



Widely tunable, narrow line width and low optical noise continuous-wave all fiber Er:Yb co-doped double-clad ring laser

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Auteur	Guesmi, Khmaies [1], Bahloul, Faouzi [2], Semaan, Georges [3], Meng, Yichang [4], Salhi, Mohamed [5], Sanchez, François [6]
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Résumé en anglais	<p>In this paper, we report a widely tunable, narrow linewidth, low noise continuous-wave double-clad Er:Yb doped fiber ring laser. Tunability is demonstrated in wide range spanning from 1520 to almost 1620 nm covering the C and L spectral bands. The cavity design is optimized in order to achieve the largest tuning range with very high optical signal-to-noise ratio (SNR). The output coupling ratio greatly influences the tuning range of the laser while the position of the spectral filter determines the SNR. The obtained laser exhibits a tuning range over 98 nm with a nearly constant SNR of about 58.5 dB.</p>
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- [1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=9352>
- [2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=9358>
- [3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=15653>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=9350>
- [5] <http://okina.univ-angers.fr/m.salhi/publications>

- [6] <http://okina.univ-angers.fr/francois.sanchez/publications>
- [7] <http://okina.univ-angers.fr/publications/ua20254>
- [8] <http://dx.doi.org/10.1088/2040-8986/19/1/015501>
- [9] <https://iopscience.iop.org/article/10.1088/2040-8986/19/1/015501>

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