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Colloidal quantum dot field-effect transistors

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Colloidal Quantum Dot Field-Effect Transistors

From Electronic Circuits to Light Emission
and Detection

Artem Shulga

Colloidal Quantum Dot Field-Effect Transistors

Artem Shulga

PhD thesis

Rijksuniversiteit Groningen



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Front cover: schematics of a double-gated quantum dot field-effect transistor. The formulas represent quantum confinement of a particle in a box, hopping conductivity, drain current and cutoff frequency.

Back cover: illustration of one of the labs where this research was conducted.



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Colloidal Quantum Dot Field-Effect Transistors

From Electronic Circuits to Light Emission and
Detection

PhD thesis

to obtain the degree of PhD at the
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the decision by the College of Deans.

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Friday 15 March 2019 at 16.15 hours

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