CURRICULUM VITA

Surname: Noormohammadi
Name: Mohammad
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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) ۷۰۳۲–۷۰٤۰.

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.

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١٤- M Soltani, R Aliramezani, S Akhavan, Z Erfani Gahrouei, M Noormohammadi, Fabrication of anodic aluminium oxide template and the generation of magnetic Co nanowires within it Journal of Advanced Materials and Processing ٧ (٤), ٥٧-٦٦ (٢٠١٩)

١٥- M Noormohammadi, ZS Arani, A Ramazani, MA Kashi, S Abbasimofrad, Super-fast fabrication of self-١٣٦٧٦٦ (٢٠٢٠)

١٦- V Asgari, M Noormohammadi, A Ramazani, MA Kashi, The role of barrier layer temperature in the formation of long and small-diameter TiO٢ nanotube arrays , Journal of Porous Materials ٢٧ (٦), ١٦١٣-١٦٢١ (٢٠٢٠)

١٧- H Soleymani, M Noormohammadi, MA Kashi, MH Amiri, JJ Michels, ...Self-Poled Sausage-Like PVDF Nanowires Produced by Confined Phase Inversion as Novel Piezoelectric Nanogenerators, Advanced Materials Interfaces ٨ (٥), ٢٠٠١٧٣٤ (٢٠٢١)

١٨- M Ahmadzadeh, MA Kashi, M Noormohammadi, A Ramazani, Small-diameter magnetic and metallic nanowire arrays grown in anodic porous alumina templates anodized in selenic acid Applied ١٢٧ (٦), ١-١٢ (٢٠٢١)

١٩- M Ahmadzadeh, MA Kashi, M Noormohammadi, A Ramazani Self-ordered porous anodic alumina templates by a combinatory anodization technique in oxalic and selenic Acids, , Journal of Electronic Materials ٥٠ (٨), ٤٧٨٧-٤٧٩٦ (٢٠٢١)

٢٠- RA Varkani, HA Rafiee-Pour, M Noormohammadi One step immobilization of glucose oxidase on TiO٢ nanotubes towards glucose biosensing, , Microchemical Journal ١٧٠, ١٠٦٧١٢ (٢٠٢١)

٢١- M. Mohammadalizadeh, M. Almasi Kashi, M Noormohammadi , Angular-dependent magnetic properties of chemically synthesized single crystalline Co nanowires, Materials Chemistry and Physics ٢٨١ ١٢٥٨٠٧ (٢٠٢٢)

٢٢- M. Mohammadalizadeh, M. Almasi Kashi, M Noormohammadi, An investigation into nanomagnetic properties of powder and orderedcobalt nanowires synthesized by a solvothermal technique, Applied Physics A ١٢٨, ٧١٤ (٢٠٢٢)

Conferences (Published in Proceedings):

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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. M. Mohammadalizadeh, M. Almasi Kashi, M Noormohammadi ,Study on coercivity angle changes of aligned Cobalt nanowires in magnetic field, The ٨th International Biennial Conference on Ultrafine Grained and Nanostructured Materials (UFGNSM٢٠٢١).