Compact high-robustness diffractive neural network chip for water-immersed optical inference

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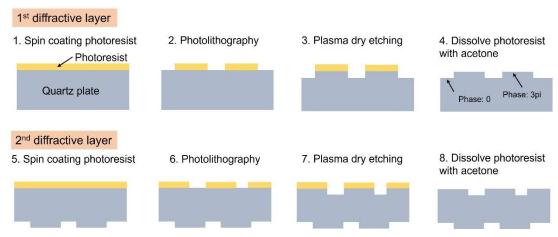


Fig. S1. Fabrication process of the DNN chip.

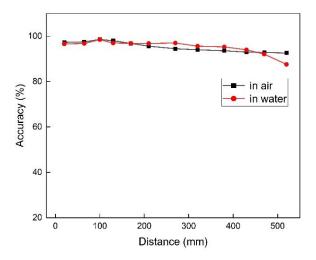


Fig. S2. The simulated impact of recognition distance on the accuracy of DNN.

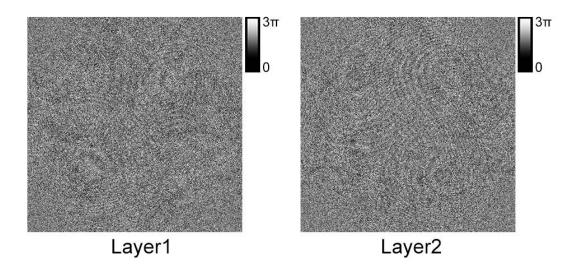


Fig. S3. The binary phase distributions of the DNN for handwritten digital recognition.

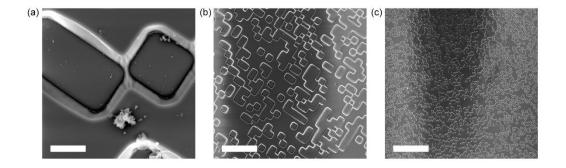


Fig. S4. The SEM images of the chip surface with different magnifications. (a) Scale bar, 5 μ m. (b) Scale bar, 50 μ m. (c) Scale bar, 200 μ m.