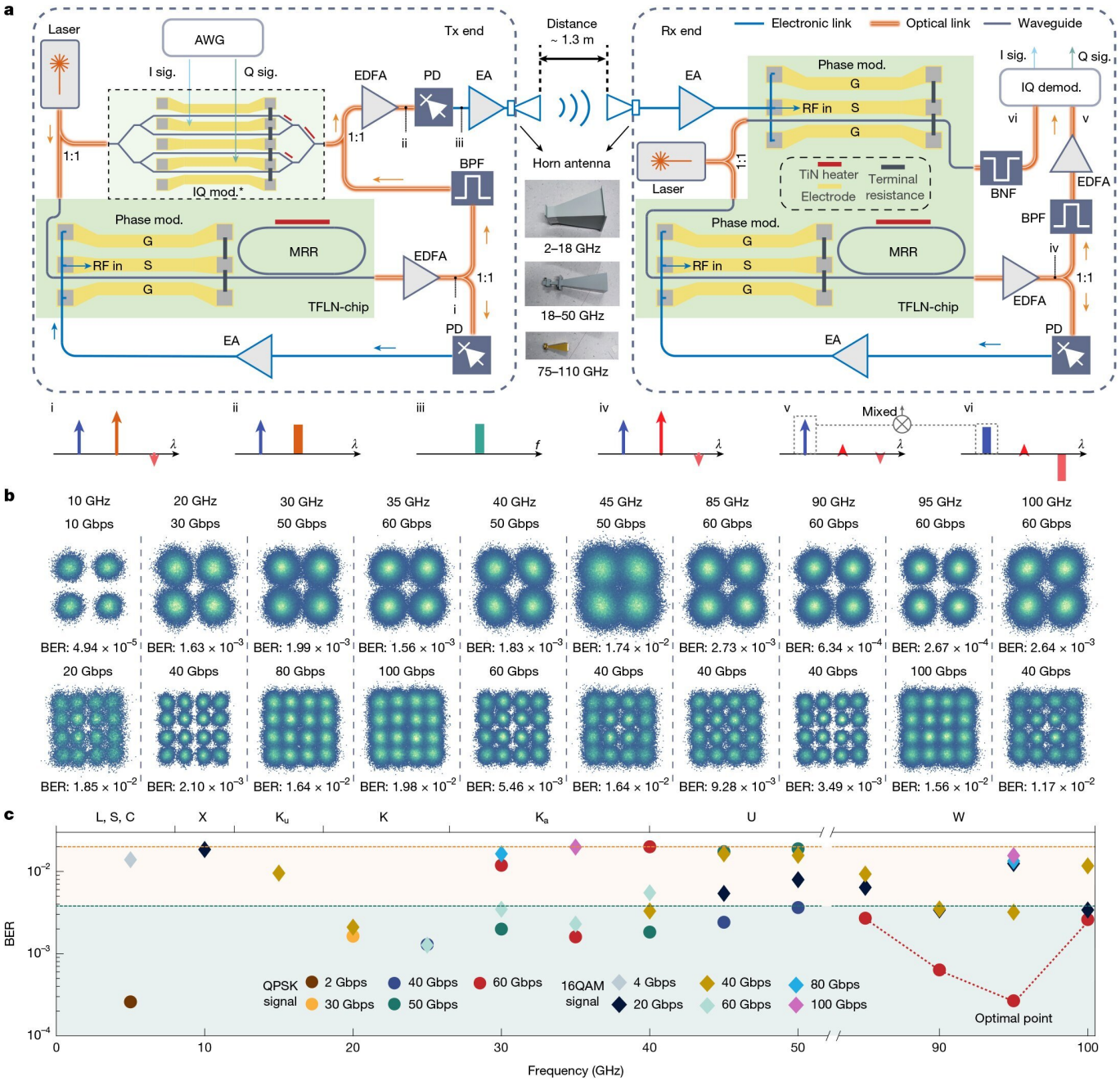
Chinese scientists reported the creation of the world’s first chip for the sixth generation. Development is able to provide mobile Internet speeds above 100 gigabits per second. The project was implemented by scientists of Beijing University and the city University of Hong Kong.

6G is considered as the successor of the existing 5G network and involves a significant leap in the development of communication. This technology should provide ultra -high data transfer speeds, minimal delays and the use of artificial intelligence to manage networks in real time. For this, 6G systems require work on a wide frequency range-from microwaves to terargyt waves.

The created chip the size of the nail has dimensions of 11 by 1.7 millimeters. It is able to work in the range from 0.5 to 115 gigaigers, which previously required the use of nine different radio systems.

The key feature of development is the unification of all the main components in one miniature device. The base of the chip is made of material called the thin -film niobat of lithium. For the generation and transmission of signals, a method is used in which radio waves are converted into optical, and then the necessary frequencies are formed through the oscillators. This approach allows you to create stable signals from microwaves to a terariate range. In the experiments, it was possible to achieve frequency settings at the level of 6 GHz for less than 200 microseconds.



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Despite the breakthrough, the technology is at an early stage of development. Experts predict that the commercial implementation of 6G networks will begin by about 2030.