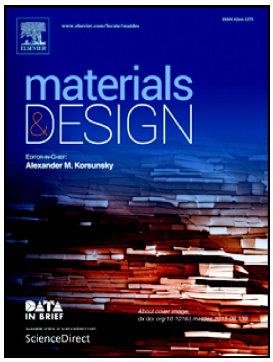
Accepted Manuscript



Hierarchically porous polymer derived ceramics: A promising platform for multidrug delivery systems

Cekdar Vakifahmetoglu, Damla Zeydanli, Veli Cengiz Ozalp, Barış Ata Borsa, Gian Domenico Soraru

PII: S0264-1275(17)31078-X
DOI: doi:10.1016/j.matdes.2017.11.047
Reference: JMADE 3524

To appear in: *Materials & Design*

Received date: 23 August 2017
Revised date: 20 November 2017
Accepted date: 21 November 2017

Please cite this article as: Cekdar Vakifahmetoglu, Damla Zeydanli, Veli Cengiz Ozalp, Barış Ata Borsa, Gian Domenico Soraru , Hierarchically porous polymer derived ceramics: A promising platform for multidrug delivery systems. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Jmade(2017), doi:10.1016/j.matdes.2017.11.047

Hierarchically porous polymer derived ceramics: a promising platform for multidrug delivery systems

Cekdar Vakifahmetoglu[1,#], Damla Zeydanli[2], Veli Cengiz Ozalp[3], Barış Ata Borsa[4], Gian Domenico Soraru[5]

[1]Department of Materials Science and Engineering, Izmir Institute of Technology, 35430, Urla, Izmir, Turkey.

[2]Department of Chemistry, Istanbul Technical University, 34469, Istanbul, Turkey

[3]Department of Bioengineering, Konya Food & Agriculture University, 42080, Konya, Turkey

[4]Department of Medical Microbiology, Faculty of Medicine, Yeditepe University, 34755, Istanbul, Turkey

[5]Department of Industrial Engineering, University of Trento, Via Sommarive 9, 38123 Trento, Italy

Abstract

Mesoporous silicon oxycarbide (SiOC) components were formed with the use of "molecular spacer" (a sacrificial vinyl-terminated linear siloxane which while decomposing during pyrolysis generates pores with size proportional to the molecular weight), followed by a post-pyrolysis

[#] Corresponding author: Ph: +90 232 7507619 ; fax: +90 232 7507603
E-mail addresses: cekdarvakifahmetoglu@iyte.edu.tr or cvahmetoglu@gmail.com (C. Vakifahmetoglu),