

Highest microlense concentration factor for arrays of SPADs

[MEGAFRAME] Oct. 2009: MEGAFRAME reports on the performance of an array of 32x32 plano-convex 50 μ m pitch microlenses (see LEOS 2009), fabricated by co-polymer casting in a photoresist replica mold, which have been characterized by a specially developed Optical Test Bench. The measured detection sensitivity increase reaches up to a factor of 35. This concentration factor is, to the best of our knowledge, presently the highest reported to date for any array of SPADs.