CURRICULUM VITAE

PERSONAL DATA:

Name: Maksimenko Sergey Afanasievich

Date of Birth 13th August, 1954

Place of Birth Krivichi, Minsk region, Belarus, USSR

Nationality: Belarus

Marital Status: Married

Business address: Belarus State University, Institute for Nuclear Problems,
11 Bobruiskaya Str., 220030 Minsk, Belarus

Position: Director

Fax: (375-17) 226 51 24

Tel: (375-17) 200 84 81

Email: sergey.maksimenko@gmail.com , maksim@bsu.by,

EDUCATION:

- D. Sc. in Physics, (Doctor of Science in Phys. and Math.), 1996, Inst. of Physics, Belarus Academy of Science, Minsk, Belarus. Thesis title: "Propagation of waves and wave packets in periodical and dispersive media".
- Ph.D. in Physics (Candidate of Science in Phys. and Math.), 1988, Belarus State University, Minsk, Belarus. Thesis title: "Polarization and time-domain effects under the interaction of radiation from x-ray spectral range with anisotropic and dispersive media".
- M. Sc. in Physics, June 1976, Belarus State University, Physical Department, Minsk, Belarus. Subject of examination: general physics, heat- and mass-transfer.

EXPERIENCE:

Institute of Heat- and Mass Transfer, Belarus Ac. of Sci., Minsk, Belarus

08/1976 – 09/1977 (Engineer-Researcher).

Belarus State University, Minsk, Belarus

01/1977 – 09/1980 (PhD Student).
06/2000 – 02/2005 (Deputy Vice-Rector - Chief of General Directorate of Sciences)
09/2006 – **Present** (Professor at the Solid State Physics departament)

Institute of Applied Physical Problems, Belarus State University, Minsk, Belarus

10/1980 – 07/1986 (Junior Researcher).

Institute for Nuclear Problems, Belarus State University, Minsk, Belarus

08/1986 – 01/1992 (Researcher, Major Researcher).
02/1992 – 12/2012(Head of Laboratory).
03/1997 – 06/2000 (Deputy Director).
*01/2013 – **Present** **(Director)***

Max-Born Institut fur Nichtlineare Optik und Kurzzeitspektroskopie, Berlin, Germany

1998 – 2004 Visiting Scientist, repetitevly

Institut für Festkörperphysik, Technische Universität Berlin, Berlin, Germany

1999 –2016 Visiting Scientist, repetitevly

Eindhoven University of Technology, Department of Applied Physics, Eindhoven, The Netherlands

2005 -2014 Visiting Scientist, repetitevly

Facultés Universitaires Notre-Dame de la Paix, Laboratoire de Physique du Solide, Namur, Belgium

2006 –2016,Visiting Scientist, repetitevly

Frascati National Laboratory , National Institute of Nuclear Physics, Frascati, Italy

2008– 2014, Visiting Scientist, repetitevly

LECTURE COURSE:

Physics of nanostructured materials, Physics of Nanostructures, Physical Department, BSU

INTERNATIONAL RESEARCH GRANTS:

- **Diffraction, Localization and Dynamical Stochasticity in Nonlinear Media and Systems** from the International Science Foundation, Contracts No U9Y000 and U9Y200, 1994-1996, Principal Researcher: Prof. F. G. Bass (Kharkov, Ukraine).
- **Quantum Dot Laser** from the INTAS, 1997-2000. Reference number: INTAS-96-0467, Project co-ordinator: Prof. D. Bimberg, (Berlin, Germany).
- **Light Emitting Devices Based on GaAsN-GaN Double Heterostructures** from the NATO Science for Peace Program, 1998-2004. Ref. number: SfP-972614, Project co-ordinators: Acad. Z. Alferov (St.-Petersburg, Russia), Dr. A. Hoffman, (Berlin, Germany).
- **New Methods and Approaches for Femtosecond Lasers** within the Framework of bilateral RB-FRG scientific-technical cooperation (BMBF), project number WEI-001-98, Project leaders: Prof. J. Herrmann (MBI, Berlin, Germany), V. Kalosha (INP, Minsk, Belarus).
- **Dynamics of ultra-short soliton-like pulses in resonant dispersive media** from the INTAS, 1998-2001. Reference number: INTAS-97-2018, Project co-ordinator: Prof. J.Herrmann, (Berlin, Germany)
- **Nonlinear optical and transport effects in carbon nanotubes** within the Framework of bilateral RB-FRG scientific-technical cooperation (BMBF), project number BEL-01-01, Project leaders: Prof. J. Herrmann (MBI, Berlin, Germany), S.A. Maksimenko (INP, Minsk, Belarus), 2001-2004.
- **Electromagnetic and transport properties of solid state nanostructures with electron-photon and electron-phonon resonant states**, from the Russian-Belarus Joint Call of Foundations for Fundamental Research, 2002-2004, F01-R-047 Principal Researcher: G.Ya.Slepyan.
- **Quantum dot in a microcavity: Local field effects in the strong coupling regime,** from the NATO Science Programme, Cooperative Science And Technology Sub-Programme, Collaborative Linkage Grant under project PST.CLG.980375, 2004-2005, Principal Researchers: Dr. A. Hoffmann, (Berlin, Germany) and S.A. Maksimenko.
- **Highly Oriented Arrays of Carbon Nanotubes: Synthesis, Characterization and Physical Properties,** from the INTAS, 2004-2006. Reference number: 03-50-4409, Project coordinator: Prof. László Forró, (Lausanne, Switzerland)
- **Nonlinear optical properties of carbon nanotube composites,** World Federation of Scientists, National Scholarship Programme in the frame of the topic "Science and Technologies for Developing Countries", 2004. Grant holder A. Nemilentsau under supervision of S.A. Maksimenko
- **Electrodynamical properties of a semiconductor quantum dot: The Influence of Local fields,** from the INTAS Young Scientist Fellowship, 2005-2007, Ref. Nr 04-83-3607, grant holder: A.V.Magyarov, supervisors Dr. A. Hoffmann, (Berlin, Germany) and S.A. Maksimenko.

- **Development of Electromagnetic Wave Absorbing Coatings based on Carbon Onions** from the NATO Science for Peace Program, 2005-2008. Ref. number: SfP-981051, Project co-ordinators: O. Shenderova (Raleigh, USA), V.L. Kuznetsov (Novosibirsk, Russia), Ph. Lambin (Namur, Belgium), I. Larionova (Dzerzhinsk, Russia), S. Maksimenko (Minsk, Belarus), A. Okotrub (Novosibirsk, Russia)
- **Endohedral metallofullerene peapod as a vibrator nanoantenna in the optical range: method of excitation and spectral-angular characteristics,** from the INTAS Young Scientist Fellowship, 2006-2008, Ref. Nr 05-109-4595, grant holder: A..Nemilentsau, supervisors Prof. E. Campbell, (Gothenburg, Sweden) and S.A. Maksimenko.
- **Quantum optics of excitonic composites,** from Deutsche Forschungsgemeinschaft (DFG). Host institution: Institut fuer Festkoerperphysik, Technische Universitat Berlin, Berlin, Germany, Dr. A. Hoffmann, 2006
- **Electromagnetics of nanostructures**, from the INTAS, 2006-2008. Reference number: 05-1000008-7801, Project coordinator: Dr. A. Hoffmann, Institut fuer Festkoerperphysik, Technische Universitat Berlin, Berlin, Germany
- **Electromagnetic response properties of carbon onions and carbon onion-based composites,** from the INTAS, 2006-2008, Ref. Nr 06-1000013-9225, Project coordinator: Prof. Ph. Lambin (Namur, Belgium)
- **Physical response properties of carbon nanotubes arrays in strong electric and magnetic fields, f**rom the Joint Call CNRS (France)-Belarus Foundations for Fundamental Research, 2007-2009, F07F-013, Principal Researchers: S. Maksimenko and J. Galibert (National Laboratory of Pulsed Magnetic Fields, Touolouse, France).
- **Optical properties of carbon nanotube based composite medium,** World Federation of Scientists, National Scholarship Programme in the frame of the topic "Science and Technologies for Developing Countries", 2008. Grant holder M. Shuba under supervision of S.A. Maksimenko
- **Terahertz applications of carbon nanotubes,** within the Framework of bilateral RB-FRG scientific-technical cooperation (IB BMBF), project number BLR 08/001, Project leaders: Prof. Ch. Thomsen (Institut fuer Festkoerperphysik, TUB, Berlin, Germany), S.A. Maksimenko (INP, Minsk, Belarus), 2008-2010.
- **Rabi waves – a new class of excitations in semiconductor nanostructures,** from Deutsche Forschungsgemeinschaft (DFG). Host institution: Institut fuer Festkoerperphysik, Technische Universitat Berlin, Berlin, Germany, Dr. A. Hoffmann, 2008
- **Terahertz applications of carbon-based nanostructures,** EU FP7 TerACaN project FP7-230778, 2009-2013, Principal Researcher: M. Portnoi (Univer Exeter, UK), team leaders S. Maksimenko, O. Kibis (Novosibirsk, NSTU), I. Luk'yanchuk (Amiens University, France).
- **Interaction of quantum dot-based metamaterials with electromagnetic radiation,** from the Belarus Foundations for Fundamental Research, International Collaboration Call, project F09MC-009, 2009-2011, Principal Researchers: S. Maksimenko and Dr. A. Hoffmann (Institut fuer Festkoerperphysik, Technische Universitat Berlin, Berlin, Germany,).
- **Nanocarbon based composite materials for electromagnetic applications,** from ISTC project B-1708, 2009-2012, Project manager S.A.Maksimenko, participants: A. Gusinskii (BSUIR, Belarus) I. Larionova (Biysk, Russia), V.L. Kuznetsov (Novosibirsk, Russia), A. Okotrub (Novosibirsk, Russia); collaborators: O. Shenderova (Raleigh, USA), Ph. Lambin (Namur, Belgium)
- **Nano carbon based components and materials for high frequency electronics,** EU FP7 CACOMEL project FP7-247007, Call ID "**FP7-PEOPLE-2009-IRSES**", 2010-2014, Coordinator: Prof. Ch. Thomsen (Institut fuer Festkoerperphysik, TUB, Berlin, Germany), partners: S. Maksimenko, Y. Svirko (University of Eastern Finland, Finland), Yu.N. Shunin (University of Latvia, Institute of Solid State Physics). E. Obrazcova (A.M. Prokhorov General Physics Institute of RAS), P. Dyachkov (Kurnakov Institute of General and Inorganic Chemistry, RAS) G. Miano (Università degli Studi di Napoli Federico II, Italy)

- **Carbon nanotubes based composite materials for electromagnetic shielding in microwaves,** Collaborative Linkage Grant under project CBP.EAP.CLG 983910, 2010-2011, Principal Researchers: J. Banis, (Vilnius, Lithuania) and S.A. Maksimenko.
- **Electromagnetic waves in carbon nanotubes: absorption mechanisms and instability,** from Deutsche Forschungsgemeinschaft (DFG) Ref. no TH 662/16-1. Host institution: Institut fuer Festkoerperphysik, Technische Universitat Berlin, Berlin, Germany, Prof. Ch. Thomsen, 2010
- **Institutional Development of Applied Nanoelectromagnetics: Belarus in ERA Widening,** EU FP7 BY-NanoERA project FP7-266529, Call ID FP7-INCO-2010-6, 2010-2013. Coordinator Prof. S. Maksimenko, partners: A. Hoffmann (Institut fuer Festkoerperphysik, TUB, Berlin, Germany); Central Laboratory of Physico-Chemical Mechanics, Bulgarian Academy of Sciences, Sofia (Bulgaria); Frascati National Laboratory, National Institute of Nuclear Physics, Frascati (Italy), Institute of Electronic Structure and Laser (IESL), Heraklion, Crete (Grece), Belarusian Institute of System Analysis and Information Support of Scientific and Technical Sphere (Belarus); Science & Technology Park "Metolit" at Belarusian National Technical University (Belarus)
- **Fundamental and Applied Electromagnetics of Nano-Carbons,** EU FP7 project FP7-318617 FAEMCAR, Call ID FP7-PEOPLE-2012-IRSES, 2012-2017, Principal Researcher: **Ph. Lambin** (Facultes Universitaires Notre-Dame de la paix de Namur, Belgium**), team leaders:** Y. Banis (Vilniaus Universitetas, Lithuania), S. Bellucci (Istituto Nazionale di Fisica Nucleare, Frascati, Italia), L. P. Biró (Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest, Hungary), L.A. Chernozatonskii (Institute for Biochemical Physics RAS, Moscow, Russia), G. I. Dovbeshko (Institute of Physics, NASU, Kiev, Ukraine), P. Kuzhir (INP BSU).
- **Carbon-nanotube-based terahertz-to-optics rectenna,** EU FP7 project FP7-612285 CANTOR, Call ID FP7-PEOPLE-2013-IRSES, 2013-2017, Principal Researcher: M. Portnoi (University of Exeter, UK), team leaders S. Maksimenko (INP BSU), G. Slepyan (Tel Aviv University, Israel)
- **Nano-Thin and Micro-Sized Carbons: Toward Electromagnetic Compatibility Application,** project FP7-610875 NAMICEMC, Call ID FP7-PEOPLE-2013-IRSES, 2013-2017, Principal Researcher: A. Celzard (ENSTIB, Universite de Lorraine, Epinal, Franse), team leaders: S. Bellucci (Istituto Nazionale di Fisica Nucleare, Frascati, Italia), P. Kuzhir (INP BSU).
- **Multi-layered sandwich graphene devices**, EU FP7 project FP7- 604391 GRAPHENE FLAGSHIP, INP BSU team leader; Task 4.7. partners: University of Namur, Belgium, Istituto Nazionale di Fisica Nucleare, Frascati, Research Centre for Natural Sciences, Hungarian AS, Budapest, University of Salerno, Italy, Inst. of Mechanics, Bulgarian Acad. of Sciences Sofia, Bulgaria, Institute of Electronic Structure and Laser (IESL), Heraklion, Crete, Greece, Univ. of Eastern Finland, Joensuu, Finland
- **Collective Excitations in Advanced Nanostructures,** EU Horizon 2020, Call: H2020-MSCA-RISE-2014, Proposal Number: SEP-210156718 CoExAN, Coordinator: Prof. Olivia Pulci, Universita degli Studi di Roma Torvergata; Partners: INP BSU, Yerevan State University (Armenia), University of Exeter (UK), Institute of Semiconductor Physics NAS Ukraine, Kiyev, Ukraine, University of Iceland, Iceland, The University of Eastern Finland, Joensuu, Finland De La Salle University (DLSU, Philippines;
- **Graphene-based revolutions in ICT and beyond**, project H2020-649953 GRAPHENE FPA, Call: H2020-FETFLAG-2014, INP BSU team leader
- **Collective Excitations in Advanced Nanostructures, EU Horizon 2020**, Call: H2020-MSCA-RISE-2014, project H2020- 644076 COEXAN, Coordinator: Prof. Olivia Pulci, Universita degli Studi di Roma Torvergata; Partners: INP BSU, Yerevan State University (Armenia), University of Exeter (UK), Institute of Semiconductor Physics NAS Ukraine, Kiyev, Ukraine, University of Iceland, Iceland, The University of Eastern Finland, Joensuu, Finland De La Salle University (DLSU, Philippines;
- **Nanosized Cherenkov-type terahertz light emitter based on double-walled carbon,** CRDF Global Agreement # AF20-15-61804-1, 2015-2016, Principal Investigator Maksimenko, Sergey

- **Multifunctional Graphene-based Nanocomposites with Robust Electromagnetic and Thermal Properties for 3D-printing Application,** EU Horizon 2020, project H2020-734164 GRAPHENE 3D
- **Erasmus+ Programme, Inter-institutional agreement between University of Cassino and Southern Lazio, Cassino, Italy and Belarusian State University,** 2016-2018 (Contact Teachers: Prof. A. Maffucci and Prof. S. Maksimenko)

MEMBERSHIP OF PROFESSIONAL SOCIETIES AND AWARDS

- Joint Institute for Nuclear Research (Dubna, Russia), Scientific Coincil Member
- Diploma of the Council of Ministers of the Republic of Belarus for achievements in professional work and teaching (2011)
- Belarus State University Award named by Academician A.N.Sevchenko for the work "Electromagnetics of nanostructures" (2011)
- Honored Staff Member of the Belarus State University (2010)
- SPIE Fellow (2009)
- DAAD Fellowship (2009)
- Belarus National Scholarship for Advanced Achievements in Research (2007)
- Diploma of the National Assembly of the Republic of Belarus for achievements in professional work and teaching (2001)
- Belarus Physical Society
- European Material Research Society
- SPIE-The International Society for Optical Engineering
- Societa' Italiana di Fisica
- BSU and INP academic councils member
- Supreme Certification Committee of the Republic of Belarus for academic degree adjudgment, Expert Council member
- Co-ordinator of the State Program of Basic Research "Nanothech" (2003-2005)
- Scientific Council member of the State Program of Basic Research "Nanothech" (2006-2010)
- Scientific Council member of the State Program of Basic Research "Convergentsia" (2011-2015; 2016-2020).

OTHER RELEVANT EXPERIENCE:

- **Journal of Nanophotonics** (JNP), **Associate Editor**, http://spie.org/app/Publications/
- International conference "Nano and Giga Challenges in Electronics, Photonics and Renewable Energy ", Tomsk, Russia, September 18-22, 2017, Program Committee member and special Session Organizer, nanoandgiga.com/ngc2017
- International conference on Physics, Chemistry and Application of Nanostructures "Nanomeeting 2017", May 30-June 2, 2017, Minsk, Belarus, http://www.nanomeeting.org/, International Organizing Committee Member
- The Emerging Technologies 2017 Conference, Warsaw, Poland, May: 28-30, 2017, special session "Nanoelectromagnetics: materials and devices, http://www.etcmos.com/current_event.php?event=2017 , co-organiser
- The 4th Conference on New Advances in Condensed Matter Physics (NACMP 2017), February 26 - 28, 2017, Guilin, China, Technical Program Committee member, http://www.engii.org/ws2017/Home.aspx?ID=882,
- International Applied Computational Electromagnetics Society Symposium, ACES 2017, Florence, Italy, March, 26-30, 2017, special session "Nanoelectronics and nanoelectromagnetics: modeling and applications " http://www.aces-society.org/conference/Italy_2017/ , co-organiser

- Applied Nanotechnology and Nanoscience International Conference 2016, ANNIC 2016, Pompeu Fabra University, Barcelona, Nov 9-11 2016, Scientific Committee Member, www.premc.org/annic2016
- 4th International Conference "Nanotechnologies" Nano – 2016 October 24 – 27, 2016, Tbilisi, Georgia, International Scientific Committee Member, http://nano2016.gtu.ge/
- The 3rd Conference on New Advances in Condensed Matter Physics (NACMP 2016), February 28 – March 1, 2016, Beijing, China. Technical Program Committee member, http://www.engii.org/ws2016/Home.aspx?ID=684
- The 6th International Conference "Actual problems of Radiophysics", October 5-10, 2015, Tomsk, Russia, Program Committee member, http://conference.tsu.ru/apr/en/
- NATO Advanced Research Workshop "Fundamental and Applied NanoElectroMagnetics" FANEM'15, May 25-27, 2015, Belarusian State University, Minsk, Belarus, **Co-director**, http://www.fanem.org/
- International conference on Physics, Chemistry and Application of Nanostructures "Nanomeeting 2015", May 26-29, 2015, Minsk, Belarus, http://www.nanomeeting.org/, **International Organizing Committee Member**
- The 2nd Conference on New Advances in Condensed Matter Physics (NACMP 2015), January 31 - February 2, 2015, Shanghai, China, http://www.scirp.org/Conference/Home.aspx?ConferenceID=78. Technical Program Committee member.
- Fourth International Conference "Engineering of Scintillation Materials and Radiation Technologies" (ISMART 2014), 12 - 16 October 2014, Minsk, Belarusian State University, **Co-Chairman**
- Korea-Belarus joint symposium on physics and devices of functional nanostructures, June 17-19, 2014, **Chairman**
- 2nd Global Conference on Materials Science and Engineering (CMSE 2013), Hubei University of Science and Technology, Xianning, Hubei Province of China Nov. 20-22, 2013, http://www.cmseconf.org/, Technical Program Committee member
- International conference on Physics, Chemistry and Application of Nanostructures "Nanomeeting 2013", May 28-31, 2013, Minsk, Belarus, http://www.nanomeeting.org/, International Organizing Committee Member and Special Session "Nanoelectromagnetics" organizer
- International conference Nanoscience and Nanotechnology N&N13, INFN – Laboratori Nazionali di Frascati, October 1-4, 2012, Frascati, Italy, http://www.lnf.infn.it/conference/nn2013/
- The Referee for the Evaluation of research projects on behalf of the Italian Ministry of Education, University and Research (MEUR) https://referee.cineca.it, Italy
- MN 2012 program of the French National Research Agency, https://aap.agencerecherche.fr/, France, project reviewer
- International Conference Nanoscience And Nanotechnology 2012 (n&n2012) 1 - 4 October 2012, Frascati (Rome), Italy, :http://www.lnf.infn.it/conference/nn2012/, see also http://physicsworld.com/cws/event/17900, International Advisory Committee member
- International conference "Fundamental and Applied NanoElectroMagnetics" FANEM'12, May 22-25, 2012, Belarusian State University, Minsk, Belarus, Chair, http://www.nano.bsu.by/
- The 5th Global Symposium on Millimeter-Waves 2012 (GSMM2012) May 27-30, 2012, Harbin, China, Techincal Program Committee member , http://www.gsmm2012.org
- The IEEE Electrical Design of Advanced Packaging & Systems (EDAPS) Symposium, December 12-14, 2011, Hangzhou, China, International Techincal Program Committee member, http://www.edaps2011.org/
- Second international conference Nanobiophysics: fundamental and applied aspects, 6-9 October 2011, Kiev, Ukraine, Program Committee member, http://www.iop.kiev.ua/~nbp2011/
- Fedorov Memorial Symposium, International Conference "Spins & Photonic Beams at Interface", September 25–26, 2011, Minsk, BELARUS, International Advisory Board Member, http://master.basnet.by/congress2011/symposium/
- International conference on Physics, Chemistry and Application of Nanostructures "Nanomeeting 2011", May 24-27, 2011, Minsk, Belarus, http://www.nanomeeting.org/, Organizing Committee Member and Special Session "Nanoelectromagnetics" organizer

- International Conference Interdisciplinary Research and Future Technologies, May 16 – 18, 2011, Minsk, Belarus, Organising Committee Member, http://master.basnet.by/idrft2011/ru/
- 11th international conference on electromagnetic properties of Complex Materials BIAN06, September 25-30, 2006, Samarkand, Uzbekistan, international advisory committee member
- Int. Conference "Nanomodeling II", part of SPIE's Optics & Photonics, 13 - 17 August 2006, San Diego, California, USA, Conference Chair
- Belarus-India joint seminar on Nanoscience and Nanotechnology, December 21-23, 2005, Hyderabad, India, Coordinator from Belarus
- Int. Conference "Nanomodeling", part of SPIE's 49th Annual Meeting, August 2004, Denver, USA, Conference Chair
- Int. Conference "Nanotubes and Nanowires", part of SPIE's 48th Annual Meeting, August 2003, San Diego, USA, Conference Chair
- Synchrotron Radiation Week at the Belarus State University, January 1999, Coordinator
- 3rd International Workshop "Quantum Systems: New Trends And Methods" (Minsk, Belarus, June 1999), Organizing Committee member.
- 7th International Conference on Complex Media (Braunschweig, Germany, June 1998) Scientific Advisory Committee member.
- Independent expert evaluating proposals in the INTAS Calls 1997, 2000, 2003-2004, 2005-2006
- Paper referee for Physical Review Letter, Physical Review B, Physics Letters A, IEEE Transactions on Nanotechnology, IEEE Transactions on Antennas and Propagation, Carbon, Journal of Physics A: Mathematical and Theoretical.

CURRENT RESEARCH ACTIVITY:

Electromagnetics-of-nanostructures group exists in the Institute for Nuclear Problems since 1995. Electromagnetic response properties and electronic transport as well as linear and nonlinear optical phenomena in nanostructures are currently in the focus of the group activity. Several main topics can be singled out:

- Electromagnetic waves and signal propagation in nano-sized components and integrated nano-structured systems; electromagnetic compatibility problem on the nano scale.
- Electromagnetic response properties of composite materials with nano inclusions; electromagnetic shielding materials; nanocarbon in electromagnetic applications; nanocarbon based metamaterials.
- Ionizing radiation shielding materials; boron, boron nitride and chemically modified (doped) carbon nanotube-based composite materials;
- Nanocarbon in medical applications; far-infrared and terahertz range thermolysis of cancer cells.

A general approach is elaborated based on the interplay of present-day solid-state physics and classical methods of electrodynamics of inhomogeneous media. In particular,

– The method of effective boundary conditions has been extended to nanostructures and shown to be a universal tool for studying a wide range of problems of nanoelectrodynamics. The strong slowing down of surface waves in CNTs has been predicted, the concept of nanotubes as nanowaveguides of surface waves has been proposed (1999);

– The Mossotti-Clausius homogenization procedure for estimating the effective constitutive parameters of nanoparticle-based composite media, such as arrays of CNTs and QDs has been developed (1998, 2000).

– Polarisation-dependent splitting of the gain band in the QD array has been predicted and experimentally verified (in collaboration with A.F.Ioffe Physical-Technical Institute, St.Peterburg and Institut für Festkörperphysik, TU Berlin) (1999);

– The high-order harmonic generation by metallic CNTs exposed to an intense ultrashort pulse has been theoretically investigated. The strong nonlinearity of the laser interaction with CNTs has been predicted and confirmed experi-

mentally (in collaboration with the Max-Born Institut fuer Nichtlineare Optik und Kurzzeitspektroskopie, Berlin) (2001-2006);

- The concept of excitonic composite has been introduced and local-field impact on quantum optics of isolated QDs and excitonic composites is under studying (1999-2007). It has been shown that the local fields induce a fine structure of the QD absorption (emission) spectrum (2002).
- The formalism of electrodynamics of lossy dispersive media has been applied to the problem of spontaneous radiation of an excited atom in the carbon nanotube demonstrating strong Parcell effect in CNTs (2002).
- The manifestation of local-field effect in Rabi oscillations of level population in QDs has been revealed (2003-2007)
- Wave scattering by an isolated finite-length CNT has been analysed. The potential of isolated CNTs as infrared and terahertz nanoantennas has been established. The analysis has been extended to CNT bundles and multi-wall CNTs. (2006 –);
- Thermal emission from CNTs has been investigated and a concept of CNT as a thermal nanoantenna has been proposed (2007);
- A concept of the CNT-based monomolecular light emitter — nanoscale traveling wave tube (TWT), backward oscillator (BWO) and free-electron laser (FEL) has been proposed. The calculations demonstrate that at the current stage of nanotechnology development the construction of CNT-based nanoFEL for terahertz frequency range is already possible (2006 –)
- Electromagnetic shielding properties of nano-carbon based composites in microwaves are currently under investigation both theoretically and experimentally, demonstrating promising high potential of OLC for the design of electromagnetic shielding materials over a broad microwave and terahertz frequency ranges (2006 –)

SCIENTIFIC PUBLICATIONS:

- >40 invited talks at international conferences
- guest editor for 3 issues of SPIE Proceedings, for 2 special sections at the Journal of Nanophotonics
- 7 contributed chapters to books
- ResearchID (ISI web of Knowledge): F-1888-2011 (h-factor **26**)
- Author ID (Scopus): 7004065644 (h-factor **26**)
- ORCID: 0000-0002-8271-0449
- The Scopus list of publication is available at http://www.scopus.com/authid/detail.url?authorId=7004065644

INVITED TALKS, since 2006:

1. S.A. Maksimenko and G.Ya. Slepyan, Electromagnetic properties of nanostructures (Plenary talk), ***13th International School-Conference "Foundations & Advances in Nonlinear Science"***, September 25-28, 2006 (Minsk, Belarus)
2. K.G. Batrakov, P.P. Kuzhir, S.A. Maksimenko, Generation and propagation of electromagnetic waves in carbon nanotubes: new proposition for optoelectronics and bio-medical applications (invited), ***Int. Conf. on nano-materials for electronics ICNME-2006***, Centre For Materials for Electronics Technology (C-MET), Pune INDIA, November 27-29, 2006
3. S. A. Maksimenko, Frontier Research in Byelorussia, (Plenary talk), ***LATVIJAS UNIVERSITĀTES 65. KONFERENCE, Plenary session,*** EU Financed Research in Latvia, Opening of 7th Framework Programme in Latvia, February 5, 2007

4. S.A. Maksimenko and G. Ya. Slepyan, Electromagnetic waves in nanostructures (invited lecturer), ***School-seminar "Dynamical Chaos and its applications"***, Institute of Radio Engineering and Electronics RAS, hotel "Zvenigorodsky" (Moscow region) February 26 - March 1, 2007.
5. S.A. Maksimenko and G. Ya. Slepyan, "Electrodynamics of nanostructures: ideas, methods and perspectives". ***XIV Scientific School "Nonlinear waves 2008"***, Inst. Applied Physics RAS, N. Novgorod, 1-7 March 2008, http://www.nonlinearwaves.sci-nnov.ru, invited lecture
6. G. Slepyan, M. Shuba, A. Nemilentsau, S. Maksimenko, Electromagnetic theory of nanodimensional antennas for terahertz, infrared and optical regimes (invited), ***12-th International Conference on Mathematical Methods in Electromagnetic Theory MMET 2008***, June 29 – July 2, 2008 - Odesa, Ukraine, Programme, http://www.mmet.org
7. S. A. Maksimenko, G. Ya. Slepyan, Carbon Nanotube as a Terahertz Delay Line: Manifestations and Potentiality for Applications in Nanoelectromagnetics (invited talk) ***The 2008 IEEE International Symposium on Antennas and Propagation and the 2008 USNC/URSI (U.S. National Committee of the International Union of Radio Science) National Radio Science meeting***, July 5-11, 2008, San Diego, California http://www.apsursi2008.org/ .
8. S.A. Maksimenko, Electromagnetic waves in carbon nanostructures, ***International Workshop "Nanocarbon Photonics and Optoelectronics"***, 3 - 9 August 2008 Holiday Centre «Huhmari», Polvijärvi, Finland http://www.joensuu.fi/fysiikka/npo2008/ .
9. S.A. Maksimenko and G.Y. Slepyan, Electrodynamics of carbon nanotubes: principles, device applications and open questions, ***XXIIIrd International Winterschool on Electronic Properties of Novel Materials***, 07-14 March, 2009, Hotel Sonnalp - Kirchberg / Tirol – Austria, www.iwepnm.org
10. S.A. Maksimenko and G.Y. Slepyan, Electromagnetic effects in carbon nanotubes: modelling and device applications, ***International Symposium Nanostructures: Physics and Technology,*** Minsk, Belarus 22–26, June 2009, http://www.ioffe.ru/NANO2009/
11. S.A. Maksimenko and G.Y. Slepyan, Terahertz-range carbon nanotube-based electromagnetic devices and systems: waveguide, antenna, interconnects, traveling wave tube, etc., ***The 20th ISTC-Korea Workshop***, Korean Institute of Science and Technology (KIST), Seul, Korea, September 15-18, 2009
12. S. A. Maksimenko and G.Y. Slepyan, Electromagnetic Effects in Carbon Nanotubes: Modelling, Potential Device Applications and Open Questions, ***12th European Microwave Week 2009, 39th European Microwave Conference (EuMC), Workshop WFTH12 (EuMC) "Bridging Radio-Frequency and Nanotechnology: A New Generation of RF-Nanocomponents, Systems and NEMS***", Nuova Fiera di Roma, Rome, Italy 28 September - 2 October 2009, http://eumw2006.com/2009/
13. P.P. Kuzhir, S.A. Maksimenko, V.L. Kuznetsov, O. Shenderova, Ph. Lambin, Nanocarbon-based polymer composites in electromagnetic applications (invited), ***Second International Conference on Polymer Processing and Characterization (ICPPC – 2010)***, January 15-17, 2010, Kottayam, Kerala, India, http://www.processing.macromol.in,
14. S. A. Maksimenko, G. Ya. Slepyan, M. V. Shuba, P.P. Kuzhir, A. Lakhtakia, Electromagnetic response of carbon nanotube-based composite materials (invited), ***The Second International Workshop on Nanocarbon Photonics and Optoelectronics*****,** Koli/North Karelia/Finland 1-6 August 2010, http://npo.fi/npo2010
15. G. Ya. Slepyan, M. V. Shuba, S. A. Maksimenko, C. Thomsen, A. Lakhtakia, Electromagnetic properties of composite materials containing carbon nanotubes, ***2010 International Symposium on Electromagnetic Theory*****, EMTS 2010** Berlin, August 16-19 2010, http://www.cem.tf.uni-kiel.de/emts2010/
16. S.Maksimenko, P.Kuzhir, G.Slepyan, V.Kuznetsov, O.Shenderova, A.Okotrub L.G. Bulusheva, J.Macutkevic, Ph.Lambin, Carbon onions for electromagnetic applications, ***2010 International Symposium on Electromagnetic Theory*****, EMTS 2010** Berlin, August 16-19 2010 http://www.cem.tf.uni-kiel.de/emts2010/

17. S.Maksimenko, M. Shuba, G. Slepyan, G. Hanson (key lecture) Potentiality of carbon nanotubes for the cancer cells thermolysis in the RF exposing field. ***NATO Advanced Research Workshop NATO ARW CRB.NUKR.ARW 984333 "Nanodevices and Nanomaterials for Ecological Security"***, Yurmala-Riga-Latvia, June 20-23, 2011, Programme, http://isma.lv/en/research/nato-arw-2011-latvia/
18. S.A. Maksimenko, M.V. Shuba, G. Ya. Slepyan, G.W. Hanson (Plenary Lecture), Finite size effects in RF and microwave response of carbon nanotube saline solutions: toward the malignant cells thermolysis. ***2nd International Conference NANOBIOPHYSICS: fundamental and applied aspects*****,** 6-9 October 2011, Kiev, Ukraine, **http://www.iop.kiev.ua/~nbp2011/**
19. S.A. Maksimenko, G.Ya. Slepyan, M.V. Shuba, and A. Lakhtakia, Terahertz and Sub-terahertz Responses of Finite-Length Multiwall Carbon Nanotubes(Invited talk), ***The IEEE Electrical Design of Advanced Packaging & Systems (EDAPS) Symposium***, December 12-14, 2011, Hangzhou, China, http://www.edaps2011.org/
20. S. Maksimenko, Challenges and perspectives in nanoscale electromagnetic and circuital modelling, **(Inviterd lecture)** ***16th IEEE Workshop on Signal Power Integrity SPI 2012*****,** Grand Hotel Parco dei Principi May 13-16, 2012, Sorrento, Italy, http://www.spi2012.org
21. M.V. Shuba, A.G. Paddubskaya, P.P. Kuzhir, S.A. Maksimenko, G.Y. Slepyan, V.K. Ksenevich, P. Buka, D. Seliuta, I. Kasalynas, J. Macutkevic, G. Valusis, C. Thomsen, A. Lakhtakia, (Invited talk) Carbon nanotube antenna: theory and experimental detection in thin composite films, ***3rd International Workshop NPO2012 Nanocarbon Photonics and Optoelectronics,*** *29 July –3 August, 2012, Holiday Centre "Huhmari", Polvijärvi, Finland,* **http://npo.fi**
22. S. Maksimenko, "Theory and Macroscopic Evidence of Terahertz Carbon nanotube Antenna" – Invited Speaker Lecture, ***International conference Nanoscience and Nanotechnology N&N12***, INFN – Laboratori Nazionali di Frascati, October 1-4, 2012, Frascati, Italy, Program, http://www.lnf.infn.it/conference/nn2012/
23. S. Maksimenko, Electrodynamics of Carbon Nanotubes: Basic Approaches, Potential Applications and Open Questions, (Pleanry lecture) ***IV Congress of Belarusian Physicists,*** 24–26 April 2013, Minsk, Belarus http://master.basnet.by/congress2013/indexen.html
24. S. Maksimenko, Challenges and perspectives in nanoscale electromagnetic, ***ET-2013 XXIX Riunione Annual e dei Ricercatori di Elettrotecnica,*** Università degli Studi di Padova, 19-21 giugno 2013, Padova, Italy, http://www.dii.unipd.it/et2013/index.php
25. S. Maksimenko, Terahertz response properties of carbon nanotubes and nanotube-based composite materials, The 2013 EMN Fall Meeting, December 7-10, 2013 Orlando,Florida, http://www.emnfall.org/ Prgramme and Abstracts, p. 200
26. S. Maksimenko, Electromagnetic response of carbon nanotubes and nanotube-based composites in terahertz range, ***The Fourth International Workshop on Nanocarbon Photonics and Optoelectronics***, 28 July - 1 August, 2014, the Holiday Centre "Huhmari", Polvijärvi, North Karelia, Finland, http://www.uef.fi/en/npo/npo2014,
27. S. Maksimenko, Challenges and perspectives of nanoelectromagnetics**,** ***European Microwave Week (EuMW2014),*** *Workshop "* ***Nanoelectromagnetics of advanced materials for microwave-to-THz applications***", Fiera di Rome, 5-10 October 2014, Rome, Italy, www.eumweek.com
28. S. Maksimenko, Terahertz Response of Carbon Nanotube Thin Films: Evidence of Nanotube Antenna, 17th International Symposium on the Physics of Semiconductors and Applications (ISPSA-2014), Jeju Island, Korea, December 7-11, 2014. .
29. S. A. Maksimenko, Carbon Nanotube Thin Films in THz Range: Theory And Evidence of Nanotube Antenna Resonances (invited), **The 4th Russia–Japan–USA Symposium on Fundamental & Applied Problems of Terahertz**

Devices & Technologies "RJUS TeraTech-2015", Institute of microelectronics technology and high purity materials RAS (IMT RAS), Chernogolovka, Russia, June 9-12, 2015

30. S. Maksimenko, Challenges and Perspectives of Nanoelectromagnetics in the THz range **, 2015 IEEE Computer Society Annual Symposium on Very-Large-Scale Integration (ISVLSI 2015)**, 08–10 July 2015, Montpellier, France, http://www.eng.ucy.ac.cy/theocharides/isvlsi15/#intro
31. S. Maksimenko, P. Kuzhir, K. Batrakov, S. Voronovich, T. Kaplas, Yu. Svirko, Enhanced Electromagnetic Properties of Ultrathin Pyrolytic Carbon Films in Ka-Band, **2015 International Conference on Electromagnetics in Advanced Applications** - ICEAA '15 - 17 th Edition, Turin, 7-11 September 2015
32. K. Batrakov, P. Kuzhir, S. Maksimenko, Propagation and generation of THz electromagnetic waves in multi-walled CNTs and multi-layered graphene, **EMN Meeting on metamaterials,** Dubrovnik, Croatia, May 8 - 12, 2016. http://emnmeeting.org/ metamaterials/
33. K. Batrakov, P. Kuzhir, S. Maksimenko, G. Slepyan, Electromagnetic Effects in Carbon Nanotubes and Multi-Layered Graphene, **International School of Solid State Physics** EPIOPTICS-14/SILICENE-2, 24 – 30 July 2016 ERICE, SICILY, http://www.ism.cnr.it/en/workshop/epioptics-14/
34. S. A. Maksimenko, **Electromagnetics Of Nanocarbon Structures,** 4th International Conference "Nanotechnologies" Nano – 2016 October 24 – 27, 2016, Tbilisi, Georgia, http://nano2016.gtu.ge/

BOOKS and EDITING:

1. S.A. Maksimenko and G.Ya. Slepyan, Electrodynamic properties of carbon nanotubes, in "**Electromagnetic Fields in Unconventional Structures and Materials**", Ed. by: O.N. Singh and A.Lakhtakia, John Wiley & Sons, Inc., New York, 2000, pp. 217-255.
2. **Proceedings of the Int. Workshop on Quantum Systems: New Trends And Methods**, Ed. by L.M.Tomil'chik, I. D. Feranchuk, and S.A.Maksimenko, National Academy of Sciences of Belarus, Minsk, 2001
3. S.A. Maksimenko and G.Ya. Slepyan, Electromagnetics of Carbon Nanotubes, in "**Introduction to Complex Mediums for Optics and Electromagnetics**", Ed. by: W. Weiglhofer and A. Lakhtakia, SPIE Press Vol. PM 123, 2003, pp. 507-546.
4. **Proceedings of SPIE Vol. 5219** "Nanotubes and Nanowires", Ed. by: A.Lakhtakia and S.A. Maksimenko, SPIE Press, Bellingham, WA, 2003
5. S.A. Maksimenko and G.Ya. Slepyan, Nanoelectromagnetics of low-dimensional structures, in "**The Handbook of Nanotechnology: Nanometer Structure Theory, Modeling, and Simulation**," Ed. by: A. Lakhtakia, SPIE Press, 2004, pp. 145-206.
6. **Proceedings of SPIE Vol. 5509** "Nanomodeling" Editor(s): Akhlesh Lakhtakia, Sergey A. Maksimenko, SPIE Press, Bellingham, WA, 2004
7. **Proceedings of SPIE Vol. 6328** "Nanomodeling II" Editor(s): Akhlesh Lakhtakia, Sergey A. Maksimenko, SPIE Press, Bellingham, WA, 2006
8. S. A. Maksimenko, G. Ya. Slepyan, K. G. Batrakov, A.A. Khrushchinsky, P.P. Kuzhir, A. M. Nemilentsau, and M. V. Shuba, Electromagnetic waves in carbon nanostructures, in: "**Carbon Nanotubes and Related Structures**". Editors: V. Blank and B. Kulnitskiy, Research Signpost Publisher (2008), pp. 147-187
9. A.M. Nemilentsau, G. Ya. Slepyan, S. A. Maksimenko, O. V. Kibis, M. E. Portnoi, Terahertz radiation from carbon nanotubes, **The Handbook of Nanophysics, Vol. 4: Nanotubes and Nanowires**, editor: Klaus D. Sattler, Taylor & Francis, London, 2010 (ISBN: 978-1-4200-7542-7, Published by: CRC Press, 2010)
10. **Journal of Nanophotonics,** vol. 4, 2010, Special Section on Carbon Nanotubes, guest editors S.A. Maksimenko and G.Y. Slepyan, http://spie.org/x3650.xml

11. M. V. Shuba, S. A. Maksimenko, G. Ya. Slepyan, G. W. Hanson, Potential of Carbon Nanotubes for Cancer Cells Thermolysis in an RF Exposing Field, in: **Y.N. Shunin & A.E. Kiv (Eds), Nanodevices and Nanomaterials for Ecological Security, Part 1, pp. 37-48,** NATO Science for Peace and Security Series B: Physics and Bophysics**,** Springer Science + Business Media, Dordreht, 2012, DOI: 10.1007/978-94-007-4119-5_4
12. J. Macutkevic, D. Seliuta, G. Valusis, J. Banys, P. Kuzhir, S. Maksimenko, V. Kuznetsov, S. Moseenkov, O. Shenderova and Ph. Lambin, Dielectric Relaxation of Onion-Like Carbon Based Polymers Composites, in: **Peter J. Graham and Catherine M. Neely (Eds), Polymer relaxation**, Nova Science Publisher Inc, 2012, pp. 107-136 **ISBN** 9781614703815 https://www.novapublishers.com/catalog/product_info.php?products_id=24866
13. **Journal of Nanophotonics,** vol. 6, 2012, Special Section Fundamental and Applied Nanoelectromagnetics, guest editor S.A. Maksimenko, http://spie.org/x3650.xml
14. A. Maffucci, S. A. Maksimenko, G. Miano , and G. Ya. Slepyan, Carbon Nanotubes: from electrodynamics to signal propagation models, in: **Graphene, Carbon Nanotubes, and Nanostructures: Techniques and Applications**, J. E. Morris and K. Iniewski (Editors), Taylor & Francis, CRC Press, 2013, 1- 24
15. **Journal of Nanophotonics,** vol.10, 2016, Special Section on NanoCarbon Photonics and Optoelectronics, guest editors S.A. Maksimenko and E. Obraztsova, http://spie.org/x3650.xml
16. A. Maffucci and S. A. Maksimenko (Eds), **Fundamental and Applied Nano-Electromagnetics,** NATO Science for Peace and Security Series B: Physics and Biophysics**,** SPRINGER Science + Business Media. ISBN 978-94-017-7476-5 doi: 10.1007/978-94-017-7478-9 http://www.springer.com/gp/book/9789401774765
17. S. Mokhlespour, J. E. M. Haverkort, G. Y. Slepyan, S. A. Maksimenko, A. Hoffmann, Quantum dot lattice as nano-antenna for collective spontaneous emission, in: **A. Maffucci and S. A. Maksimenko (Eds), Fundamental and Applied Nano-Electromagnetics,** NATO Science for Peace and Security Series B: Physics and Bophysics**,** Springer Science + Business Media, 2016, pp. 69-88 doi: 10.1007/978-94-017-7478-9_4
18. A. Maffucci, S. A. Maksimenko, M. E. Portnoi, Carbon nanotubes and graphene nanoribbons for terahertz applications, in: **A. Maffucci and S. A. Maksimenko (Eds), Fundamental and Applied Nano-Electromagnetics,** NATO Science for Peace and Security Series B: Physics and Bophysics**,** Springer Science + Business Media. 2016 pp. 103-123, doi: 10.1007/978-94-017-7478-9_6
19. T. Kaplas, Y. Svirko, K. Batrakov, P. Kuzhir, S. Maksimenko, Microwave properties of ultrathin pyrolytic carbon films, in: **A. Maffucci and S. A. Maksimenko (Eds), Fundamental and Applied Nano-Electromagnetics,** NATO Science for Peace and Security Series B: Physics and Bophysics**,** Springer Science + Business Media. 2016, pp. 239-250 doi: 10.1007/978-94-017-7478-9_13
20. A. Maffucci, S. A. Maksimenko, G. Miano, and G. Ya. Slepyan, Electrical Conductivity of Carbon Nanotubes: Modeling and Characterization, in: **Todri-Sanial**, **Aida**, **Dijon**, **Jean**, **Maffucci**, **Antonio (Eds.), Carbon Nanotubes for Interconnects:** Process, Design and Applications**,** Springer International Publishing Switzerland 2017, pp. 101-128, doi: 10.1007/978-3-319-29746-0_4, http://www.springer.com/in/book/9783319297446#aboutBook, ISBN 978-3-319-29744-6

SELECTED PAPERS, since 1995:

21. G.Ya. Slepyan, A.V. Gurevich, and S.A. Maksimenko, Floquet-Bloch waves in periodic chiral media, ***Phys. Rev. E*** **51**, 2543-2549 (1995).
22. G.Ya. Slepyan, S.A. Maksimenko, F.G.Bass, and A. Lakhtakia, Nonlinear electromagnetics in chiral media: self-action of waves, ***Phys. Rev. E*** **52**, 1049-1058 (1995).
23. S.A.Maksimenko, G.Ya.Slepyan, and A.Lakhtakia, Gaussian pulse propagation in a linear, lossy chiral medium. ***J. Opt. Soc. Amer. A*** **14**, 894-900 (1997).

24. O.M.Yevtushenko, G.Ya.Slepyan, S.A.Maksimenko, A.Lakhtakia, and D.A.Romanov, Nonlinear electron transport effects in a chiral carbon nanotube. ***Phys. Rev. Lett.*** **79**, 1102-1105 (1997).
25. G.Ya.Slepyan, S.A.Maksimenko, A.Lakhtakia, O.M.Yevtushenko, and A.V.Gusakov, Electronic and electromagnetic properties of nanotubes. ***Phys. Rev. B*** **57**, 9485-9497 (1998).
26. G.Ya. Slepyan, S.A. Maksimenko, V.P. Kalosha, J. Herrmann, N.N. Ledentsov, I.L. Krestnikov, Zh.I. Alferov, and D. Bimberg, Polarization splitting of the gain band in quantum wire and quantum dot arrays, ***Phys. Rev. B*** **59**, 12275-12278 (1999).
27. G.Ya.Slepyan, S.A. Maksimenko, V.P.Kalosha, J.Herrmann, E.E.B.Campbell, I.V.Hertel, Highly efficient high harmonic generation by metallic carbon nanotubes, ***Phys. Rev. A*** **60**, R777-R780 (1999).
28. G.Ya. Slepyan, S.A. Maksimenko, A. Lakhtakia, O.M. Yevtushenko, and A.V. Gusakov, Electrodynamics of carbon nanotubes: Dynamic conductivity, impedance boundary conditions and surface wave propagation, ***Phys. Rev. B*** **60**, 17136-17149 (1999).
29. S.A.Maksimenko, G.Ya.Slepyan, V.P.Kalosha, S.V.Maly, N.N.Ledentsov, J.Herrmann, A.Hoffmann, D.Bimberg, and Zh.I.Alferov, Electromagnetic response of 3D arrays of quantum dots, ***J. Electronic Materials*** **29**, 494-503 (2000).
30. G.Ya.Slepyan, S.A.Maksimenko, V.P.Kalosha, A.V.Gusakov, and J.Herrmann, High-order harmonic generation by conduction electrons in carbon nanotube rope, ***Phys. Rev. A*** **63**, 053808 (2001).
31. G.Ya. Slepyan, S.A. Maksimenko, V.P. Kalosha, A. Hoffmann, and D. Bimberg, Effective boundary conditions for planar quantum-dot structures, ***Phys. Rev. B*** **64**, 125326 (2001).
32. S.A. Maksimenko, G.Ya. Slepyan, Electrodynamics of carbon nanotubes (review). ***J. Communications Technology and Electronics*** **47** (3), 235-252 (2002).
33. I.V. Bondarev, G.Ya. Slepyan and S.A. Maksimenko Spontaneous decay of excited atomic states near a carbon nanotube ***Phys. Rev. Lett.*** **89** (11), 115504 (2002).
34. C.Stanciu, R.Ehlich, V. Petrov, O. Steinkellner, J. Herrmann, I.V. Hertel, G. Ya. Slepyan, A. A. Khrutchinski, S.A. Maksimenko, F. Rotermund, E.E.B. Campbell, and F. Rohmund, Experimental and theoretical study of third-order harmonic generation in carbon nanotubes. ***Appl. Phys. Lett.*** **81** (21), 4064-4066 (2002)
35. G.Ya. Slepyan, S.A. Maksimenko, A. Hoffmann, and D. Bimberg, Quantum optics of a quantum dot: local-field effects. ***Phys. Rev. A*** **66**, 063804, 1-17 (2002).
36. I.V. Bondarev, S.A. Maksimenko, G.Ya. Slepyan, I.L. Krestnikov, A. Hoffmann, Exciton-phonon interactions and exciton dephasing in semiconductor quantum-well heterostructures, ***Phys. Rev. B*** **68**, 073310 (2003)
37. G. Ya. Slepyan, A. Magyarov, S.A. Maksimenko, A. Hoffmann and D. Bimberg, Rabi oscillations in a semiconductor quantum dot: the influence of local fields, **Phys. Rev. B 70**, 045320 (2004)
38. A. M. Nemilentsau, G. Ya. Slepyan, A.A. Khrutchinskii, S.A. Maksimenko, Third-order optical nonlinearity in single-wall carbon nanotubes, **Carbon**, **44**(11), 2246-2253 (2006).
39. G. Ya. Slepyan, M. V. Shuba, S. A. Maksimenko, A. Lakhtakia, Theory of optical scattering by achiral carbon nanotubes, and their potential as optical nanoantennas, **Phys. Rev. B 73,** 195416 (2006).
40. S.A. Maksimenko, V.N. Rodionova, G.Ya. Slepyan, V.A. Karpovich, O. Shenderova, J.Walsh,V.L. Kuznetsov, I.N.Mazov, S.I.Moseenkov, A.V. Okotrub, Ph. Lambin, Attenuation of electromagnetic waves in onion-like carbon composites, **Diamond and Related Materials 16** (4-7), 1231–1235 (2007).
41. A. M. Nemilentsau, G. Ya. Slepyan, S. A. Maksimenko, Thermal Radiation From Carbon Nanotube in Terahertz Range, 2007, **Phys. Rev. Lett. 99**, 147403 (2007)
42. M.V. Shuba, S.A. Maksimenko and A. Lakhtakia, Electromagnetic wave propagation in an almost circular bundle of closely packed, metallic, carbon nanotubes, **Phys. Rev. B 76**, 155407 (2007)
43. G. Ya. Slepyan, A. Magyarov, S.A. Maksimenko, and A. Hoffmann, Microscopic theory of quantum dot interactions with quantum light: Local field effect, **Phys. Rev. B 76,** 195328(1-14) (2007)
44. R Langlet, Ph Lambin, A Mayer, S A Maksimenko and P P Kuzhir, Dipole polarizability of onion-like carbons and electromagnetic properties of their composites, **Nanotechnology, 19** (11) 115706 (8pp) (2008)

45. G. Ya. Slepyan and S. A. Maksimenko, Photon statistics dispersion in excitonic composites, **New J. Phys. 10** (2) 023032 (22pp) (2008) [arXiv.org:quant-ph/0605189 (2006)]
46. S. A. Maksimenko, G. Ya. Slepyan, A. M. Nemilentsau, and M. V. Shuba, Carbon nanotube antenna: Far-field, near-field and thermal-noise properties, **Physica E 40** (7) 2360-2364 (2008).
47. J. Macutkevic, R. Adomavicius, A. Krotkus, D. Seliuta, G. Valusis, S. Maksimenko, P. Kuzhir, K. Batrakov, V. Kuznetsov, S. Moseenkov, O. Shenderova, A.V. Okotrub, R. Langlet and Ph. Lambin, Terahertz Probing of Onion-Like Carbon-PMMA Composite Films, **Diamond and Related Materials 17**, 1608-1612 (2008).
48. O.V. Kibis, G.Ya. Slepyan, S.A. Maksimenko, and A. Hoffmann, Matter Coupling to Strong Electromagnetic Fields in Two-Level Quantum Systems with Broken Inversion Symmetry, **Phys. Rev. Lett. 102**, 023601 (2009)
49. K. G. Batrakov, S.A. Maksimenko, P.P. Kuzhir and C. Thomsen, Carbon nanotube as a Cherenkov-type light emitter and free electron laser, **Phys. Rev. B 79**, 125408 (2009) [doi: 10.1103/PhysRevB.79.125408]
50. M.V. Shuba, G.Ya. Slepyan, S.A. Maksimenko, C. Thomsen, A. Lakhtakia, Theory of multiwall carbon nanotubes as waveguides and antennas in the infrared and the visible regimes, **Phys. Rev. B 79**, 155403 (2009)
51. I. Mazov, V. Kuznetsov, S. Moseenkov, A. Usoltseva, A. Romanenko, O. Anikeeva, T. Buryakov, P. Kuzhir, S. Maksimenko, D. Bychanok, J. Macutkevic, D. Seliuta, G. Valusis, J. Banys, and Ph. Lambin, Electromagnetic shielding properties of MWNT/PMMA composites in Ka-band, **Phys. Stat. Sol. B**, 246 (11) 2662-2666, December 2009
52. J. Macutkevic, P. Kuzhir, D. Seliuta, G. Valusis, J. Banys, A. Paddubskaya, D. Bychanok, G. Slepyan, S. Maksimenko, V. Kuznetsov, S. Moseenkov, O. Shenderova, A. Mayer and Ph. Lambin, Dielectric properties of novel high absorbing onion-like-carbon based polymer composite, **Diamond and Related Materials** 19(1) 91–99 (2010);
53. A. Burlaka, S. Lukin, S. Prylutska, O. Remeniak, Yu. Prylutskyy,M. Shuba, S. Maksimenko, U. Ritter, P. Scharff, Hyperthermic Effect Of Multi-Walled Carbon Nanotubes Stimulated With Near Infrared Irradiationfor Anticancer Therapy: In Vitro Studies, **Experimental Oncology 32**(1), 48-50 (2010).
54. G.Ya. Slepyan, M. V. Shuba, S. A. Maksimenko, C. Thomsen, and A. Lakhtakia, Terahertz conductivity peak in composite materials containing carbon nanotubes: Theory and interpretation of experiment, **Phys. Rev. B 81**, 205423 (2010)
55. D. Seliuta, I. Kašalynas, J. Macutkevic, G. Valušis, M.V. Shuba, P.P. Kuzhir, G.Y. Slepyan, S.A. Maksimenko, V. Ksenevich, V. Samuilov, and Q. Lu, Terahertz sensing with carbon nanotube layers coated on silica fibers: Carrier transport versus nanoantenna effects, **Appl. Phys. Lett. 97**, 073116 (2010) doi:10.1063/1.3478009
56. M.V. Shuba, G. Y. Slepyan, S. A. Maksimenko, and G.W. Hanson, Radiofrequency field absorption by carbon nanotubes embedded in a conductive host, **J. Appl. Phys.** 108(11) 114302 (10pp) (2010)
57. A. M. Nemilentsau, G. Ya. Slepyan, S. A. Maksimenko, A. Lakhtakia, and S. V. Rotkin, Spontaneous decay of the excited state of an emitter near a finite-length metallic carbon nanotube, **Phys. Rev. B 82**, 235411 (2010) [9 pages]

    A. M. Nemilentsau, M. V. Shuba, G. Ya. Slepyan, P. P. Kuzhir, S. A. Maksimenko, P. N. D'yachkov, A. Lakhtakia, Substitutional doping of carbon nanotubes to control their electromagnetic characteristics, **Phys. Rev. B 82,** 235424 **(2010)** [10 pages]
58. G. Miano, C. Forestiere, A. Maffucci, S. A. Maksimenko, G. Ya. Slepyan, Signal propagation in carbon nanotubes of arbitrary chirality, **IEEE Trans. Nanotechnology, 10**(1)**, 135-149 (2011),** doi:10.1109/TNANO.2009.2034262
59. P. Kuzhir, A. Paddubskaya, D. Bychanok, A. Nemilentsau, M. Shuba, A. Plusch, S. Maksimenko, S. Bellucci, L. Coderoni, F. Micciulla, I. Sacco, G. Rinaldi, J. Macutkevic, D. Seliuta, G. Valusis, J. Banys, Microwave probing of nanocarbon based epoxy resin composite films: toward electromagnetic shielding, **Thin Solid Films, 519(12), 4114-4118, 1 April (2011)** doi:10.1016/j.tsf.2011.01.198
60. D. S. Bychanok, M. A. Kanygin, A. V. Okotrub, M. V. Shuba, A. G. Paddubskaya, A. O. Plyushch, P. P. Kuzhir, S. A. Maksimenko, Anisotropy of the Electromagnetic Properties of Polymer Composites Based on Multiwall Carbon Nanotubes in the Gigahertz Frequency Range, **JETP Letters, 93 (10), 607–611 (2011)**

61. M. V. Shuba, G. Ya. Slepyan, S. A. Maksimenko, and G. W. Hanson, RF and microwave electrical response of carbon nanotube saline solutions for potential biomedical applications, **Nanosci. Nanotechnol. Lett., 3, No. 6, 885-888 (2011)**
62. P. P. Kuzhir, A. G. Paddubskaya, S. A. Maksimenko, V. L. Kuznetsov, S. Moseenkov, A. I. Romanenko, O. A. Shenderova, J. Macutkevic, G. Valusis, P. Lambin, Carbon onion composites for EMC applications**, IEEE Trans. Electromagnetic Compatibility, 54(1), pp. 6-16, February 2012,** doi: 10.1109/TEMC.2011.2173348,
63. J. Macutkevic, D. Seliuta, G. Valusis, R. Adomavicius, A. Krotkus, P. Kuzhir, A. Paddubskaya, S. Maksimenko, V. Kuznetsov, I. Mazov, I. Simonova, Multi-walled carbon nanotubes / PMMA composites for THz applications, **Diamond & Related Materials, 25 13–18 (2012),** doi: 10.1016/j.diamond.2012.02.002
64. M. V. Shuba, A. G. Paddubskaya, P. P. Kuzhir, G. Ya. Slepyan, S. A. Maksimenko, V. K. Ksenevich, P. Buka, D. Seliuta, I. Kasalynas, J. Macutkevic, G. Valusis, C. Thomsen, A. Lakhtakia, Experimental evidence of localized plasmon resonance in composite materials containing single-wall carbon nanotubes, **Phys. Rev. B 85, 165435 (2012)**
65. C. Forestiere, A. Maffucci, S. A. Maksimenko, G. Miano, G. Ya. Slepyan, Transmission Line Model for Multiwall Carbon Nanotubes with Intershell Tunneling, **IEEE Trans. Nanotechnology, 11(3) pp. 554 - 564 (2012),**
66. M.V. Shuba, D. Seliuta, P.P. Kuzhir, S.A. Maksimenko, V.K. Ksenevich, I. Kašalynas, J. Macutkevič, G. Valušis Antenna resonances in terahertz photoconductivity of single wall carbon nanotube fibers, **Diamond & Related Materials, vol. 27–28, pp 36-39 July–August 2012** doi:10.1016/j.diamond.2012.05.012
67. G.Ya. Slepyan, Y.D. Yerchak, S.A. Maksimenko, A. Hoffmann and F. G. Bass, Mixed states in Rabi waves and quantum nanoantennas, **Phys. Rev. B 85, 245134, June 28, 2012,** DOI:10.1103/PhysRevB.85.245134
68. M.V. Shuba, A.G. Paddubskaya, P.P. Kuzhir, S.A. Maksimenko, V.K. Ksenevich, G. Niaura, D. Seliuta, I. Kasalynas, G. Valusis, Soft cutting of single-wall carbon nanotubes by low temperature ultrasonication in a mixture of sulfuric and nitric acids, **Nanotechnology 23 495714 (9pp) (2012),** doi: 10.1088/0957-4484/23/49/495714
69. Dongxiao Li, Yun Suk Jung, Hong Koo Kim, Junda Chen, David A. Geller, Mikhail V. Shuba, Sergey A. Maksimenko, Sarah Patch, Ebrahim Forati, and George W. Hanson, The effect of sample holder geometry on electromagnetic heating of nanoparticle and NaCl solutions, **IEEE Trans. Biomedical Engineering, 59 (12), 3468 - 3474 (2012),**
70. P. Kuzhir, S.A. Maksimenko, K.N. Lapko, V.A. Lomonosov, O.A. Ivashkevich, A.I. Lesnikovich, P.V. Sedyshev, V.N. Shvetsov, A.S. Kurilin, L. Sartinska, P. Silenko, G. Frolov, Yu. Solonin And S. Bellucci, Boron Enriched Unfired Phosphate Ceramics As Neutron Protector, **Nanosci. Nanotechn. Lett.,** vol. 4, No 11, 2012 , pp. 1104-1109(6)
71. K. G. Batrakov, V. A. Saroka, S. A. Maksimenko and C. Thomsen, Plasmon polariton slowing down in graphene structures, **Journal of Nanophotonics, 6(1), 061719(11), 2012** DOI: 10.1117/1.JNP.6.061719
72. P. Kuzhir, A. Paddubskaya, M. Shuba, S. Maksimenko, A. Celzard, V. Fierro, G. Amaral-Labat, A. Pizzi, J. Macutkevic, G. Valusis, J. Banys, S. Bistarelli, M. Mastrucci, F. Micciulla, I. Sacco, S. Bellucci, Electromagnetic shielding efficiency in Ka-band: carbon foam versus epoxy/CNT composites, **J. Nanophotonics, 6, 061715(18) 2012**
73. S. Mokhlespour, J. E. M. Haverkort, G. Slepyan and S. Maksimenko, A. Hoffmann, Collective spontaneous emission in coupled quantum dots: physical mechanism of quantum nanoantenna, **Phys. Rev. B 86, 245322 (2012) [11 pages]**
74. P. Kuzhir, A. Paddubskaya, S. Maksimenko, T. Kaplas And Yu. Svirko, Microwave Absorption Properties Of Pyrolytic Carbon Nanofilm, **Nanoscale Research Letters 2013, vol. 8, Art No 60 (pp)** doi:10.1186/1556-276X-8-60
75. D. Bychanok, P. Kuzhir, S. Maksimenko, S. Bellucci, and C. Brosseau, Characterizing epoxy composites filled with carbonaceous nanoparticles from dc to microwave, **Journal of Applied Physics, 113, 124103 (2013)**

76. M.A. Kanygin, O.V. Sedelnikova, I.P. Asanova, L.G. Bulusheva, A.V. Okotrub, P.P. Kuzhir, A.O. Plyushch, S.A. Maksimenko, K.N. Lapko, A.A. Sokol, O.A.Ivashkevich, Ph. Lambin, Effect of nitrogen doping on the electromagnetic properties of CNT-based composites**, Journal of Applied Physics, 113**, 144315 (2013) (8pp)
77. P. Kuzhir, N. Volynets, S. Maksimenko, T. Kaplas and Yu. Svirko, Multilayered Graphene in Ka-band: Nanoscale Coating for Aerospace Applications. **J. Nanosci and Nanotechn, Vol 13 (8), pp. 5864-5867(4) August 2013**,
78. J. Macutkevic, P. Kuzhir, A. Paddubskaya, S. Maksimenko, J. Banys, A. Celzard, V. Fierro, S. Bistarelli, A. Cataldo, F. Micciulla, and S. Bellucci, Electrical transport in carbon black-epoxy resin composites at different temperatures, **J. Appl. Phys. 114, 033707 (8pp), published 17 July 2013;** doi: 10.1063/1.48158702013
79. M.V. Shuba, A.V. Melnikov, A.V. Paddubskaya, P.P. Kuzhir, S.A. Maksimenko, C. Thomsen, The role of finite size e□ects in the microwave and sub-terahertz electromagnetic response of multiwall carbon nanotube based composite: Theory and interpretation of experiment, **Phys. Rev. B 88, 045436 (8pp) July 2013**
80. K. Batrakov, P. Kuzhir, S. Maksimenko, A. Paddubskaya, S. Voronovich, T. Kaplas, and Yu. Svirko, Enhanced microwave shielding effectiveness of ultrathin pyrolytic carbon films, **Applied Physics Letters, 103, 073117 (2013);**
81. B. De Vivo, P. Lamberti, V. Tucci, P. Kuzhir, S. Maksimenko and S. Bellucci, Equivalent Electric Circuits For The Simulation of Carbon Nanotube-Epoxy Composites, **IEEE Trans. Nanotechnology,** Volume:12 , Issue: 5, pp. 696 - 703, Sept. **2013,** doi:10.1109/TNANO.2013.2268209
82. D. Bychanok, M Shuba, P. Kuzhir, S. Maksimenko, V. Kubarev, M. Kanygin, O. Sedelnikova, L. Bulusheva, and A. Okotrub "Anisotropic electromagnetic properties of polymer composites containing oriented multiwall carbon nanotubes in respect to terahertz polarizer applications", **J. Applied Physics, 114, 114304, 17 September 2013 (7 pp)**
83. H.K. Avetissian, G.F. Mkrtchian, K.G. Batrakov, S. A. Maksimenko, and A. Hoffmann, Multiphoton resonant excitations and high-harmonics generation in bilayer graphene, **Phys. Rev. B, B 88, 165411, (2013)**
84. P. Kuzhir; A. Paddubskaya; A. Plyushch; N. Volynets; S. Maksimenko; J. Macutkevic; I. Kranauskaite; J. Banys; E. Ivanov; R. Kostilkova; A. Celzard; V. Fierro; J. Zicans; T. Ivanova; R. Merijs Meri; I. Bochkov; A. Cataldo; F. Micciulla; S. Bellucci; P. Lambin, Epoxy composites filled with high surface area-carbon fillers: optimization of electromagnetic shielding, electrical, mechanical and thermal properties, **J. Applied Physics, 114** , 164304 (2013)
85. D. S. Bychanok, A. G. Paddubskaya, P. P. Kuzhir, S. A. Maksimenko, C. Brosseau, J. Macutkevic, and S. Bellucci, A study of random resistor-capacitor-diode networks to assess the electromagnetic properties of carbon nanotube filled polymers, **Appl. Phys. Lett. 103, 243104 (December 10, 2013);** doi: 10.1063/1.4847335
86. H. K. Avetissian, G. F. Mkrtchian, K. G. Batrakov, S. A. Maksimenko, And A. Hoffmann, Nonlinear Theory Of Graphene Interaction With Strong Laser Radiation Beyond The Dirac Cone Approximation: Coherent Control Of Quantum States In Nanooptics, **Phys. Rev. B 88, 245411 (December 10, 2013)** DOI: 10.1103/PhysRevB.88.245411
87. S. Voronovich, A. Paddubskaya, K. Batrakov, P.Kuzhir, S. Maksimenko, T. Kaplas, Yu. Svirko, Electromagnetic Properties of Graphene-like Films in Ka-Band, **Appl. Sci. 2014, 4, 255-264**; doi:10.3390/app4020255
88. I. Kranauskaite, J. Macutkevic, P. Kuzhir, N. Volynets, A. Paddubskaya, D. Bychanok, S. Maksimenko, J. Banys, S. Bistarelli, A. Cataldo, F. Micciulla, S. Bellucci, V. Fierro, A. Celzard, Dielectric properties of graphite-based epoxy composites, **Physica Status Solidi A, 211, No. 7, 1623–1633 (2014)** , DOI 10.1002/pssa.201431101
89. K. Batrakov, P. Kuzhir, S. Maksimenko, A. Paddubskaya, S. Voronovich, Ph. Lambin, T. Kaplas, Yu. Svirko, Flexible transparent graphene/polymer multilayers for efficient electromagnetic field absorption, **Scientific Reports** 4, Article number: 7191, 2014, doi:10.1038/srep07191, Published 26 November 2014

90. R. Kotsilkova, E. Ivanov, D. Bychanok; A. Paddubskaya; M. Demidenko; J. Macutkevic; S. Maksimenko, P. Kuzhir, Effects of sonochemical modification of carbon nanotubes on electrical and electromagnetic shielding properties of epoxy composites, **Composite Science and Technology 106 (2015) 85–92,** doi: 10.1016/j.compscitech.2014.11.004
91. V. Baryshevsky, N. Belous, A. Gurinovich, E. Gurnevich, P. Kuzhir, S. Maksimenko, P. Molchanov, M. Shuba, V. Roddatis, T. Kaplas, Y. Svirko, Study of nanometrically thin pyrolytic carbon films for explosive electron emission cathode in high-voltage planar diode, **Thin solid Films, 581, 107-111, 2015**, DOI: 10.1016/j.tsf.2014.09.044
92. G. Slepyan, A. Boag, V. Mordachev, E. Sinkevic, S. Maksimenko, P. Kuzhir, G. Miano, M. E. Portnoi, and A. Maffucci, Nanoscale Electromagnetic Compatibility: Quantum Coupling and Matching in Nanocircuits, **IEEE Transactions on Electromagnetic Compatibility, vol.57, no.6, pp.1645-1654, Dec. 2015**
93. A. Lobko E. Golubeva; P. Kuzhir; S. Maksimenko; A. Paddubskaya; O. Shenderova; V. Uglov; N. Valynets, "Nanodiamond Targets For Accelerator X-Ray Experiments", **Nuclear Instruments and Methods in Physics Research Section B, Volume 355, 15 July 2015, Pages 261-263,** doi:10.1016/j.nimb.2015.02.031
94. M. V. Shuba, A. G. Paddubskaya, P. P. Kuzhir, S. A. Maksimenko, N. A. Poklonski, S. Bellucci, G. Kenanakis, M. Kafesaki, Temperature induced modification of the mid-infrared response of single-walled carbon nanotubes, **J. Appl. Phys. 119, 104303(8pp) (2016);** doi:10.1063/1.4943499
95. K. Batrakov, P. Kuzhir, S. Maksimenko, N. Volynets, S.Voronovich, A. Paddubskaya, G. Valusis, T. Kaplas, Yu. Svirko, and Ph. Lambin , Enhanced microwave-to-terahertz absorption in Graphene, **Appl. Phys. Lett**. **108, 123101 (2016)**
96. A. Paddubskaya, N. Valynets, P. Kuzhir, K. Batrakov, S. Maksimenko, R. Kostilkova, H. Velichkova, I. Petrova, I. Biro, K. Kertesz, G. Mark, Z. Horvath, and L. Biro "Electromagnetic and Thermal properties of 3D Printed Multilayered Nano-carbon / Poly(lactic) Acid Structures", J. **Appl. Phys. 119, 135102 (2016);** doi: 10.1063/1.49455762016

    A. Paddubskaya, N. Valynets, P. Kuzhir, K. Batrakov, S. Maksimenko, R. Kostilkova, H. Velichkova, I. Petrova, I. Biro, K. Kertesz, G. Mark, Z. Horvath, and L. Biro "Electromagnetic and Thermal properties of 3D Printed Multilayered Nano-carbon / Poly(lactic) Acid Structures", **J. Appl. Phys. 119, 135102 (2016);**,
97. K. G. Batrakov, A. G. Paddubskaya, N. I. Valynets, S. P. Voronovich-Solonevich, P. P. Kuzhir, S. A. Maksimenko, T. Kaplas, Yu. Svirko, Microwave Absorption in Graphene Films: Theory and Experiment, **Journal of Applied Spectroscopy, 83(4), 650–655, September 2016,** DOI: 10.1007/s10812-016-0342-x
98. D. S. Bychanok, A. O. Plyushch, G. V. Gorokhov, V. S. Bychanok, P. P. Kuzhir, and S. A. Maksimenko, Microwave Radiation Absorbers Based on Corrugated Composites with Carbon Fibers, **Technical Physics, 2016, Vol. 61, No. 12, pp. 1890–1894** DOI: 10.1134/S1063784216120094
99. A.V. Kukhta, A.G. Paddubskaya, P.P. Kuzhir, S.A. Maksimenko, S.A. Vorobyova, S. Bistarelli, A. Cataldo, S. Bellucci, Copper nanoparticles decorated graphene nanoplatelets and composites with PEDOT:PSS, **Synthetic Metals**, **Vol 222, Part B, pp 192–197, Dec 2016**, Available online 27 October 2016, doi: 10.1016/j.synthmet.2016.10.006
100. Volynets, N.I., Bychenok, D.S., Lyubimov, A.G., P. P. Kuzhir, S. A. Maksimenko, S. A. Baturkin, A. Ya. Klochkov, M. Mastrucci, F. Micciulla, S. Bellucci, **Tech. Phys. Lett. (2016) 42: 1141**. doi:10.1134/S1063785016120129
101. Kukhta A. V., Paddubskaya A. G., Kuzhir P. P., Maksimenko S. A., Vorobyova S. A., Bellucci S., Khanna P. K. Electroactive Polymer Based Conducting, Magnetic, and Luminescent Triple Composites, **Advances in Science and Technology, Vol. 97, pp 24-29, 2017** doi:10.4028/www.scientific.net/AST.97.24

102. D. Bychanok, G. Gorokhov, D. Meisak, P. Kuzhir, S. A. Maksimenko, Y. Wang, Z. Han, X. Gao, and H. Yue, "Design of carbon nanotube-based broadband radar absorber for ka-band frequency range," **Progress In Electromagnetics Research M, Vol. 53, 9-16, 2017.** http://www.jpier.org/pierm/pier.php?paper=16090303