

List of Journal Publications (indexed by ISI Web of Science)

- 1999 J. M. Evans, M. Hassan, N. J. MacKay and A. J. Mountain: *Local conserved charges in principal chiral models*, Nuclear Physics B561 (1999), 385-412.
- 2000 J. M. Evans, M. Hassan, N. J. MacKay and A. J. Mountain: *Conserved charges and supersymmetry in principal chiral and WZW models*, Nuclear Physics B580 (2000), 605-646
- 2005 U. Saleem and M. Hassan, *Zero-curvature formalism of supersymmetric principal chiral model*, European Physical Journal C38 (2005), 521.
- 2005 M. Siddiq and M. Hassan, *On the linearization of the super sine-Gordon equation*, Europhysics Letters 70 (2005), 149.
- 2005 U. Saleem, M. Hassan and M. Siddiq, *Conserved quantities in noncommutative principal chiral model with Wess-Zumino term*, Journal of Physics A: Mathematical and General: 38 (2005), 9241.
- 2005 U. Saleem, M. Siddiq and M. Hassan, *On noncommutative sinh-Gordon equation*, Chinese Physics Letters 22 (2005), 1076.
- 2005 M. Siddiq and M. Hassan, *From Backlund transformation to linear system of sine-Gordon theory in superspace*, Chinese Physics Letters 22 (2005), 1567.
- 2006 U. Saleem and M. Hassan, *Superfield Lax formalism of supersymmetric sigma model on symmetric spaces*, European Physical Journal C46 (2006) 797-805.
- 2006 M. Siddiq, M. Hassan, U. Saleem, *On Darboux transformation of the supersymmetric sine-Gordon equation*, Journal of Physics A: Mathematical and General: 39 (2006) 7313-7318.
- 2006 U. Saleem, M. Hassan, *Lax pair and Darboux transformation of noncommutative $U(N)$ principal chiral model*, Journal of Physics A: Mathematical and General: 39 (2006) 11683.
- 2007 U. Saleem, M. Hassan and M. Siddiq, *Non-local continuity equations and binary Darboux transformation of non-commutative (anti) self-dual Yang-Mills equations*, Journal of Physics A: Mathematical and Theoretical: 40 No 19 (2007) 5205-5217.
- 2008 M. Siddiq, U. Saleem, M. Hassan, *Darboux transformation and multisoliton solutions of a non-commutative sine-Gordon system*, Modern Physics Letters A 23 115-127 (2008).
- 2008 Bushra Haider and M. Hassan, *On algebraic structures of the supersymmetric principal chiral model*, European Physical Journal C 53, 627-633 (2008).
- 2008 Bushra Haider and M. Hassan, *The $U(N)$ chiral model and exact multisolitons*, Journal of Physics A: Mathematical and Theoretical 41, 255202 (2008).
- 2009 M. Hassan, *Darboux transformation of the generalized coupled dispersionless integrable system*, Journal of Physics A: Mathematical and Theoretical 42, 065203 (2009).
- 2009 Bushra Haider and M. Hassan, *Quasideterminant solutions of an integrable chiral model*, Journal of Physics A: Mathematical and Theoretical 42, 355211 (2009).
- 2010 U. Saleem and M. Hassan, *Quasideterminant solutions of the generalized Heisenberg magnet model*, Journal of Physics A: Mathematical and Theoretical 43 045204 (12pp) (2010).
- 2010 Bushra Haider and M Hassan, *Quasideterminant multisoliton solutions of a supersymmetric chiral field model in two dimensions*, Journal of Physics A: Mathematical and Theoretical 43 035204 (19pp) (2010).
- 2011 U. Saleem and M. Hassan, *Darboux transformation and multi-soliton solutions of principal chiral and WZW models*, Modern Physics Letters A 26 73-85 (2011).

- 2011 Bushra Haider, M. Hassan, U. Saleem *Binary Darboux transformation and quasideterminant solutions of the chiral field*, Journal of Nonlinear Mathematical Physics, 18, 2, 299 (2011)
- 2011 Bushra Haider, M. Hassan, *Binary Darboux transformation of supersymmetric chiral field model*, Journal of Nonlinear Mathematical Physics, 18, 4, 557-581 (2011)
- 2012 Bushra Haider, M. Hassan, *Quasigrammian solutions of the coupled dispersionless integrable system*, Symmetry, Integrability, Geometry: Methods and Applications (SIGMA) 8, 084, 2012
- 2012 U. Saleem, M. Hassan, *Darboux transformation and multisoliton solutions of the short pulse equation*, Journal of Physical Society of Japan, 81, 094008, 2012
- 2013 N. Mushahid, M. Hassan, U. Saleem, *Conserved quantities in the generalized Heisenberg magnet (GHM) model*, Modern Physics Letters A Vol. 28, No. 7 (2013) 1350020
- 2013 N. Mushahid, M. Hassan, *On the Zakharov-Shabat dressing method for the generalized coupled dispersionless integrable system*, Modern Physics Letters A Vol. 28, No. 20 (2013) 1350088 (20 pages)
- 2014 N. Mushahid, M. Hassan, *A noncommutative coupled dispersionless system, Darboux transformation and explicit solutions*, Modern Physics Letters A Vol. 29, No. 39 (2014) 1450206 (20 pages)
- 2015 U. Saleem, M. Hassan, *Quasideterminant solutions of nonlinear Schrodinger equations based on Hermitian symmetric spaces*, Communications in Nonlinear Science and Numerical Simulation Vol. 23, No. 1-3 (2015) 343-365
- 2017 U. Saleem, M. Hassan, *Darboux transformation and exact multisolitons of CP^N nonlinear sigma model*, Journal of Mathematical Analysis and Applications Vol. 447, No. 2 (2017) 1080-1101
- 2017 Arifa Mirza, M. Hassan, *Bilinearization and soliton solutions of $N=1$ supersymmetric coupled dispersionless integrable system*, Journal of Nonlinear Mathematical Physics Vol.24, No. 1 (2017) 107-115.
- 2017 H. W. A. Riaz and M. Hassan, *Darboux transformation of a semi-discrete coupled dispersionless integrable system*, Communications in Nonlinear Science and Numerical Simulation, Vol.48, (2017) 387-397