

Supporting Information
for
**Two-dimensional photonic crystals increasing vertical
light emission from Si nanocrystal-rich thin layers**

Lukáš Ondič^{*1}, Marian Varga¹, Ivan Pelant¹, Alexander Kromka¹, Karel Hruška¹ and Robert G. Elliman²

Address: ¹Institute of Physics, Czech Academy of Sciences, v.v.i., Cukrovarnická 10, 162 00, Prague 6, Czech Republic and ²Research School of Physics and Engineering, The Australian National University, Canberra, ACT 2601, Australia

Email: Lukáš Ondič - ondic@fzu.cz

* Corresponding author

Additional experimental data

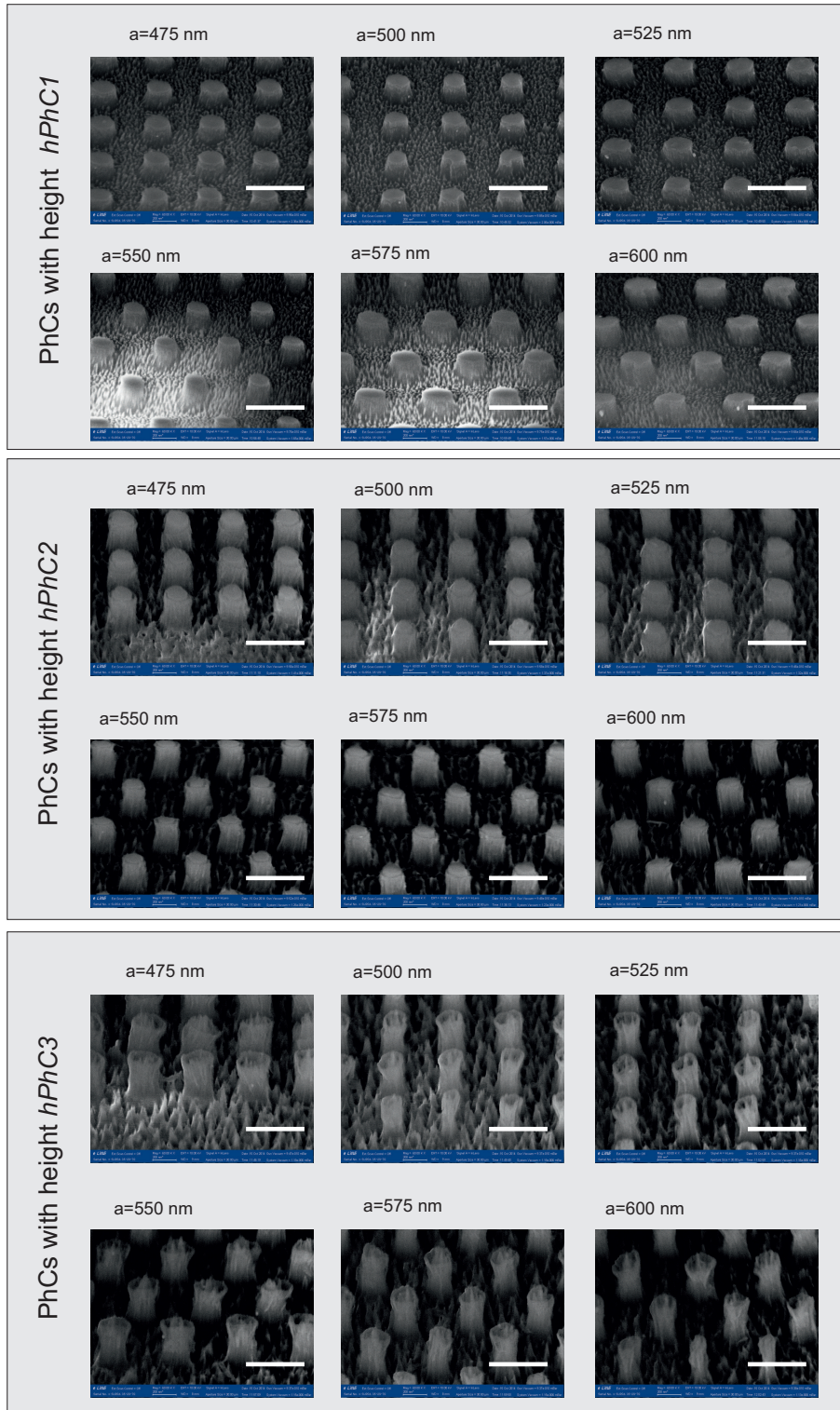
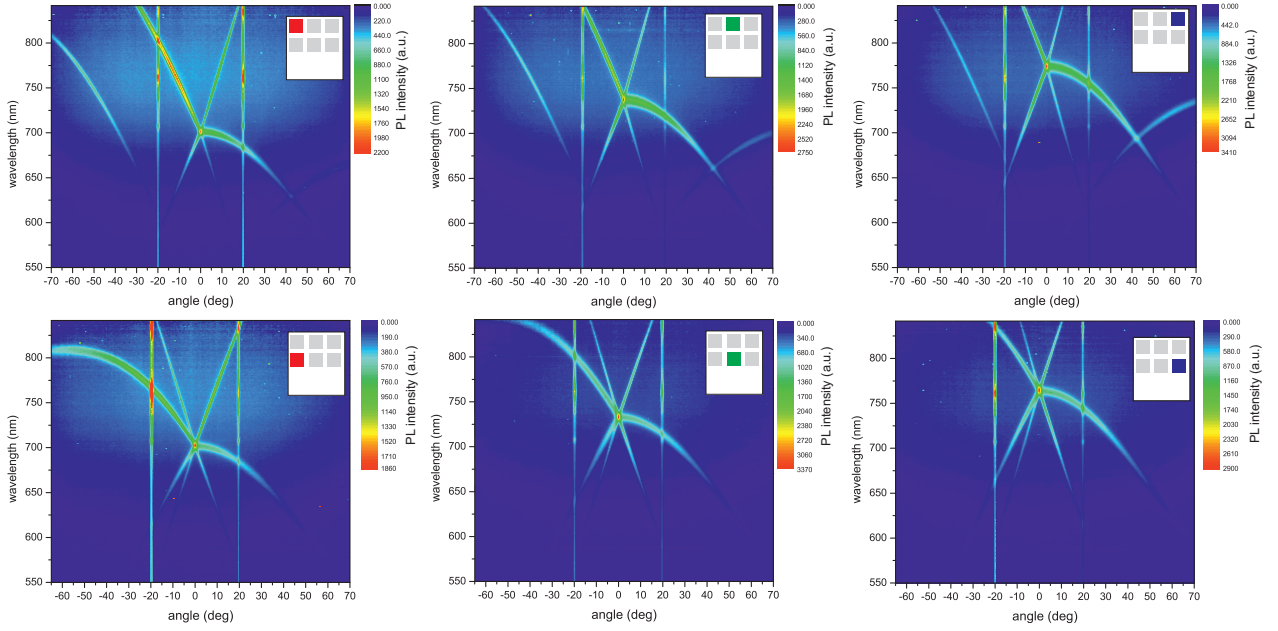


Figure S1: SEM images of the PhCs prepared on SiNCs-rich layers (implant fluence of $1 \times 10^{17} \text{ cm}^{-2}$). The scale bar is 500 nm.

square and hexagonal PhCs with hPhC1 (see the color code)



square and hexagonal PhCs with hPhC2 (see the color code)

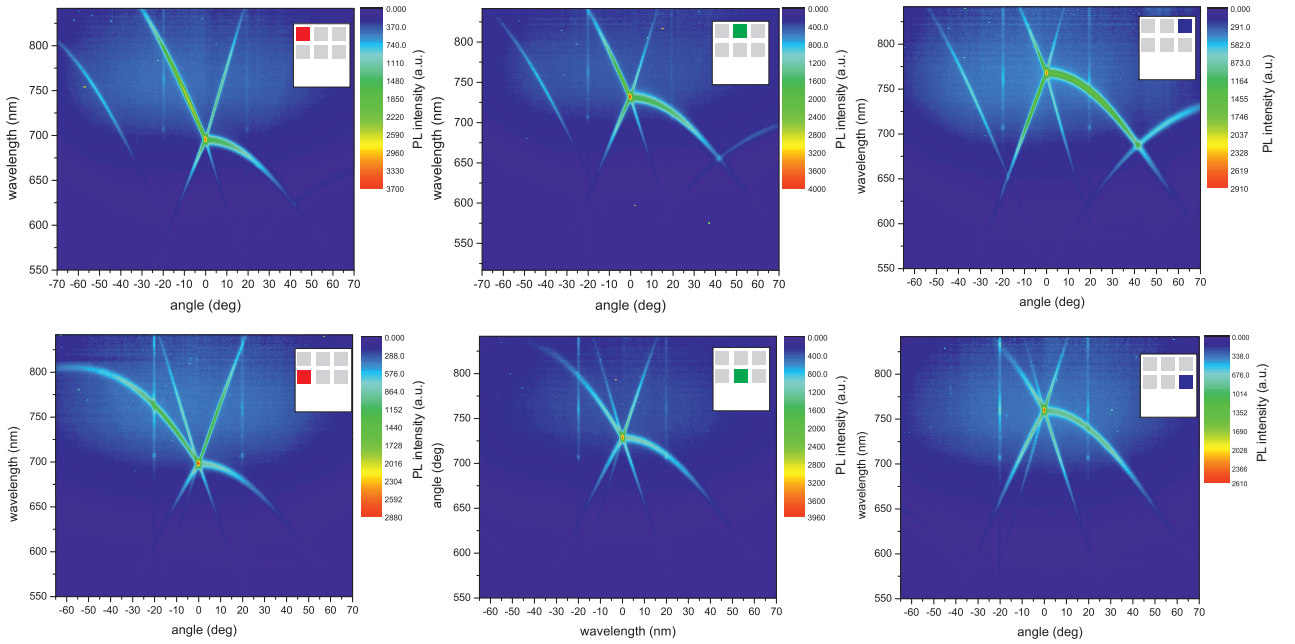


Figure S2: Angle-resolved PL measurements of the PhCs prepared on SiNCs-rich layers.

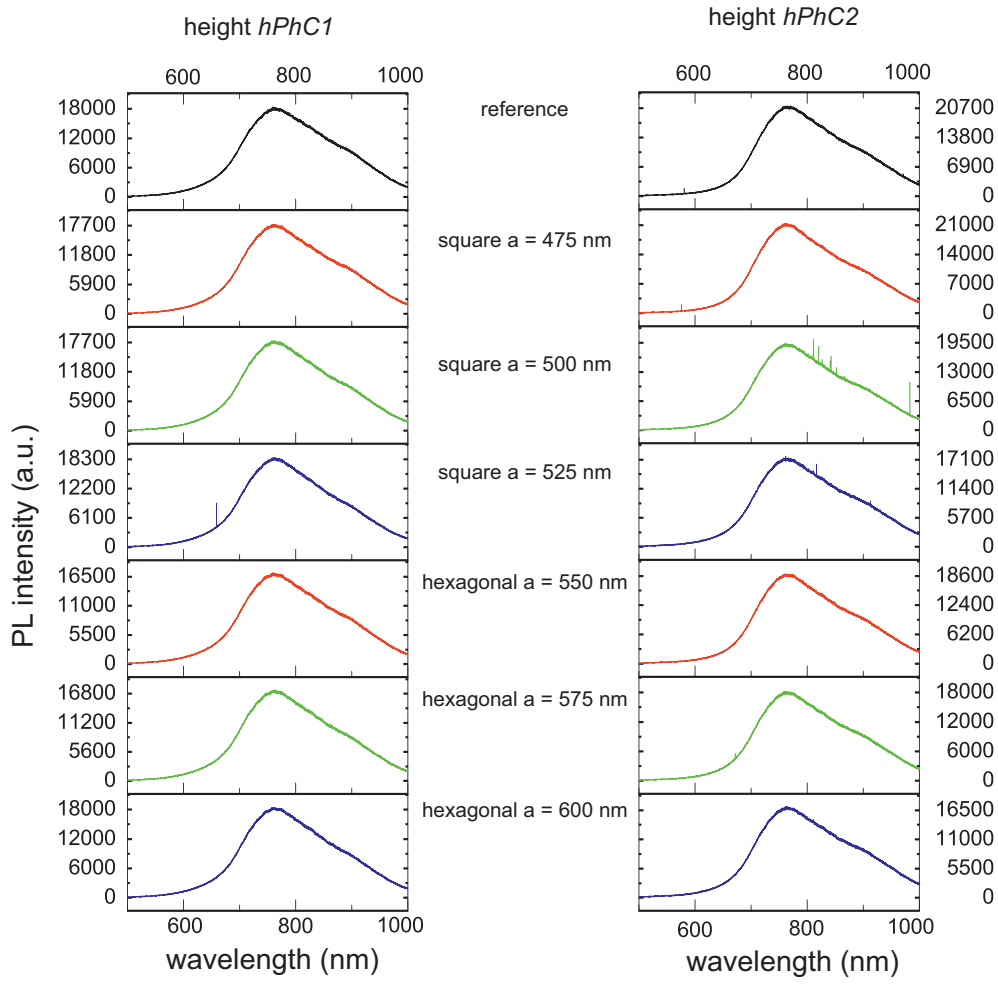


Figure S3: Micro-PL spectra measured in confocal geometry with the objective NA = 0.4 (collection half angle = 23.6°).