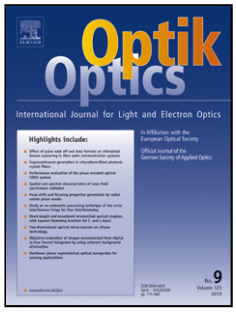


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# Jacobian elliptic periodic traveling wave solutions for Biswas-Milovic equation

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**Abstract**

The Biswas-Milovic equation can also be treated as the generalized version of usual nonlinear Schrodingers equation. With the help of $F$-expansion method, the explicit Jacobian elliptic periodic traveling wave solutions for Biswas-Milovic equations are constructed. Here we will discuss the two nonlinear media, those are Kerr Law and the Power Law.

**Key words**: Biswas-Milovic equation, Optical solitons, $F$-expansion Method

## 1 Introduction

Optical solitons is an emerging field and lots of research is being done on it [1-27]. The nonlinear Schrodingers equation (NLSE) is one of the popular model of this era. There are other many models that contributed in this field like Sasa-Satsuma equation, Schrodinger-Hirota equation, Manakov Models etc. Biswas and Milovic also contributed their work and gave a very effective model, which can also be treated as the generalized version of NLSE. In this paper we will solve the Biswas-Milovic equation (BMS) ([7], [11]), by applying $F$-expansion method ([5], [8]) on it. The Biswas-Milovic equation for soliton propagation in the optical fibers is given as