#### PERSONAL INFORMATION



Republic of Kazakhstan, city of Karaganda, st. Universitetskaya, 28, Karaganda University named after academician E.A. Buketova

Karaganda University named after academician E.A. Buketovi

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ttps://publons.com/researcher/2058441/serikov-m-timur/

#### PLACE OF WORK, POSITION

Karaganda University named after academician E.A. Buketova, Faculty of Physics and Technology, Associate Professor of the Department of Physics and Nanotechnology

#### SCIENTIFIC DEGREE, SCIENTIFIC TITLE (ACADEMIC DEGREE)

Doctor of Philosophy (PhD)

#### **WORK EXPERIENCE**

#### Place and date

- 2009-2010, senior laboratory assistant at the Department of Radiophysics and Electronics, Karaganda State University named after academician E.A. Buketova.
- 2012-2013, lecturer at the Department of Radiophysics and Electronics, Karaganda State University named after academician E.A. Buketova.
- 2016-2019, senior lecturer at the Department of Physics and Nanotechnology, Karaganda State University named after academician E.A. Buketova.
- 2020- and up to the present time, Head of the Department of Physics and Nanotechnology, NJSC KarU named after E.A.Buketova ".

## EDUCATION AND PROFESSIONAL TRAINING

- 2005-2009, Karaganda State University named after academician E.A. Buketov, specialty "Radio engineering, electronics and telecommunications".
- 2010-2012, National Research Tomsk Polytechnic University, Karaganda State University named after academician E.A. Buketov, master's degree in the specialty 5B060400- "Physics".

#### **Education**

- 2013-2016, Karaganda State University named after academician E.A. Buketova, PhD doctoral studies in the specialty 6D060400 - "Physics".
- 2019-2020, postdoctoral studies at Moscow State University.

- In 2012 (2 weeks) completed an internship at Novosibirsk State University, birsk.
- In 2016 (4 months) completed a scientific internship at Moscow State University. M.V. losov.
- In 2018, he passed refresher courses under the program "Intensive course of studying 1" Kaz NU named after Əl-farabi.

#### Professional trainings, Scientific trips

- - In the period from 03.09.2018 to 27.09.2018, within the framework of guest lectures by Doctor Mitko Stoev, Associate Professor of Southwestern University "Neofit Rylsky" jaria, Blagoevgrad), a course on the topic "The current problems of modern electronics and technologies ".
- Program of legal comprehensive training on the topic "Labor legislation, safety and rotection". The course was conducted by specialists of the Republican Scientific Research e for Labor Protection, Ministry of Health and Social Development of the Republic of nstan (KarSU, Karaganda 2020).

### SKILLS DEVELOPMENT INFORMATION

- February 4-12, 2013 Thomson Reuters online seminars (on basic opportunities);
- March 25-29, 2013 Thomson Reuters online seminars (on advanced features);

#### **PERSONNEL QUALITIES**

**ADDITIONAL INFORMATION** 

#### Native language

#### Kazakh, Russian, English (Pre-Intermediate)

LANGUAGE	UNDERSTANDING		SPEAKING		WRITING
	Hearing	Reading		Oral speech	WKITING
Kazakh	excellent	excellent	excellent	excellent	excellent
	LANGUAGE CERTIFICATE:				
English	B1	B1	B1	B1	B1
	LANGUAGE CERTIFICATE:				
German					
	LANGUAGE CERTIFICATE:				
Spanish					
Farmel	LANGUAGE CERTIFICATE:				
French	I ANOUAGE GERTIFICATE				
	LANGUAGE CERTIFICATE:				
Digital skills	ADVANCED USER: MICROSOFT OFFICE (WORD, EXCEL, POWER POINT), GRAPHIC EDITORS (CORELDRAW, ADOBE PHOTOSHOP, VIDEO PROGRAMS (PINACLE, MOVAVI). KNOWLEDGE OF OPERATING SYSTEMS: WINDOWS.				
Other skills (hobbies)	Fishing sports, table tennis				

- 1. Serikov T.M., Ibrayev N.K., Nuraje N., Savilov S.V., Lunin V.V. Influence of surface properties of the titanium dioxide porous films on the characteristics of solar cells, Russian Chemical Bulletin.— 2017.— V.66(4).—P. 614-621 (IF 0.781)
- 2. Serikov T.M.,D.A. Afanasyev, N.Kh. Ibrayev, A.K. ZeinidenovEffect of the titanium dioxide shell on the plasmon properties of silver nanoparticles, Russian Journal of Physical Chemistry A.— 2016.— V. 90(4).—P. 833—837(IF 0.562)
- 3. Ibrayev N.K., A.K. AimukhanovSerikov T.M.,Effect of Formulas of Titanoxide Compositions on the Photovoltaic Characteristics of Solar Cells, Russian Journal of Physical Chemistry A. 2016. V. 90(12). P. 2489–2492. (IF 0.562)
- 4. Serikov T.M., Ibrayev N.K., Zh.Kh. Smagulov, K.A. Kuterbekov.Influence of annealing temperature on optical and photovoltaic properties of nanostructured TiO2 films, IOP Conf. Series: Materials Science and Engineering.— 2017.— V. 168.—P. 012054 (IF 0.156)
- 5. Seliverstova, E., Ibrayev, N.K., Serikov T.M., Zhusupov, S., Dzhanabekova, R.The effect of composition and conditions of preparation of graphene oxide Langmuir films on their electrophysical parameters, Proceedings of the 2017 IEEE 7th International Conference on Nanomaterials: Applications and Properties, NAP 20172017-January,03CBN10
- 6. Ibrayev N., Seliverstova E., Dzhanabekova R., Serikov T. Photovoltaic properties of DSSC with composite counter electrodes based on Pt and SLGO, IOP Conference Series: Materials Science and Engineering.— 2018.— V. 289(1).P. 012009 (IF 0.156)
- 7. Ibrayev N., Serikov T., Zavgorodniy A., Sadykova A. The effect of the DSSC photoanode area based on TiO2/Ag on the conversion efficiency of solar energy into electrical energy, IOP Conference Series: Materials Science and Engineering.— 2018.— V. 289(1).—P. 012024 (IF 0.156)
- 8. Moniruddin M., Ilyassov B., Serikov T.M., Zhao X., Asmatulu R., Ibrayev N., Nuraje N. Recent progress on perovskite materials in photovoltaic and water splitting applications, Materials Today Energy.— 2018.— V. 7.—P. 246-259 (IF 1.6).

HI (Scopus)-4.

HI (Clarivate Analytics) - 4.

**НІ (РИНЦ)** – 5.

HI (Google Scholar) - 4.

- "Development of technology for obtaining metal oxide films with a high specific surface for photovoltaic cells of Gretzel", KN MES RK, 2012-2014
- "A new approach to plasmon-enhanced photovoltaic cells", KN MES RK, 2012-2015
- "Development of nanostructured graphene films for photovoltaics", KN MES RK, 2015-2017
- "Development of an electrochemical method for the synthesis of porous TiO2 films with specified microstructural and electrophysical properties" KN MES RK, 2015-2017
- "Photo-induced electronic processes in nanocomposite materials for" green "energy", KN MES RK, 2015-2017
- "Nanoplasmonics: synthesis of nanostructures, study of properties and modern applications", KN MES RK, 2018-2020
- 2020 Holder of a research grant from the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan: Development of new nanocomposite materials for photocatalytic decomposition of water, 2020-2022.
- In 2013, the winner of the VI Republican competition of projects among young scientists for the promotion of renewable energy sources and energy efficient lighting in Kazakhstan.
- 2019 Winner of a grant from the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan within the framework of the project "Stimulating productive innovation" under the grant program "Grants to support research and training of postdoctoral students (PhD)".
- 2020 Holder of a research grant from the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan: Development of new nanocomposite materials for photocatalytic decomposition of water, 2020-2022.
- In 2020, the holder of the title "Best Young Scientist 2020".
- In 2020, the holder of the title "The best teacher of the university 2020".

#### Main publications

# Participation in the implementation of scientific projects

# Membership in professional scientific organizations

#### **Awards and titles**

- 1. Physics
- 2. Methods for obtaining nanomaterials
- 3. Methods of research of nanomaterials
- Courses 4. Nanoplasmonics
  - 5. Methods of scanning microscopy

# Professional and scientific interests

- Photovoltaics
- Photocatalysis
- Hydrogen energy

# SCIENTIFIC DATABASES IDENTIFIERS

**Researcher ID:** O-2377-2017 **ORCID ID:** 0000-0003-4302-9674 **Author ID Scopus:** 56669712000