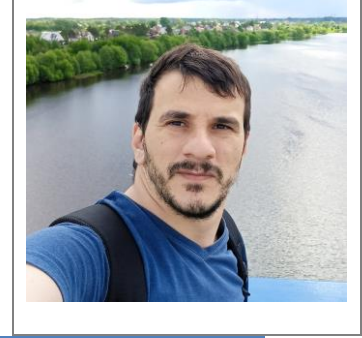




**INSTITUTE OF RADIATION PROBLEMS, MINISTRY OF SCIENCE AND
EDUCATION REPUBLIC OF AZERBAIJAN
FRANK LABORATORY OF NEUTRON PHYSICS AT THE JOINT INSTITUTE
FOR NUCLEAR RESEARCH**

Sabuhi M. Nuruyev



PERSONAL INFORMATION

Name	Sabuhi
Surname	Nuruyev
Address	Surakhani Region, Azerbaijan, Baku, AZ1133, Azerbaijan
Phone:	+79654061110 +994558630103
e-mails	sebuhinuruyev@gmail.com sebuhinuruyev@jinr.ru
Date of birth	06.09.1989

PERSONAL STATEMENT

With an extensive background as a specialist at both the Institute of Nuclear Research and the Institute of Radiation Problems, my expertise lies in nuclear physics and detector development, focusing on researching the physical parameters of micropixel avalanche photodiodes and silicon photomultipliers.

My career in experimental nuclear physics has revolved around advancing radiation detectors. I have concentrated on developing detectors based on silicon photomultipliers and scintillators for the detection of various particles. The critical role of radiation detectors in applications such as radiation safety, medical diagnostics, tomography, time-of-flight experiments, and the evolution of position-sensitive detectors is undeniable.

My tenure as a scientific engineer at the Frank Neutron Physics Laboratory, Joint Institute for Nuclear Research, has provided invaluable experience in Nuclear Physics. Additionally, as a PhD student, I am focused in research on the temperature dependencies of micropixel photodiodes and the physical parameters of SiPMs.

Our collective effort is directed towards the advancement of silicon micropixel photodiodes. In modern conditions, silicon photomultipliers are presented as an alternative to traditional vacuum photomultipliers, due to their distinctive features: insensitivity to magnetic fields, high photon detection ability, compactness, and low operating voltage requirements.

I am deeply passionate about exploring and contributing to the advancements in nuclear physics, particularly in the realm of radiation detection technology. My commitment, combined with my research and varied experiences, positions me as a valuable asset in furthering the development of state-of-the-art detection systems.

EDUCATION

2007 - 2011 Azerbaijan Technical University, bachelor

2012 - 2014 Azerbaijan Technical University, Master degree

2018 – Present Institute of Radiation Problems, Ministry of Science and Education of Azerbaijan, Baku, AZ1143, Azerbaijan

Ph.D: Radiation material science, application and technology

Thesis Title: Physical Mechanisms of Temperature Shift of Breakdown Voltage in Silicon-Based Avalanche Photodiodes

Degree: Ph.D Student

EMPLOYMENT HISTORY

01/02/2015 – present

Position : Scientific Researcher

Department : Radiation physics of magnetoelectrics

Affiliation : Institute of Radiation Problems, Ministry of Science and Education of Azerbaijan, AZ1143, Baku, Azerbaijan

01/07/2015 – Present

Position : Scientific Researcher

Department : Frank Laboratory of Neutron Physics, Department of Nuclear Physics, Neutron-nuclear interactions research sector

Affiliation : Joint Institute for Nuclear Research, Scientific and Experimental Physical Department, 141985, Dubna, Russia.

ADDITIONAL SKILLS / RESEARCH INTEREST

I have been working as a scientific engineer at the Frank Laboratory of Neutron Physics at the Joint Institute for Nuclear Research since 2015. During this period I researched the following topics:

- **Silicon photomultipliers ;**
- **IREN Accelerator ;**
- **Micropixel Avalanche photodiodes ;**
- **Detectors physics based on SiPM ;**

COMPUTER SKILLS

Operational systems	: Windows, Linux,
Data analysis	: Origin pro, C&C++ programming languages, ROOT
Simulation	: SRIM, TRIM
Electronics	: Proteus

PARTICIPATING PROJECTS

Furthermore, I have actively participated in various training programs and collaborative projects with esteemed companies and institutions. These experiences have enriched my expertise significantly.

- **Joint Institute for Nuclear Research --- Russia**
 - **Zekotek Photonics --- Canada**
 - **Mikron company --- Russia**
 - **Malaysian Institute of Microelectronic Systems --- Malaysia**
 - **Institute of Experimental and Applied Physics --- Czech Republic**
 - **University of West Bohemia, Faculty of Electrical Engineering --- Czech Republic**
-

PUBLICATION LIST

- 1. Scintillation readout with MAPD array for gamma spectrometer.**
RA Akbarov, SM Nuruyev, GS Ahmadov, FI Ahmadov, SI Tyutyunnikov, AZ Sadigov, R Mammadov, Michael Holik, D Berikov, Yu Kopatch, <https://iopscience.iop.org/article/10.1088/1748-0221/15/01/C01001/meta>
DOI 10.1088/1748-0221/15/01/C01001
- 2. A new physical model of Geiger-mode avalanche photodiodes.**
F. Ahmadov, F. Abdullayev, G. Ahmadov, R. Akbarov, R. Mukhtarov, S. Nuruyev, A. Sadigov, Z. Sadygov, S. Suleymanov, <https://iopscience.iop.org/article/10.1088/1748-0221/15/01/C01009/meta>
DOI 10.1088/1748-0221/15/01/C01009
- 3. Performance of silicon photomultipliers at low temperature**
S. Nuruyev, G. Ahmadov, A. Sadigov, R. Akberov, F. Ahmadov, M. Holik and Yu. Kopatch, <https://iopscience.iop.org/article/10.1088/1748-0221/15/03/C03003/meta>
DOI 10.1088/1748-0221/15/03/C03003
- 4. Miniaturized read-out interface “Spectrig MAPD” dedicated for silicon photomultipliers M.**
Holik, F. Ahmadov, G. Ahmadov, R. Akbarov, D. Berikov, Y. Mora, S. Nuruyev, P. Pridal, A. Sadigov, Z. Sadygov, J. Zich, <https://www.sciencedirect.com/science/article/abs/pii/S0168900220308378>
DOI 10.1016/j.nima.2020.164440
- 5. Gamma-ray spectroscopy with MAPD array in the readout of LaBr3:Ce scintillator** *G. Ahmadov, F. Ahmadov, M. Holik, D. Berikov, Z. Sadygov, R. Akbarov, S. Nuruyev, A. Sadigov, A. Mammadli, R. Mammadov, Yu. Kopatch, P. Pridal, E. Yilmaz, E. Doganci and J. Zich, <https://iopscience.iop.org/article/10.1088/1748-0221/16/07/P07020/meta>*
DOI 10.1088/1748-0221/16/07/P07020
- 6. Improvement of parameters of micro-pixel avalanche photodiodes** *A.Z. Sadigov, F.I. Ahmadov, Z.Y. Sadygov, G.S. Ahmadov, D. Berikov1, M. Holik, A. Mammadli, R.A. Akbarov, S.M. Nuruyev, K. Ajdarli, A. Garibli, E. Doganci, Y. Mora and E. Yilmaz, <https://iopscience.iop.org/article/10.1088/1748-0221/17/07/P07021/meta>*
DOI 10.1088/1748-0221/17/07/P07021

7. **Investigation of parameters of new MAPD-3NM silicon photomultipliers** *F. Ahmadov, G. Ahmadov, R. Akbarov, A. Ahtag, E. Budak, E. Doganci, U. Gurer, M. Holik, A. Kahraman, H. Karaçali, S. Lyubchyk, A. Lyubchyk, S. Lyubchyk, A. Mammadli, F. Mamedov, S. Nuruyev, P. Pridal, A. Sadigov*, <https://iopscience.iop.org/article/10.1088/1748-0221/17/01/C01001/meta>
DOI [10.1088/1748-0221/17/01/C01001](https://doi.org/10.1088/1748-0221/17/01/C01001)

Google Scholar Page :

https://scholar.google.com/citations?hl=tr&user=5zNL_i4AAAAJ&view_op=list_works&sortby=pubdate

ResearchGate Page : <https://www.researchgate.net/profile/Sabuhi-Nuruyev/research>