**Dr. MOHAMMAD ISLAM**

Advanced Manufacturing Institute, King Saud University,

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**SUMMARY**

A materials engineering professional with research and/or teaching experience from universities in the United States, France, Pakistan and Saudi Arabia. Extensive experience of hands-on research as well as research supervision in the areas of surface engineering, nanostructures and coatings for enhanced corrosion resistance and photovoltaic applications. Supervised about 10 MS Theses and 2 senior design projects (FYPs). Instrumental in preparing working paper to initiate materials engineering undergraduate course curriculum. Offered many undergraduate and postgraduate courses in the Materials Engineering field. Authored/Co-authored two books and more than 40 articles in ISI peer-reviewed journals, besides successfully completing many funded projects.

**1. WORK EXPERIENCE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Name & Address of Employer** | **Position** | **From** | **To** |
| 1. | Advanced Manufacturing Institute, King Saud University, Riyadh 11421, KSA | Associate Prof. | Apr 2016 | Present |
| 2. | Center of Excellence for Research in  Engineering Materials, Advanced Manufacturing Institute, King Saud University, Riyadh 11421, KSA | Assistant Prof. | Sep 2011 | Mar 2016 |
| 3. | School of Chemical & Materials Engineering, National University of Sciences & Technology (NUST), Islamabad, Pakistan. | Assist. Prof. | Sep 2007 | Sep 2011 |
| 4. | Institut des Matériaux de Nantes (IMN), Universite de Nantes, France | Postdoc Fellow | Oct 2009 | Apr 2010 |
| 5. | Department of Chemical Engineering, New Mexico Inst. of Mining & Tech, Socorro, NM, USA | Visiting Assistant Prof. | Aug 2006 | Jul 2007 |
| 6. | Department of Materials Engineering, New Mexico Inst. of Mining & Tech, Socorro, NM, USA | Research Assistant | 08/99 | 12/06 |
|  | Pacific Northwest Research Laboratory (PNNL), Richland, WA, USA | Researcher | 05/00 | 08/00 |

**TECHNICAL SKILLS**

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| ***Synthesis Techniques:*** Electrochemical deposition, Electroless plating, Plasma-enhanced physical vapor deposition (dc-, rf-magnetron sputtering, evaporation-condensation), plasma-enhanced chemical vapor deposition, sol-gel processing, chemical bath deposition, plasma polymerization, Powder consolidation and sintering, High-frequency induction heated sintering, Melt extrusion using twin-screw extruder |
| ***Characterization:***Electrochemical impedance spectroscopy (EIS), Potentiodynamic polarization studies, Scanning electron microscopy, X-ray diffraction, Atomic force microscopy, Scanning tunneling microscope, X-ray photoemission spectroscopy (XPS), Fourier transform infrared spectroscopy, profilometry (diamond based contact stylometer), optical microscopy, mechanical testing |
| ***Others:*** Lithography, heat treatment, electroplating, adhesion testing, spin/dip coating, electronic *J*-V testing |

**Equipment / Tools used**

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| *Solution based synthesis:* Model CHI 660A electrochemical workstation, Electroless process, Spin coating, Dip coating, Sol-gel technique, Chemical bath deposition (CBD) |
| *Vacuum technology components:* Mechanical pumps (RV dual stage, turbomolecular), Power supplies (rf, dc, matching network), Probes and gauges for temperature, pressure monitoring |
| *Characterization tools:* Scanning Probe Microscope (SPM5200 JEOL), Atomic Force Microscope (Multimode Nanoscope IIIa, Bruker and XE-100 Park Systems, Korea), Field-emission scanning electron microscope (JSM7600F, JEOL), High-resolution Transmission Electron Microscope (Hitachi HNAR9000), X-ray diffraction machines (Siemens, STOE Stadi MP, Bruker) FTIR spectroscope, Dektek 8 profilometer, Tribometer for Wear testing  **RESEARCH SUPERVISION** |

**SENIOR DESIGN PROJECTS (FYP)**

|  |  |  |
| --- | --- | --- |
| **No** | **Students** | **Thesis Title** |
| *1.* | *Ansar Hayat; Bilal Ahsan; Haroon Rasheed* | Synthesis and characterization of multilayer thin films for CIGS based solar cells |
| *2.* | *Hassan Javed; Nasrullah Khatri* | Polymer based nanocomposites reinforced with multi-walled carbon nanotubes |

**MS THESES**

|  |  |  |
| --- | --- | --- |
| **No** | **Student** | **Thesis Title** |
| *1.* | *Mahboob Alam* | Process optimization for cadmium sulfide (CdS) buffer layer produced using chemical bath deposition (CBD) technique |
| *2.* | *Majid Khan* | Deposition, characterization and process optimization of Molybdenum thin films using DC-plasma magnetron sputtering for back contact application in CIGS based thin film solar cells |
| *3.* | *Asif Mahmood* | Development of Polyaniline based polymer nanocomposites containing pristine or functionalized multi-walled CNTs |
| *4.* | *Shahzad Salam* | Sol-gel synthesis of zinc oxide TCO thin films for thin film solar cells |
| *5.* | *Nasir Mehmood* | Development of Nylon based polymer nanocomposites reinforced with pristine and functionalized multi-walled CNTs |
| *6.* | *Asad Hameed* | Epoxy/Nanotube Composites with different loadings of pristine & functionalized multiwalled carbon nanotubes for improvement in mechanical and thermo-mechanical properties |
| *7.* | *Tauheed Shahbaz* | Synthesis, post-deposition treatment, and characterization of Ni-P thin films using electroless deposition technique |
| *8.* | *Jibran Khaliq* | Synthesis and characterization of multi-walled carbon nanotubes for various applications |
| *9.* | *M. Rizwan Saleem* | Effect of processing parameters on boron doped silica preform rods fabricated using modified MCVD process |

**FUNDED RESEARCH PROJECTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Project Title** | **Funding agency** | **Amount** |
| 1. | Corrosion and Wear Resistant Nickel–Phosphorus based Nanocoatings for Oil and Petrochemical Applications (APPROVED) | NPST, KACST | SAR 1,736,980 |
| 2. | Development of electroless Ni–P and Ni–P–X (where X=CNT, SiC, PTFE) composite coatings with enhanced wear and corrosion resistance for petrochemical industry (COMPLETE) | CEREM, KSU, | SAR 877,000.00 |
| 3. | Inhibition of failure due to poor resistance to oil in polycarbonate electrical insulating material used for cover plate (IN-PROGRESS) | Alfanar Electric Company | SAR 400,000 |
| 4. | Nanocomposites for corrosion resistance and structural applications | DSR, KSU | SAR 150,000 |
| 5. | Nanomaterials for photovoltaics and energy applications | DSR, KSU | SAR 150,000 |
| 3. | Development of Automotive Brake Pads from Aluminum based Metal Matrix Composites (MMCs) (2015– COMPLETE) | CEREM, KSU | SAR 20,000 |
| 4. | Polycarbonate Nanocomposites Reinforced with Carbon Nanotubes or Graphene (2015– ) | CoE, KSU | SAR 20,000 |
| 7. | Fabrication, characterization, and testing of copper-indium-gallium-arsenide (CIGS) based thin film solar cells for power generation (IN-PROGRESS) | HEC, Pakistan | US $ 67,400 |
| 8. | Thin film photovoltaics (COMPLETE) | NUST, Pakistan | PKR. 300,000.00 |

**COURSES TAUGHT**

**Undergraduate**: Introduction to Chemical Engineering, Fundamentals of Engineering Materials, Surface Engineering, Principles of Chemical Engineering, Thermal and Chemical Treatment of Surfaces, Design of Experiments and Data Analysis, Materials Thermodynamics

**Postgraduate**: Surface Engineering and Characterization, Advanced Surface Coatings, Mechanical Behavior of Materials, Nano Materials and Nano Processing, Engineering Ceramics and Glasses, Engineering Tribology

**ADMINISTRATIVE RESPONSIBILITIES**

* Designed course curriculum for Materials Engineering undergraduate program
* Member of difference committees including Graduate research committee, Quality enhancement cell
* Operation and maintenance of X-ray diffraction apparatus and Scanning Electron Microscope
* In-charge Atomic Force Microscope and Surface Engineering laboratories
* Member of the organizing committee for 1st ASEAN-Pakistan Conference on Materials Science (APCOMS-1), islamabad, Pakistan (2008)
* Honorary judge for Intel Science and Engineering Fair (ISEF), Albuquerque, NM (2006)

**2. EDUCATION**

**Ph.D. Materials Engineering** (2006) New Mexico Inst. Mining & Tech, Socorro, NM 87801

Dissertation: *Improvement in thermionic energy converter (TEC) performance using thin film deposition techniques*

**M.Sc. Materials Engineering**(2001) New Mexico Inst. Mining & Tech, Socorro, NM 87801

Thesis: *Synthesis of aligned multiwalled carbon nanotubes on mesoporous silica films using catalytic chemical vapor deposition method*

**B.Sc. Metallurgical & Materials Engineering** *(1997) GIK Institute of Engineering Sciences & Technology, Pakistan*

Senior Design Project: *Synthesis and characterization of ceramic matrix composites (CMCs)*

**3. HONORS / AWARDS**

* Regular member, American Association for the Advancement of Science (AAAS Member Number: 41693465)
* Invited talk at 1st International Conference on Sensing for Industry, Control, Communications and Security Technologies (ICSICCST’13), Karachi, Pakistan, Jun 23-25, 2013
* Invited speaker at 2nd ASEAN-Pakistan Conference on Materials Science (APCoMS2), Hanoi, Vietnam, Apr 26-27, 2011
* Recipient of French Postdoctoral Research Fellowships (2009-10)
* One-week training on Scanning Probe Microscope by JEOL, Tokyo, Japan (2008)
* Recipient of Ashman Award for the best graduate student (2004)
* Recipient of the Electrical Coil and Manufacturing Association scholarship (2002)
* Recipient of teaching and research assistantships during postgraduate studies

**4. PUBLICATIONS**

h-index: 11

i-10 index: 13

Total citations: 382

ORCID: 0000-0003-0117-6422

Google Scholar: [*https://scholar.google.com/citations?user=t1hwnEgAAAAJ&hl=en*](https://scholar.google.com/citations?user=t1hwnEgAAAAJ&hl=en)

**Reviewer for the journals**

Surface and Coatings Technology, Materials Chemistry and Physics, Materials Science in Semiconductor Processing, Polymer Composites, Journal of Nanoparticles Research, NUST Journal of Engineering Sciences

BOOKS (2)

1. **Mohammad Islam** Renewable Energy Technologies: Thermionic Energy Conversion – Thin films and surfaces for enhanced device performance, LAMBERT Academic Publishing, Germany (2010)
2. Nasir Mahmood, **Mohammad Islam**,Asif Mahmood, Handbook of Carbon Nanotubes-Polymer Nanocomposites, LAMBERT Academic Publishing, Germany (2014) ISBN: 978-3-659-64990-5

**List of ISI journal articles**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Journal | Impact Factor | Articles | Author position | | | | Times cited | |
|  |  |  |  | 1st/ Corr. | 2nd | 3rd | ≥ 4th | Self- | total |
| 45. | Adv. Natural Sci. Nanosci. Nanotechnol. | 1.581 | 1 | 1 |  |  |  |  | 7 |
| 44. | Diamond and Related Materials | 2.125 | 1 |  |  |  | 1 |  |  |
| 43. | The European Physical Journal Plus | 1.521 | 1 |  |  | 1 |  |  |  |
| 42. | Adv. Nat. Sci.: Nanosci. Nanotechnol. | 1.56 | 1 | 1 | 1 |  |  |  | 9 |
| 41. | Current Applied Physics | 2.1 | 1 |  |  |  | 1 |  | 1 |
| 39, 40. | Journal of Power Sources | 6.333 | 2 |  |  |  | 2 |  | 11 |
| 38. | Solar Energy Materials & Solar Cells | 4.732 | 1 |  |  | 1 |  |  | 3 |
| 37. | Polymers (MDPI) | 3.867 | 1 | 1 |  |  |  |  | 23 |
| 36. | Nanotechnology | 3.573 | 1 |  | 1 |  |  |  | 3 |
| 35. | Materials and Design | 3.997 | 1 |  | 1 |  |  |  | 13 |
| 34. | Powder Technology | 2.759 | 1 |  |  | 1 |  |  |  |
| 31-33. | Materials Science in Semiconductor Processing | 2.264 | 3 | 1 | 1 |  | 1 |  | 10+1 |
| 26-30. | Journal of Materials Engineering and Performance | 1.094 | 5 | 3 | 1 | 1 |  |  | 3+3+1+2 |
| 25. | Journal of Polymer Engineering | 0.631 | 1 | 1 |  |  |  |  | 1 |
| 24. | Polymer Composites | 2.004 | 1 | 1 |  |  |  |  | 5 |
| 23. | Modern Physics Letters B | 0.746 | 1 |  |  |  | 1 |  |  |
| 20-22. | Surface & Coatings technology | 2.139 | 3 | 3 |  |  |  |  | 20+9+7 |
| 19. | Materials Characterization | 2.383 | 1 |  | 1 |  |  |  | 8 |
| 16-18. | Thin Solid Films | 1.761 | 3 | 1 |  |  | 2 |  | 33+3 |
| 14-15. | Surface Review and Letters | 0.44 | 2 | 2 |  |  |  |  | 4 |
| 12-13. | Journal of Composite Materials | 1.242 | 2 | 1 | 1 |  |  |  | 15 |
| 11. | Korean Journal of Chemical Engg | 1.408 | 1 |  |  | 1 |  |  |  |
| 10. | Global NEST Journal | 0.458 | 1 |  |  |  | 1 |  | 3 |
| 9. | Ceramics International | 2.758 | 1 |  | 1 |  |  |  | 13 |
| 8. | PLOS ONE | 3.54 | 1 |  |  | 1 |  |  | 3 |
| 7. | Semiconductors | 0.705 | 1 |  | 1 |  |  |  | 7 |
| 6. | Sensors and Actuators A: Physical | 2.201 | 1 |  |  | 1 |  |  | 13 |
| 5. | Sensors | 2.033 | 1 |  |  | 1 |  |  | 22 |
| 4. | Materials Chemistry and Physics | 2.101 |  |  |  | 1 |  |  | 5 |
| 3. | Physica E: Low dimensional systems and  nanostructures | 1.904 | 1 |  | 1 |  |  |  | 45 |
| 2. | J. Vacuum Science & Technology A: Vacuum, Surfaces, and Films | 1.724 | 1 | 1 |  |  |  |  | 5 |
| 1. | Journal of Applied Physics | 2.101 | 1 | 1 |  |  |  |  | 10 |
|  |  | 93.285 | 45 | 18 | 10 | 8 | 9 |  |  |

INTERNATIONAL JOURNALS (**Total 48; Cumulative I.F. 93.285**)

**2017 (5)**

1. H. Achour, A. Achour, S. Solaymani, **M. Islam**, S. Vizireanu, A. Arman, A. Ahmadpourian, G. Dinescu, *Plasma surface functionalization of boron nitride nanosheets*, Diamond and Related Materials 77 (2017) 110-115 **I.F. 2.125**
2. A. Achour, A. Arman, **M. Islam**, A. A. Zavarian, A. B. Al-Zubaidi, J. Szade, *Synthesis and Characterization of Porous CaCO3 Micro/Nano-particles,* The European Physical Journal Plus 132 (2017) 267 (10 pages) **I.F. 1.521**
3. A. Achour, M. Chaker, A. Arman, H. Achour, **M. Islam**, M. Mardani, H. Boujtita, L. Le. Brizoual, M. A. Djouadi, T. Brousse, *Role of nitrogen doping at the surface of titanium nitride thin films towards capacitive charge storage enhancement*, Journal of Power Sources 359 (2017) 349-354 **I.F. 6.333**
4. I. Ahmad, **M. Islam**, N. H. Alharthi, H. Alawadhi, T. Subhani, K. S. Munir, S. I. Shah, F. Inam, Y. Zhu, *Chemical and structural analyses of the graphene nanosheet/alumina ceramic interfacial region in rapidly consolidated ceramic nanocomposites*, Journal of Composite Materials (2017) 1-12 DOI: 10.1177/0021998317708235 **I.F. 1.257**
5. N. Ouldhamadouche, A. Achour, K. Ait. Aissa1, **M. Islam**, A. Ahmadpourian, A. Arman, M.A. Soussou, M. Chaker, L. Le Brizoual, M. A. Djouadi, *AlN film thickness effect on photoluminescence properties of AlN/carbon nanotubes shell/core nanostructures for deep ultra-violet optoelectronic devices,* Thin Solid Films 622 (2017) 23-28 **I.F. 1.761**

**2016 (7)**

1. I. Ahmad, S. Ahmed, T. Subhani, K. Saeed, **M. Islam**, N. Wang, Y. Zhu, *Synergic influence of MWCNTs and SiC nanoparticles on the microstructure and properties of Al2O3 ceramic hybrid nanocomposites*, Current Applied Physics 16 (2016) 1649-1658 **I.F. 2.144**
2. I. Ahmad, M. Islam, T. Subhani, Y. Zhu, *Toughness enhancement in graphene nanoplatelet/SiC reinforced Al2O3 ceramic hybrid  nanocomposites*, Nanotechnology 27(42) (2016) 425704 (13pp) **I.F. 3.573**
3. Z.  Wang, E. Yassitepe, **M. Islam**, S. I. Shah,  *Phase Transformation Reaction Path during Sonication Assisted Solid State Synthesis of Cu2ZnSnSe4*, Powder Technology 295C (2016) 202-208 **I.F. 2.349**
4. A. Safdar, **M. Islam**, I. Ahmad, A. Akram, M. Mujahid, Y. Khalid, Y. Zhu, *Quantum Confinement and Size Effects in Cu2ZnSnS4 Thin Films Produced using Solution Processed Ultrafine Nanoparticles*, Materials Science in Semiconductor Processing 41 (2016) 420-427 **I.F2.264**
5. M. Aftab Akram, S. Javed, **M. Islam**, M. Mujahid, A. Safdar, *Arrays of CZTS Sensitized ZnO/ZnS and ZnO/ZnSe core/shell Nanorods for Liquid Junction Nanowire Solar Cells*, Solar Energy Materials and Solar Cells 146 (2016) 121-128 **I.F. 5.337**
6. A. Safdar, **M. Islam**, A. Akram, M. Mujahid, Y. Khalid, S. I. Shah, *Reaction Time and Film Thickness Effects on Phase Formation and Optical Properties of Solution Processed Cu2ZnSnS4 Thin Films*, Journal of Materials Engineering and Performance 25(2) (2016) 457-465 **I.F. 1.094**
7. H. Javed, **M. Islam**, N. Mahmood, A. Achour, A. Hameed, N. khatri, *Catalytic Growth of Multi-walled Carbon Nanotubes using NiFe2O4 Nanoparticles and Incorporation into Epoxy Matrix for Enhanced Mechanical Properties*, Journal of Polymer Engineering 36(1) (2016) 53-64 **I.F. 0.465**

**2015 (9)**

1. **M. Islam**, M. R. Azhar, Y. Khalid, R. Khan, H. S. Abdo, M. A. Dar, O. R. Oloyede, T. D. Burleigh, *Electroless Ni-P/SiC Nanocomposite Coatings With Small Amounts of SiC Nanoparticles for Superior Corrosion Resistance and Hardness*, Journal of Materials Engineering & Performance 24(12) (2015) 4835-4843 **I.F. 1.094**
2. A. Achour, R. R. L. Porto, M. A.  Soussou, **M. Islam**, M. Boujtita, A. A. Kaltouma, L. B. Laurent,  M. A. Djouadi, B. Thierry, *Titanium Nitride Films for Micro-Supercapacitors: Effect of Surface Chemistry and Film Morphology on the Capacitance*, Journal of Power Sources 300 (2015) 525-532 **I.F. 6.217**
3. I. Ahmad, **M. Islam**, T, Subhani, Y. Zhu, *Characterization of GNP containing Al2O3 nanocomposites fabricated via high frequency-induction heat sintering route*, Journal of Materials Engineering & Performance 24(11) (2015) 4236-4243 **I.F. 1.094**
4. I. Ahmad, **M. Islam**, H. S. Abdo, T. Subhani, K. A. Khalil, A. A. Almajid, B. Yazdani, Y. Zhu*, Toughening Mechanisms and Mechanical Properties of Graphene Nanosheet-Reinforced Alumina*, Materials and Design 88 (2015) 1234-1243 **I.F. 3.501**
5. A. Hameed, **M. Islam**, I. Ahmad, N. Mahmood, S. Saeed, H. Javed, *Thermal and Mechanical Properties of CNT/Epoxy Nanocomposites Reinforced with Pristine and Functionalized Multi-Walled Carbon Nanotubes*, Polymer Composites 36(10) (2015) 1891-1898 **2014** **I.F. 2.004**
6. R. A. Afzal, R. Afrin, U. Manzoor, A. S. Bhatti, **M. Islam**, M. T. Amin, A. A. Alazba, *Diameter control of carbon nanotubes using argon-acetylene mixture and their application as IR sensor*, Modern Physics Letters B 29 (2015) 1550131 (10 pages) **I.F. 0.687**
7. **M. Islam**, M. R. Azhar, O. R. Oloyede, N. Fredj, T. D. Burleigh, A. A. Almajid, S. I. Shah, *Influence of* *SiO2 Nanoparticles on Hardness and Corrosion Resistance of Electroless Ni-P Coatings*, Surface & Coatings technology 261 (2015) 141-148 **I.F. 1.998**
8. I. Ahmad, **M. Islam**, M. A. Dar, F. Xu, S. I. Shah, Y. Zhu, *Magnesia tuned Multi-Walled Carbon Nanotubes–Reinforced Alumina Nanocomposites*, Materials Characterization, 99 (2015) 210-219 **I.F. 1.915**
9. I. Ruzybayev, E. Yassitepe, A. Ali, A. S. Bhatti, R. M. Mohamed, **M. Islam**, S. I. Shah, *Reactive Pulsed Laser Deposited N-C Codoped TiO2 Thin Films*, Materials Science in Semiconductor Processing, 39 (2015) 371-376 **I.F. 2.264**

**2014 (11)**

1. A. Achour, M. A. Soussou, K. A. Aissa, **M. Islam**, N. Barreau, E. Faulques, L.  Le Brizoual, M. A. Djouadi, M. Boujtita, *Nanostructuration and Band Gap Emission Enhancement of ZnO Film via Electrochemical Anodic Oxidation*, Thin Solid Films 571 (2014) 168-174 **I.F. 1.759**
2. M. Khan, **M. Islam**, A. Akram, Z. Qi, L. Li, *Residual Strain and Electrical Resistivity Dependence of Molybdenum Films on DC Plasma Magnetron Sputtering Conditions*, Materials Science in Semiconductor Processing 27(2014) 343–351 **I.F. 2.264**
3. M. Alam, **M. Islam**, A, Achour, A. Hayat, B. Ahsan, H. Rasheed, S. Salam, M. Mujahid, *Solution Processing of Cadmium Sulfide Buffer Layer and Aluminum-Doped Zinc Oxide Window Layer for Thin Films Solar Cells*, Surface Review and Letters 21(4) (**2014**) 1450059 (10 pages) **I.F. 0.380**
4. N. Mahmood, **M. Islam**, A. Hameed, S. Saeed, A. N. Khan, *Polyamide 6 based Composites Reinforced with Pristine or Functionalized Multi-Walled Carbon Nanotubes Produced using Melt Extrusion Technique*, Journal of Composite Materials, 48(10)**2014** 1197-1207 **I.F. 1.173**
5. M. A. Dar, H. Abuhimd, I. Ahmad, **M. Islam**, M. R. Karim, and H.-S. Shin, *Effects of cobalt and cobalt oxide buffer layers on nucleation and growth of hot filament chemical vapor deposition diamond films on silicon (100)*, Korean Journal of Chemical Engineering, 31(7) (**2014**) 1271-1275 **I.F. 1.059**
6. M. T. Amin, S. Hamid, A.A. Alazba, M.N. Amin, **M. Islam**, U. Manzoor, *Environmental dynamics and engineered systems for the degradation of trichloroethylene: A critical review*, Global NEST Journal, 16(2) (**2014**) 317-329 **I.F. 0.705**
7. H. Javed, N.H. Saddiqi, **M. Islam**, Recent advances in focused ion beam applications: A review, International Journal of Recent Scientific Research5(1), **(2014)** 123-127
8. I. Ahmad, **M. Islam**, A. A.  Almajid, B.  Yazdani, Y. Q. Zhu, *Study of yttria-doped alumina nanocomposites reinforced by multi-walled carbon nanotubes*, Ceramics International 40 **(2014)** 9327–9335 **I.F. 1.789**
9. N.-H. Saddiqi, H. Javed, **M. Islam**, K. M. Ghauri, *A Review on Synthesis of Silicon Nanowires by Laser Ablation*,Chemistry and Materials Research 6(1) 76-86, **2014** ISSN 2224- 3224 (Print) ISSN 2225- 0956 (Online)
10. U. Manzoor, Do K. Kim, **M. Islam**, A. S. Bhatti, *Removal of Micrometer Size Morphological Defects and Enhancement of UV Emission by Thermal Treatment of Ga-Doped ZnO Nanostructrues*, PLOS ONE (Public Library of Sciences), 9(1) **(2014)** e86418 (8 pages) 10.1371/journal.pone.0086418 **I.F. 3.730**
11. O. R. Oloyede, Z. Liu, **M. Islam**, H. Liu, R.X. Guo, *Deposition and Characterization of Electroless Ni-P/Ni-W-P Duplex Coating using Electrochemical Impedance Spectroscopy*, Advanced Materials Research856 (2014) 103-107

**2013 (5)**

1. M. Khan, **M. Islam**, A. Akram, U. Manzoor, *Processing–Structure–Property Correlation in Dc Sputtered Molybdenum Thin Films*, Surface Review and Letters 20(6) **(2013)** 1350065 (6 pages) World Scientific Publishing Company (DOI: 10.1142/S0218625X13500650) **I.F. 0.380**
2. **M. Islam**, M. R. Azhar, N. Fredj, T.D. Burleigh, *Electrochemical Impedance Spectroscopy and Indentation Studies of Pure and Composite Electroless Ni-P Coatings*, Surface and Coatings Technology 236 (**2013**) 262-268 **I.F. 1.998**
3. N. Mahmood, **M. Islam**, A. Hameed, S. Saeed, *Polyamide 6/Multiwalled Carbon Nanotubes Nanocomposites with Modified Morphology and Thermal Properties*, Polymers (MDPI), *5* (**2013**) 1380-1391 (DOI:10.3390/polym5041380) **I.F. 2.652**
4. M. Khan, **M. Islam**, *Deposition and Characterization of Molybdenum Thin Films using DC-Plasma Magnetron Sputtering*, Fizika i Tehnika Poluprovodnikov/ Semiconductors (*ISSN 1063-7826,* Springer), 47(12) (**2013**) 1610-1615 **I.F. 0.705**
5. S. Salam, **M. Islam**, A. Akram, *Sol–Gel Synthesis of Intrinsic and Aluminum-Doped Zinc Oxide Thin Films as Transparent Conducting Oxides for Thin Film Solar Cells*, Thin Solid Films 529 (**2013**) 242-247 **I.F. 1.759**

**2012 (5)**

1. R. Afrin, J. Khaliq, **M. Islam**, I. H Gul, A. S. Bhatti, U. Manzoor, *Synthesis of Multiwalled Carbon Nanotube-based Infrared Radiation Detector*, Sensors and Actuators A: Physical 187 (**2012**) 73-78 **I.F. 1.903**
2. M. Amin, U. Manzoor, **M. Islam**, A. S. Bhatti, N. A. Shah, *Synthesis of ZnO Nanostructures for Low Temperature CO and UV Sensing*, Sensors 2012, 12(10), 13842-13851 **I.F. 2.245**
3. A. Maqsood, **M. Islam**, M. Ikram, S. Salam, S. Ameer, *Synthesis, Characterization and Hall Effect Measurements* *of Nano-Crystalline ZnO Thin Films*, Key Engineering Materials 510-511 (2012) 186-193**I.F. 0.224**
4. S. Javed, M. Mujahid**, M. Islam**, U. Manzoor,*Morphological Effects of Reflux Condensation on Nanocrystalline Anatase gel and Thin Films*, Materials Chemistry and Physics 132 (2012) 509– 514 **I.F. 2.259**
5. **M. Islam**, M. R. Saleem, *Composition-Property Correlation in B2O3-SiO2 Preform Rods Produced using Modified Chemical Vapor Deposition Technique*, J. Materials Engineering and Performance 21(2) (2012) 202–207 **I.F. 1.094**

**2011 (2)**

1. S. Salam, **M. Islam**, M. Alam, A. Akram, M. Ikram, A. Mahmood, M. Khan, M. Mujahid, *The Effect of Processing Conditions on the Structural Morphology and Physical Properties of ZnO and CdS Thin Films Produced via Sol–Gel Synthesis and Chemical Bath Deposition Techniques*, Adv. Nat. Sci.: Nanosci. Nanotechnol. **2** (2011) 045001 (6pp) **I.F. 1.581**
2. **M. Islam,** T. Shehbaz, *Effect of Synthesis Conditions and Post-Deposition Treatments on Composition and Structural Morphology of Medium-Phosphorus Electroless Ni-P Films*, Surface and Coatings Technology 205 (2011) 4397–4400 **I.F. 1.998**

**Before 2011 (4)**

1. U. Manzoor, **M. Islam**, L. Tabassam, S. U. Rahman, *Quantum Confinement Effect in ZnO Nanoparticles Synthesized by Co-Precipitate Method*, Physica E: Low dimensional systems and  nanostructures 41 (2009) 1669-1672 **I.F. 2.00**
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