عنوان فارسی مقاله:
مطالعه ویژگی‌های فتوکاتالیستی دی اکسید تیتانیوم نانوبلورین

عنوان انگلیسی مقاله:
Study on Photocatalysis Properties of Nanocrystalline Titanium Dioxide

توجه!
این فایل تنها قسمتی از ترجمه می‌باشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک فرمایید.
4 Conclusions
Nano-TiO₂ powders with pure anatase structure were prepared by the method of precipitation-solutiongelation, using H₂TiO₃, hydrogen peroxide and ammonia as reactants. Active red X-3B dye solution was selected as a model pollutant for the photocatalysis degradation experiments. The effects of grain sizes, dosage and structure of nano-TiO₂ on its photocatalysis properties were studied. The results show that the photoactivity of nano-TiO₂ is enhanced with the grain sizes reducing and dosages increasing of nano-TiO₂. However, excess increase in nano-TiO₂ dosage is unfavorable for the enhancement of the photoactivity. Anatase nano-TiO₂ exhibited a higher photoactivity than ruffle TiO₂. The dye solution hardly degraded without nano-TiO₂ powders being added into it or under sunlight irradiation.