

جوهرهای ضد جعل پلیمری برای رمزگذاری و تشخیص اسناد امنیتی

Anticounterfeiting polymer inks for encryption and authentication of security documents

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Counterfeiting of security and confidential documents, such as banknotes, passports, national cards, certificates, and valuable products, have significantly been increased, which is a major challenge for governments, companies, and customers. Development of anticounterfeiting and authentication technologies with multi-level securities is a powerful solution to overcome this challenge. Polymeric anticounterfeiting inks have recently received a great attention because of their high stability for printing on confidential documents. In addition, the printing technologies including had-writing, stamping, inkjet printing, screen printing, and also anticounterfeiting labels are discussed for introduction of the most efficient methods for application of different anticounterfeiting inks.



Hossein Roghani-Mamaqani received his PhD degrees in polymer engineering at Amirkabir University of Technology. He was selected as recognized PhD Student by National Elite Foundation in 2011-2013 and also Iran's recognized PhD student by the ministry of science in 2013. He joined Sahand University of Technology (SUT, Iran) as an assistant professor in 2013. He was nominated as the young recognized assistant professor by National Elite Foundation in 2013. Currently, he is an associate professor of polymer engineering at SUT. He has been selected as the top 2 percent scientists announced by Stanford University in 2020 and also recognized researcher in East Azarbaijan Province in 2020.