

M. Almasi Kashi

Academic Position Assistant Professor

Qualifications B.A. in Physics, University of Kashan, Iran, 1988

M.Sc. in Atomic Physics, University of Tarbiat Moallem, Tehran, Iran, 1993

Ph.D. in Solid State Physics, University of Salford, UK, 2001



Research Areas

The Magnetic Thin Film and magnetic nanowires.

Courses

- 1-Electromagnetic
- 2- Advanced Magnetism
- 3-Thin film
- 4-English for students of Physics
- 5-Analysis methods in Nanotechnology
- 6- Fabrication methods in Nanotechnology

Graduated M.Sc Student

- 1- F.Yaghobi, graduated
- 2- A. Khayatian , graduated
- 3- H. Kaviani, graduated
- 4- M. Alikhani, graduated
- 5- M. Rahmandoost, graduated
- 6- M. Ghaffari, graduated
- 7- M. Zarei, graduated
- 8- N. Akhshi, graduated
- 9- Hossini, graduated
- 10- S. Doodafkan, graduated
- 11- A. Karimzadeh, graduated
- 12- M. Raufi, graduated
- 13- S. Kabiri, graduated
- 14- F. Adelnia, graduated
- 15- Z. fallah graduated
- 16- H. Abbasian graduated
- 17- A.S. Esmaeili graduated
- 18- M. Zangouri

Ph.D Student

- 1- R. Pouladi graduated
- 2 -A. Khayatian, working
- 3- S. Doudafkan working
- 4- S. Aghakhanzadeh working

Publications

- 1) The dependence of magnetic and microstructural properties of CoCrPtNb films on annealing. *J. MMM* 2001
- 2) The magnetic and microstructural properties of sputter – deposited and annealed CoCrPt (High Pt Content) thin film. *J. MMM* 2002
- 3) The Effect of non – magnetic, Cr – rich CoCrPt intermediate and spacer layers on the magnetic properties and microstructure of CoCrPt thin films. *J. PhysD.: appl. hys*(2002)
- 4) The effect of temperature and concentration on the self organized pore formation in anodic alumina, M. Almasi and A.Ramazani, *J. Phys. D: Appl. Phys.* **38** (2005) 2396–2399
- 5) The influence of the oxalic acid concentration on the ordering of pore formation during long time anodization of anodic alumina, A. Ramazani, M. Almasi Kashi, A. Khayyatian and R. Golipour, *IJNN*, 2,(2006) 1.
- 6) The influence of the ac electrodeposition conditions on the magnetic properties and microstructure of Co nanowire arrays, M Almasi Kashi, A Ramazani and A, Khayyatian, *J. Phys. D: Appl. Phys.* **39** (2006) 4130–4135
- 7) The effect of pH and composition of sulfuric-oxalic acid mixture on the self ordering configuration of high porosity alumina nanohole array, M. Almasi Kashi, A. Ramazani, M. Rahmandoost and M. Noormohammadi *J. Phys. D: Appl. Phys* **40** 4625 2007
- 8) Optimized microstructure and magnetic properties in arrays of ac electrodeposited Co nanowires induced by the continuous and pulse electrodeposition A Ramazani, M Almasi Kashi, M Alikhani and S Erfanifam, *J. Phys. D: Appl. Phys* **40** 5533 2007
- 9) Optimum self-ordered nanopore arrays with 130–270 nm interpore distances formed by hard anodization in sulfuric/oxalic acid mixtures, M. Almasi Kashi, A. Ramazani, M. Noormohammadi, M. Zarei and P. Marashi. *J. Phys. D: Appl. Phys.* **40** (2007) 1–9
- 10) Fabrication of high aspect ratio Co nanowires with controlled magnetization direction using ac and pulse electrodeposition, A. Ramazani*, M. Almasi Kashi, M. Alikhani, S. Erfanifam, *Materials Chemistry and Physics* 112 (2008) 285–289
- 11) The effect of growth rate enhancement on the magnetic properties and microstructures of ac electrodeposited Co nanowires using non-symmetric reductive/oxidative voltage, M. AlmasiKashi , A.Ramazani, M.Ghaffari, V.B.Isfahani

12) Fabrication of Self-Ordered Nanoporous Alumina with 69-115 nm Interpore Distances in Sulfuric/Oxalic Acid Mixtures by Hard Anodization, Mohammad Almasi Kashi, Abdolali Ramazani, Yashar Mayamai, and Mohammad Noormohammadi, Japanese Journal of Applied Physics 49 (2010).

13) The influence of crystallinity enhancement on the magnetic properties of ac electrodeposited Fe nanowires, A Ramazani, M Almasi Kashi, V Bayzi Isfahani and M Ghaffari, Appl Phys A, 98, 691–697(2010).

14) The effect of annealing on single-layer CoCrPtNb thin films, M. Almasi Kashi, S.P.H. Marashi, R. Pouladi, Thin Solid Films 518 2157–2162 (2010).

15) Nano-grain Al₂O₃ crystals grown by sputtering of aluminium on CoCrPt thin films for potential application in ultra-high-density recording media, S.A. Manafi, R. Pooladi, M.A. Bahrevar, M. Almasi-kashi, Journal of Materials Processing echnology 209 4874–4879 (2009).

16) Microstructures and magnetic properties of as-deposited and annealed Fe_xCo_{1-x} alloy nanowire arrays embedded in anodic alumina templates, M. AlmasiKashi, A.Ramazani, F.Eshaghi, S.Ghanbari, A.S.Esmaeily, Physica B, (2010).

17) Self-ordering of anodic porous alumina fabricated by accelerated mild anodization method, M. Almasi Kasi, A. Ramazani, M. Raoufi, A. Karimzadeh (in revision on thin solid film).

18) M. Almasi Kashi · A. Ramazani · S. Doudafkan · A.S. Esmaeily Appl Phys A
DOI 10.1007/s00339-010-5980-x

19) Abdolali Ramazani, Mohammad Almasi Kashi, Keyvan Maleki, and Mohsen Mohammadniaei Japanese Journal of Applied Physics 50 (2011) 035203

۱۸) ساختار نمار شکست آلومینا در بلور نوری آلومینای حفره‌دار، ارایه شده در کنفرانس فوتونیک ایران ۱۳۸۴

۱۹) نقش ناهمسانگردیهای بلوری و شکلی بر خواص مغناطیسی نانوسیم‌های کبالت و نیکل

روح ا... گلی پور، علی خیاطیان، عبدالعلی رضانی، محمد الماسی کاشی، مجله پژوهش فیزیک، تابستان ۱۳۸۶،
جلد ۷ شماره ۲

۲۰) تعیین تابع توزیع بهینه نمار شکست و عمق نفوذ آنیونها در بلور نوری آلومینای حفره دار، حمیده کویانی، عبدالعلی رمضانی و محمد الماسی کاشی در دست مجله پژوهش فیزیک، پاییز ۱۳۸۶، جلد ۷ شماره ۳

۲۱) نانوحسگرهای گازی بر اساس نانوحفره های آلومینای ساخته شده به روش آندیزاسیون سخت برای حسگری رطوبت در دمای اتاق؛ زارعی، مجید؛ الماسی کاشی، محمد؛ رمضانی، عبدالعلی؛ ترکاشوند، غفار در دست چاپ مجله پژوهش فیزیک

CONFERENCE PAPERS

1) Fabrication Of Copper Nano-Probe Array In Porous Anodic Alumina
Zareei M. , Noormohammadi M. , Almasi Kashi M. , Ramazani A.A.
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

2) The Effect of Frequency in the AC Electrodeposition on the Magnetic properties and Microstructure of Iron Nanowires
V.Isfahani , A.Ramazani and M.Almasi Kashi
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

3) The effect of pH and composition of sulfuric-oxalic acid mixture on the self ordering configuration of high porosity alumina nanohole array
M. Almasi Kashi, A. Ramazani, M. Rahmadoost
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

4) The Effect of NiAl and Cr underlayers on The magnetic properties and Crystallography of The CoCrPt thin films
M. Almasi, F. Yaghoobi shad
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

5) The influence of the unsymmetrical ac electrodeposition technique on the magnetic properties and microstructure of Co nanowire arrays
M.Ghaffari, M.Almasi Kashi and A.Ramazani
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

6) The Effect of pH and Frequency in the AC Electrodeposition on the Magnetic properties and Microstructure of Cobalt Nanowires
M.Alikhani, M.Almasi Kashi and A.Ramazani
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

7) Fabrication of two dimensional photonic crystals based on hard anodization method and its optical investigations
M. Noormohammadi, M. Zarei, A. Ramazani and M. Almasi Kashi
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran

- 8) The effect of pulse shape electrodeposition in anodic aluminum oxide on the magnetic properties of Co nanowires
S.Erfanifam , A.Ramazani and M.Almasi
The second nanotechnology student conference 5-7 September 2007 Kashan, Iran
- 9) Fabrication of high aspect ratio Co nanowires with controlled magnetization direction using ac and pulse electrodeposition
A. Ramazani*, M. Almasi Kashi, M. Alikhani, S. Erfanifam Materials Chemistry and Physics 112 (2008) 285–289
- 10) The effect of the pulse shape and length of the wire on the microstructure and magnetic properties of the pulsed electrodeposition Co nanowires
S. Erfanifam ^a S. Erfanifam ^b A Ramazani and M Almasi Kashi
Proceedings of the 2nd Conference on Nanostructures (NS2008)
March 11-14, 2008, Kish University, Kish Island, I.R. Iran
- 11) Fabrication of two dimensional grating based on nanoporous alumina arrays using hard and mild anodization technique
M. Noormohammadi, M. Zarei, A. Ramazani and M. Almasi Kashi
Proceedings of the 2nd Conference on Nanostructures (NS2008)
March 11-14, 2008, Kish University, Kish Island, I.R. Iran
- 12) The Influence of the ac Electrodeposition Conditions on the Magnetic Properties of Ni Nanowire Arrays *M. Almasi kashi A. Ramazani, R. Golipour*
First International Congress on Nanoscience and Nanotechnology
Faculty of Engineering , University of Tehran December 2006
- 13) Effect of annealing on single layer CoCrPt Al₂O₃ nanostructured materials
M. Almasi kashi R.Pooladi and P. Marashi First International Congress on Nanoscience and Nanotechnology
Faculty of Engineering , University of Tehran December 2006

طرحهای پژوهشی خاتمه یافته

- ۱) ساخت نانوسیمهای مغناطیسی کبالت و کبالت پلاتین
- ۲) طراحی و ساخت مغناطومتر گرادیان نیروی متناوب
- ۴) طراحی و ساخت مغناطومتر نمونه مرتعش
- ۵) ساخت و آنالیز و شبیه سازی شبکه های نوری بر اساس نانوحفره های آلومینا (طرح تحقیقاتی استانی)

تاسیس شرکت دانش بنیان

در راستای عدم وابستگی به بیگانگان اقدام به ساخت دستگاههای مغناطومتر نموده و شرکت دانش بنیان مغناطیس دقیق را تاسیس نموده است. هم اکنون ابزارهای دقیق این شرکت در چندین دانشگاه کشور به رشد پژوهش کمک میکند.