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CURRICULLUM VITAE

Dr. Anatoli I. Popov

Leading research scientist

Institute of Solid State Physics, University of Latvia

PERSONAL DETAILS

Name	Anatoli I Popov, PhD, Dr.Phys
Date of birth	December 22, 1960, Chusovoi, Perm region, Russia, USSR
Address	Institute of Solid State Physics, University of Latvia, 8 Kengaraga Str., LV-1063 RIGA, Latvia
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<http://www.cfi.lu.lv/teor/index.html>

<http://www.researcherid.com/rid/E-8828-2010>

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<https://www.scopus.com/authid/detail.uri?authorId=7402986699>

Marital Status Married, one child

EDUCATION

1978-1984	M.S.+B.S. degrees: Department of the Molecular and Chemical Physics (1978-1982), Department of General and Applied Physics (1982-1984), Moscow Institute of Physics and Technology, МИПТ, Dolgoprudnyi, Московский Физико-технический институт, МФТИ
1990	Ph D in Physics, Institute of Physics, The Latvian Academy of Sciences
1993	Dr in Physics, Institute of Solid State Physics, University of Latvia

ACADEMIC AND PROFESSIONAL EXPERIENCE

1985-1989	Engineer, Institute of Physics, Latvian Academy of Sciences
1989-1993	Research fellow at the same Institute
1991-1993	Lecturer of general physics, University of Latvia
1993-1994	Research fellow, Institute of Solid State Physics, University of Latvia
1995 - current	Leading Research Scientist at the Institute of Solid State Physics, University of Latvia, Riga

PROFESSIONAL ACTIVITIES, FELLOWSHIPS PROFESSIONAL ACTIVITIES, FELLOWSHIPS

A.

- 05 and 09-12.1993 Visiting scientist, Institute für Festkörperforschung, Forschungszentrum Jülich GmbH, Jülich, Germany
- 04.1995 – 08.1995 Visiting professor, Aarhus University, Aarhus, Denmark
02.1996
- 03.1996 – 03.1997 Visiting scientist, Centre Interdisciplinaire de Recherches avec les Ions Lourds, CEA/CNRS, Caen, France
- 1996 - 1997 Frequent visitor (Crystal Clear collaboration), CERN, Switzerland
- 12.1997 – 01.1998 Visiting scientist, Freie University, Berlin, Germany
- 05.1998 – 08.1998 Visiting scientist, University of Manchester, UK
- 09.1998 – 08.1999 Visiting professor, Universidad Carlos III de Madrid, Spain
- 02.2000 – 04.2001 Visiting scientist, Institute of Physical and Chemical Research, RIKEN, Japan
- 09.2001 – 12.2007 Visiting scientist, Institut Laue-Langevin (ILL) and EMBL, Grenoble, France
- 2003 – 2017 Frequent visitor of DAFNE Synchrotron Facility, Laboratori Nazionali di Frascati, as a Head of several EU TARI Projects
- 2006 – 2012 Frequent visitor of DESY Synchrotron Facility, Hamburg, Germany, as a Head of several EU Projects
- 2009 -2018 Frequent visitor, Max-Planck Institut für Festkörperforschung, Stuttgart, Germany
- 11.2012 – 01.2013 DAAD fellowship, TU Darmstadt, Germany
- 2013 – 2016 Frequent visitor, TU Darmstadt, Germany
- 2014 - 2018 Frequent visitor (EUROFUSION), CIEMAT, Spain
- 2007 – 2018 Frequent visitor and long-term collaborator of the Institut Laue-Langevin (ILL), France
- 2018, April Visiting Professor, K. Zhubanov Aktobe Regional State University, Aktobe, Kazakhstan

B. The official opponent of four PhD dissertations at Tartu University, Estonia and two PhD thesis in Vilnius University.

C. Chairman of the **First Baltic School on Application of Neutron and Synchrotron Radiation in Solid State Physics and Material Science** (BSANS-2012), Riga, Latvia, October 1-4, 2012

Co-organizer of the ESS Meeting “**The European Spallation Source ERIC (ESS) - Partner Day in Riga**”, Riga, Latvia, 1 June, 2016.

D. Guest-Editor of Special Issue of “**Low Temperature Physics**” - Low-temperature radiation effects in wide gap materials (2016, July) and Member of International Advisory Board (since 2018).

RESEARCH INTERESTS

Radiation damage of insulators. Point defects.

Optical properties of insulators. Luminescence. VUV, IR and FTIR spectroscopy.

Synchrotron radiation spectroscopy (VUV, XD, XAS, EXAFS, FTIR)

Neutron imaging and spectroscopy.
 Scintillators. Storage phosphors. Dosimetry and radiation imaging.
 Superionics. Nanomaterials.

MATERIALS OF MAJOR INTEREST:

pure and doped halides (KCl, KBr, KI, CsI, KBr-In, KBr-Tl, BaFBr-Eu, CsI:Tl, RbCl-In, RbBr-In, MgF₂, SrI₂, CdI₂),
 oxides and perovskites (Al₂O₃, MgO, MgAl₂O₄, Gd₃Ga₅O₁₂, Gd₂O₃, Li₂B₄O₇, YAlO₃, KNbO₃, BaZrO₃, PLZT, TeO₂, Y-ZrO₂, NiWO₄, ZnWO₄, PbWO₄ etc),
 AlN, borates (Sr₂B₅O₉Br:Ce³⁺ and Ca₂B₅O₉Br:Ce³⁺), SiC, Ag₂CdI₄, LaPO₄, YVO₄, CdCoS,
 carbon nanotubes, relaxor ferroelectrics, hydroxyapatite, etc.
 GeS₂-Ga₂S₃-CsCl –glasses etc
 Cu_{0.4}Co_{0.4}Ni_{0.4}Mn_{1.8}O₄ ceramics
 Organic thin films.

PUBLICATIONS

More than 145 journal papers (Web of Science, more than 1450 citations; H-index = 22),
 More than 350 conference presentations (no longer count).

TITLE OF SCI JOURNAL	Number of publications	IMPACT FACTOR WEB OF SCI (2016)
ACTA PHYSICA POLONICA A	1	0.469 Q4
CURRENT APPLIED PHYSICS	1	1.971 Q2
CENTRAL EUROPEAN JOURNAL OF PHYSICS	2	0.765 Q3
COMPUTATIONAL MATERIALS SCIENCE	1	2.292 Q2
EUROPEAN PHYSICAL JOURNAL B	1	1.436 Q3
FERROELECTRICS	1	0.551 Q4
INTEGRATED FERROELECTRICS	1	0.457 Q4
JETP LETTERS	1	1.235 Q3
JOURNAL OF ALLOYS AND COMPOUNDS	1	3.133 Q1
JOURNAL OF APPLIED PHYSICS	3	2.068 Q2
JOURNAL OF ELECTRON SPECTROSCOPY RELATED PHENOMENA	1	1.661 Q3
JOURNAL OF LUMINESCENCE	2	2.686 Q2
JOURNAL OF NUCLEAR MATERIALS	1	2.048 Q1
JOURNAL OF PHYSICAL CHEMISTRY A	1	2.847 Q2
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN	1	1.450 Q2
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS	1	2.059 Q2
JOURNAL OF PHYSICS-CONDENSED MATTER	9	2.678 Q2
JOURNAL OF SAUDI CHEMICAL SOCIETY	1	2.887 Q2
LOW TEMPERATURE PHYSICS	9	0.804 Q4
MATERIALS SCIENCE AND ENGINEERING B	1	1.756 Q2
MATERIALS SCIENCE FORUM	1	0.399 Q4
MOLECULAR CRYSTALS AND LIQUID CRYSTALS	1	0.571 Q4
NANOSCALE RESEARCH LETTERS	1	2.833 Q2
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS	23	1.109 Q3
OPTICAL MATERIALS	2	2.238 Q2
OPTICS AND SPECTROSCOPY	2	0.716 Q4
PHILOSOPHICAL MAGAZINE LETTERS	1	0.941 Q2
PHYSICA B-CONDENSED MATTER	2	1.405 Q3
PHYSICA STATUS SOLIDI B	12	1.674 Q3
PHYSICAL REVIEW B	6	3.836 Q2
RADIATION EFFECTS AND DEFECTS IN SOLIDS	6	0.443 Q4
RADIATION MEASUREMENTS	6	1.442 Q1
SOLID STATE COMMUNICATIONS	3	1.554 Q3
SOLID STATE IONICS	2	2.354 Q2

Publications (2018 - 1987)

147. V. Serga, M. Maiorov, A. Cvetkovs, A. Krumina, **A. I. Popov**
Fabrication and characterization of magnetic FePt nanoparticles prepared by extraction–pyrolysis method
Chemija 2018, **29**, N.2, pp.107-111
146. A. Lushchik, S. Dolgov, E. Feldbach, R. Pareja, **A.I. Popov**, E. Shablonin, V. Seeman.
Creation and thermal annealing of structural defects in neutron-irradiated MgAl₂O₄ single crystals.
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2018
DOI: [10.1016/j.nimb.2017.10.018](https://doi.org/10.1016/j.nimb.2017.10.018)
145. V.N. Kuzovkov, E.A. Kotomin, **A.I. Popov**.
Kinetics of dimer F₂ type center annealing in MgF₂ crystals
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2018
DOI: [10.1016/j.nimb.2017.10.025](https://doi.org/10.1016/j.nimb.2017.10.025)
144. Mironova-Ulmane, N., I. Sildos, E. Vasil'chenko, G. Chikvaidze, V. Skvortsova, A. Kareiva, J. E. Muñoz-Santiuste, R. Pareja, E. Elsts, and **A. I. Popov**.
Optical absorption and Raman studies of neutron-irradiated Gd₃Ga₅O₁₂ single crystals.
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2018
<https://doi.org/10.1016/j.nimb.2018.02.006>
143. V.N. Kuzovkov, E.A. Kotomin, and **A.I. Popov**.
Kinetics of the electronic center annealing in Al₂O₃ crystals.
J. Nuclear Materials, 2018, **502**, pp. 295-300.
<https://doi.org/10.1016/j.jnucmat.2018.02.022>
142. A. Lushchik, Ch. Lushchik, E. Vasil'chenko, and **A.I. Popov**.
Radiation creation of cation defects in alkali halide crystals: Review and today's concept.
Low Temperature Physics, 2018, **44**, pp. 357-367
141. A. Antuzevics, U. Rogulis, A. Fedotovs, and **A.I. Popov**.
Crystalline phase detection in glass ceramics by EPR spectroscopy.
Low Temperature Physics, 2018, **44**, pp. 449-454.
140. Ya. Zhydachevskyy, N. Martynyuk, **A.I. Popov**, D. Sugak, P. Bilski, S. Ubizskii, M. Berkowski, and A. Suchocki.
Thermally induced fading of Mn-doped YAP nanoceramics.
J. Phys.: Conf. Ser., 2018, 987, 012009 (pp. 1-3).
DOI: 10.1088/1742-6596/987/1/012009
139. E.A. Kotomin, V.N. Kuzovkov, **A.I. Popov**, J. Maier, R. Vila.
Anomalous Kinetics of Diffusion-Controlled Defect Annealing in Irradiated Ionic Solids
J. Physical Chemistry A, 2018, 122, pp. 28–32.
DOI: 10.1021/acs.jpca.7b10141
138. R.I. Eglitis, **A.I. Popov**.
Systematic trends in (001) surface ab initio calculations of ABO₃ perovskites
Journal of Saudi Chemical Society, 2018, **22**, Issue 4, Pages 459-468.
DOI: [10.1016/j.jscs.2017.05.011](https://doi.org/10.1016/j.jscs.2017.05.011)

137. **A.I. Popov**, E.A. Kotomin, J. Maier.
Analysis of self-trapped hole mobility in alkali halides and metal halides.
Solid State Ionics, 2017, **302**, pp. 3–6.
DOI: 10.1016/j.ssi.2016.12.004
136. V. Dimza, **A.I. Popov**, L. Lāce, M. Kundzins, K. Kundzins, M. Antonova, M. Livins.
Effects of Mn doping on dielectric properties of ferroelectric relaxor PLZT ceramics.
Current Applied Physics, 2017, **17**, pp.169-173.
DOI: 10.1016/j.cap.2016.11.010
135. **A.I. Popov**, A. Lushchik, and E.A. Kotomin,
Low-temperature radiation effects in wide gap materials.
Low Temperature Physics, 2016, **42**, pp. 687-688.
134. A. Kuzmin, V. Pankratov, A. Kalinko, A. Kotlov, L. Shirmane, and **A.I. Popov**,
UV-VUV synchrotron radiation spectroscopy of NiWO₄.
Low Temperature Physics, 2016, **42**, p. 694-698.
133. N. Mironova-Ulmane, V. Skvortsova, and **A.I. Popov**,
Optical absorption and luminescence studies of fast neutron-irradiated complex oxides for jewellery applications. *Low Temperature Physics*, 2016, **42**, p. 743-747.
132. V.N. Kuzovkov, **A.I. Popov**, E.A. Kotomin, A.M. Moskina, E. Vasil'chenko, and A. Lushchik,
Theoretical analysis of the kinetics of low-temperature defect recombination in alkali halide crystals.
Low Temperature Physics, 2016, **42**, p. 748-755.
131. I. Karbovnyk, I. Bolesta, I. Rovetskyi, V. Lesivtsiv, Ya. Shmygelsky, S. Velgosh, and **A.I. Popov**,
Long-term evolution of luminescent properties in CdI₂ crystals.
Low Temperature Physics, 2016, **42**, p. 756-759.
130. V.P. Savchyn, **A.I. Popov**, O.I. Aksimentyeva, H. Klym, Yu.Yu. Horbenko, V. Serga, A. Moskina, and I. Karbovnyk,
Cathodoluminescence characterization of polystyrene–BaZrO₃ hybrid composites.
Low Temperature Physics, 2016, **42**, p. 760-763
129. H. Klym, A. Ingram, O. Shpotyuk, I. Hadzaman, V. Solntsev, O. Hotra, and **A.I. Popov**,
Positron annihilation characterization of free volume in micro- and macro-modified Cu_{0.4}Co_{0.4}Ni_{0.4}Mn_{1.8}O₄ ceramics.
Low Temperature Physics, 2016, **42**, p. 764-769.
128. **A.I. Popov**, J. Zimmermann, G.J. McIntyre, C. Wilkinson.
Photostimulated luminescence properties of neutron image plates.
Optical Materials, 2016, **59**, pp. 83–86
DOI: 10.1016/j.optmat.2016.01.038
127. I. Karbovnyk, I. Olenych, A. Kukhta, A. Lugovskii, G. Sasnouski, Yu. Olenych, A. Luchechko, **A.I. Popov**, L. Yarytska.
Multicolor photon emission from organic thin films on different substrates.
Radiation Measurements, 2016, **90**, pp. 38- 42.
DOI:10.1016/j.radmeas.2015.12.022
126. H. Klym, A. Ingram, O. Shpotyuk, O. Hotra, **A.I. Popov**. Positron trapping defects in free-volume investigation of Ge-Ga-S-CsCl glasses.
Radiation Measurements, 2016, **90**, pp.117-121.
DOI: 10.1016/j.radmeas.2016.01.023

125. H. Klym, I. Karbovnyk, M. Cestelli Guidi, **A.I. Popov**.
Optical and vibrational spectra of CsCl-enriched GeS₂-Ga₂S₃ glasses.
Nanoscale Research Letters, 2016, **11**, 132.
DOI: 10.1186/s11671-016-1350-8
124. A. Lushchik, Ch. Lushchik, **A.I. Popov**, K. Schwartz, E. Shablonin, & E. Vasil'chenko.
Influence of complex impurity centres on radiation damage in wide-gap metal oxides.
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2016, **374**, pp.90-96.
doi:10.1016/j.nimb.2015.07.004
123. V.M. Lisitsyn, L. A. Lisitsyna, **A.I. Popov**, E. A. Kotomin, F. U. Abuova, , A. Akilbekov, & J. Maier.
Stabilization of primary mobile radiation defects in MgF₂ crystals.
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2016, **374**, pp.24-98.
doi:10.1016/j.nimb.2015.08.002
122. E.A. Kotomin, V.N. Kuzovkov, **A.I. Popov** & R. Vila.
Kinetics of F center annealing and colloid formation in Al₂O₃.
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 2016, **374**, pp.107-110.
doi:10.1016/j.nimb.2015.08.055
121. E. Shablonin, **A.I. Popov**, A. Lushchik, A. Kotlov & S. Dolgov.
Excitation of different chromium centres by synchrotron radiation in MgO:Cr single crystals.
Physica B: Condensed Matter. 2015, **477**, pp.133-136.
120. A.V. Bystrova, Y. D. Dekhtyar, **A.I. Popov**, J. Coutinho, V.S. Bystrov.
Modified Hydroxyapatite Structure and Properties: Modeling and Synchrotron Data Analysis of Modified Hydroxyapatite Structure.
Ferroelectrics, 2015, **475**, pp.135-147.
119. I. Karbovnyk, P. Savchyn, A. Huczko, M. Cestelli Guidi, C. Mirri, **A.I. Popov**,
FTIR studies of silicon carbide 1D-nanostructures.
Materials Science Forum, 2015; **821-823**, pp. 261-264.
118. A.V Bystrova, Yu.D. Dekhtyar, **A.I. Popov**, and V.S. Bystrov,
Modeling and Synchrotron Data Analysis of Modified Hydroxyapatite Structure.
Mathematical Biology and Bioinformatics, 2014, **9**, p. 171–182.
117. O.I. Aksimentyeva, V.P. Savchyn, V.P. Dyakonov, S. Piechota, Yu.Yu. Horbenko, I.Ye. Opainych, P.Yu. Demchenko, **A. Popov**, and H. Szymczak,
Modification of polymer-magnetic nanoparticles by luminescent and conducting substances.
Molecular Crystals and Liquid Crystals, 2014, **590**, p. 35–42.
116. O. Aksimentyeva, V. Savchyn, I. Opainych, P. Demchenko, Yu. Horbenko, V. Pankratov, **A.I. Popov**
Effect of polymer matrix on the structure and luminescence properties of barium zirconate nanocrystals.
Chemistry of Metals and Alloys, 2013, **6**, pp. 177-182
115. A. Bystrova, Y. Dekhtyar, V. S. Bystrov, R. C. Pullar, E. Hosseini, A. L. Kholkin, A. Saprónova, I. Bdikin, S. Kopyl, **A. Popov**,
Study of polar and electrical properties of Hydroxyapatite: Modeling and data analysis.
2013 IEEE International Symposium on the Applications of Ferroelectric and Workshop on the Piezoresponse Force Microscopy (ISAF/PFM). pp: 100-103, 2013

114. V. Pankratov, **A.I. Popov**, L. Shirmane, A. Kotlov, G.A. Bizarri, A. Burger, P. Bhattacharya, E. Tupitsyn, E. Rowe, V.M. Buliga, and R.T. Williams, Luminescence and ultraviolet excitation spectroscopy of SrI₂ and SrI₂:Eu²⁺. *Radiation Measurements*, 2013, **56**, p. 13-17.
113. **A.I. Popov**, L. Shirmane, V. Pankratov, A. Lushchik, A. Kotlov, V.E. Serga, L.D. Kulikova, G. Chikvaidze, and J. Zimmermann, Comparative study of the luminescence properties of macro- and nanocrystalline MgO using synchrotron radiation. *Nucl. Instr. Meth. Phys. Res. B*, 2013, **310**, p. 23-26.
112. I. Karbovnyk, V. Lesivtsiv, I. Bolesta, S. Velgosh, I. Rovetsky, V. Pankratov, C. Balasubramanian, and **A.I. Popov**, BiI₃ nanoclusters in melt-grown CdI₂ crystals studied by optical absorption spectroscopy. *Physica B*, 2013, **413**, p. 12–14.
111. P.V. Savchyn, V.V. Vistovskyy, A.S. Pushak, A.S. Voloshinovskii, A.V. Gektin, V. Pankratov, and **A.I. Popov**, Synchrotron radiation studies on luminescence of Eu²⁺-doped LaCl₃ microcrystals embedded in a NaCl matrix. *Nucl. Instr. Meth. Phys. Res. B*, 2012, **274**, p. 78-82.
110. P. Savchyn, I. Karbovnyk, V. Vistovskyy, A. Voloshinovskii, V. Pankratov, M. Cestelli Guidi, C. Mirri, O. Myahkota, A. Riabtseva, N. Mitina, A. Zaichenko, and **A.I. Popov**, Vibrational properties of LaPO₄ nanoparticles in mid- and far-infrared domain. - *J. Appl. Phys.*, 2012, **112**, 124309 (p. 1-6).
109. I. Karbovnyk, P. Savchyn, **A.I. Popov**, A. Huczko, M. Cestelli-Guidi, C. Mirri. Infrared characterization of silicon carbide nanowires. *Nanomaterials: Applications and Properties* (NAP-2011). Vol. 2, Part I, pp.134-136
108. V. Pankratov, **A.I. Popov**, L. Shirmane, A. Kotlov, and C. Feldmann, LaPO₄:Ce,Tb and YVO₄:Eu nanophosphors: Luminescence studies in the vacuum ultraviolet spectral range. *J. Appl. Phys.*, 2011, **110**, 053522 (p. 1-7).
107. E. Klotins, **A.I. Popov**, V. Pankratov, L. Shirmane, and D. Engers, Numerical evidences of polarization switching in PMN-type relaxor ferroelectrics. *Integrated Ferroelectrics*, 2011, **123**, p. 32-39.
106. V. Pankratov, **A.I. Popov**, A. Kotlov, and C. Feldmann, Luminescence of nano- and macrosized LaPO₄:Ce,Tb excited by synchrotron radiation. *Optical Materials*, 2011, **33**, p. 1102–1105.
105. S. Velgosh, B. Andriyevsky, I. Karbovnyk, I. Bolesta, O. Bovgyra, W. Ciepluch-Trojanek, I.V. Kityk, and **A.I. Popov**, First-principles simulations of the electronic density of states for superionic Ag₂CdI₄ crystals. *Solid State Ionics*, 2011, **188**, p. 31-35.
104. A. Kalinko, A. Kotlov, A. Kuzmin, V. Pankratov, **A.I. Popov**, and L. Shirmane, Electronic excitations in ZnWO₄ and Zn_xNi_{1-x}WO₄ (x = 0.1 – 0.9) using VUV synchrotron radiation. *Centr. Eur. J. Phys.*, 2011, **9**, p. 432-437
103. E. Klotins, **A.I. Popov**, V. Pankratov, L. Shirmane, and D. Engers, Polar nanoregions in Pb(Mg_{1/3}Nb_{2/3})O₃ (PMN):insights from a supercell approach. *Centr. Eur. J. Phys.*, 2011, **9**, p. 438-445.
102. V. Pankratov, **A.I. Popov**, S.A. Chernov, A. Zharkouskaya, and C. Feldman, Mechanism for energy transfer processes between Ce³⁺ and Tb³⁺ in LaPO₄ : Ce,Tb nanocrystals by time-resolved luminescence spectroscopy. *Physica Status Solidi B*, 2010, **247**, pp. 2252–2257.
101. **A.I. Popov**, E.A. Kotomin, and J. Maier,

Basic properties of the F -type centers in halides, oxides and perovskites.
Nucl. Instr. Meth. Phys. Research B, 2010, **268**, pp. 3084-3089

100. R. Sathyamoorthy, P. Sudhagar, A. Balerna, C. Balasubramanian, S. Bellucci, **A.I. Popov** and K. Asokan. Surfactant assisted synthesis of $Cd_{1-x}Co_xS$ nanocluster alloys and their structural, optical and magnetic properties. *Journal of Alloys and Compounds* 2010, **493**, pp. 240-245.

99. V. Savchyn, I. Karbovnyk, **A. I. Popov** and A. Huczko. Combustion Formation of Novel Nanomaterials: Synthesis and Cathodoluminescence of Silicon Carbide Nanowires.
Acta Physica Polonica A 2009, **116**, S142-S144.

98. A. Huczko, A. Dabrowska, V. Savchyn, **A. I. Popov**, I. Karbovnyk. Silicon carbide nanowires: synthesis and cathodoluminescence. *Physica Status Solidi (b)* 2009, **246**, pp. 2806 - 2808

97. A. Voloshynovskii, P. Savchyn, I Karbovnyk, S. Myagkota, M. Cestelli Guidi, M. Piccinini and **A.I. Popov**, CsPbCl₃ nanocrystals dispersed in the Rb_{0,8}Cs_{0,2}Cl matrix studied by far-infrared spectroscopy. *Solid State Communications*, 2009, **149**, pp. 593-597

96. I. Karbovnyk, S. Piskunov, I. Bolesta, S. Bellucci, M. Cestelli Guidi, M. Piccinini, E. Spohr and **A.I. Popov**, Far IR spectra of Ag₂CdI₄ at temperature range 10-420 K: Complementary experimental and First-principle theoretical study. *Eur. Phys. J. B*, 2009, **70**, 443-447

95. S. Bellucci, I. Bolesta, I. Karbovnyk, R Hrytskiv, G Fafilek and **A I Popov**, Microstructure of Ag₂BI₄ (B = Ag, Cd) superionics studied by SEM, impedance spectroscopy and fractal dimension analysis. *J. Phys.: Cond. Matter*, 2008, **20**, 474211 (5 pp)

94. Yu.F. Zhukovskii, **A.I. Popov**, C. Balasubramanian, and S. Bellucci, Theoretical simulations of regular and defective aluminium nitride nanotubes. 2007 *J. Phys.: Conf. Ser.* **93** 012005 (8pp)

93. O. Aksimentyeva, O. Konopelnik, I. Bolesta, I. Karbovnyk, D. Poliovyi, and **A.I. Popov**, Charge transport in electrically responsive polymer layers. 2007 *J. Phys.: Conf. Ser.* **93** 012042 (6pp)

92. E.A. Kotomin and **A.I. Popov**, The kinetics of point defect aggregation and metallic colloid formation in ionic solids. *Radiation Effects in Solids, NATO Science Series II: Mathematics, Physics and Chemistry* (Eds. K. Sickafus and E.A. Kotomin), Vol. 235, pp.153-192

91. S. Bellucci, I. Bolesta, M. Cestelli Guidi, I. Karbovnyk, V. Lesivtsiv, F. Micciulla, R. Pastore, **A.I. Popov**, and S. Velgosh, Cadmium clusters in CdI₂ layered crystals: the influence on the optical properties. - *J. Phys.: Cond. Matter*, 2007, **19**, 395015 (9 pp.).

90. Yu.F. Zhukovskii, N. Pugno, **A.I. Popov**, C. Balasubramanian, and S. Bellucci, Influence of F centers on structural and electronic properties of AlN single-walled nanotubes. *J. Phys.: Cond. Matter*, 2007, **19**, 395021 (p. 1-18).

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