Dmitry Aksyonov

Curriculum Vitae

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Personal Information

Date of Birth	May 26, 1989
Sex	Male
Citizenship	Russia
Languages	English (Advanced), German (Elementary), Russian (Native speaker)

Overview

- 12 years of research experience
- 6 years of mentoring experience
- 5 years of teaching experience
- 30+ publications in high-impact journals,
- h-index=11 (Google Scholar) or 10 (Scopus)

Research Experience

01.2019 – current **Senior Research Scientist**, Center of Energy Science and Technology, Skoltech)
Leading computational research of energy materials, teaching in computational materials science, development of commercial service for computational materials

08.2016 – 12.2018 **Research Scientist**, Center for Electrochemical Energy Storage, Skoltech
Computational study of cathode materials for metal-ion batteries

09.2011 – 07.2016 **Junior Research Scientist**, Laboratory of Theoretical investigations and Computer simulation, Belgorod State University
Computational study of grain boundary segregation in titanium

06.2008 – 08.2011 **Lab Assistant**, Laboratory of Theoretical investigations and Computer simulation, Belgorod State University
Computational study of Ti-C phases in titanium

11.2014 – 07.2016 **Lab Assistant, part-time**, Geotech, Belgorod,
Assembly of electrical and mechanical equipment for geomagnetic probing of iron boreholes

Research stays abroad

10.2018 – 11.2018 **Visiting scientist**, Prof. G. Henkelman Computational group, University of Texas at Austin, USA
Computational study of surface reconstruction in complex layered oxides

10.2013 – 11.2014 **DAAD PhD Student**, Prof. J. Neugebauer, Dr. T. Hickel, Computational Materials Design Department, Max-Planck-Institut für Eisenforschung at Düsseldorf, Germany
Co-segregation and precipitation of light elements at high angle grain boundaries in α-titanium

Scientific Interests

- Functional energy materials for Li-ion batteries
- Surface science
- High-throughput computational materials science

Main scientific achievements

- discovery of surface antisite defects segregation in layered oxides
- methodology for Li-O_2 cathode materials screening
- rationalization of Li-ion diffusion barriers in cathode materials
- refinement of OH defect structure in $LiFePO_4$ material
- explanation of intercalation mechanism in Na_2FePO_4F
- development of scientific software for high-throughput DFT calculations in materials science
- explanation of high hydrogen solubility in titanium
- explanation for high radiation resistance of Ti-V alloys
- explanation for thermal stability of nano-Ti alloys

Current research grants

1.2019 – 1.2021 **co-investigator**, RFBR Grant №18-29-12097 (3 mln.RUB/year) PI - Dr. S. Fedotov

Defect structure in olivine mineral group: influence on functional properties and electrochemical characteristics of cathode materials for metal-ion batteries

1.2020 – 1.2023 **co-investigator**, RSF Grant №20-43-01012 , PI - Prof. A. Abakumov

Towards improved high capacity layered electrode materials for Li-ion batteries through atomic-level understanding of the redox reactions

1.2020 – 1.2022 **co-investigator**, RFBR Grant №20-33-70092 , PI - Dr. V. Nikitina

Ion transfer kinetics in electrochemical intercalation processes: experiment and molecular modeling

1.2020 – 1.2022 **co-investigator**, Skoltech-MIT NGP Grant , PI - Prof. A. Abakumov and Prof. J. Rupp

Atomic-level Understanding of Interface Structure Evolution and Engineering Guidelines for Next Li-ion Solid State Batteries

Accomplished research grants

6.2019 – 6.2021 **PI**, RSF Grant №19-73-00321 (1.5 mln.RUB/year),

Search for new materials of gas electrodes for lithium and sodium-oxygen batteries: predictive computer simulation and experimental verification

4.2018 – 3.2020 **PI**, RFBR Grant №18-33-00821 (0.5 mln.RUB/year),

Computer modelling and experimental study of surface segregation of alloying elements for sodium-containing oxides and polyanionic compounds of transition metals

4.2018 – 4.2020 **PI**, Personal funds (0.2 mln.RUB/year), in collaboration with Belgorod State University,

Grain boundary segregation of Li in copper

Education

10.2011 – 11.2014 **Candidate of Sciences in Physics and Mathematics (PhD)**, Belgorod State University, Belgorod, Russia

Speciality: Condensed Matter Physics

Computer simulation of Ti-C phases and grain boundary segregation of carbon and oxygen in titanium

09.2006 – 06.2011 **Specialist in the field of nanomaterials**, Diploma with distinction **(GPA 5.00)**, Belgorod State University, Belgorod, Russia

Department of Physics and Engineering

Prediction of the structure and characteristics of Ti-C precipitates in α-titanium.

Teaching experience and supervising

2016, 2017, 2018, 2019, 2020 **TA in 2016 and 2017, then Co-instructor**, Couple of lectures and practical lessons at Skoltech TERM 2 course

Computational Chemistry and Materials Modeling

2020, 2021 **invited lecturer**, One lecture at Skoltech TERM 4 course

Advanced Materials Modeling

1.2018 – current **Organizer**, Coordination and organization of educational seminar at Skoltech

Computational Materials Science Seminar (23 lectures)

2015 – current **Supervisor**, Mentoring of 1 postdoc and 4 students

2015-current, Dr. Anton Boev, postdoc at Skoltech
2020-2022, Arseniy Burov, MSc at Skoltech
2021, Artem Dembitskiy, MSc at Skoltech, Co-advising with Prof. S.Fedotov
2020-2022, Alexander Kokin, MSc at MSU, Co-advising with Prof. V.Nikitina
2020-2021, German Vershinin, MSc at Bauman State univiersity
2018-2020, Daniel Poletaev, postdoc at BelSU
2018-2020, Irina Varlamova, MSc at Skoltech, Co-advising with Prof. A.Zhugayevych
2019, Flor Garza, BSc at MIT, summer internship

Developed educational material

A set of educational tutorials (https://github.com/dimonaks/siman/wiki) for Skoltech course

Computational Chemistry and Materials Modeling

Organizing experience

11.2021 **Tutor**, Design and implementation of Computational Track during VI International Conference of Young Scientists at Skoltech

Crash course on DFT modeling: bulk properties, point and planar defects, diffusion

1.2019 – 11.2019 **Coordinator**, Coordinator of admission on-line test for Materials Science Program at Skoltech

3.2019 **Co-organizer**, Gen-Y2.0 Conference for Skoltech Young Scientists, https://gen-y.skoltech.ru

9.2019 **Co-organizer**, Inaugural Symposium for Computational Materials Program of Excellence at Skoltech, https://cmp.skoltech.ru

Development and service

- Development of methodology and Python toolbox "SIMAN" for high-throughput DFT calculations, https://github.com/dimonaks/siman
- Development of web-interface for CEE CREI Materials database, http://10.30.99.214/aksenov-www/csvhtml/index.html
- Technical expert for VASP scientific code at Skoltech
- IPython notebook server and educational tutorials in computational materials science

Innovation

- Project proposal at Skoltech Innovation Workshop: web-service for automatic calculation of materials properties
- Plans for commercialization of in-home developed python toolbox "SIMAN" in 2022-2024

Honors and Awards

2021 Moscow Government Award for Young Scientists in Chemistry and Materials Science together with Prof. S. Fedotov and Prof. V. Nikitina

2010, 2011, 2012 The winner of the university grants for PhD students, Belgorod State University

2012 The author of the best presentation on Eurasian scientific and practical conference «The strength of inhomogeneous structures», MISIS, Moscow

2011 The winner of «Student-Researcher» contest, Belgorod State University

2009, 2010 The winner certificate, The contest held by the Support Fund of Health, Education and Sport «Pokolenie», Belgorod

2010 The winner certificate, The IVth Russian internet contest «Nanotechnologies – the breakthrough to the future», Moscow

2010 The winner certificate, The Russian inter-university youth school of high performance computing in applied numerical simulation, Moscow

2010 The best student of the year, The contest held by the Support Fund of Health, Education and Sport «Pokolenie», Belgorod

2010 Diploma for progress in science, Days of student Science, Belgorod

2009 The medal for the best student scientific work in the field of nanotechnology, Russian contest of student scientific works in the field of nanotechnologies and nanomaterials

Scholarships

10.2013 – 11.2014 DAAD Scholarship: «Research fellowship for young scientists»

1.2013 – 12.2013 Scholarship of the Russian Federation President for young scientists

1.2013 – 12.2013 Scholarship of the Belgorod governor for young scientists

1.2012 – 12.2012 Scholarship of the Belgorod governor for young scientists

1.2011 – 12.2011 Scholarship of the Russian Federation President for young scientists

1.2010 – 12.2010 Scholarship of the Russian Federation Government for young scientists

Computer skills

Scientific packages VASP, ABINIT, Wien2K

Programming Python, C/C++, FORTRAN, Bash, MPI, CUDA, OpenCL

General Linux OS, LaTeX

List of Publications indexed in Scopus and Web of Science databases (h-index=10)

2021 **D.A. Aksyonov**, V.Nikitina, Charge transfer through interfaces in metal-ion intercalation systems, chapter in *Comprehensive Inorganic Chemistry III* (2021), accepted

2021 **D.A. Aksyonov**, I. Varlamova, I.A. Trussov, A.A. Savina, A. Senyshyn, K.J. Stevenson, A.M. Abakumov, A. Zhugayevych, S.S. Fedotov, Hydroxyl Defects in $LiFePO_4$ Cathode Material: DFT+U and an Experimental Study, *Inorg. Chem.* 60 (2021) 5497–5506. **IF=5.165 Q1**

2021 A.O. Boev, S.S. Fedotov, K.J. Stevenson, **D.A. Aksyonov**, High-throughput computational screening of cathode materials for Li-O_2 battery, *Comput. Mater. Sci.* 197 (2021) 110592. **IF=3.3 Q1**

2021 A.O. Boev, S.S. Fedotov, A.M. Abakumov, K.J. Stevenson, G. Henkelman, **D.A. Aksyonov**, The role of antisite defect pairs in surface reconstruction of layered AMO_2 oxides: A DFT+U study, *Appl. Surf. Sci.* 537(2021) 147750. **IF = 6.707 Q1**

2021 A.M. Abakumov, C. Li, A. Boev, **D.A. Aksyonov**, A.A. Savina, T.A. Abakumova, G. Van Tendeloo, S. Bals, Grain Boundaries as a Diffusion-Limiting Factor in Lithium-Rich NMC Cathodes for High-Energy Lithium-Ion Batteries, *ACS Appl. Energy Mater.* 4 (2021) 6777–6786. **IF=6.024 Q1**

2021 S.V. Porokhin, V.A. Nikitina, **D.A. Aksyonov**, D.S. Filimonov, E.M. Pazhetnov, I.V. Mikheev, A.M. Abakumov, Mixed-Cation Perovskite $La_{0.6}Ca_{0.4}Fe_{0.7}Ni_{0.3}O_{2.9}$ as a Stable and Efficient Catalyst for the Oxygen Evolution Reaction, *ACS Catal.* 11 (2021) 8338–8348. **IF=13.084 Q1**

2021 N.D. Luchinin, **D.A. Aksyonov**, A.V Morozov, S.V Ryazantsev, V.A. Nikitina, A.M. Abakumov, E.V Antipov, S.S. Fedotov, α-$TiPO_4$ as a Negative Electrode Material for Lithium-Ion Batteries, *Inorg. Chem.* 60 (2021) 12237–12246. **IF=5.165 Q1**

2021 A.O. Boev, I. V Nelasov, A.G. Lipnitskii, A.I. Kartamyshev, **D.A. Aksyonov**, Self-point defect trapping responsible for radiation swelling reduction in V–Ti alloys, *Solid State Commun.* 329 (2021) 114252. **IF=1.521 Q2**

2021 M.R. Gazizov, A.O. Boev, C.D. Marioara, S.J. Andersen, R. Holmestad, R.O. Kaibyshev, **D.A. Aksyonov**, V.S. Krasnikov, The unique hybrid precipitate in a peak-aged Al-Cu-Mg-Ag alloy, *Scr. Mater.* 194 (2021) 113669. **IF=5.079 Q1**

2021 M.R. Gazizov, A.O. Boev ,C.D. Marioara, R. Holmestad, **D.A. Aksyonov**, M. Yu. Gazizova, R.O. Kaibyshev Precipitate/matrix incompatibilities related to the 111 Al plates in an Al-Cu-Mg-Ag alloy, *Materials Characterization* 182 (2021) 111586. **IF=4.342 Q1**

2020 S.S. Fedotov, N. D. Luchinin, **D.A. Aksyonov**, A. V. Morozov, S.V. Ryazantsev, K. J. Stevenson, A.M. Abakumov, E.V. Antipov, Titanium-based potassium-ion battery positive electrode with extraordinarily high redox potential, *Nature Communications*, 11, 1484 (2020). **IF = 14.92 Q1**

2020 M.A. Kirsanova, A.S. Akmaev, **D.A. Aksyonov**, S. V Ryazantsev, V.A. Nikitina, D.S. Filimonov, M. Avdeev, A.M. Abakumov, Monoclinic α-Na_2FePO_4F with Strong Antisite Disorder and Enhanced Na^+ Diffusion, *Inorg. Chem.* 59 (2020) 16225–16237. **IF = 5.165 Q1**

2020 I.V. Tereshchenko, **D.A. Aksyonov**, A. Zhugayevych, E.V. Antipov, A.M. Abakumov, Reversible electrochemical potassium deintercalation from >4V positive electrode material $K_6(VO)_2(V_2O_3)_2(PO_4)_4(P_2O_7)$, Solid State Ionics. 357 (2020) 115468. IF=3.107

2020 D. O. Poletaev, **D.A. Aksyonov**, Lipnitskii, A.G., Evolutionary search for new compounds in the Ti-Si system, Calphad. 71 (2020) 102201. IF=1.947

2020 A.I. Kartamyshev, A.G. Lipnitskii, A.O. Boev, I.V. Nelasov, V.N. Maksimenko, **D.A. Aksyonov** and T.K. Nguyen, Angular dependent interatomic potential for Ti–V system for molecular dynamics simulations. Modelling and Simulation in Materials Science and Engineering, 28(5), p.055010. IF=1.874

2019 O.A. Drozhzhin, A. V Sobolev, V.D. Sumanov, I.S. Glazkova, **D.A Aksyonov**, A.D. Grebenshchikova, O.A. Tyablikov, A.M. Alekseeva, I. V Mikheev, I. Dovgaliuk, Exploring the Origin of the Superior Electrochemical Performance of Hydrothermally Prepared Li-Rich Lithium Iron Phosphate $Li_{1+\delta}Fe_{1-\delta}PO_4$, J. Phys. Chem. C. 124 (2019) 126–134. IF = 4.189

2019 S.S. Fedotov, **D.A Aksyonov**, A.S. Samarin, O.M. Karakulina, J. Hadermann, K.J. Stevenson, N.R. Khasanova, A.M. Abakumov, E. V Antipov, Tuning the Crystal Structure of A_2CoPO_4F (A= Li, Na) Fluoride-Phosphates: A New Layered Polymorph of $LiNaCoPO_4F$, Eur. J. Inorg. Chem. 2019 (2019) 4365–4372. IF=2.578

2019 V.D. Sumanov, **D.A. Aksyonov**, O.A. Drozhzhin, I.A. Presniakov, A.V. Sobolev., A.A. Tsirlin, D. Rupasov, A. Senyshyn, K.J. Stevenson, E.V. Antipov, A.M. Abakumov, "Hydrotriphylites" as cathode materials for Li-ion batteries, Chemistry of Materials 31, no. 14, 5035-5046 (2019). IF = 9.890

2019 O.A. Drozhzhin, I.V. Tertov, A.M. Alekseeva, **D.A. Aksyonov**, K.J. Stevenson, A.M. Abakumov, E. V Antipov, β-$NaVP_2O_7$ as a superior electrode material for Na-ion batteries, Chem. Mater. 31 (2019) 7463–7469. IF = 9.890

2019 M.A. Kirsanova, V.D. Okatenko, **D.A. Aksyonov**, R.P. Forslund, J.T. Mefford, K.J. Stevenson, and A.M. Abakumov, Bifunctional OER/ORR catalytic activity in the tetrahedral $YBaCo_4O_{7.3}$ oxide, Journal of Materials Chemistry A. 7, 1, 330–341 (2019). IF = 9.931

2019 M.A. Kirsanova, **D.A. Aksyonov**, O.V. Maximova, L.V. Shvanskaya, A.N. Vasiliev, A.A. Tsirlin, and A.M. Abakumov, Crystal Structures and Low-Dimensional Ferromagnetism of Sodium Nickel Phosphates $Na_5Ni_2(PO_4)_3H_2O$ and $Na_6Ni_2(PO_4)_3OH$. Inorganic Chemistry. 58, 1, 610–621 (2019). IF = 4.700

2018 **D.A. Aksyonov**, S.S. Fedotov, S.S. Stevenson, A. Zhugayevych, Understanding migration barriers for monovalent ion insertion in transition metal oxide and phosphate based cathode materials: A DFT study. Computational Materials Science, 154, 449-458 (2018). IF = 2.57

2018 S.S. Fedotov, A.S. Samarin, V.A. Nikitina, **D.A. Aksyonov**, S.A. Sokolov, A. Zhugayevych, K.J. Stevenson, N.R. Khasanova, A.M. Abakumov, E.V. Antipov, Reversible facile Rb^+ and K^+ ions de/insertion in a $KTiOPO_4$-type $RbVPO_4F$ cathode material. J. Mater. Chem. A 6 14420 (2018). IF = 9.931

2018 I. V. Tereshchenko, **D.A. Aksyonov**, O. A. Drozhzhin, I. A. Presniakov, A. V. Sobolev, A. Zhugayevych, K. Stevenson, E. V. Antipov, A. M. Abakumov, The role of semi-labile oxygen atoms for intercalation chemistry of the metal-ion battery polyanion cathodes. J. Am. Chem. Soc., 140 (11), 3994-4003 (2018). IF = 14.357

2017 **D. A. Aksyonov**, A.G. Lipnitskii, «Solubility and grain boundary segregation of iron in hcp titanium: A computational study», Comput. Mater. Sci., vol. 137, pp. 266–272, 2017.

2017 A.O. Boev, **D.A. Aksyonov**, A.I. Kartamyshev, V.N. Maksimenko, I.V. Nelasov, A.G. Lipnitskii, Interaction of Ti and Cr atoms with point defects in bcc vanadium: A DFT study, Journal of Nuclear Materials, vol. 492, pp. 14-21, 2017.

2016 **D.A. Aksyonov**, T. Hickel, J. Neugebauer, A.G. Lipnitskii, «The impact of carbon and oxygen in alpha-titanium: Ab initio study of solution enthalpies and grain boundary segregation», accepted in Journal of Physics: Condensed Matter, vol. 28, no. 38, p. 385001, 2016.

2016 D.O. Poletaev, **D. A. Aksyonov**, Dat Duy Vo, A. G Lipnitskii, «Hydrogen solubility in hcp titanium with the account of vacancy complexes and hydrides: a DFT study», Comput. Mater. Sci., vol. 114, pp. 199-208, 2016.

2014 D. O. Poletaev, A. G. Lipnitskii, A. I. Kartamyshev, **D. A. Aksyonov**, E. S. Tkachev, S. S. Manokhin, M. B. Ivanov, and Y. R. Kolobov, «Ab initio-based prediction and TEM study of silicide precipitation in titanium», Comput. Mater. Sci., vol. 95, pp. 456–463, Dec. 2014.

2013 **D. A. Aksyonov**, A. G. Lipnitskii, and Y. R. Kolobov, «Grain boundary segregation of C, N and O in hexagonal close-packed titanium from first principles», Model. Simul. Mater. Sci. Eng., vol. 21, no. 7, p. 075009, Oct. 2013.

2012 **D. A. Aksyonov**, A. G. Lipnitskii, and Y. R. Kolobov, «Ab initio study of Ti–C precipitates in hcp titanium: Formation energies, elastic moduli and theoretical diffraction patterns», Comput. Mater. Sci., vol. 65, pp. 434–441, Dec. 2012.

2009 A. G. Lipnitskii, **D. A. Aksenov**, and Y. R. Kolobov, «Ab initio calculation of characteristics of a hcp Ti–C system in α-titanium», Russ. Phys. J., vol. 52, no. 10, pp. 1047–1051, 2009.

List of Talks

14.11.2021, Invited talk **D.A. Aksyonov**, Computational modeling of inorganic solids // VI International Conference of Young Scientists 2021, Skoltech, Russia

24.09.2021, Oral talk **D.A. Aksyonov**, A. Zhugayevych, S.Fedotov, I. Trussov, Structure, energetics, and dynamics of unexpected hydroxyl defects in LiFePO4 cathode material // XVI INTERNATIONAL CONFERENCE «Topical problems of energy conversation in lithium electrochemical systems» (http://www.li-energy.ru/) in UFA, Russia

21.07.2019-26.07.2019, Oral talk **D.A. Aksyonov**, A. Boev, A. Zhugayevych, K. Stevenson, Surface energy and reconstruction of Li and Na based transition metal oxides: A computational study //Electrochemical Conference on Energy and the Environment: Bioelectrochemistry and Energy Storage (ECEE 2019, https://www.electrochem.org/ecee2019) in Glasgow, Scotland, UK

04.09.2019-08.09.2019, Invited talk **D.A. Aksyonov**, S.S. Fedotov, A. Zhugayevych, A.M. Abakumov, K.J. Stevenson, Towards high-throughput DFT modeling of energy materials // Inaugural Symposium for Computational Materials Program of Excellence (cmp.skoltech.ru) in Moscow, Russia,

09.09.2019-13.09.2019, Invited talk **D.A. Aksyonov**, S.S. Fedotov, A. Zhugayevych, A.M. Abakumov, K.J. Stevenson, Accelerating the development of intercalation cathode materials for li, na, and k-ion batteries using computer simulation techniques // Conference «XXI Mendeleev congress on general and applied chemistry»(www.mendeleev2019.ru),

15.09.2019-18.09.2019, Invited Talk **D.A. Aksyonov**, S.S. Fedotov, A. Zhugayevych, A.M. Abakumov, K.J. Stevenson, Quantum-mechanical modelling and development of cathode materials for Li, Na, and, K-ion batteries // "The 4th International Conference of Young Scientists (https://crei.skoltech.ru/cest/conference-of-young-scientists-2019), Vozdivizhenskoe.

23.09.2018 - 26.09.2018, Poster — **D.A. Aksyonov**, S.S. Fedotov, K. Stevenson, A. Zhugayevych, DFT study of Li, Na, K migration in oxide and phosphate cathode materials // The 3nd International Conference of Young Scientists «Topical problems of modern electrochemistry and electrochemical materials science « Vozdvizhenskoe, Moscow region

29.03.2018, Oral talk — **D.A. Aksyonov**, Understanding catalytic activity through DFT calculations of surface adsorption // Presentation on Computational Materials Science seminar, Skoltech

1.10.2018, Oral talk — **D.A. Aksyonov**, Segregation-induced protection of Na layered oxide cathodes // Presentation on Henkelman's group seminar, University of Texas at Austin,

29.09.2017-01.10.2017, Oral talk — **D.A. Aksyonov**, A. Zhugayevych, K. Stevenson, The prospects of Li for Na and K cation exchange in Li-ion battery cathodes //Generation-Y Young Scientists Cross Disciplinary Conference, Sochi, Rosa Khutor,

11.29.2016-11.30.2016, Oral talk — **D.A. Aksyonov**, S.S. Fedotov, A. Zhugayevych, K. Stevenson, High-throughput DFT calculations of redox potentials and diffusion barriers for alkali - ion cathode materials // 5th School - Conference on Atomistic Simulation of Functional Materials Center for Photochemistry RAS, Moscow,

15.06.2017, Oral talk — **D.A. Aksyonov**, Computational study of cathode materials for metal-ion batteries // Presentation on CEE CREI seminar,

17.09.2017 - 20.09.2017, Poster — **D.A. Aksyonov**, S.S. Fedotov, A. Zhugayevych, K. Stevenson, Computational study of K and Rb diffusion in VPO4F // The 2nd International Conference of Young Scientists Topical problems of modern electrochemistry and electrochemical materials science Vozdvizhenskoe, Moscow region,

25.04.2017-04.26.2017, Poster — A. Chekannikov, **D.A. Aksyonov**, K. Stevenson, R. Kapaev, S. Novikova, T. Kulova, Synthesis, characterization and computational study of maricite-type NaFePO4 cathode material for batteries // Skoltech and MIT Conference: «Shaping the Future: Big Data, Biomedicine and Frontier Technologies»Skolkovo Institute of Science and Technology Technology, Moscow,

25.04.2017-04.26.2017, Poster — M.V Zakharkin, **D.A. Aksyonov**, O.A. Drozhzhin, A.M. Abakumov, E.V. Antipov, K.J. Stevenson, Synthesis and investigation of cathodes for sodium-ion batteries with NASICON structure // Skoltech and MIT Conference: «Shaping the Future: Big Data, Biomedicine and Frontier Technologies»Skolkovo Institute of Science and Technology Technology, Moscow,

17.09.2017 - 20.09.2017, co-author — I. V. Tereshchenko, **D.A. Aksyonov**, O. A. Drozhzhin, I. A. Presniakov, A. V. Sobolev, A. Zhugayevych, K. Stevenson, E. V. Antipov, A. M. Abakumov, The role of semi-labile oxygen atoms for intercalation chemistry of the metal-ion battery polyanion cathodes // The 2nd International Conference of Young Scientists «Topical problems of modern electrochemistry and electrochemical materials science « Vozdvizhenskoe, Moscow region,

17.09.2017 - 20.09.2017, co-author — M.V Zakharkin, **D.A. Aksyonov**, O.A. Drozhzhin, A.M. Abakumov, E.V. Antipov, K.J. Stevenson, Synthesis and investigation of NASICON-type cathode materials for sodium-ion batteries // The 2nd International Conference of Young Scientists «Topical problems of modern electrochemistry and electrochemical materials science « Vozdvizhenskoe, Moscow region,