

Title: Discovery of novel MLK4 inhibitors against colorectal cancer through computational approaches

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Abstract: An Optical Frequency Comb has been numerically generated using a Silicon Nitride Waveguide. Geometrical parameters have been optimized for all normal dispersion profiles. Using a dual-wavelength pump around 1.55 μm in the all-dispersion 0.04 m long waveguide, a frequency comb spanning 88 nm with 10 dB bandwidth is obtained. As far as we know, this is the first instance such broadband frequency comb is reported in a channel waveguide generated in a single stage with small geometrical dimensions. This optical comb can be used in the advancement of optical atomic clocks, optical rulers, wavelength division multiplexing, and others.

Keywords: Atom optics , Silicon nitride , Geometrical optics , Wavelength division multiplexing , Optical pumping , Optical harmonic generation

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