CURRICULUM VITA

Surname: Noormohammadi
Name: Mohammad
Academic position: Assistant Professor Department of Physics, University of Kashan, Iran
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Education:

Ph.D programs(۲۰۰۸-۲۰۱۳)
Ph.D. in Physics (Condensed matter physics), Shiraz University, Shiraz, Iran.
Thesis: Fabrication of ۲D and ۳D alumina nanostructure and investigation about their physical properties and applications
Supervisors: Prof M. Moradii

M.Sc. programs (۲۰۰۵-۲۰۰۸)
Nuclear physics, University of Kashan, Kashan, Iran
Thesis: Fabrication of two dimensional photonic crystals based on hard anodization method and its optical investigation Supervisors: Prof A.Ramazani,
M.Sc. course work

B.Sc. programs (۲۰۰۰-۲۰۰۵)
B.Sc. in Physics (Solid State) Kashan University, Kashan, Iran

Research Interests:
Photonic Crystals, Piezoelectric Nanogenerators, photovoltaic Nano-Structures

Course taught:
General physics, Solid State Physics I, Thermodynamics, Statistical mechanics.

Scientific publications:

۱. M. Almasi Kashi, A. Ramazani, M. Noormohammadi, M. Zarei and P. Marashi “Optimum self-ordered nanopore arrays with ۱۳۰–۲۷۰nm interpore distances formed by hard anodization in sulfuric/oxalic acid mixtures” J. Phys. D: Appl. Phys. ٤٠ (۲۰۰۷) ۷۰۳۲–۷۰٤٠.

۲. M. Almasi Kashi, A. Ramazani, M. Rahmandoost and M. Noormohammadi “The effect of pH and composition of sulfuric–oxalic acid mixture on the self-ordering configuration of high porosity alumina nanohole arrays” J. Phys. D: Appl. Phys. ٤٠ (۲۰۰۷) ۱–٦.

۳. M. Almasi Kashi, A. Ramazani, Y. Mayamai and M. Noormohammadi “Fabrication of Self-Ordered Nanoporous Alumina with ٦۹–۱۱٥nm Interpore Distances in Sulfuric/Oxalic Acid Mixtures by Hard Anodization” Japanese Journal of Applied Physics ٤۹ (۲۰۱۰) ۰۱٥۲۰۲-۰۱٥۲۰۷.

٤. M. Moradi, M. Noormohammadi and F. Behzadi “Three-dimensional structural engineering of nanoporous alumina by controlled sprinkling of anelectrolyte on a porous anodic alumina (PAA) template” J. Phys. D: Appl. Phys. ٤٤ (٢٠١١) ٠٤٥٣٠١.

٥. M. Noormohammadi, M. Moradi “ Structural engineering of nanoporous alumina by direct cooling the barrier layer during the aluminum hard anodization” Materials Chemistry and Physics ١٣٥ (٢٠١٢) ١٠٨٩.

٦. M. Noormohammadi , M. Moradi, M. Almasi Kashi , A. Ramazani c, Y. Mayamai ”Structural engineering of nanoporous alumina by controlling the anodization voltage during the spontaneous current oscillation in hard anodization” Surface & Coatings Technology ٢٢٣ (٢٠١٣)١٠٤–١٠٩.

٧. Z. Chamanzadeh, M. Noormohammadi, M. Zahedifar,Enhanced photovoltaic performance of dye sensitized solar cell using TiO٢ and ZnO nanoparticles on top of free standing TiO٢ nanotube arrays, Materials Science in Semiconductor Processing, ٦١ (٢٠١٧) ١٠٧-١١٣.

٨. V. Asgari, M. Noormohammadi, A. Ramazani, M. Almasi Kashi “A facile method to form highly-ordered TiO٢ nanotubes at a stable growth rate of ١٠٠٠□nm min–١ under ٦٠ V using an organic electrolyte for improved photovoltaic properties” Journal of Physics D: Applied Physics, ٥٠ (٢٠١٧) ٣٧٥٥٠١.

٩. V. Asgari, Mohammad Noormohammadi, Abdol ali Ramazani, Mohammad Almasi Kashi,A new approach to electropolishing of pure Ti foil in acidic solution at room temperature for the formation of ordered and long TiO٢ nanotube arrays,Corrosion Science, ١٣٦ (٢٠١٨) ٣٨-٤٦.

١٠. M. Arefpour, M. Almasi Kashi, F. Khansari Barzoki, M. Noormohammadi, A.Ramazani “Electrodeposited metal nanowires as transparent conductive electrodes: Their release conditions, electrical conductivity, optical transparency and chemical stability” Materials & Design,١٥٧ (٢٠١٨) ٣٢٦-٣٣٦.

١١. S. Abbasi mofrad ,M. Almasi Kashi ,M. Noormohammadi, A. Ramazani “Tuning the optical properties of nanoporous anodic alumina photonic crystals by control of allowed voltage range via mixed acid concentration” Elsevier Journal of Physics and Chemistry of Solids, ١١٨ (٢٠١٨) ٢٢١-٢٣١.

١٢. Z. Chamanzadeh, M. Noormohammadi, M. Zahedifar “Self-organized and uniform TiO٢ nanotube arrays with optimized NH٤F concentration in electrolyte by high voltage electrochemical anodization” Materials Research Express, ٥ (٢٠١٨) ٠٥٥٠٢٥.

١٣- M. Noormohammadi, Z. Sabaghpou rArani, A. Ramazani, M. Almasi Kashi, S. Abbasimofrad” Super-fast fabrication of self-ordered nanoporous anodic alumina membranes by ultra-hard anodization” Electrochimica Acta ٣٥٤(٢٠٢٠) ١٣٦٧٦٦

١٤- V. Asgari, Mohammad Noormohammadi, Abdol ali Ramazani, Mohammad Almasi Kashi “The role of barrier layer temperature in the formation of long and small-diameter TiO٢ nanotube arrays” Journal of Porous Materials volume ٢٧(٢٠٢٠) ١٦١٣–١٦٢١

١٥- H. Soleymani, M. Noormohammadi, M. Almasi Kashi, M. Hassanpour Amiri, J. J. Michels K. Asadi, M, Mahdi Abolhasani “Self□Poled Sausage□Like PVDF Nanowires Produced by Confined Phase Inversion as Novel Piezoelectric Nanogenerators” Advanced Materials Interfaces ٨ (٢٠٢١) ٢٠٠١٧٣٤

Conferences (Published in Proceedings):

١. M. Ahmadzadeh , M . Almasi Kashi , M . noormohammadi ,Fabrication of highly ordered CoFe nanowires arrays via selenic acid anodizing ,٧th International Congress on Nanoscience and Nanotechnology ,٢٠١٨ ٠٩ ٢٦.

٢. Z. Chamanzadehb, M.Zahedifarab, M.Noormohammadia ,Investigation the effect of high anodization voltage on TiO٢ nanotubes properties and application in dye sensitized solar cell ,٧th International Congress on Nanoscience and Nanotechnology (ICNN٢٠١٨) ,٢٠١٨ ٠٩ ٢٦.

٣. Z. Chamanzadehb, M.Zahedifarab, M.Noormohammadia ,Investigation the effect of ZnO nanoparticles decorated TiO٢ nanotube arrays on the performance of dye sensitized solar cells ,٧th International Conference on Nanostructures (ICNS٧) ,٢٠١٨ ٠٢ ٢٧.

٤. مهدیه احمدزاده ازناوه، محمد الماسی کاشی، محمد نورمحمدی، اثرجریان الکترونهشت بر خواص مغناطیسی نانوسیم های Co، کنفرانس فیزیک ایران ، دانشگاه تبریز ١٣٩٨