

Dual-frequency fiber Raman laser for terahertz and radio-over-fiber applications

Photonic methods for generating and detecting THz signals are a subject of a great research activity in recent years because such systems combine the potential of a high THz wireless communication capacity with a long-range fiber-optic communication potential. We propose the new design scheme of dual-frequency fiber Raman laser in our work and its advantages in comparison with semiconductor photonics circuits for terahertz and radio-over-fiber applications are discussed.

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