Minas Marat Sukiasyan

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Senior Researcher

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Senior Researcher

Institute of Physics
Chair of Optics and Photonics
Assistant

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Education

Faculty	Physics
Date	2016 - 2019
Degree name	PhD student

Institution	Yerevan State University
Faculty	Physics
Date	2014 - 2016
Degree name	Masters

Institution	Yerevan State University
Faculty	Physics
Date	2010 - 2014
Degree name	Bachelor

Scientific Rank/degree

Date	2019
Degree name	Candidate
Scientific Supervisor	Levon Mouradian
Research Topic	Solitonic and resembling processes for ultrashort laser pulse's characteristic and spectral self-compression

Language skills

Հայերեն English

Work experience

Institution	CANDLE
Period of time	2016 till now
Rank/degree	researcher

Institution	YSU
Period of time	2015 till now
Rank/degree	Senior researcher

Publications

Conference

Evaluating the Impact of Linear Correction on Spectral Phase Reconstruction
M. Papyan, L. Mikaelyan, M. Sukiasyan, A. Kutuzyan

2025 62-63

https://ipr.sci.am/LP25/

Conference

Third Harmonic Generation as a Monitoring Tool for Precision Glass Processing
M.L. Sargsyan, M.M. Sukiasyan, T.K. Sargsyan, A.S. Yeremyan

2025 37-38

https://ipr.sci.am/LP25/

Conference

Formation of a Functionally Unique Type of Similariton in Optical Fibers
Michael Papyan, Lilit Mikaelyan, Minas Sukiasyan, Aghavni Kutuzyan

2025 60-60

https://www.we-heraeus-stiftung.de/veranstaltungen/optics-and-its-applications-...

Conference

Assessing the Influence of Linear Compensation on Reconstruction of the Spectral Phase Profile
Lilit Mikaelyan, Michael Papyan, Minas Sukiasyan, Aghavni Kutuzyan

2025 94-94

https://www.we-heraeus-stiftung.de/veranstaltungen/optics-and-its-applications-...

Conference

Effect of Weak Nonlinearity on Dispersion-Induced Pulse Broadening in Optical Fibers
Aghavni Kutuzyan, Minas Sukiasyan, Vardan Avetisyan, Karen Apresyan, Meri Kalashyan

2025 92-92

https://www.we-heraeus-stiftung.de/veranstaltungen/optics-and-its-applications-...

Article

Observation of coherent Cherenkov radiation of electron bunches from a partially dielectric loaded waveguide
L.Sh. Grigoryan, A.P. Potylitsyn, M.V. Shevelev, A.V. Vukolov, P.V. Karataev, S.B. Dabagov,

A.S. Vardanyan, A.S. Yeremyan, M.M. Sukiasyan, A.A. Saharian, V.R. Kocharyan, T.R. Muradyan, M.L. Grigoryan, D.E. Baghdasaryan, V.Kh. Kotanjyan, A.V. Sargsyan, H.P. Harutyunyan, H.F. Khachatryan, A.R. Mnatsakanyan, A.H. Mkrtchyan

Nuclear Instruments and Methods in Physics Research Section A Accelerators Spectrometers Detectors and Associated Equipment
2024 169177

Article

Generation of a New Type of Similaritons in Optical Fibers [Генерация нового типа симиляритонов в оптических волокнах]
A. Kutuzyan, V. Avetisyan, M. Sukiasyan

Proceedings of NAS RA Physics 2024 36–40

Article

Influence of Noise Distortions of the Spectral Phase on the Profile of an Ultrashort Pulse [Влияние шумовых искажений спектральной фазы на профиль ультракороткого импульса]
V. Avetisyan, M. Sukiasyan, A. Avetisyan, A. Kirakosyan, A. Kutuzyan

Proceedings of NAS RA Physics 2024 149-153

Article

Self-Formation of Temporal Dark Solitons in a Single-Mode Optical Fiber [Самоформирование временных темных солитонов в одномодовом оптическом волокне]
A. Kutuzyan, M. Sukiasyan, Ar. Kirakosyan, V. Avetisyan

Proceedings of NAS RA Physics 2024 238-243

Article

APPLICATION OF LOW-ENERGY, TUNABLE-DELAY ULTRASHORT ELECTRON BUNCH PAIRS FOR IRRADIATION EXPERIMENTS
A. Yeremyan, H. Davtyan, A. Grigoryan, B. Grigoryan, M. Ivanyan, V. Khachatryan, N. Martirosyan, M. Sargsyan, M. Sukiasyan, A. Vardanyan

Journals of Accelerator Conferences Website 2023 4142-4145

Article

Spectral Self-Compression of Chirp-Free Pulses in Anomalously Dispersive Optical Fibers
Minas Sukiasyan, Vardan Avetisyan, Aghavni Kutuzyan

Photonics 2023 1207

Conference

The influence of spectral phase noise in the laser pulse reconstruction
Anna Avetisyan, Minas Sukiasyan, Arthur Kirakosyan, Aghavni Kutuzyan

2023 94 - 94

https://photonicsai.com/wp-content/uploads/2023/08/Book-of-Abstracts_OPTICS11.p...

Conference

Application of picosecond-delay laser pulse pairs for materials processing
A.S. Yeremyan, M.L. Sargsyan, M.M. Sukiasyan, N.W. Martirosyan

2023 47 - 47

https://ipr.sci.am/pl/conferences/archive.html

Conference

Noise sensitivity in the spectral phase measurement technique based on dispersive Fourier transform

M. Sukiasyan, A. Avetisyan, A. Kutuzyan

2023 74-75

https://ipr.sci.am/pl/conferences/archive.html

Article

Formation of a new type of self-similar pulses in optical fibers with anomalous dispersion

Aghavni Kutuzyan, Vardan Avetisyan, Meri Kalashyan, Minas Sukiasyan

Optics InfoBase Conference Papers (Frontiers in Optics) 2022 185766

Patent

Լազերային գերկարճ իմպուլսների սպեկտրալ փուլի որոշման եղանակ

Աղավնի Կուտուզյան, Մինաս Սուքիասյան, Վարդան Ավետիսյան, Մերի Քալաշյան

2021

Conference

Determination of the Spectral Phase of Femtosecond Pulses based on Frequency-to-Time mapping

Minas Sukiasyan, Aghavni Kutuzyan

2020 2

https://www.frontiersinoptics.com/home/schedule/?day=Wednesday#Wednesday

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Article

Measurement of the ultrashort pulse spectral phase based on dispersive Fourier transformation

MINAS SUKIASYAN, NAREK KARAPETYAN, HRACH TONEYAN, AGHAVNI KUTUZYAN, LEVON MOURADIAN

Applied Optics 2019 2817-2822

Article

Similaritonic Method on Ultrashort Pulse Duration Measurement by Oscilloscope

M.M. Sukiasyan, N. P. Karapetyan, H.A. Toneyan, A.A. Kutuzyan, L.Kh. Mouradian

Armenian Journal of Physics 2019 107-112

Article

Spectral Self-Compression of Partially Coherent Pulses

M.M. Sukiasyan

Armenian Journal of Physics 2019 113-118

Conference

Solitonic and Resembling Processes for Ultrafast Laser Pulse Registration and Spectral Self –Compression

Minas Sukiasyan

2019 12

http://candle.am/uba19/

Article

ЧИСЛЕННОЕ ИССЛЕДОВАНИЕ ПРОЦЕССА ФОРМИРОВАНИЯ СПЕКТРОНА: ФАЗОВЫЕ ОСОБЕННОСТИ

Н. КАРАПЕТЯН, Г. ТОНЕЯН, А. КУТУЗЯН, М. СУКИАСЯН, В. АВЕТИСЯН, Д. ГУЛКАНЯН, К. АПРЕСЯН,

Л. МУРАДЯН

Proceedings of NAS RA Physics 2018 173-180

Conference

Spectron and Dispersive Fourier Transformation: Phase Aspect
N. Karapetyan, M. Sukiasyan, H. Toneyan, A. Kutuzyan, L. Kh. Mouradian

2018 2

https://www.osapublishing.org/aop/abstract.cfm?uri=LS-2018-JTu3A.45

Conference

Spectral phase measurement based on spectron shaping
N. Karapetyan, M. Sukiasyan, H. Toneyan, A. Kutuzyan, L. Mouradian

2018 18

http://ionsyerevan.osahost.org/

Article

Spectral Characteristics of Nonlinear-Dispersive Similariton Generated in Single-Mode Fiber without Gain
H. Toneyan, K. Manoukyan, M. Sukiasyan, A. Kutuzyan, L. Mouradian

Armenian Journal of Physics 2017 192-198

Conference

Simple Diagnostics of Femtosecond Pulses by the Use of Nanosecond Oscilloscope
K.Manukyan, M.Sukiasyan, H.Toneyan, A. Zeytunyan, L. Mouradian

2017 CN 2769809 (2pp)

http://www.frontiersinoptics.com/home/

Conference

Experimental Demonstration of Self-Spectral Compression of Supercontinuum’s Fraction by 4.1x
V. Avetisyan, M. Sukiasyan, H. Toneyan, A. Kutuzyan, A. Yeremyan, L. Mouradian

2017 2-3

http://ipr.sci.am/lp/

Conference

EXPERIMENTAL DEMONSTRATION OF SPECTRAL SELF-COMPRESSION OF FRACTION OF SUPERCONTINUUM RADIATION
Hrach Toneyan, Minas Sukiasyan, Vardan Avetisyan, Levon Kh. Mouradian

2017 9-9

http://candle.am/uba17/

Conference

NUMERICAL STUDY OF FEMTOSECOND SIGNAL SPECTRAL SELF-COMPRESSION
Minas Sukiasyan, Hrach Toneyan, Vardan Avetisyan, Aghavni Kutuzyan, Levon Kh. Mouradian

2017 11-11

http://candle.am/uba17/

Conference

SIMILARITON BASED TECHNIQUE FOR DETERMINATION OF FEMTOSECOND PULSE DURATION

Karapet Manukyan, Hrach Toneyan, Minas Sukiasyan, Aghavni Kutuzyan, Levon Kh. Mouradian

2017 10-10

http://candle.am/uba17/

Conference

Simple Similaritonic Technique for Measurement of the Bell-Shaped, Two-Peak and Compressed Pulse Duration in Femtosecond Domain
K. Manukyan, M. Sukiasyan, H. Toneyan, L. Mouradian

2017 71-72

http://ionsbalvanyos.osahost.org/about-ions-balvanyos/

Article

Designing the femtosecond optical oscilloscope
H. Toneyan, M. Sukiasyan, A. Zeytunyan, V. Tsakanov, L. Mouradian

Journal of Physics Conference Series 2016 6

http://iopscience.iop.org/journal/1742-6596

Conference

Solitonic Self-Spectral Compression of Noisy Supercontinuum Radiation
Hrach Toneyan, Minas Sukiasyan, Levon Mouradian, Aghavni Kutuzyan, Vardan Avetisyan,

Arsham Eremyan

2016 JW4A44

http://www.osa.org/en-us/meetings/global_calendar/events/2015/frontiers_in_opti...

Conference

Solitonic Spectral Self-Compression of Regular and Randomly Modulated Pulses
M.Sukiasyan, H.Toneyan, A.Kutuzyan, V.Tsakanov, L. Mouradian

2016 1

http://ipr.sci.am/fop2016/

Conference

4.1x Solitonic Self-Spectral Compression of Supercontinuum’s Fraction
Minas Sukiasyan, Vardan Avetisyan, Hrach Toneyan, Aghavni Kutuzyan, Arsham Yeremyan,

Levon Kh. Mouradian

2016 72-72

http://www.lasphys.com/workshops/lasphys16/program-poster-session

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Conference

Solitonic Self-Spectral Compression of Supercontinuum Fraction
Vardan Avetisyan, Minas Sukiasyan, Levon Kh. Mouradian, Arsham Yeremyan, Aghavni Kutuzyan,

Hrach Toneyan

2016 57-58

http://www.rau.am/optics2016/

Conference

Solitonic Self-Spectral Compression of Noisy Supercontinuum Radiation
Hrach Toneyan, Minas Sukiasyan, Vardan Avetisyan, Aghavni Kutuzyan, Arsham Yeremyan,

Levon Kh. Mouradian

2016 2 Եր