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(2008-2013)
Ph.D. in Physics (Condensed matter physics), Shiraz University, Shiraz, Iran.
Thesis: Fabrication of 2D and 3D alumina nanostructure and investigation about their physical properties and applications
Supervisors: Prof M. Moradii

M.Sc. programs (2005-2008)
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 (2000-2005)
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:
1. M. Almasi Kashi, A. Ramazani, M. Noormohammadi, M. Zarei and P. Marashi “Optimum self-ordered nanopore arrays with 130–270nm interpore distances formed by hard anodization in sulfuric/oxalic acid mixtures” J. Phys. D: Appl. Phys. 40 (2007) 7032–7040.

2. 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. 40 (2007) 1–6.

3. M. Almasi Kashi, A. Ramazani, Y. Mayamai and M. Noormohammadi “Fabrication of Self-Ordered Nanoporous Alumina with 69–115nm Interpore Distances in Sulfuric/Oxalic Acid Mixtures by Hard Anodization” Japanese Journal of Applied Physics 49 (2010) 015202-015207.

4. 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. 44 (2011) 045301.

5. M. Noormohammadi, M. Moradi “ Structural engineering of nanoporous alumina by direct cooling the barrier layer during the aluminum hard anodization” Materials Chemistry and Physics 135 (2012) 1089.

6. 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 223 (2013) 104–109.

7. Z. Chamanzadeh, M. Noormohammadi, M. Zahedifar,Enhanced photovoltaic performance of dye sensitized solar cell using TiO2 and ZnO nanoparticles on top of free standing TiO2 nanotube arrays, Materials Science in Semiconductor Processing, 61 (2017) 107-113.

8. V. Asgari, M. Noormohammadi, A. Ramazani, M. Almasi Kashi “A facile method to form highly-ordered TiO2 nanotubes at a stable growth rate of 1000 nm min−1 under 60 V using an organic electrolyte for improved photovoltaic properties” Journal of Physics D: Applied Physics, 50 (2017) 375501.

9. 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 TiO2 nanotube arrays,Corrosion Science, 136 (2018) 38-46.

10. 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,157 (2018) 326-336.

11. 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, 118 (2018) 221-231.

12. Z. Chamanzadeh, M. Noormohammadi, M. Zahedifar “Self-organized and uniform TiO2 nanotube arrays with optimized NH4F concentration in electrolyte by high voltage electrochemical anodization” Materials Research Express, 5 (2018) 055025.

13-, M Soltani, A Shafyei, S Akhavan, M Noormohammadi, Investigation the Mild and Hard Anodizing of 1100 Aluminium Alloy in Different Acidic Electrolyte, and Characterization of Obtained Oxide Film, Journal of Advanced Materials and Technologies 8 (1), 1-12 (2019)

14- 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 7 (4), 57-66 (2019)

15- M Noormohammadi, ZS Arani, A Ramazani, MA Kashi, S Abbasimofrad, Super-fast fabrication of self-ordered nanoporous anodic alumina membranes by ultra-hard anodization , Electrochimica Acta 354, 136766 (2020)

16- V Asgari, M Noormohammadi, A Ramazani, MA Kashi, The role of barrier layer temperature in the formation of long and small-diameter TiO2 nanotube arrays , Journal of Porous Materials 27 (6), 1613-1621 (2020)

17- 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 8 (5), 2001734 (2021)

18- 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 Physics A 127 (6), 1-12 (2021)

19- 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 50 (8), 4787-4796 (2021)

20- RA Varkani, HA Rafiee-Pour, M Noormohammadi One step immobilization of glucose oxidase on TiO2 nanotubes towards glucose biosensing, , Microchemical Journal 170, 106712 (2021)

21- M. Mohammadalizadeh, M. Almasi Kashi, M Noormohammadi , Angular-dependent magnetic properties of chemically synthesized single crystalline Co nanowires, Materials Chemistry and Physics 281 125807 (2022)

22- 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 128, 714 (2022)

Conferences (Published in Proceedings):

1. M. Ahmadzadeh , M . Almasi Kashi , M . noormohammadi ,Fabrication of highly ordered CoFe nanowires arrays via selenic acid anodizing ,7th International Congress on Nanoscience and Nanotechnology ,2018 09 26.

2. Z. Chamanzadehb, M.Zahedifarab, M.Noormohammadia ,Investigation the effect of high anodization voltage on TiO2 nanotubes properties and application in dye sensitized solar cell ,7th International Congress on Nanoscience and Nanotechnology (ICNN2018) ,2018 09 26.

3. Z. Chamanzadehb, M.Zahedifarab, M.Noormohammadia ,Investigation the effect of ZnO nanoparticles decorated TiO2 nanotube arrays on the performance of dye sensitized solar cells ,7th International Conference on Nanostructures (ICNS7) ,2018 02 27.

4. M. Mohammadalizadeh, M. Almasi Kashi, M Noormohammadi ,Study on coercivity angle changes of aligned Cobalt nanowires in magnetic field, The 8th International Biennial Conference on Ultrafine Grained and Nanostructured Materials (UFGNSM2021).