



Naser Hatefi Kargan

Associate Professor

Faculty : Science

Departments : Physics

Phone : +9854 - 31136347

Email : n.hatefi@phys.usb.ac.ir

Address : Dept.of Physics, Faculty of Science, University of Sistan and Baluchestan, Daneshgah Ave., Zahedan, Iran.

Education

- ✓ B.Sc, Physics, Tabriz University - 1994
- ✓ MS, Solid-State Physics, Tarbiat Modares University - 1997
- ✓ PhD, Photonics, University of Leeds - 2007

Courses

- | | |
|---------------------------------------|---|
| 1. Physics 1 | 2. Thermodynamics and Statistical Mechanics |
| 3. Solid State Physics Laboratory | 4. Computer Application in Physics |
| 5. Physics of Semiconductor Devices 1 | 6. Applied Numerical Methods |
| 7. Photonics II | 8. Quantum Mechanics1 |
| 9. Electronics1 | 10. Physics 2 |
| 11. Physics Laboratory 1 | 12. Physics Laboratory 2 |
| 13. Quantum Electronics | 14. Computational Physics |
| 15. Photonics I | 16. Numerical Calculations |

Journals Papers

2024

1. Plasmonic graphene/perovskite Schottky barrier photodetector

Hadiseh Shahriyari, Naser Hatefi Kargan, Ahmadreza Daraei

ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES Volume: (79) 815 - 821

2. High Q/V single-mode nanobeam-grating resonator, functional in the ultra-high sensitive label-free lab-on-a-chip chemical sensor

Maryam Zoor, Ahmadreza Daraei, Naser Hatefi Kargan, Mohammad mahdi Babakhani fard

APPLIED PHYSICS A-MATERIALS SCIENCE and PROCESSING Volume: (130) 364-1 - 364-13

2022

3. Performance of a tunable photoconductive graphene plasmonic photodetector

Fateme Molavi, Naser Hatefi Kargan, Ahmadreza Daraei

ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES Volume: (77) 813 - 819

2021

4. Investigating the effect of relaxation time on the behaviour of plasmon-polaritons in a nanolayer graphene

Fateme Molavi, Naser Hatefi Kargan

Volume: (8) 121 - 128

5. Investigation of nonlinear optical properties of Eosin-B nanoparticles painted

Nahid Karshenas najafabadii, Sharifi Soheil, Hamed Ghannadan, Naser Hatefi Kargan

Iranian Journal of Physics Research Volume: (21) 161 - 169

2020

6. Enhancing crystal quality and optical properties of GaN nanocrystals by tuning pH of the synthesis solution

Mohammad, Naser Hatefi Kargan, Ahmadreza Daraei

ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES Volume: (75) 551 - 556

7. Ultrahigh sensitive gas sensors based on slotted photonic wire-based structures including optical microcavities

Mohammad mahdi Babakhani fard, Ahmadreza Daraei, Naser Hatefi Kargan

European Physical Journal Plus Volume: (135) 1 - 13

2018

8. Transmittance of MIM waveguides containing semi-circular ring shaped and rectangular ring shaped grooves

Naser Hatefi Kargan,

International Journal of Optics and Photonics Volume: (12) 3 - 12

2017

9. Enhancing the bioactivity of a calcium phosphate glass-ceramic with controlled heat treatment

Mohamadreza Jalali bazeh hor, Naser Hatefi Kargan, Yousef Hatefi

Advanced Ceramics Progress Volume: (3) 31 - 37

2016

10. Photocurrent nonlinearity in GaAs/AlGaAs quantum cascade photodetectors

Naser Hatefi Kargan, Shabnam Kiavar

OPTICAL AND QUANTUM ELECTRONICS Volume: (48) 1 - 9

2015

11. The effect of structural parameters on the electronic states and oscillator strength of a resonant tunneling quantum well infrared photodetector

, Naser Hatefi Kargan

International Journal of Optics and Photonics Volume: (9) 9 - 17

2013

12. Effect of temperature on the current voltage characteristics of GaAs/AlGaAs quantum cascade photodetectors

Naser Hatefi karagan,

PHYSICA E-LOW-DIMENSIONAL SYSTEMS and NANOSTRUCTURES Volume: (54) 336 - 340

13. مشخصه جریان - ولتاژ یک دیود تونل زنی تشدیدي تحت تابش موج الکترومغناطیسی

Naser Hatefi karagan

Volume: (13) 85 - 91

14. Synthesis of nickel ferrite nanoparticles by co-precipitation chemical method

Mousa Aliahmad, , Naser Hatefi Kargan, m sargazi

International Journal of the Physical Sciences Volume: (8) 854 - 858

2012

15. Detecting Ultra-Violet radiation by using Titanium Dioxide Nanoparticles

Naser Hatefi Kargan, Mousa Aliahmad,
Soft Nanoscience Letters Volume: (2) 29 - 33

2007

16. Effect of ion implantation on quantum well infrared photodetectors

Naser Hatefi Kargan, , , , , , , , ,
INFRARED PHYSICS and TECHNOLOGY Volume: (50) 106 - 112

Conferences Papers

2020

1. Schottky barrier photodetector with high responsivity

26th Iranian Conference on Optics and Photonics and 12th Iranian Conference on Photonics Engineering and Technology

Soleyman Rezaeian koochi, Naser Hatefi Kargan, Ahmadreza Daraei

2. Evaluation of the efficiency of biosensors based on surface plasmon resonance by SPR method

International Conference on Nanotechnology and Nanoscience

Simin Abtin, Naser Hatefi Kargan

2019

3. Simulation of a MSM Ultraviolet Photodetector Based on GaN

25th Iranian Conference on Optics and Photonics (ICOP 2019) AND 11th Iranian Conference on Photonics Engineering and Technology (ICEPT 2019)

Mohammad, Naser Hatefi Kargan

4. Ultra-Sensitive Chemical Gas Sensor based on Slot and Cavity Strip Silicon Waveguide

20th Iranian Inorganic Chemistry Conference

Mohammad mahdi Babakhani fard, Ahmadreza Daraei, Mohammad Ghahremani, Naser Hatefi Kargan

2018

5. Optical properties investigation of Eu-doped CaF₂ ceramics

24rd Iranian Conference on Optics and Photonics and 10th Conference on Photonics Engineering and Technology

Ashkan Jafarian dehkordy, Yosef Hatefi, Naser Hatefi Kargan, Vahid Amirzadeh Fotovat

2017

6. Designing a Frequency Splitter for Second and Third Telecommunication Windows

23rd Iranian Conference on Optics and Photonics and 9th Conference on Photonics Engineering and Technology

Naser Hatefi Kargan,

7. Effect of nanocrystals formation on the bioactivity of calcium phosphate glass-ceramic with P₂O₅-CaCl₂-NaCl system

24th Symposium on Crystallography and Mineralogy of Iran

Mohamadreza Jalali bazeh hor, Naser Hatefi Kargan,

8. Synthesis and Investigating Infrared Absorption in Lead Selenide Nanocrystals

The 4th National Conference on Nanotechnology from Theory to Application

, Naser Hatefi Kargan, Hojjat Allah Daneshmand

9. Designing a plasmonic frequency splitter based on a T shaped waveguide containing two tooth shaped grooves with the same size

3rd International Conference on Information Technology Communication and Telecommunication

, Naser Hatefi Kargan

10. A plasmonic frequency splitter for second and third telecommunication windows

5TH RIAPA Meeting On Low Dmensional Systems RIAPA-LDS 2017

11. Effect of illumination power intensity on the responsivity of a quantum cascade photodetector

2013

12. Calculating current-voltage charactristic of a quantum cascade photodetector

The 2nd Asian Symposium on Electromagnetics and Photonics Engineering

13. Optical simulation of Ni_{0.7} Zn_{0.3} Fe₂ o₄ thin film layer of nano spherical nanoparticles in microwave frequency

11th Iranian Conference on Condensed Matter

Seyed Mostafa Mirhoseini Sarejam, , Naser Hatefi Kargan, , Seyyed Hasan Hajiemam

2012

14. Numerical calculation of optical absorption coefficient at intersubband transitions and its dependence on temperature and applied voltage in quantum well structures

15. Synthesis and characterization of lead selenide nanocrystals

International Congress on Nanoscience

Naser Hatefi Kargan, Behrouz Jalilian

16. Effect of incident radiation direction size and shape of nobel metal nanoparticles on the electromagnetic scattering cross section

The 5th Conference and Workshop on Mathemathical Chemistry

Seyed Mostafa Mirhoseini Sarejam, , Naser Hatefi Kargan, Ahmadreza Daraei, Mohammad Kafi meibodi, Sead mohsean Aeazadyar, Seyyed Hasan Hajiemam

17. Ultraviolet radiation (UV) detection by using titanium oxide nanocrystals

1st National Conference on Nano Science

, Naser Hatefi Kargan, Mousa Aliahmad, Mohammad Saeid Hadavi

2010

18. Calculation of the current-voltage characteristics of a GaAs/AlAs resonant tunneling diode

17th Spring Physics Conference Institute for Research in Fundamental Sciences Tehran Iran

Naser Hatefi Kargan,

19. Calculation of tunneling coefficient in resonant tunneling diode

16 th Annual IASBS Condensed Matter Meeting

, , Naser Hatefi Kargan, Mousa Aliahmad