

## Abstract

The uncatalyzed reaction of hydrogen peroxide with (*E*)-3-[3-(2-hydroxyaryl)-3-oxoprop-1-en-1-yl]chromones resulted in a regioselective epoxidation of the chromone intracyclic C(2)=C(3) double bond to afford unique isomeric (*E*)-7a-[3-(2-hydroxyphenyl)-3-oxoprop-1-en-1-yl]-1a*H*-oxireno[2,3-*b*]chromen-7(7a*H*)-ones in high yields. 2D NMR and single-crystal X-ray diffraction were used to elucidate the structures of the chromanone epoxides. Density functional theoretical studies demonstrated a high electrophilicity of the starting chromones.