

Title (12)	:	Effect of microwave power on ZnO nanoparticles: Enhance the catalytic activity toward phenol degradation
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UniKL Author	:	Norzahir Sapawe
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Abstract	:	Successful electrochemical method-based syntheses and modifications of ZnO nanoparticle catalysts with microwave assistance led to notable improvements in pore size, mechanical strength, and chemical stability. In this work, phenol was nearly completely degraded by a 300 W ZnO catalyst in under 60 minutes of reaction time, compared to a control experiment using commercial ZnO, which produced only 70%, and also to photolysis, which only degraded phenol by less than 2%. As a result, the catalyst may provide new technologies for application in water treatment procedures.