**Supplementary Material**

**Corrosion resistant fluoridated Ca-Mg-P composite coating on magnesium alloy prepared via hydrothermal assisted sol-gel process**

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**Table S1.** Values of *E*corr and *I*corr for F1, F2 and F3 derived from the Tafel polarization curves in Fig. 3a.

|  |  |  |
| --- | --- | --- |
| Samples | *E*corr (V vs. SCE) | *I*corr (µA/ cm2) |
| F1 | -1.38±0.09 | 0.36±0.03 |
| F2 | -1.42±0.10 | 0.28±0.02 |
| F3 | -0.80±0.04 | 0.02±0.001 |

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**Fig. S1.** Bode & Phase plots of F1, F2 and F3.