

List of Publications

1. Raza, N., Sial, S. and Siddiqi, S. Sobolev gradient approach for the time evolution related to energy minimization related to Ginzberg-Landau functionals, Journal of Computational Physics., 228, 2566-2571, (2009), **ISI, Impact factor: 2.384**
2. Raza, N., Sial, S., Siddiqi, S. and Lookman, T. Energy minimization related to Nonlinear Schrodinger equation, Journal of Computational Physics., 228, 2572-2577, (2009), **ISI, Impact factor: 2.384**
3. Raza, N., Sial, S. and Siddiqi, S. Simulation study of Propagation of pulses in Optical fiber Communication Systems using Sobolev gradient and Split-Step Fourier Methods., International journal of Computational methods., 6, 1-12, (2009), **ISI, Impact factor: 0.89**
4. Raza, N., Sial, S. and Siddiqi, S. Approximating time evolution related Ginzberg-Landau functionals via Sobolev gradient methods in a finite-element setting, Journal of Computational Physics., 229, 1621-1625, (2010), **ISI, Impact factor: 2.384**
5. Raza, N., Sial S. and Neuberger, J.W. Numerical solution of Burgers' equation by the Sobolev gradient method, Applied Mathematics and Computation, 218, 4017-4024, (2011), **ISI, Impact factor: 1.124**
6. Raza, N., Sial, S. and Neuberger, J.W. Numerical solutions of integro-differential equations using Sobolev gradient method, International journal of Computational methods., 9, DOI: 10.1142/S0219876212500466, (2012), **ISI, Impact factor: 0.89**
7. Raza, N., Sial, S., and Butt, A.R. Numerical solutions of singularly perturbed reaction diffusion equation with Sobolev gradients, Journal of function spaces and Applications, ID 542897, 6 pages, (2013), **ISI, Impact factor: 0.5**
8. Raza, N., Sial S., and Butt, A.R. Numerical approximation of time evolution related to Ginzburg-Landau functionals using weighted Sobolev gradients, Computer and Mathematics with Applications, 67, 210-216, (2014), **ISI, Impact factor: 1.996**
9. Raza, N., Butt, A.R., Javaid, A, Approximate solution of nonlinear Klein-Gordon equation using singularly Sobolev gradients, Journal of function spaces, ID 1391594, 7 pages, (2016), **ISI, Impact factor: 0.56**
10. Raza, N., Sial, S. Sobolev gradient approach for Huxley & Fisher models for Gene Propagation, Applied Mathematics, 4, 1212-1219, (2013)

11. N. Raza, Application of Sobolev Gradient method to Solve Klein Gordon Equation, Punjab University Journal of Mathematics, **48**, 135-145 (2016).
12. N. Raza, A. Javid, S. Sial, M. D. Ahmad, Polynomial Solution of Singular Differential Equations Using Weighted Sobolev Gradients (Submitted)
13. N. Raza, M. Abdullah, I. Shahid, S. Sial, Semi Analytical Technique for Axial-Couette Flow of a Second Grade Fluid with Fractional Derivatives (Submitted)
14. S. Sial, N. Raza, A. Khan, J. Ahmad, Notes on Numerical Gradients for Control Theory Problems (Submitted)