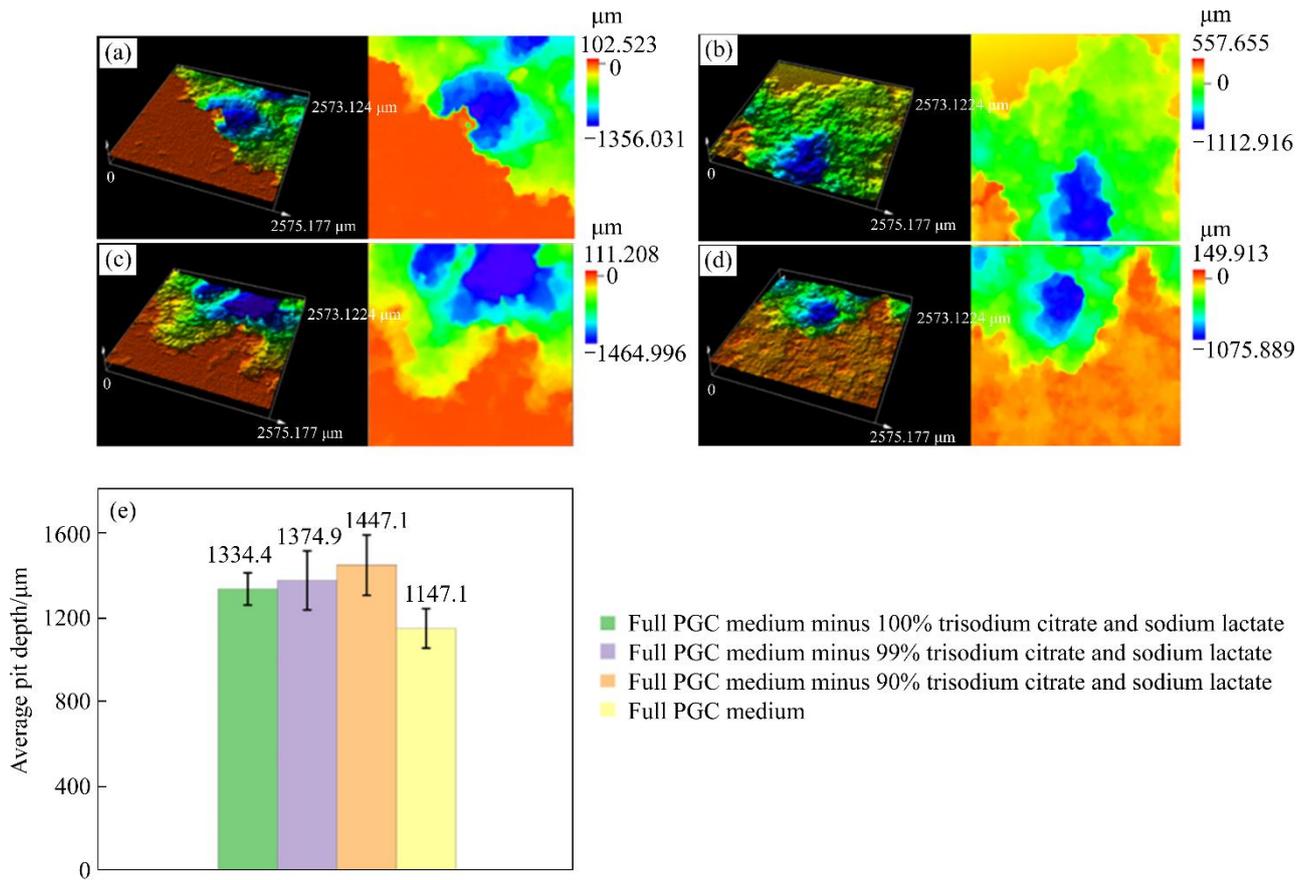


Figure S3 Confocal laser scanning microscopy (CLSM) images of AZ31B magnesium alloy coupons after 7-day incubation with carbon source addition of 0% (a), 1% (b), 10% (c) and 100% (d) after removal of the surface products, and average pit depth (e)

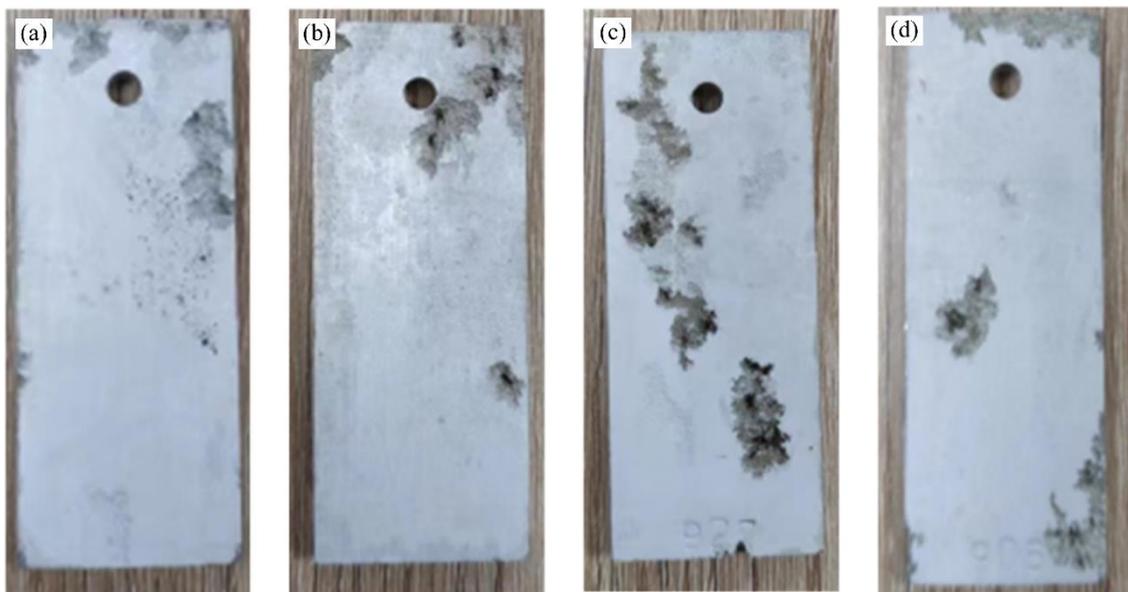


Figure S4 Surface morphology of AZ31B magnesium alloy coupons after the removal of corrosion products: (a) 0%; (b) 1%; (c) 10%; (d) 100%

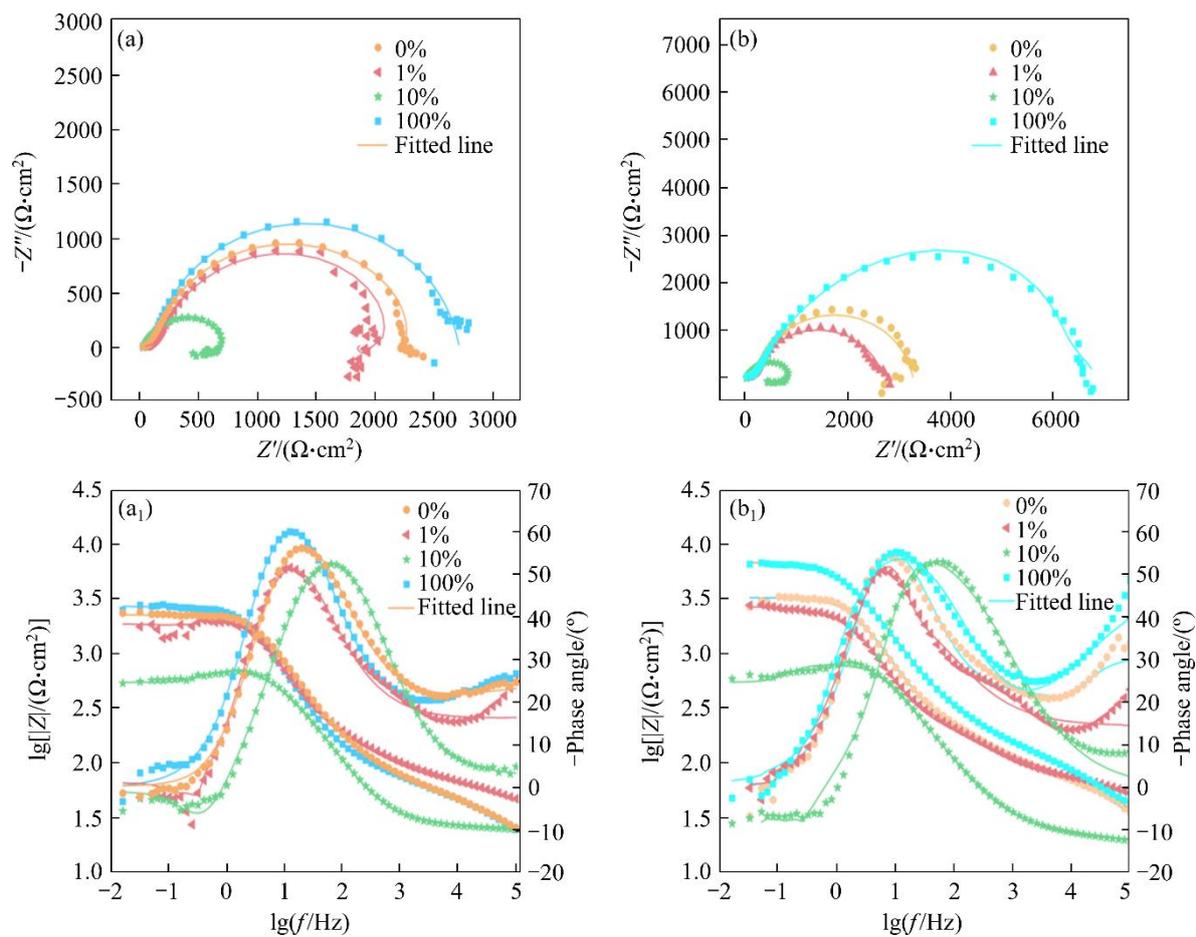


Figure S5 Nyquist and Bode plots measured of AZ31B magnesium alloy coupons after 3 d (a, a₁), and 7 d (b, b₁) during 7-day starvation test with different concentrations of carbon source (0%, 1%, 10% and 100%)