

Bonal *et al.*

Supplementary Information

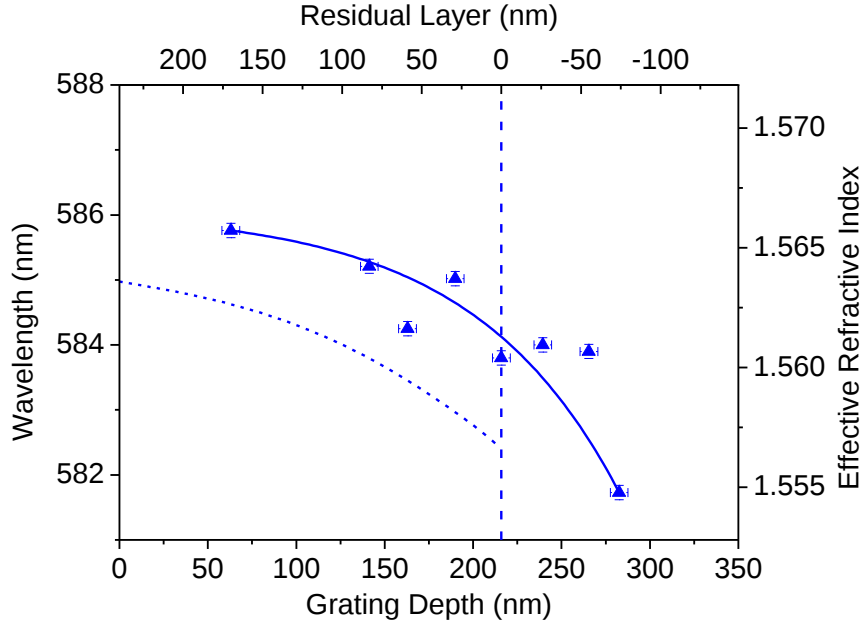
Controlling the emission properties of solution-processed organic distributed feedback lasers through resonator design

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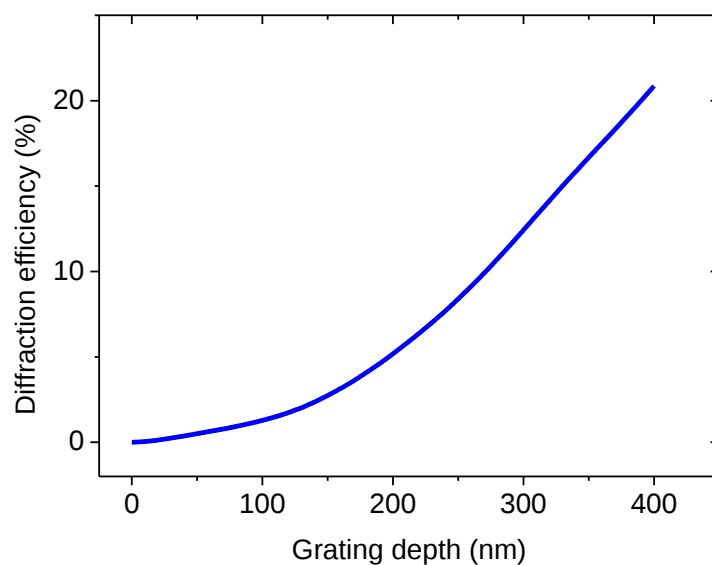
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Supplementary Figure 1. Influence of the grating depth on the laser wavelength.

Experimental emission wavelength λ_{DFB} (triangles) as a function of the grating depth d (bottom axis) and the corresponding residual layer thickness s (top axis) for lasers with initial DCG layer thickness $s_0 = 240$ nm. The full line is a guide to the eye. The dotted line corresponds to the resonant Bragg wavelength λ_{Bragg} calculated from Ec. 1 using experimental grating period Λ and effective index n_{eff} obtained from simulation (values in the right axis). The dashed vertical line indicates the resonator with no residual layer ($s = 0$).



Supplementary Figure 2. Simulation of diffraction efficiency as a function of grating depth. Simulation of diffraction efficiency vs grating depth for a DCG layer grating with a period of 373 nm and duty cycle of 75:25 (hill:valley) illuminated at 29° with a wavelength of 364 nm. This curve obtained with the program Gsolver was used to translate experimental diffraction efficiencies in grating depth values.