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Title	Multi-wavelength emission from a single InGaN/GaN nanorod analyzed by cathodoluminescence hyperspectral imaging
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Publication date	2018
Original Citation	Kusch, G., Conroy, M., Li, H., Edwards, P. R., Zhao, C., Ooi, B. S., Pugh, J., Cryan, M. J., Parbrook, P. J. and Martin, R. W. (2018) 'Multi-wavelength emission from a single InGaN/GaN nanorod analyzed by cathodoluminescence hyperspectral imaging', Scientific Reports, 8(1), 1742 (8pp). doi: 10.1038/s41598-018-20142-5
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://www.nature.com/articles/s41598-018-20142-5 - 10.1038/s41598-018-20142-5
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Download date	2026-11-02 21:11:48
Item downloaded from	https://hdl.handle.net/10468/6348



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Multi-wavelength emission from a single InGaN/GaN nanorod analyzed by cathodoluminescence hyperspectral imaging

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ABSTRACT

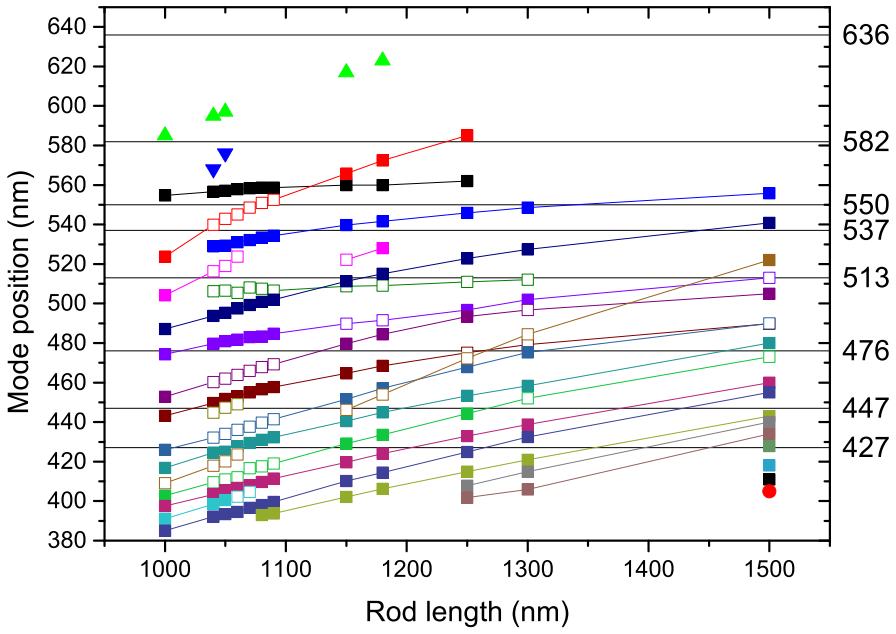


Figure 1. Mode positions as calculated by FDTD for varying nanorod length and constant nanorod diameter. Weak modes are shown as open symbols.

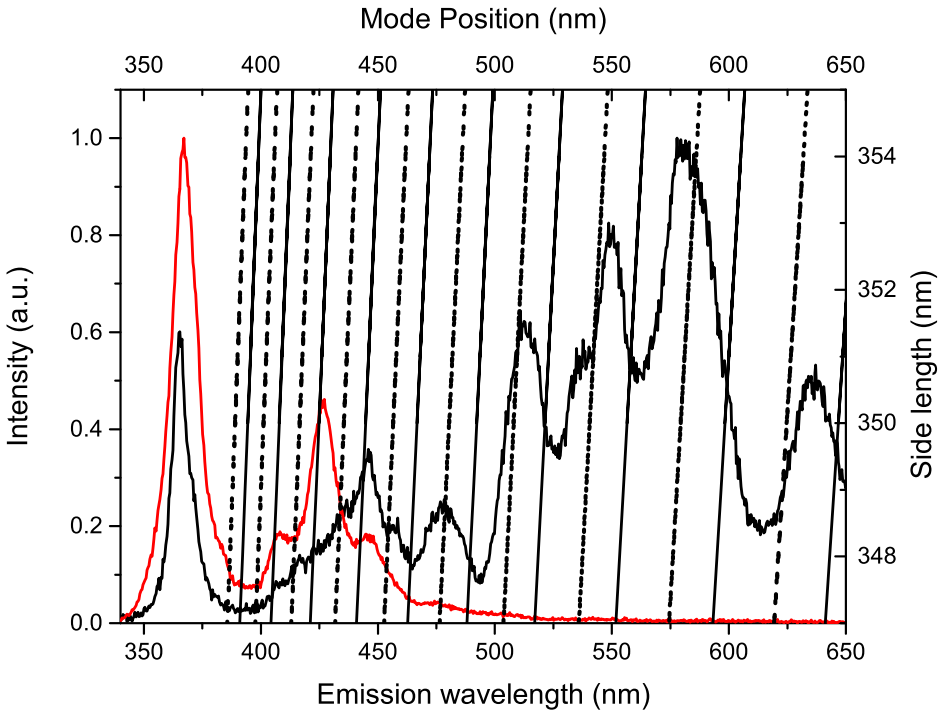


Figure 2. Mode positions as calculated by the plane wave model for different rod sidelength, TE modes are shown as dotted, TM modes as full lines.

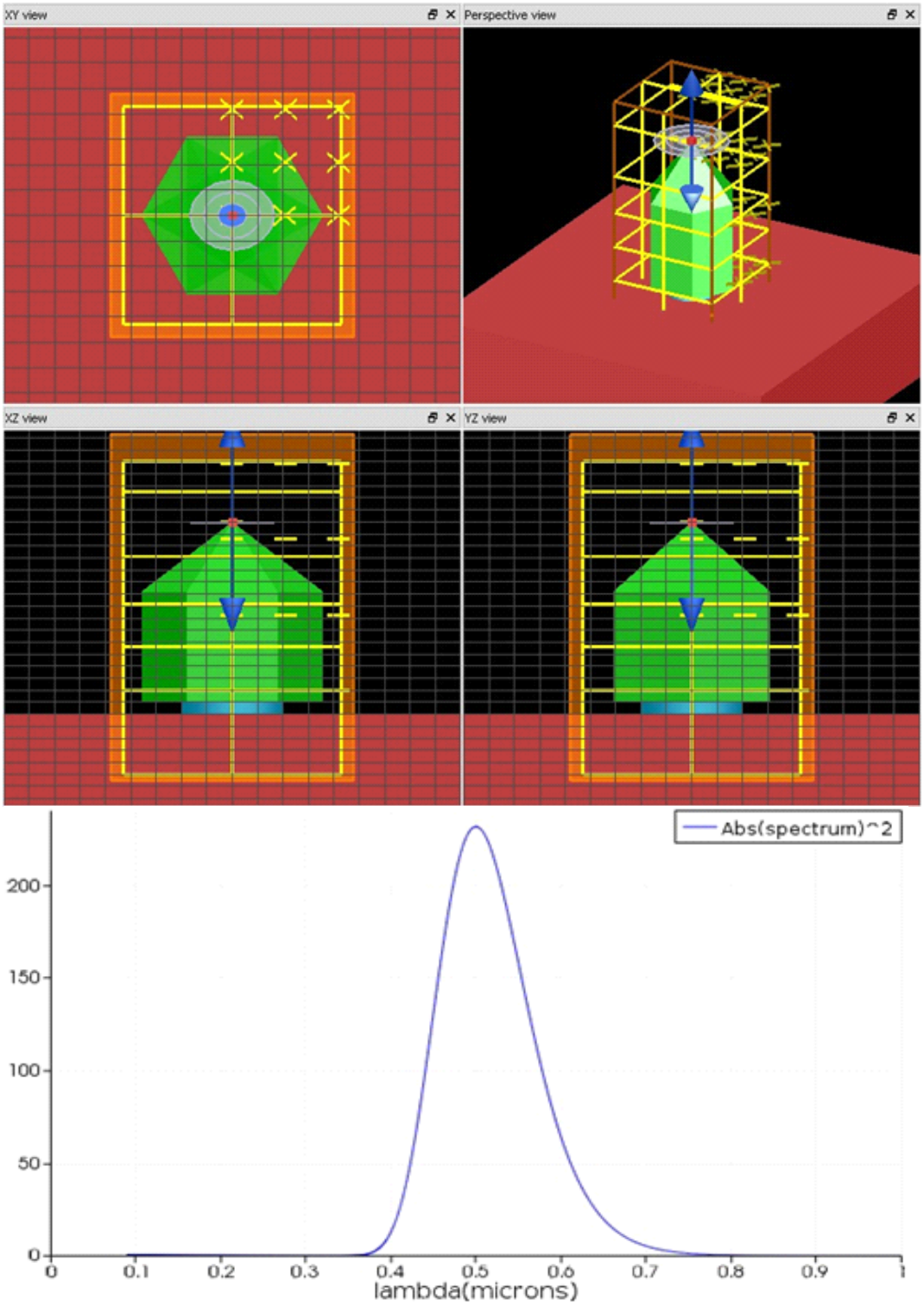


Figure 3. Nanorod geometry and input spectra used for the FDTD simulation of the nanorod. The source in the shown case is located in the apex of the nanorod representing the *c*-plane QW emission, for the modelling of the behaviour of the semipolar QWs the source was moved into the pyramidal section of the nanorod.