

## عنوان مقاله:

Synthesis of Water Soluble Oligomer of Pyrrole for Tissue Engineering Applications

## محل انتشار:

سومین کنفرانس ملی و اولین کنفرانس بین المللی پژوهش های کاربردی در علوم شیمی و مهندسی شیمی و سومین کنفرانس ملی و اولین کنفرانس بین المللی پژوهش های کاربردی در زیست شناسی (سال: 1395)

تعداد صفحات اصل مقاله: 9

## نویسندگان:

Mana hajimohammadhoseinkashi - *Department of Biomedical Engineering, Amirkabir University of Technology*

Elaheh Kowsari - *Associate Prof, Department of Chemistry, Amirkabir University of Technology*

Fathollah Moztarzadeh - *Professor, Department of Biomedical Engineering, Amirkabir University of Technology*

Hamid Mobasheri - *Associate prof, Institute of Biochemistry and Biophysics (IBB), University of Tehran*

## خلاصه مقاله:

Conductive polymers have been widely used in biomedical applications such as biosensors and tissue engineering but their non-degradability still poses a limitation. Therefore, great attention has been directed toward the degradable and electrically conductive polymers. There are different strategies for the synthesis of degradable and conducting polymers. In the present work an attempt has been made to synthesize a water soluble oligomer of pyrrole using APS (Ammonium Peroxy Disulfate) as dopant and imidazolium-based ionic liquids as catalyst. Synthesized oligomer was characterized by FTIR, XRD, SEM, and two probe KEITHEY. The analysis of the oligomer revealed high electro-conductivity in aqueous media. We believe the synthesized oligomer presented here possesses the desired potentials to be used for tissue engineering

## کلمات کلیدی:

conductive polymers, water soluble and electrically conductive oligomer, oligomer of pyrrole, imidazolium-based, ionic liquids, stabilizer, APS, tissue engineering

## لینک ثابت مقاله در پایگاه سیویلیکا:

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