

DEPARTMENT OF PHYSICS, CIIT-LAHORE

PUBLICATION FOR YEAR 2012

1. Noorhana Yahya, **Majid Niaz Akhtar** and Krzysztof Koziol, "Encapsulation of Ni_{0.8}Zn_{0.2}Fe₂O₄ Single Crystals in Multiwall Carbon Nanotubes", Journal of Nanoscience and Nanotechnology, Vol. 12, 8116-8122, 2012. doi:10.1166/jnn.2011.4520 (Scopus, Thomson ISI) Impact factor 1.98
2. M Farooq, **S F Shaukat**, et. al., "Study of tribological & water characteristics of thermal barrier coatings on stainless steel substrate", Archives Des Science, 65 (9), 517-523, (2012).
3. A. Shahzad, A. Fayyaz, **S.F. Shaukat**, et. al., "Feasibility analysis of stargate network with integration to Ethernet based passive optical networks", Journal of Faculty of Engineering Technology, 19(1), 69-77, (2012).
4. Siti Idris, T Osadola, **S F Shaukat**, I Glesk, "All optical clock recovery for OCDMA systems with optical time gating", IEEE-20-th Telecommunication Forum (TELFOR),903-906, (2012).
5. S. K. Idris, T. B. Osadola, S. F. Shaukat, and I. Glesk, "All-optical Clock Recovery for OCDMA Systems with Optical Time S. F. Shaukat Gating," in IEEE Proceedings on CD ROM 2012 20th TELECOMMUNICATIONS FORUM-(TELFOR),paper 6.3, pp. 903-906, Belgrade, Serbia, November 20-22, 2012. (ISBN 978-1-4673-2982-8).
6. **S F Shaukat**, 'Reliable Area Index: A novel approach to measure reliability of Markov Random Field Based Circuits' 4th International Conference on intelligent and advanced systems, June 12-14 2012
7. H. Qin, B. Zhu, **Rizwan Raza**, M. Singh, Liangdong Fan, Peter Lund, Integration design of membrane electrode assemblies in low temperature solid oxide fuel cell, International Journal of Hydrogen Energy, 2011, Volume 37, Issue 24, December 2012, Pages 19365–19370. Impact factor: 4.054
8. Bin Zhu, **Rizwan Raza**, H. Qin, L. Fan, Peter Lund, "A new energy conversion technology joining electrochemical and physical principles" RSC Advances, 2012,2, 5066-5070. Impact factor: 2.20
9. M. Mizuhata, K. Takeda, **Rizwan Raza**, X. Wang, L. Fan, Bin Zhu, "Interfacial Phenomena of Ceria-Molten Carbonate Composite Electrolytes Studied by Raman Spectroscopy" Int. Journal Hydrogen Energy, 2012. (accepted). Impact factor: 4.054
10. **Rizwan Raza**, M. Samavati, Bin Zhu, Design of a 5kW advanced fuel cell Polygeneration system. WIREs Energy and Environment, Volume 1(September), Issue 2, pp. 173-180, 2012. Impact factor: (To be issued in 2013)
11. **Rizwan Raza**, H. Qin, L. Fan, B. Zhu, Electrochemical study on co-doped ceria-carbonate composite, Journal Power Sources, 2012, 121-127 Impact factor: 4.951
12. Q. Liu, H. Qin, **Rizwan Raza**, L. Fan, B. Zhu, Theoretical and experimental performance analysis of SOFC with oxide ion, proton ion and dual ion conductors electrolytes. RSC Advances, 2012,2, 8036-8040. Impact factor: 2.20
13. L.Fan, B.Zhu, C. Wang, **Rizwan Raza**, H.Qin, X. Wang, Y. Ma, "High performance transition metal oxide composite cathode for low temperature solid oxide fuel cells", Journal of Power Sources, 203, 65–71, (2012). Impact factor: 4.951

14. L.Fan, C.Wangb, O.Osamudiamen, **Rizwan Raza**, M.Singh, B.Zhu, Mixed ion and electron conductive composites for single component fuel cells: I. Effects of composition and pellet thickness, *Journal of Power sources*, 217, 164-169 (2012). Impact factor: 4.951
15. G. Abbas, **Rizwan Raza**, M.A. Chaudhry, M.Singh, Q. Liu, H. Qin and B.Zhu, "Study of CuNiZnGdCe-composite anode for low temperature SOFC" *Nanoscience and Nanotechnology Letters* 4 (4), 389-393 (2012).
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17. Noorhana Yahya, Muhammad Kashif, Nadeem Nasir, **Majid Niaz Akhtar** and Noorasikin Mohd Yusof, "Cobalt Ferrite Nanoparticles: An Innovative Approach for Enhanced Oil Recovery Application", *Journal of Nano Research*, Vol. 17, 115-126, 2012. (Scopus, Thomson ISI) Impact factor 1.21.
18. Hanita Daud, **Majid Niaz Akhtar**, Noorhana Yahya, Nadeem Nasir, Hasan Soleimani, "Effect of Frequency on Hydrocarbon (HC) Detection Using 3D Finite Integral Modeling", *Defect and Diffusion Forum*, 326-328, 654, 2012. (Impact factor 0.48)
19. Noorhana Yahya, **Majid Niaz Akhtar**, Nadeem Nasir, Muhammad Kashif, Hasnah Mohd Zaid and Afza Shafie, "Guided and Direct Wave Evaluation of Controlled Source Electromagnetic Survey Using Finite Element Method", *Journal of Electromagnetic Analysis and Applications*, Vol. 4, No. 135-146, 2012. (Impact factor 1.15)
20. Noorhana Yahya, Nadeem Nasir, **Majid Niaz Akhtar**, Muhammad Kashif, Tanvir Hussain, Hasnah Mohd Zaid, Afza Shafie, "Electromagnetic Response Studies of the Antenna for Deep Water Deep Target CSEM Environments", *Journal of Electromagnetic Analysis and Application* ,Vol. 4, N0. 12, 513-522, 2012. (Impact factor 1.15)
21. **Muhammad Asif**, Umar Bashir (2012), "Steady Magnetohydrodynamic Equations for Quantum Plasmas ", *Journal of Modern Physics*, pp: 1856-1857, Vol: 3, Issue: 12, Standard: 2153-1196
22. **M. Asif** (2012), "Study of magnetic surfaces by the analytical solution of the Grad-Shafranov equation for HT-7 TOKAMAK ", *Magnetohydrodynamics* , pp: 485-492, Vol: 48, Issue: 3, Standard: 0024-998X
23. **M. Asif** (2012), "Study of Plasma Position by the Analytical solution of Grad-Shafranov Equation for HT-7 Tokamak", *Modern Physics Letters B*, pp: 1250117, Vol: 26, Issue: 18, Standard: 0217-9849.
24. **Aamir Razaq**, Leif Nyholm, Martin Sjödin, Maria Strømme, Albert Mihranyan, Paper-based energy storage devices comprising carbon fibre-reinforced polypyrrole-Cladophora nanocellulose composite electrodes. *Advanced Energy Materials*, 2(2012)445-452 (Selected for back title cover of the journal)
25. Albert Mihranyan, Mehdi Esmaeli, **Aamir Razaq**, David Alexeichik, Tom Lindström. Influence of nanocellulose raw material characteristics on electrochemical and mechanical properties of conductive paper electrodes. *Journal of Materials Science* (2012) 47, 4463-4472
26. Younas, M, Nadeem, **M, Idrees**, M, Akhtar, MJ . Jahn-Teller assisted polaronic hole hopping as a charge transport mechanism in CuO nanograins. *APPLIED PHYSICS LETTERS*, Volume: 100 Issue: 15 Article Number: 152103 DOI: 10.1063/1.3702465 APR 9 2012. IF: 3.844

Book Chapters:

1. Noorhana Yahya, **Majid Niaz Akhtar**, Nadeem Nasir, Hanita Daud and Marneni Narahari, "Forward Modeling of Seabed Logging by Finite Integration (FI) and Finite

Element (FE) Methods”, A. Öchsner et al. (eds.), Design and Analysis of Materials and Engineering Structures, *Advanced Structured Materials*, 32, Book Chapter, Springer, Verlag, Germany, (2012). doi: 10.1007/978.