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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 ( $1.9 \times 10^{10} \text{W/cm}^2$ ) 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.jspf.or.jp/PFR/>)



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