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The excel file contains experimental data for the paper “Photonic crystal waveguides on silicon rich nitride platform”. In particular:

Figure 1: Calculated normalized frequency (a/λ) vs Wavevector for different dispersion bands of a hexagonal photonic crystal of air holes in a silicon rich nitride substrate along with air light line.

Figure 1b: Calculated dispersion relation of a W1 waveguide and W0.7 waveguide in a hexagonal photonic crystal of air holes in a silicon rich nitride substrate along with air light line.

Figure 4: Measured transmission and the trend in transmission of 100 μ m long W1 waveguides in a hexagonal photonic crystal of air holes in a silicon rich nitride substrate for different lattice periods of $a = 560$ nm, 570nm and 580nm.

Figure 5a: Measured transmission and the trend in transmission of 200 μ m long W1 waveguides in a hexagonal photonic crystal of air holes in a silicon rich nitride substrate for lattice period of $a = 580$ nm.

Figure 5b: Estimated group index and estimated propagation loss along with calculated group index of W1 waveguides in a hexagonal photonic crystal of air holes in a silicon rich nitride substrate for lattice period of $a = 580$ nm.

Figure 5c: Measured transmission and the trend in transmission of 200 μ m long W0.7 waveguides in a hexagonal photonic crystal of air holes in a silicon rich nitride substrate for lattice period of $a = 580$ nm.

Figure 5d: Estimated group index and estimated propagation loss along with calculated group index of W0.7 waveguides in a hexagonal photonic crystal of air holes in a silicon rich nitride substrate for lattice period of $a = 580$ nm.