



## **Curriculum Vitae**

**Name:** Andrei A. Eliseev

**Born:** April 6, 1979, Tula, RUSSIA.

**Place of Work:** Department of Materials Science, Department of Chemistry, Moscow State University, Moscow 119992, RUSSIA.

**Position:** Associate Prof. at Department of Materials Science, MSU  
Senior researcher at Department of Chemistry, MSU

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## **Academic Background**

2002	MS degree in Materials Sciences, Department of Materials Science, Moscow State University
2004	PhD in inorganic chemistry, Moscow State University
2004 – 2008	Assistant prof, Department of Materials Science, Moscow State University
2008 – present	Associate prof, Department of Materials Science, Moscow State University
2008 – present	Senior researcher, Department of Chemistry, Moscow State University
2013 – present	Group Leader, CNIR, Moscow State University

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## **Research Interests and Expertise**

Encapsulated and doped SWNTs and graphene

Mass-transport in nanochannels

Porous and composite inorganic membranes

Petroleum gas conditioning

Magnetic nanomaterials and nanocomposites, low-dimension nanosystems

Anodic aluminum oxide

Self-organization

Self-ordered nanostructure arrays

Photonic crystals

Electrochemistry, X-ray induced electrochemistry

## **Publications**

Total number of publications: 18 patents, 2 books, 3 book chapters, over 180 papers.

Selected publications:

*Books and book chapters:*

- 1) Andrei A. Eliseev, Alexey V. Lukashin, Functional Nanomaterials. Moscow, Fizmatlit, 2010, ISBN 978-5-9221-1120-1, 456 p.
- 2) Andrei Eliseev, Lada Yashina, Marianna Kharlamova, Nikolay Kiselev One-Dimensional Crystals inside Single-Walled Carbon Nanotubes: Growth, Structure and Electronic

Properties. In: [Electronic Properties of Carbon Nanotubes](#), Ed. J.M. Marulanda, InTech, 2011, pp. 127-156, ISBN 978-953-307-499-3

*Papers*

- 1) A.A. Eliseev, M.V. Kharlamova, M.V. Chernysheva, A.V. Lukashin, Yu.D. Tretyakov, A.S. Kumskov, N.A. Kiselev Preparation and properties of single-walled nanotubes filled with inorganic compounds, *Russian Chemical Reviews*, 2009, v. 78 (9), pp. 833-854
- 2) A.A. Eliseev, L.V. Yashina, M.M. Brzhezinskaya, M.V. Chernysheva, M.V. Kharlamova, N.I. Verbitsky, A.V. Lukashin, N.A. Kiselev, A.S. Kumskov, R.M. Zakalyuhin, J.L. Hutchison, B. Freitag, A.S. Vinogradov Structure and electronic properties of AgX (X = Cl, Br, I)-intercalated single-walled carbon nanotubes, 2010, *Carbon*, v. 48 (10), pp. 2708-2721.
- 3) L.V. Yashina, A.A. Eliseev, M.V. Kharlamova, A.A. Volykhov, A.V. Egorov, S.V. Savirov, A.V. Lukashin, A.I. Belogorokhov, Growth and characterization of one-dimensional SnTe crystals within the single-walled carbon nanotube channels, *Journal of Physical Chemistry C*, 2011, 115 (9), pp. 3578-3586
- 4) A.A. Eliseev, L.V. Yashina, N.I. Verbitskiy, M.M. Brzhezinskaya, M.V. Kharlamova, M.V. Chernysheva, A.V. Lukashin, N.A. Kiselev, A.S. Kumskov, B. Freitag, A.V. Generalov, A.S. Vinogradov, Y.V. Zubavichus, E. Kleimenov, M. Nachttegaal, Interaction between single walled carbon nanotube and 1D crystal in CuX@SWCNT (X = Cl, Br, I) nanostructures, *Carbon* 2012, 50 (11) , pp. 4021-4039
- 5) A.A. Eliseev, N.A. Sapoletova, I. Snigireva, A. Snigirev and K.S. Napolskii, Electrochemical X-ray Photolithography, *Angew. Chem. Int. Ed.* 2012, 51, DOI: 10.1002/anie.201204801
- 6) A.A. Mistonov, N.A. Grigoryeva, A.V. Chumakova, H. Eckerlebe, N.A. Sapoletova, K.S. Napolskii, A.A. Eliseev, D. Menzel, S.V. Grigoriev. Three-dimensional artificial spin ice in nanostructured Co on an inverse opal-like lattice. // *Physical Review B*, 2013, 87(22), Article number 220408.
- 7) AA Eliseev, NI Verbitskiy, AA Volykhov, AV Fedorov, OY Vilkov, The impact of dimensionality and stoichiometry of CuBr on its coupling to sp<sup>2</sup>-carbon, *Carbon* 2016, 99, 619-623
- 8) DI Petukhov, AA Eliseev Gas permeation through nanoporous membranes in the transitional flow region, *Nanotechnology*, 2016, 27 (8), 085707