

# High Intensity Fluorescence of Photoactivated Silver Oxide from Composite Thin Film with Periodic Array Structure

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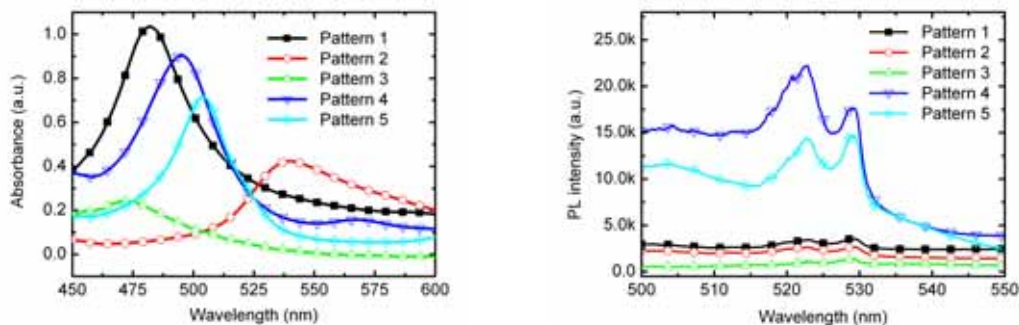
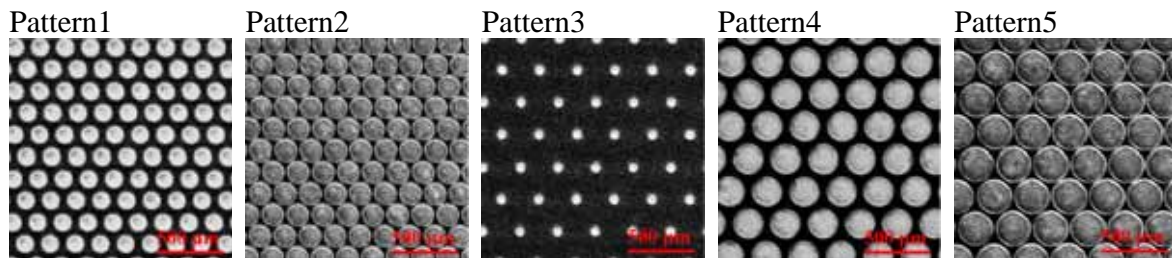
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We have fabricated a composite thin film that exhibits intense photoactivated fluorescence of silver oxide at 522 nm and 529 nm under the irradiation of a 488 nm laser. This film consists of a silver coated polymeric periodic array on indium-tin-oxide glass substrate. By adjusting the column diameters and lattice constants of the array to coincide with the excitation wavelength, an order increase in fluorescence intensity was obtained due to the surface plasmon polariton resonance of silver. This composite film has many potential applications in high efficient optoelectronic devices.



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