

Supplementary material

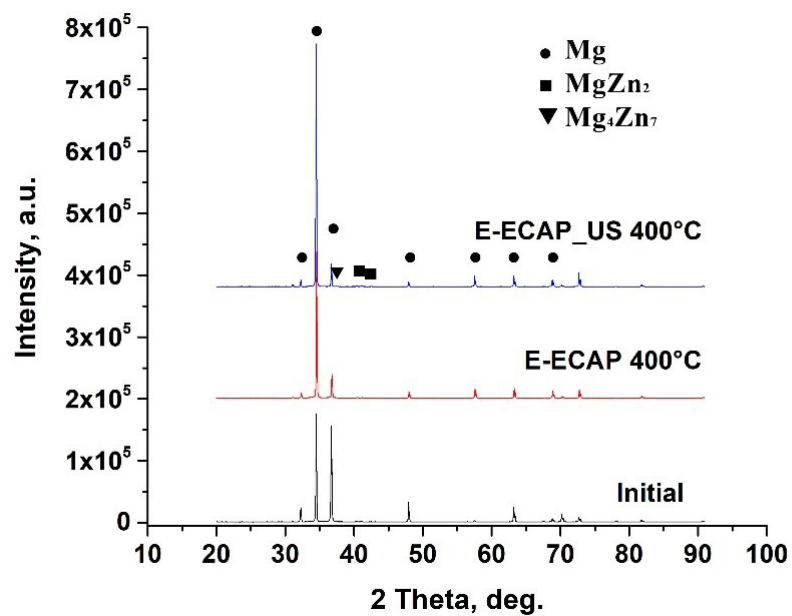


Fig. S1. (Color online) Diffraction patterns of the Mg-5.8Zn-0.5Zr alloy after Ex-ECAP 400°C.

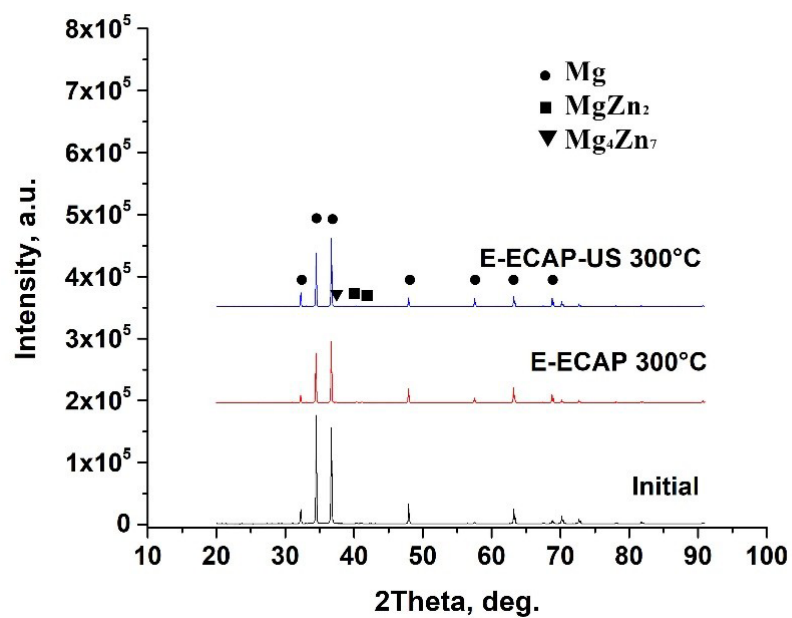


Fig. S2. (Color online) Diffraction patterns of the Mg-5.8Zn-0.5Zr alloy after Ex-ECAP 300°C.

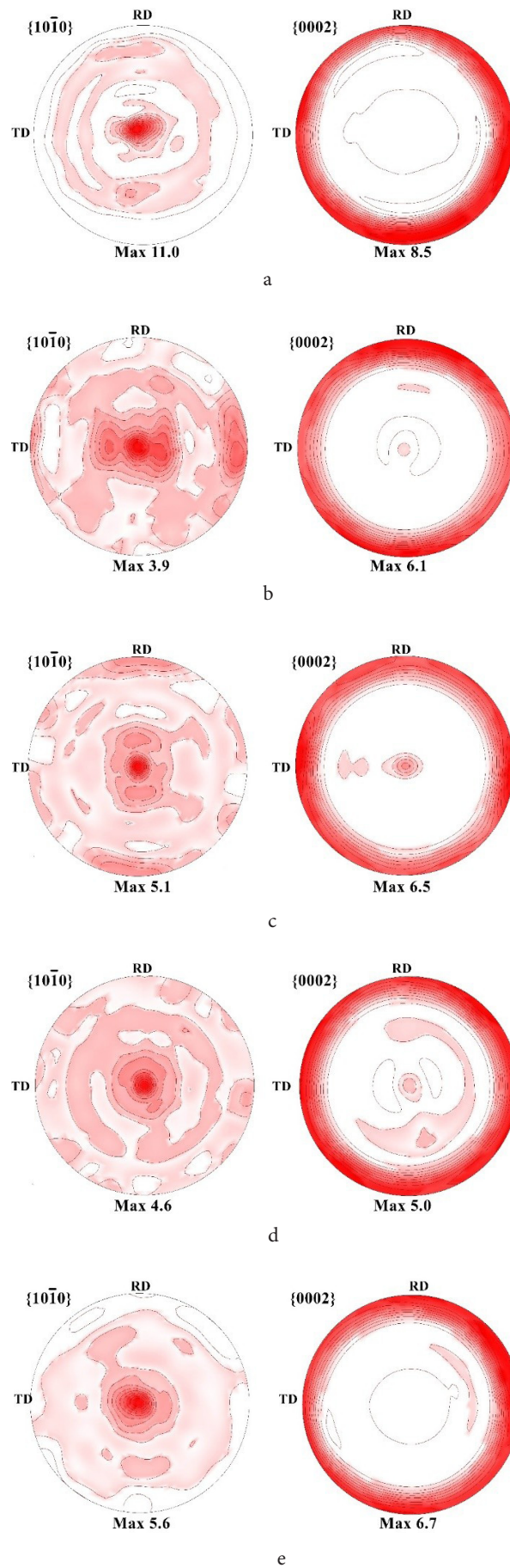


Fig. S3. (Color online) $\{0002\}$, $\{0\}$ pole figures showing the crystallographic texture of initial state (a), Ex-ECAP 400°C (b), Ex-ECAP-US 400°C (c), Ex-ECAP 300°C (d), Ex-ECAP-US 300°C (e).

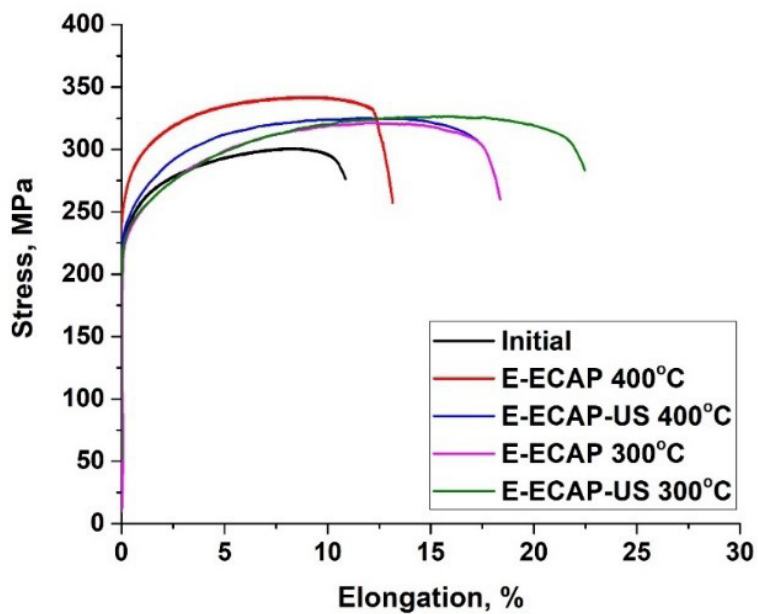


Fig. S4. (Color online) Tensile test curves for the Mg-5.8Zn-0.5Zr.

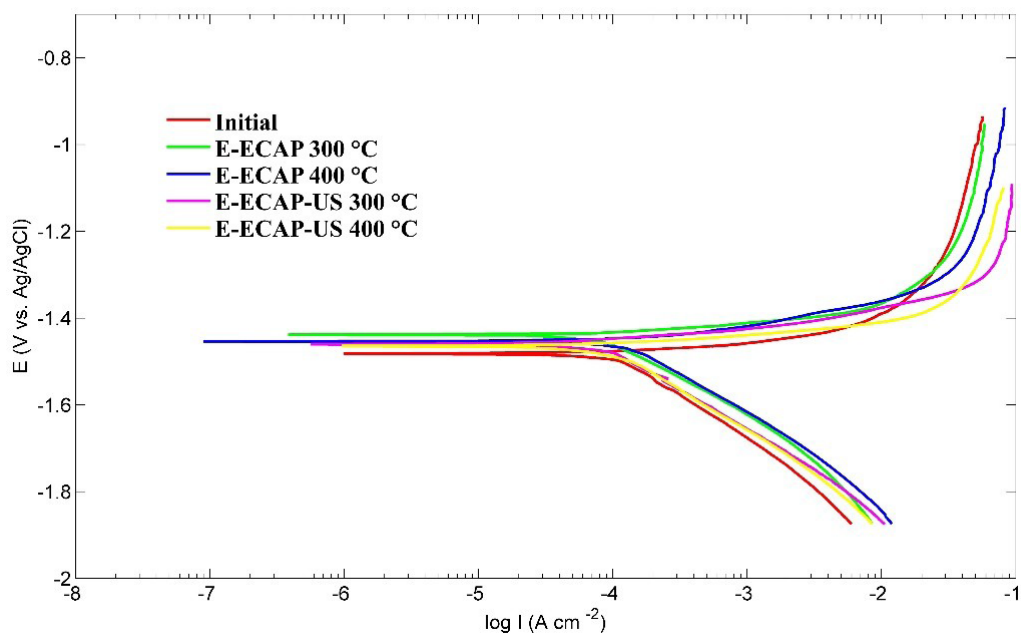


Fig. S5. (Color online) Results of the electrochemical tests.