



## Optical Properties of Confined Quantum Systems

Guest Editor:

**Dr. Serghei Klimin**  
TQC, Universiteit Antwerpen,  
Universiteitsplein 1, B-2610  
Antwerp, Belgium

Deadline for manuscript  
submissions:

**closed (31 August 2019)**

### Message from the Guest Editor

Dear Colleagues,

Advances in the science of quantum nanostructures over the course of more than twenty years are remarkable. As a result, confined nanoscale quantum systems already have an outstanding spectrum of applications in various important areas. More recently, studies of quantum phenomena in ultracold atomic gases have seen steadily growing progress and increasing interest, nontrivially involving subjects specific to many other research areas. Consequently, the optical properties of confined quantum systems represent a great experimental and theoretical interest for their characterization and getting a picture of intrinsic quantum states and collective excitations, which can have significance for potential practical realizations, including even such a fascinating perspective as quantum computing, which is still expecting a breakthrough.

The main goal of this Special Issue is to bring together experimental and theoretical studies on the dynamic response of various classes of confined quantum systems and to encourage an interchange of ideas between specialists in different topics of this comprehensive scientific area.

Dr. Serghei Klimin  
*Guest Editor*





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

Applied Sciences Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](#)