

Electronic Supplementary Information (ESI)

Equal volume impregnation-air calcination synthesis of lithium-doped MgO nanoplates for enhanced antibacterial performance

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Table S1 XRD, XPS data and antibacterial ratio of Li-doped nano-MgO.

Samples	2 θ ($^{\circ}$)	FWHM ($^{\circ}$)	<i>d</i> -Spacing (\AA)	Crystal size (nm) ^a	XPS-O _A (%)	Antibacterial ratio (%)
MgO	42.8	0.171	2.1067	49.3	50.8	84.4
0.1Li-MgO	42.9	0.174	2.1057	48.5	52.7	86.5
0.5Li-MgO	42.9	0.188	2.1049	44.9	57.6	91.8
1.5Li-MgO	42.9	0.212	2.1047	39.8	61.9	99.6

^a The crystallite size of MgO samples was calculated using the Debye-Scherrer formula based on the (200) plane from XRD data.

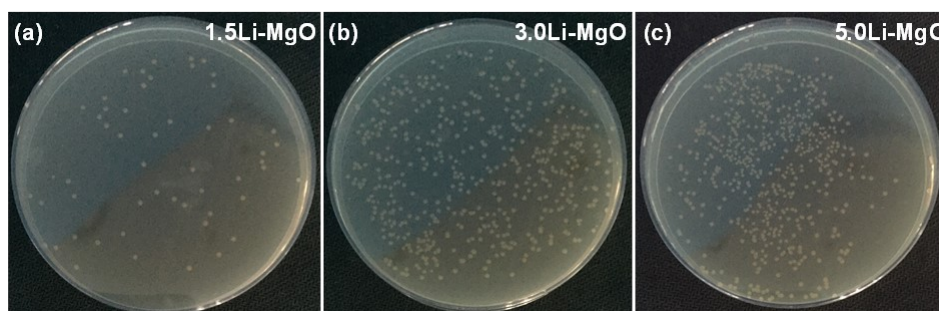


Fig. S1 Representative photographs for the antibacterial activities of 1.5Li-MgO, 3.0Li-MgO and 5.0Li-MgO.