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From an idea of using laser plasma channels as a waveguide for a sensor technology, we generated parallel plasma channels on a styrene board by a high power laser (1.9 x 10^16 W/cm^2) and propagated microwaves (300, 600, and 900 MHz) via it. As a result, it was confirmed microwave’s propagation gain over 20 dB after generating plasma and their attenuation as the decay of plasma’s conductivity. (Hirotomo NAKAJIMA et al., Plasma and Fusion Research Vol.2, 012 (2007). http://www.jspfr.or.jp/PFR/)

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