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Ganapathi S. Subramania
Stavroula Foteinopoulou
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Introduction

Advanced structuring in materials enables unprecedented photonic capabilities emanating from a cleverly designed synergy between the material's optical properties and patterned features. Of particular interest in this symposium is how these new capabilities interface with active components or quantum emitters that can take us further to a new class of dynamic electromagnetic phenomena and device platforms applicable in photodetectors, energy, biological/chemical sensing, nanoscale thresholdless lasing, solid state lighting as well as chip-scale optical computing. This vast potential for high impact applications has been a continual driving force in active photonic materials research.

The field continues to grow with carbon-based materials bringing new capabilities to tuneable photonic devices; our Active Photonic Materials V conference featured two exciting sessions with the current advances on the topic. Other topics in the many engaging presentations in our sessions encompassed a wide thematic range including extreme absorption management, photodetectors, fabrication of active photonic structures, slow light, photonic Bohm-Aharonov effect, topologically protected states, exotic electromagnetism by symmetry manipulation, spontaneous emission, nanolasing, strong coupling and cavity QED systems, as well as single photons.

Active Photonic Materials V has brought together theorists and experimentalists to exchange state-of-the-art results in this rapidly growing area of research. As conference chairs, we would like to express our sincere thanks to all the participants of the 8808 conference who contributed with their presentations, as well as manuscripts to make this conference a successful and stimulating event.

Ganapathi S. Subramania
Stavroula Foteinopoulou

