Electronic Supplementary Material (ESI) for RSC Advances.

Optical performance improvement of semi-transparent metal film electrodes with biomimetic subwavelength gratings for high-performance optoelectronic device applications

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Supplementary Information

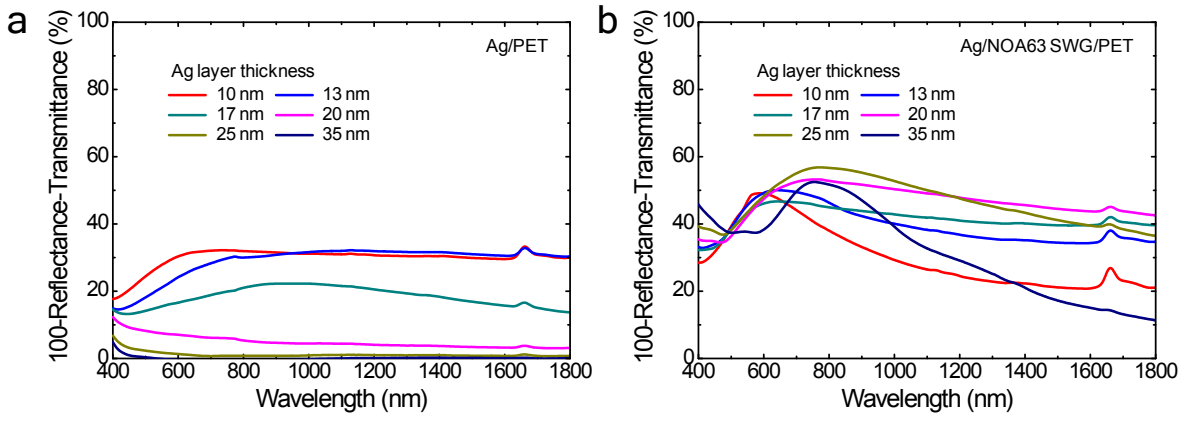
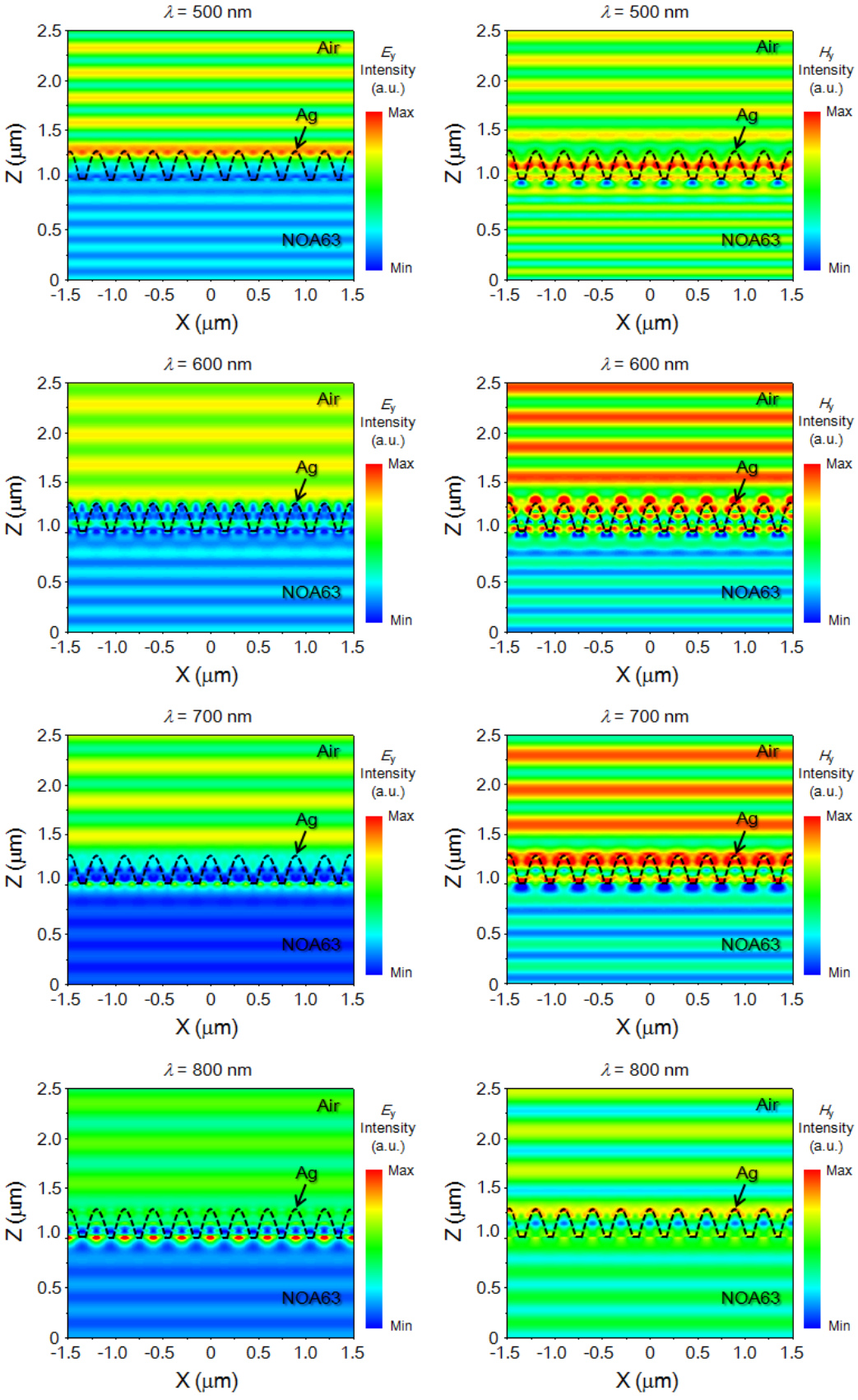


Fig. S1 Absorption (100-reflectance-transmittance) spectra of the Ag/PET and the Ag/NOA63 SWG/PET for different Ag layer thicknesses.


λ = 500 nm
Air
Ag
NOA63
Ey Intensity (a.u.)
Max
Min
Z (μm)
X (μm)
λ = 500 nm
Air
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NOA63
Hy Intensity (a.u.)
Max
Min
Z (μm)
X (μm)
λ = 600 nm
Air
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NOA63
Ey Intensity (a.u.)
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λ = 600 nm
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Ag
NOA63
Hy Intensity (a.u.)
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Z (μm)
X (μm)
λ = 700 nm
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Ag
NOA63
Ey Intensity (a.u.)
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λ = 700 nm
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NOA63
Hy Intensity (a.u.)
Max
Min
Z (μm)
X (μm)
λ = 800 nm
Air
Ag
NOA63
Ey Intensity (a.u.)
Max
Min
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λ = 800 nm
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NOA63
Hy Intensity (a.u.)
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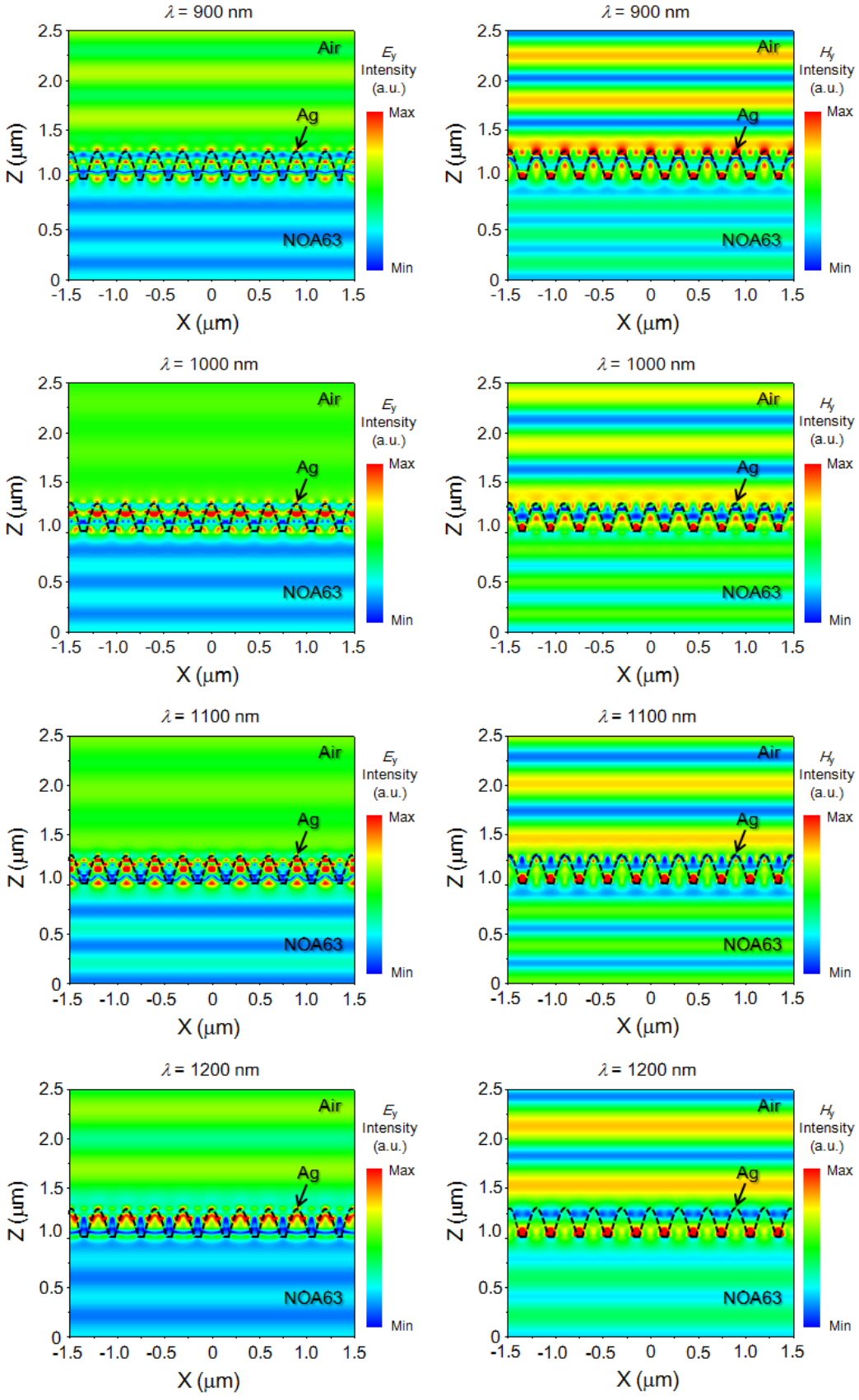
λ = 900 nm
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NOA63
Ey Intensity (a.u.)
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λ = 900 nm
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λ = 1200 nm
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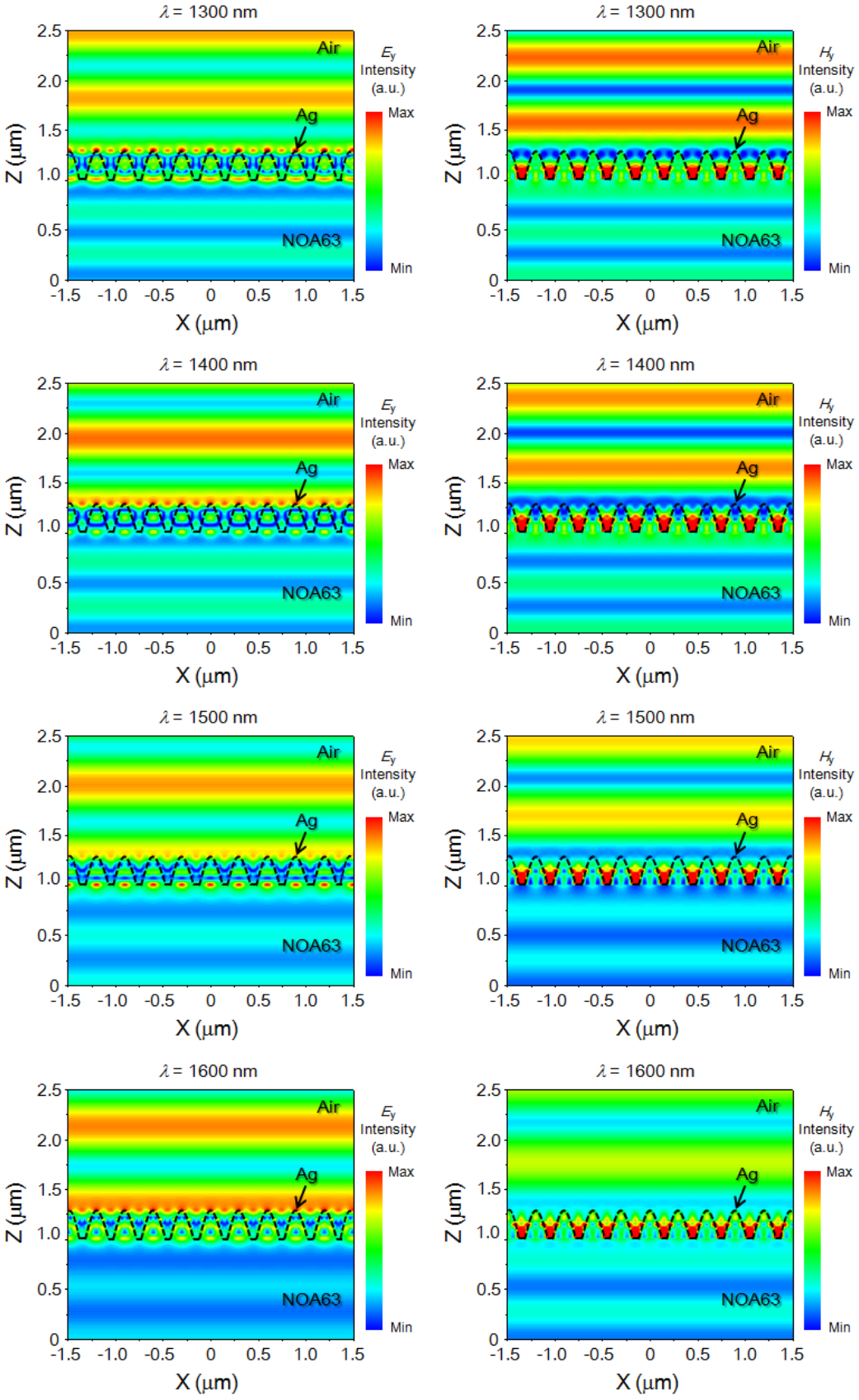

Fig. S2 Calculated electric (E_y) and magnetic (H_y) field intensity distributions of Ag (17 nm)-coated NOA63 SWGs at different wavelengths.