

## **Enhancement of polarization controller characterization using genetic algorithm**

### **ABSTRACT**

We propose and demonstrate characterization of 8-stage LiNbO<sub>3</sub> polarization controller (PC) by using Genetic Algorithm. An ability of GA to work efficiently in polarization control system possesses many advantages including easy code construction, consumption low memory and fast control speed. This algorithm is intelligent enough to characterize the PC accurately in 300 s.

**Keyword:** Polarization controller (PC); Genetic algorithm; LiNbO<sub>3</sub>