

## Professor Sergey V. Gaponenko



Born in 1958 in Minsk. Graduated from Belarusian State University in 1980, Ph.D. degree in 1984 (Mechanism of absorption saturation in ZnSe monocrystals), Doctor of science (habilitation) degree in 1996 (Spectroscopic properties of semiconductor nanocrystals and organic molecules in dielectric matrices), Professor (2009), Full member of the National Academy of Sciences of Belarus (since 2014).

**Present position/obligations:** Head of the Laboratory of Nanooptics at the B.I. Stepanov Institute of Physics of the National Academy of Sciences of Belarus (since 2002); Chairman of the Association “Lasers and Optics” (since 2007), Chairman of the Scientific Council of the Belarusian Republican Foundation for Fundamental Research (since 2014), Chairman of the Council awarding PhD and Habilitation degrees in optoelectronics (since 2014).

**Publications:** Total number exceeds 230 papers including 160 papers in international peer-reviewed journals. Coeditor of 12 books on physics of nanostructures and photonics (published by SPIE, World Scientific, Springer, and Kluwer), author of the 2 books published by Cambridge University and co-author of the book published by Springer Verlag in 2004. More than 60 invited talks at the international conferences and special seminar lectures at research centers.

**Citations** – 4900, Hirsch factor – 29.

**Fellowships:** Guest scientist at the Universities of Kaiserslautern, Karlsruhe, Dortmund and Arizona in the period of 1990-2001, visiting professor in University Technological Troyes (France, 2012) and Nanyang Technological University (2014-2015, Singapore).

Co-director of 2 NATO Workshops related to Nanophotonics (Trento, 2002, Ottawa 2008).

### **Main publications**

#### **Books**

S.V. Gaponenko, Introduction to Nanophotonics, Cambridge University Press 2010.

S.V. Gaponenko “Optical Properties of Semiconductor Nanocrystals”, Cambridge Uni. Press, 1998.

S.V. Gaponenko, H. Kalt, U. Woggon. Semiconductor Quantum Structures. Part 2. Optical Properties. – Springer Verlag, Berlin 2004.

#### **Papers**

Kulakov O., Strekal N., Yaroshevich A., Maskevich S., Gaponenko S., Nabiev I., (2002). Enhanced luminescence of CdSe quantum dots on gold colloids. *Nano Letters*, 2(12), 1449-1452.

Chigrin, D. N., Lavrinenko, A. V., Yarotsky, D. A., & Gaponenko, S. V. (1999). Observation of total omnidirectional reflection from a one-dimensional dielectric lattice. *Applied Physics A*: 68(1), 25-28.

Petrov, E. P., Bogomolov, V. N., Kalosha, I. I., & Gaponenko, S. V. (1998). Spontaneous emission of organic molecules embedded in a photonic crystal. *Physical Review Letters*, 81(1), 77-80.

Artemyev M., Bibik A., Gurinovich L., Gaponenko S., Woggon, U. (1999). Evolution from individual to collective electron states in a dense quantum dot ensemble. *Physical Review B*, 60(3), 1504-1507.

Gaponenko, S. V. (2002). Effects of photon density of states on Raman scattering in mesoscopic structures. *Physical Review B*, 65(14), 140303(R).

Scholar Google page: <http://scholar.google.com/citations?user=tI3YrycAAAAJ&hl=ru&oi=ao>

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