

# High Power, Highly Efficient Raman Fiber Laser Pumped by Laser Diodes

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We demonstrate a high power, highly efficient (over 60 percent optical-to-optical) Raman fiber laser, pumped directly by laser diodes at 976 nm. We have taken advantage of high Ge-doping level, hence high Raman gain, of a commercial graded-index core fiber, which is used as the Raman gain medium. An oscillator configuration is used which includes spectral filtering, to prevent the generation of the 2nd Stokes. To the best of our knowledge this is the highest power Raman fiber laser directly pumped by laser diodes. In addition it is the highest power Raman fiber laser demonstrated in a graded-index fiber.