Title:	Automatizing nano-processing stage and optical delay line
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Abstract:	An all-reflective dispersion-free optical delay line was implemented with custom made mechanical parts. A custom LabVIEW program was written to automate the scanning of the delay steps with a resolution of 27 as over a range of 533 f s. The delay line was characterized for collinearity, delay steps, stability, and time zero. The stability of the delay line was found to be 57 as over a distance of 107 cm for about 40 s. A motorized high-speed XY microscope stage was automated in LabVIEW to move on given (x, y) coordinate using both X and Y motors simultaneously. A high-speed electronic shutter was interfaced with the same LabVIEW program. A GUI Python3 program was written to draw arbitrary patterns on an image of the region of intere
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