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**A method of using data encoded lighting to triangulate the location of animate and inanimate objects using a simple sparse light sensing network.**
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**A novel phosphor system that is compositionally graded to generate a full spectrum (including solar matching) when irradiated with a short wavelength LED.**

**A design and method for growing metastable cubic GaN on a patterned Si substrate and its use for the design and fabrication of cubic III-nitride optoelectronic devices for improved performance.**
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A fluidic, magnetically assisted semiconductor die self-assembly process is described for the creation of large, ordered arrays of devices.

The design and method of using lighting based time of flight sensing to characterize the design and occupancy of a generic space.

A fluidic, magnetically assisted semiconductor die self-assembly process is described for the creation of large, ordered arrays of devices.

The composition, fabrication process and use of new classes of phosphors to produce narrow emission visible emission spectra with excitation spectra in the near UV and visible wavelength regions.

The design of a high resolution, compact microscope system using nanowire LEDs and a compact integrated detector system is described.