

补充数据

八角莲中两对新的双黄酮对应异构体

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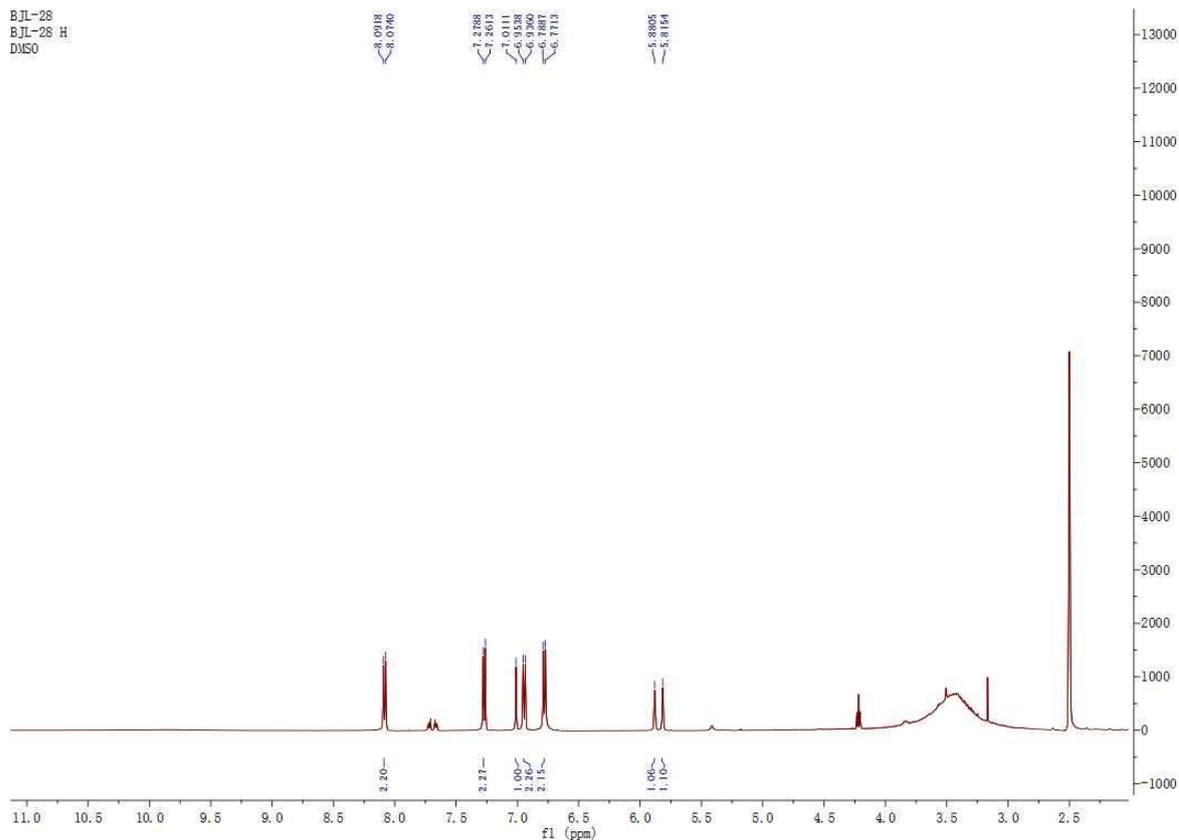


图1 化合物1的¹H NMR图谱 (500 MHz, DMSO-*d*₆)

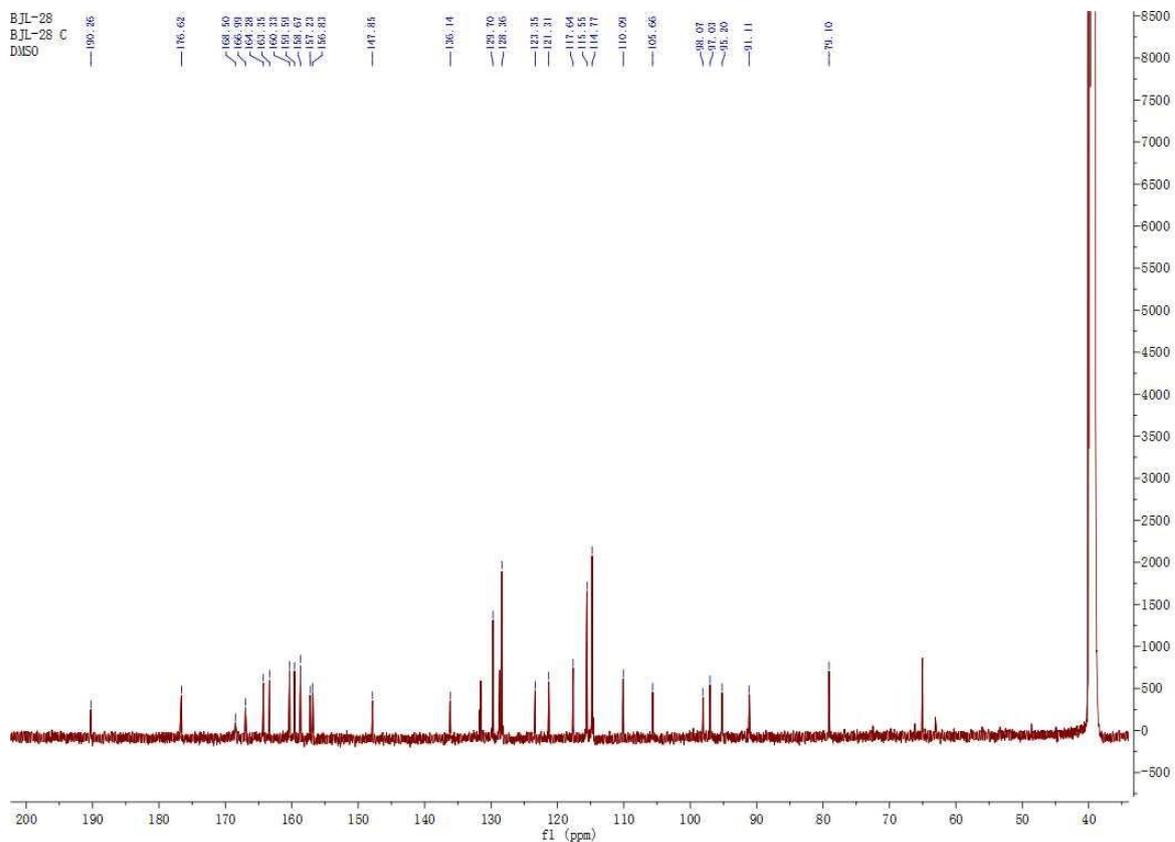


图2 化合物1的¹³C NMR图谱 (125 MHz, DMSO-*d*₆)

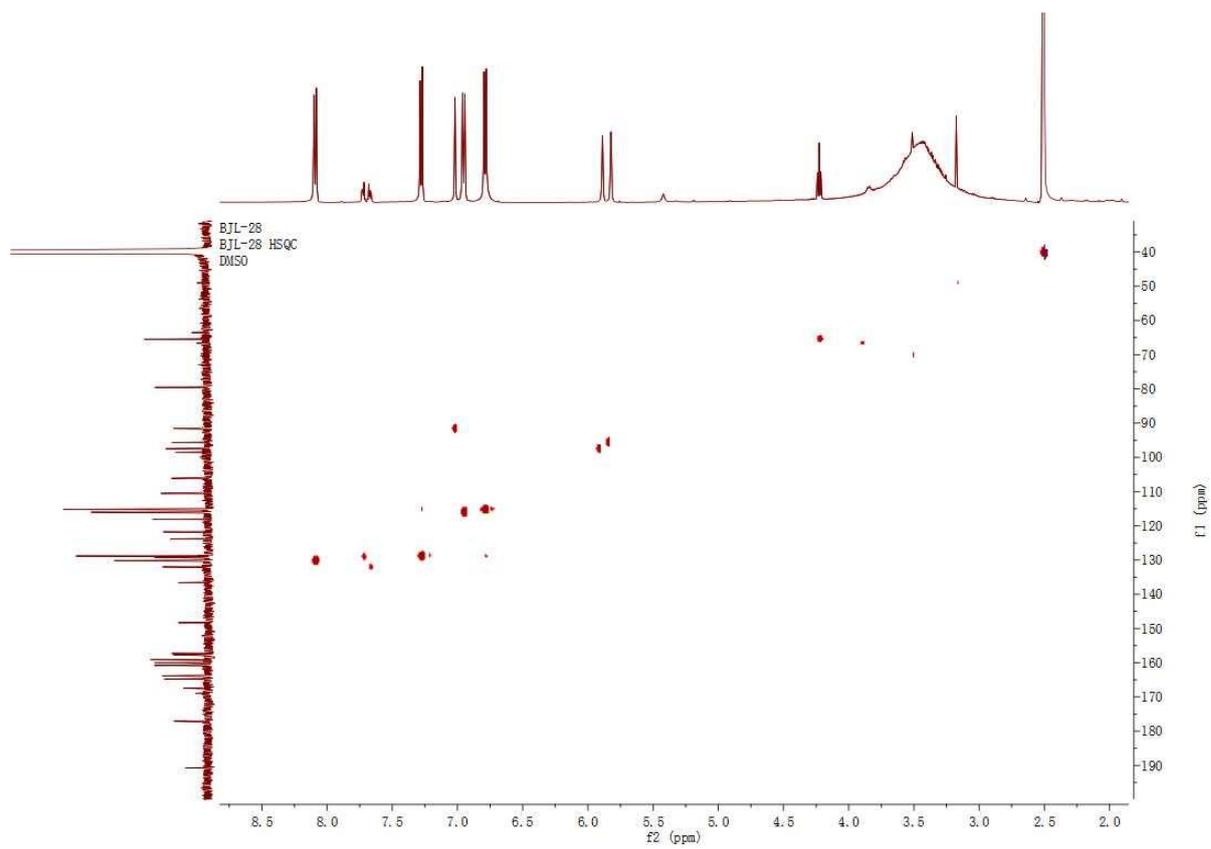


图3 化合物1的HSQC图谱

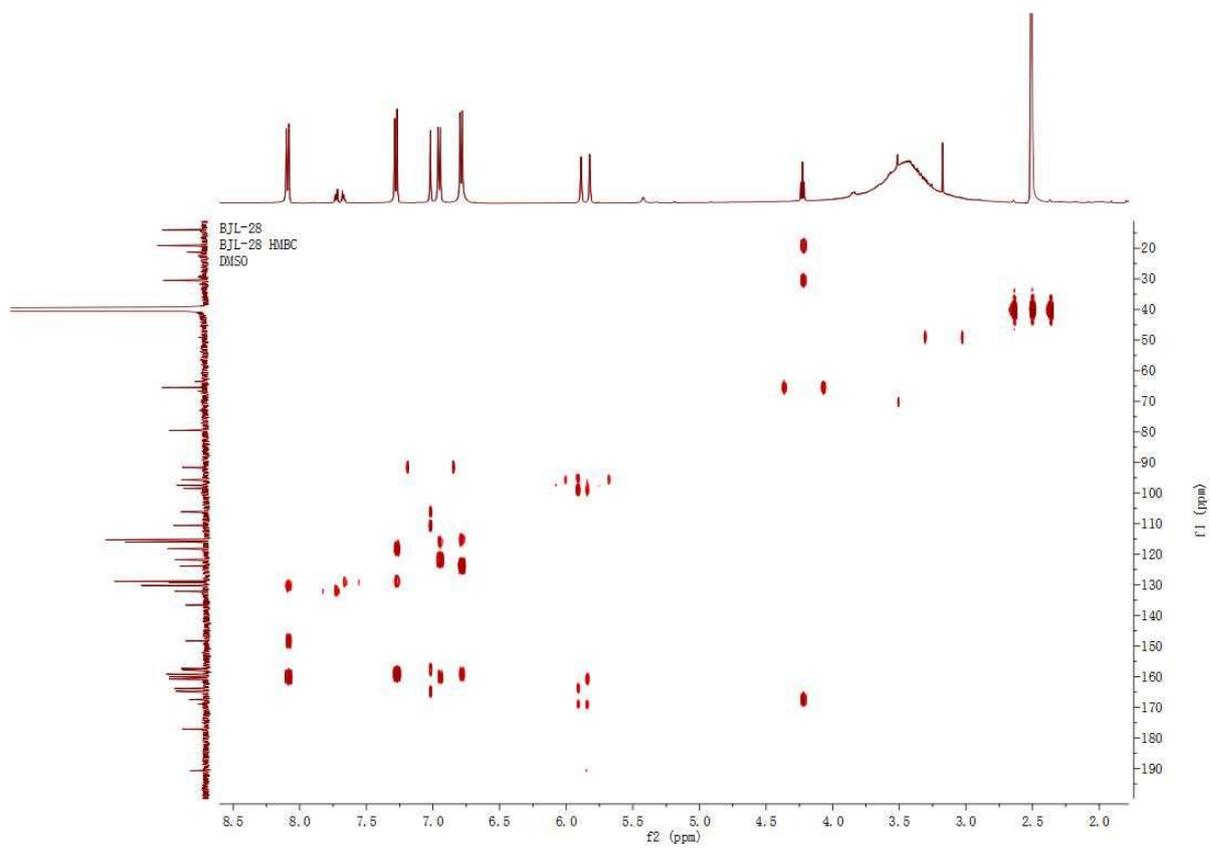


图4 化合物1的HMBC图谱

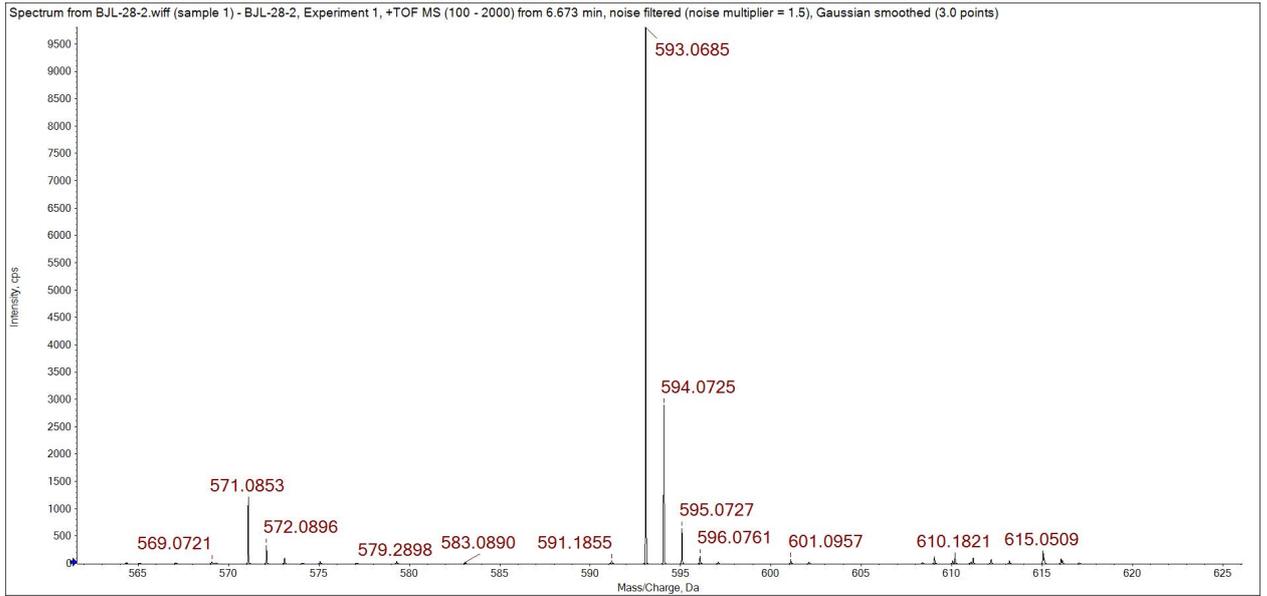


图5 化合物1的HR-ESI-MS图谱

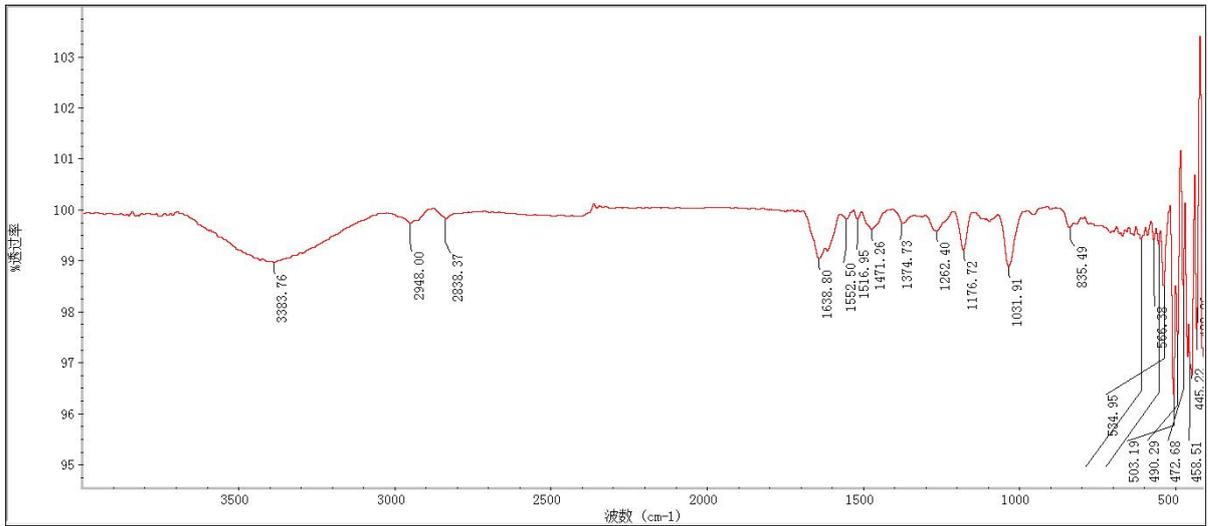


图6 化合物1的IR图谱

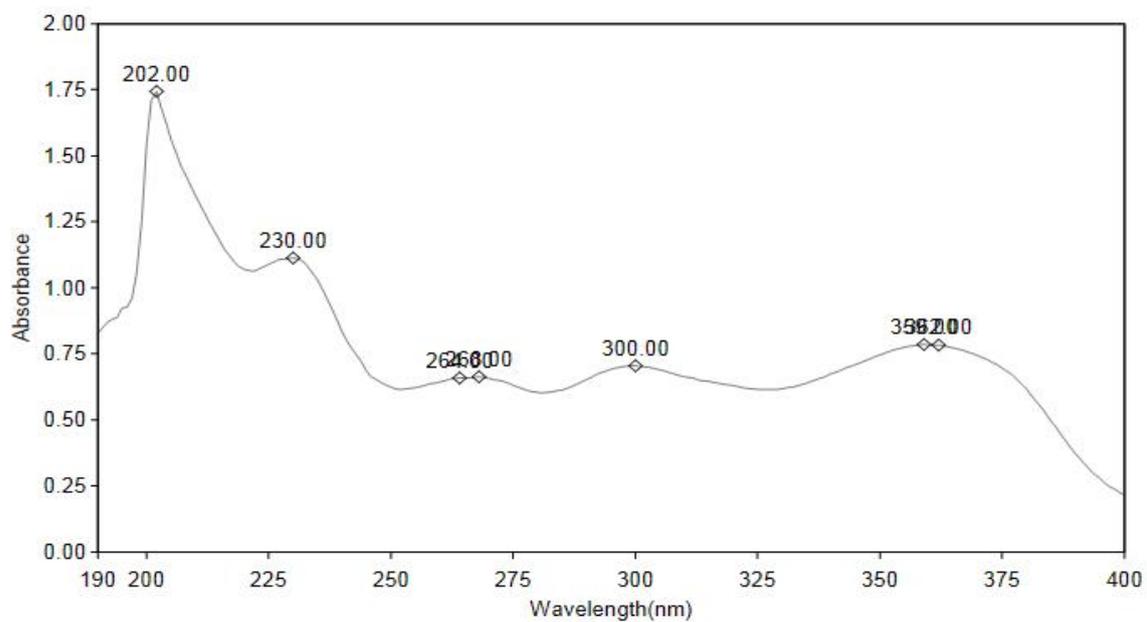


图7 化合物1的UV图谱

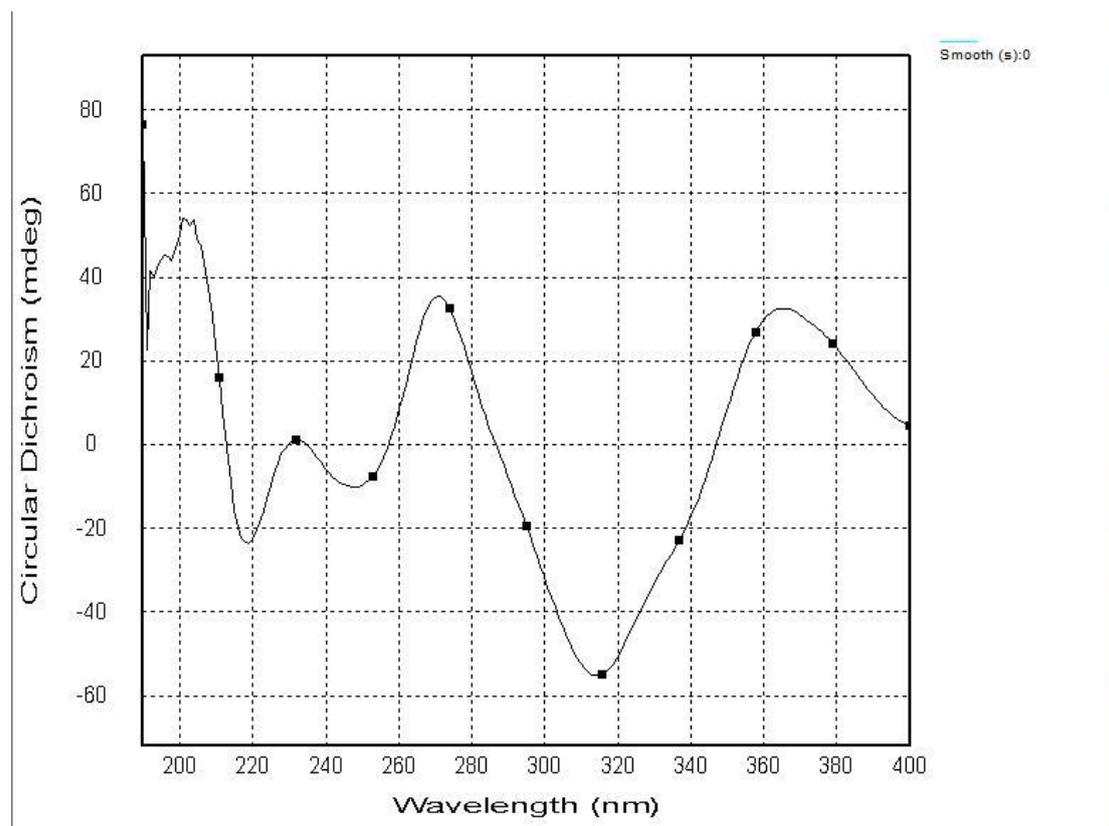


图8 化合物1a的ECD图谱

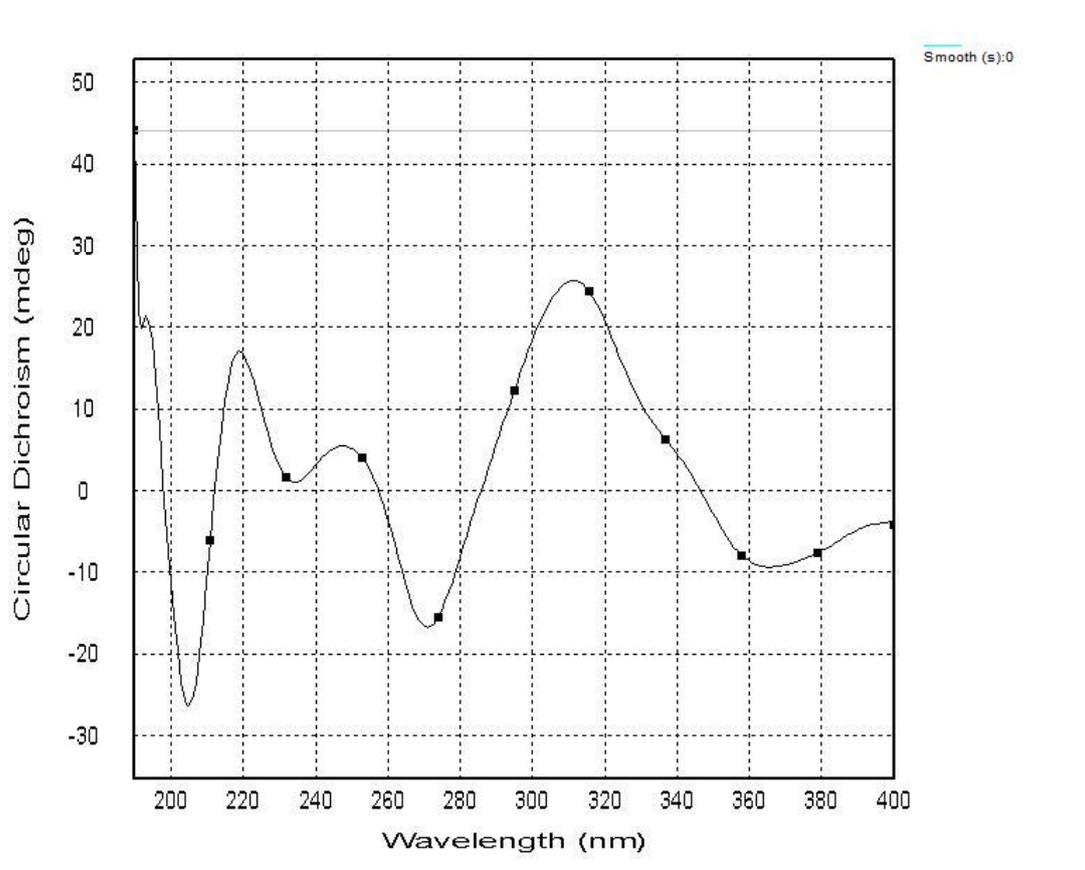


图9 化合物1b的ECD图谱

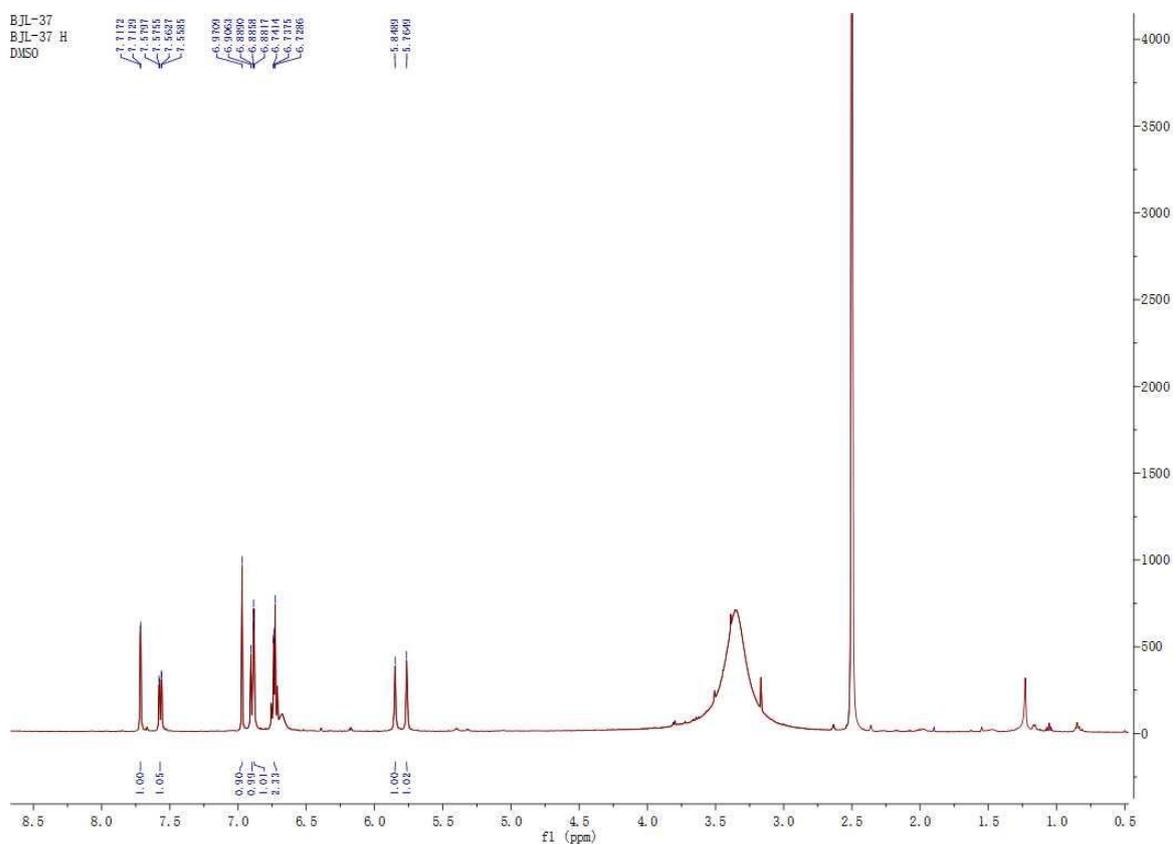


图10 化合物2的¹H NMR图谱 (500 MHz, DMSO-*d*₆)

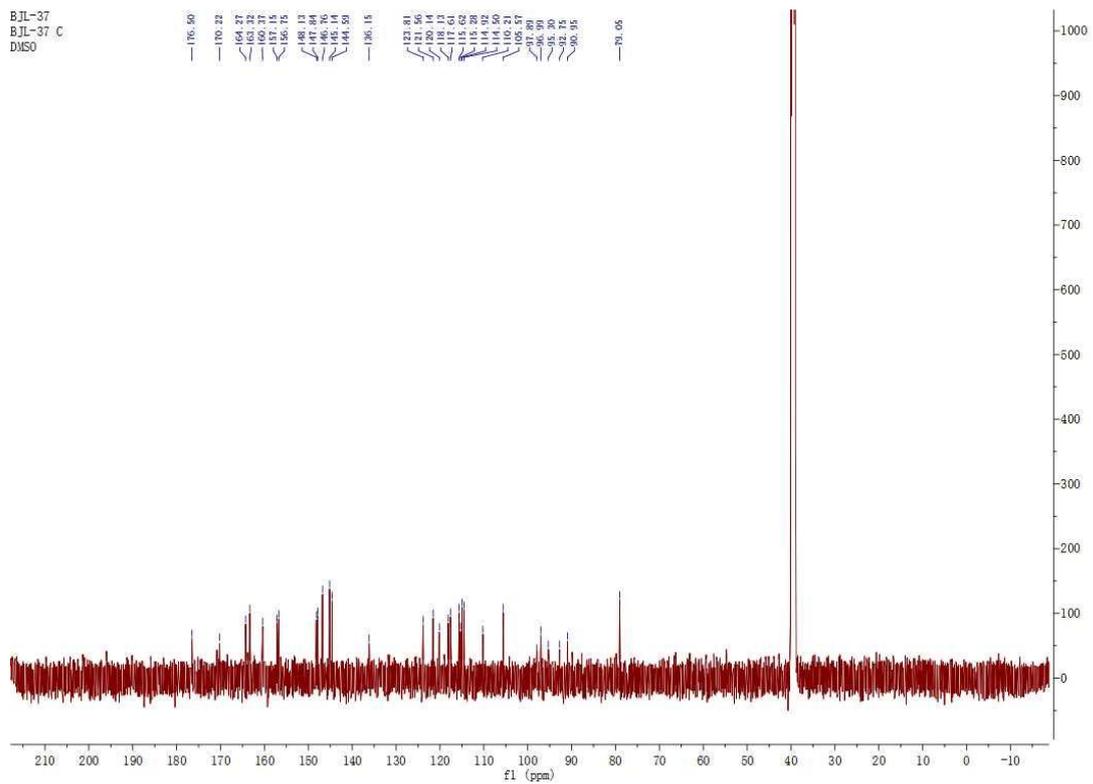


图11 化合物2的¹³C NMR图谱 (125 MHz, DMSO-*d*₆)

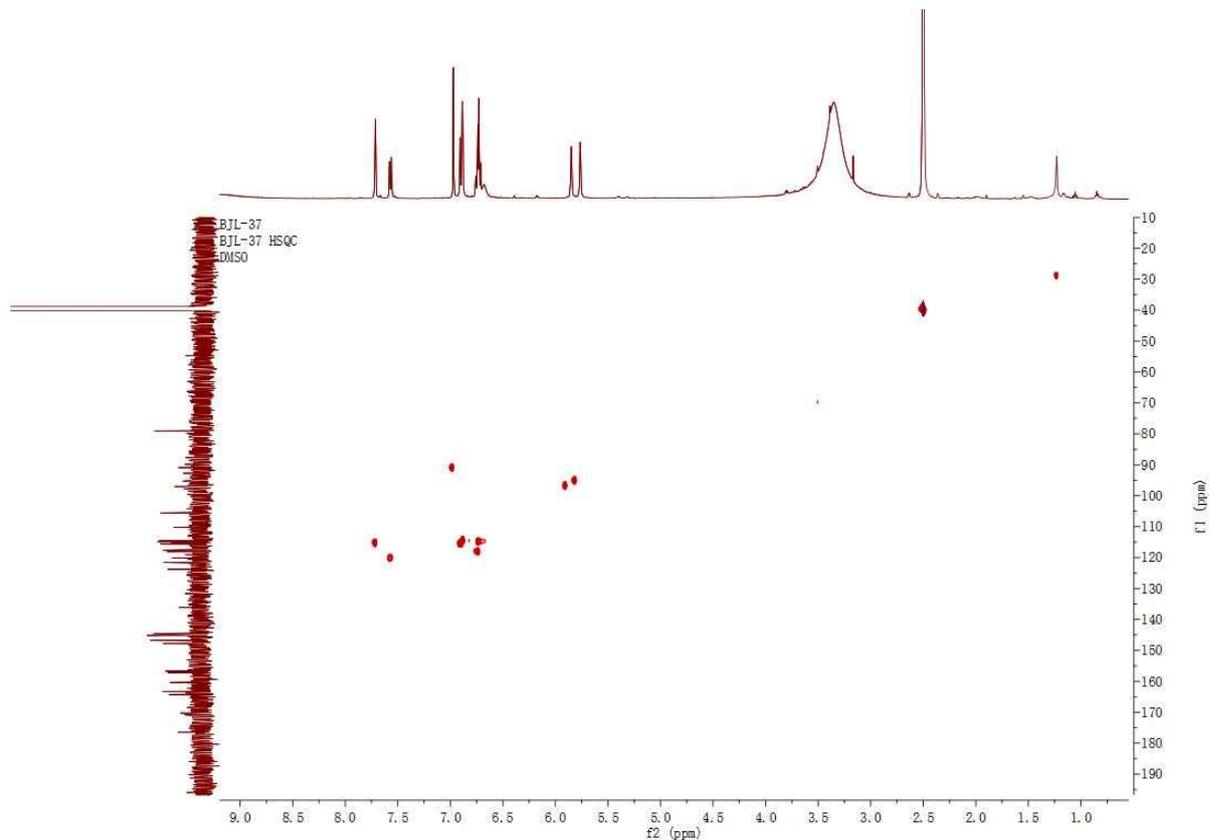


图12 化合物2的HSQC图谱

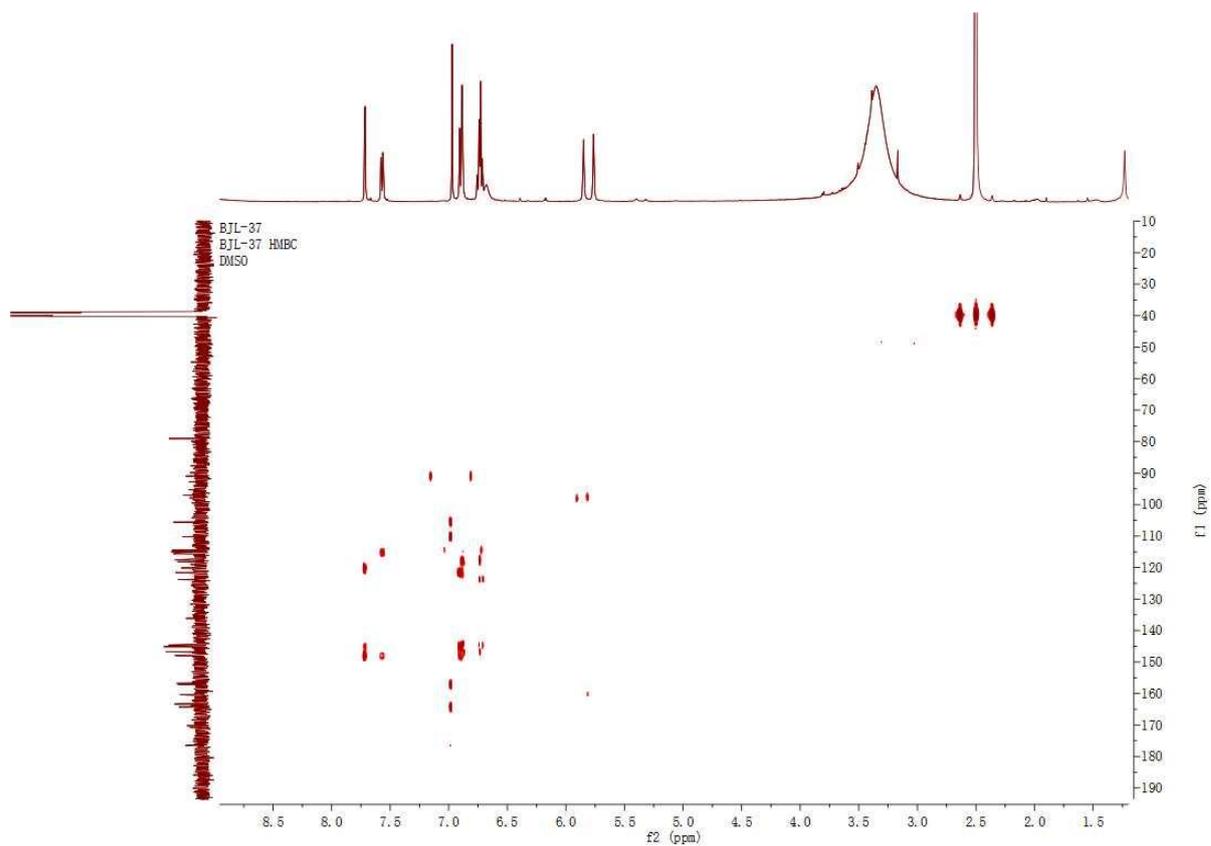


图13 化合物2的HMBC图谱

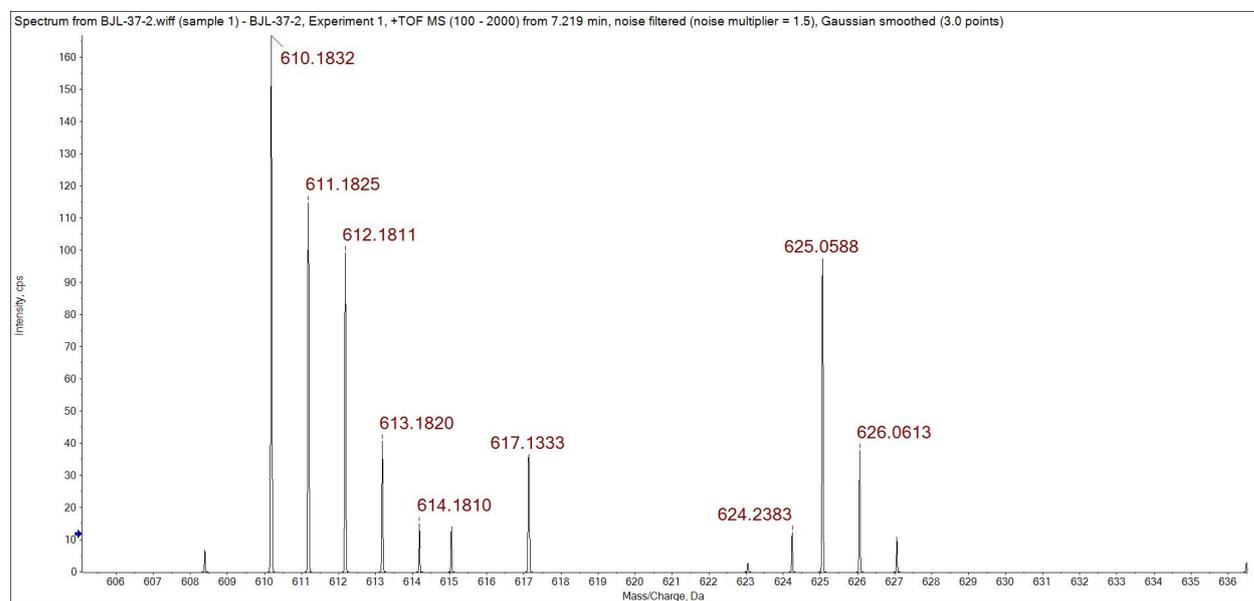


图14 化合物2的HR-ESI-MS图谱

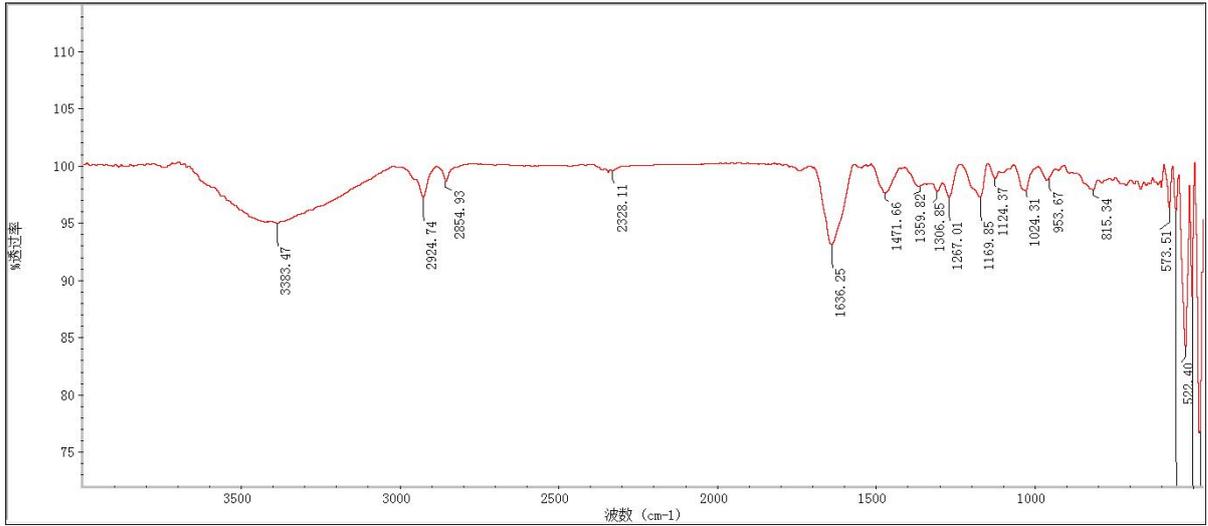


图15 化合物2的IR图谱

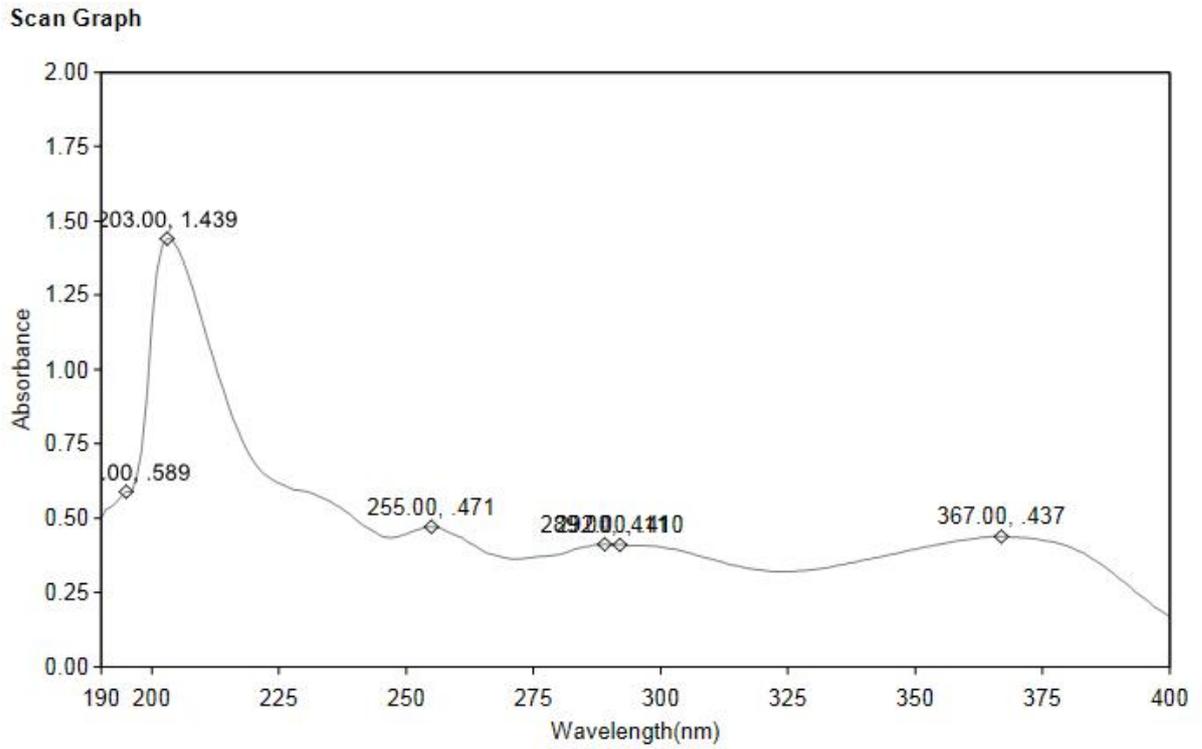


图16 化合物2的UV图谱

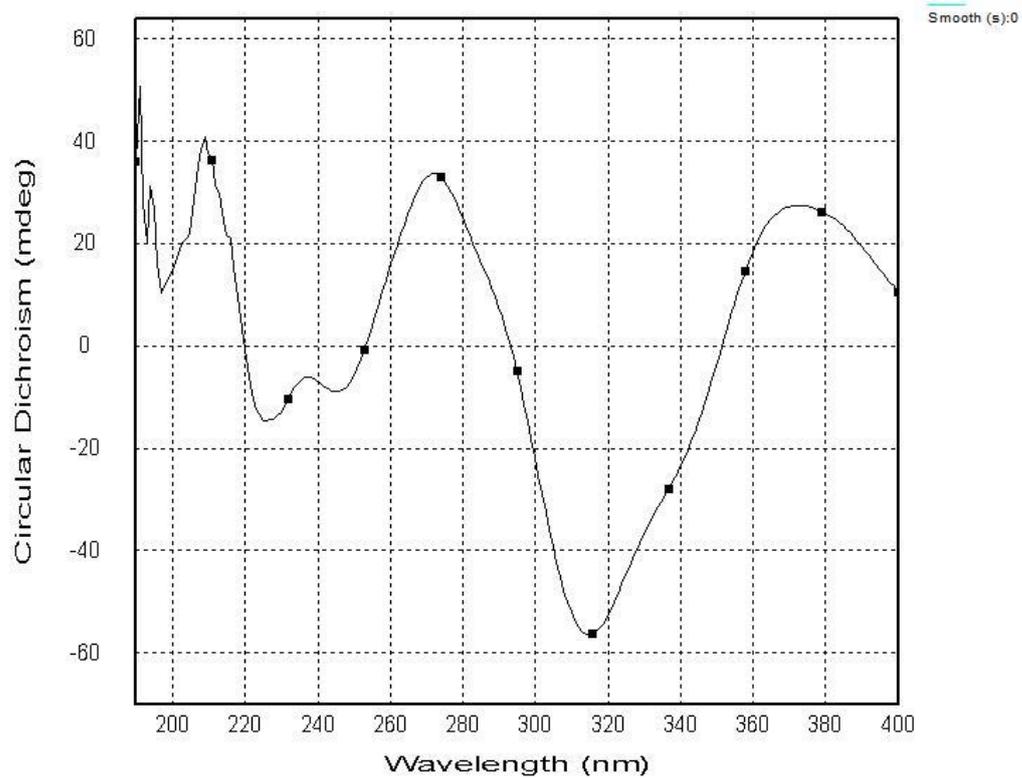


图17 化合物2a的ECD图谱

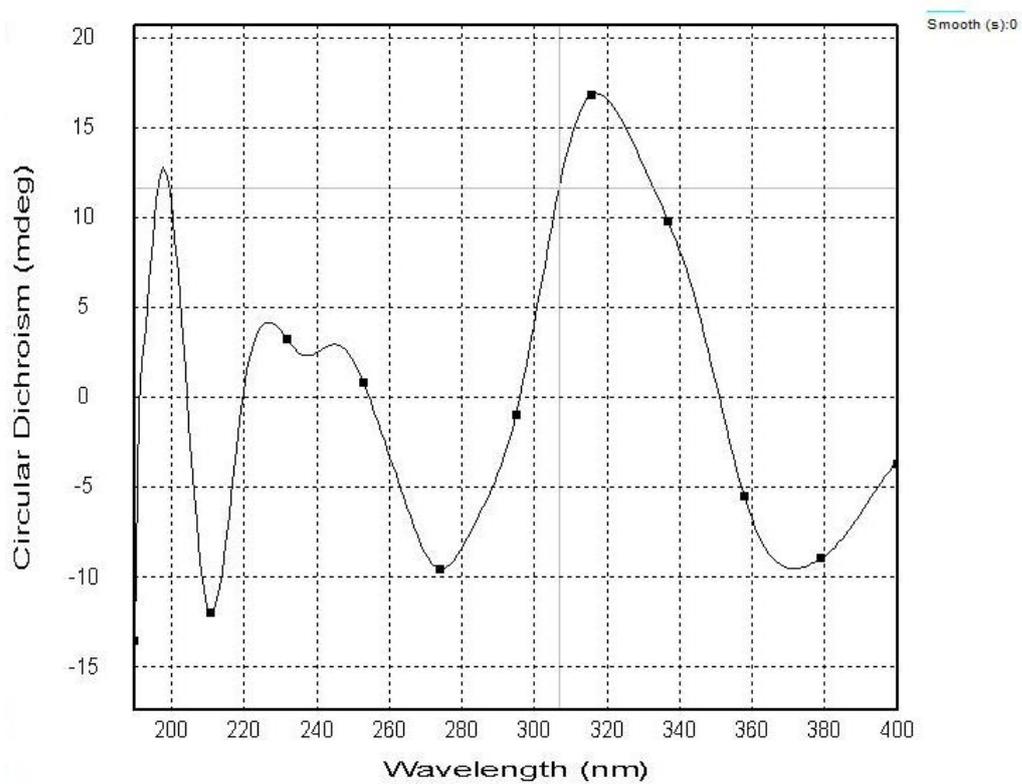
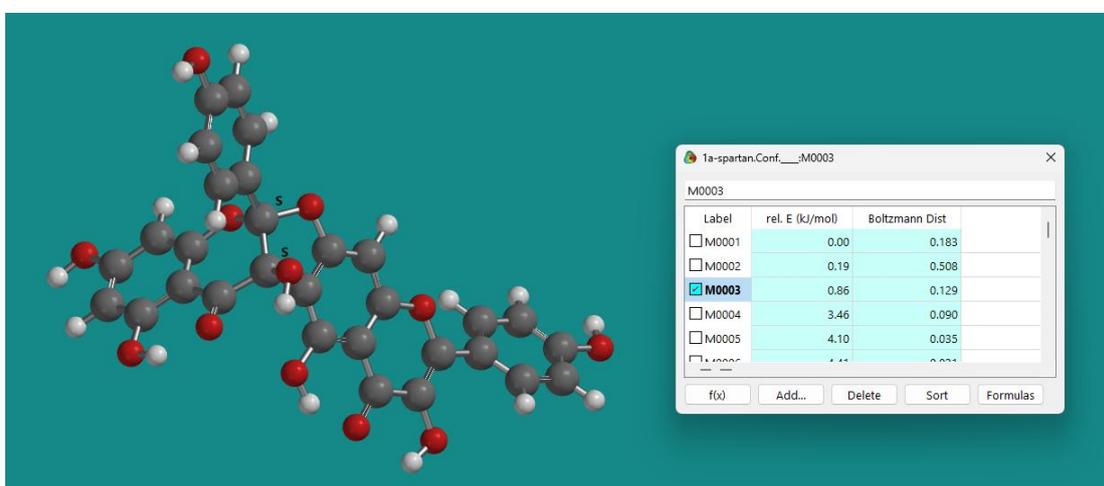
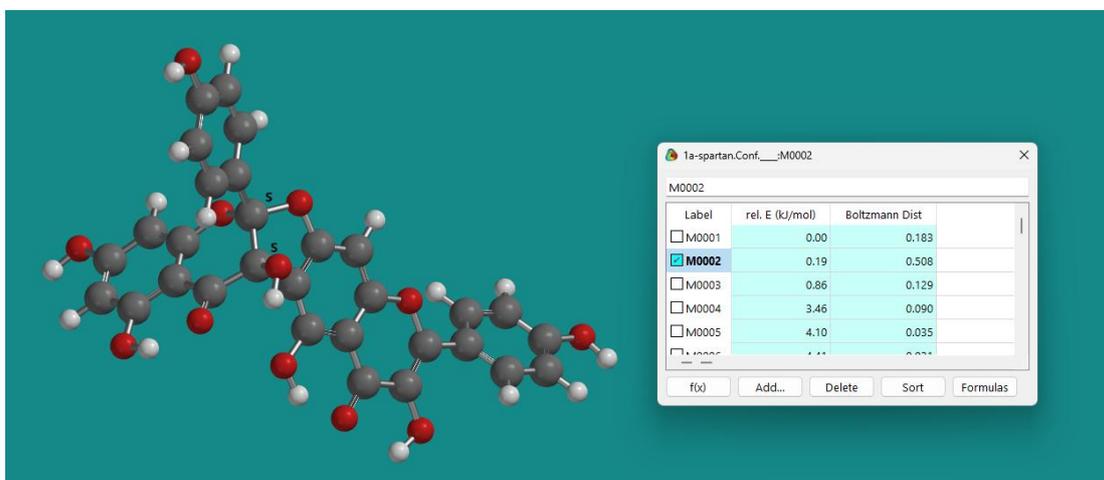
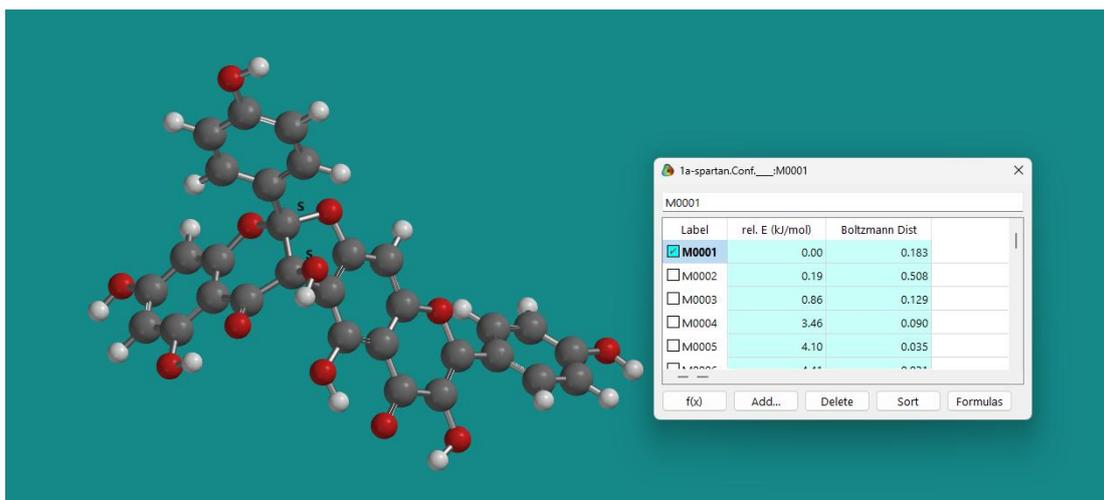
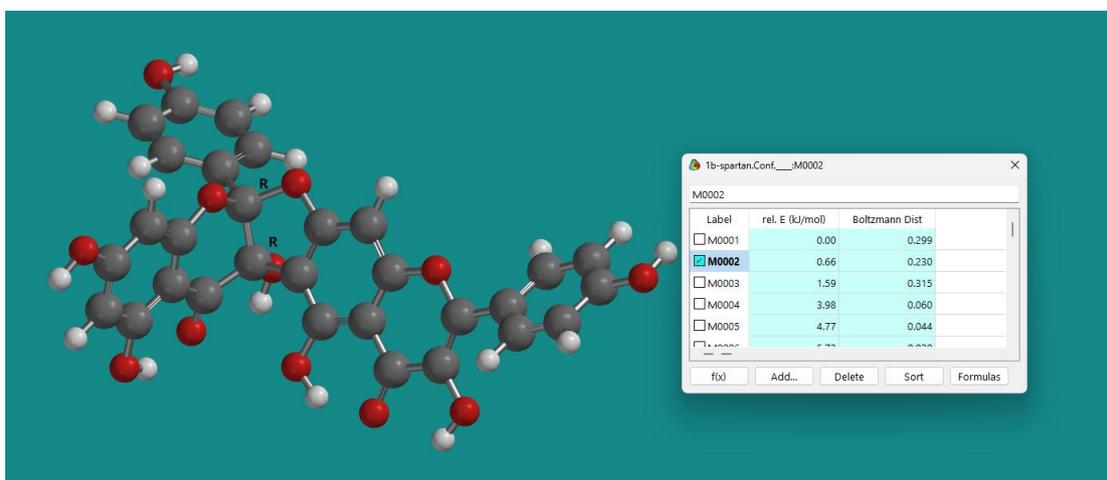
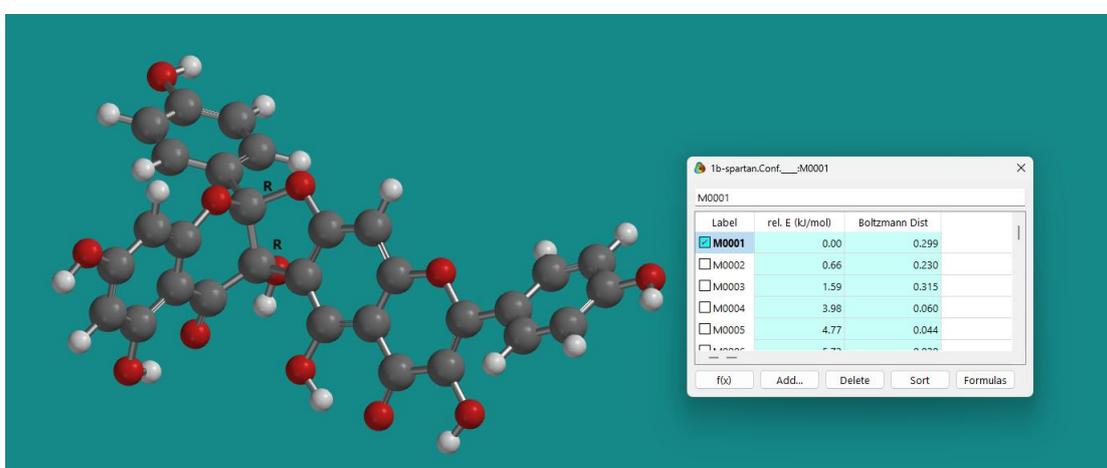
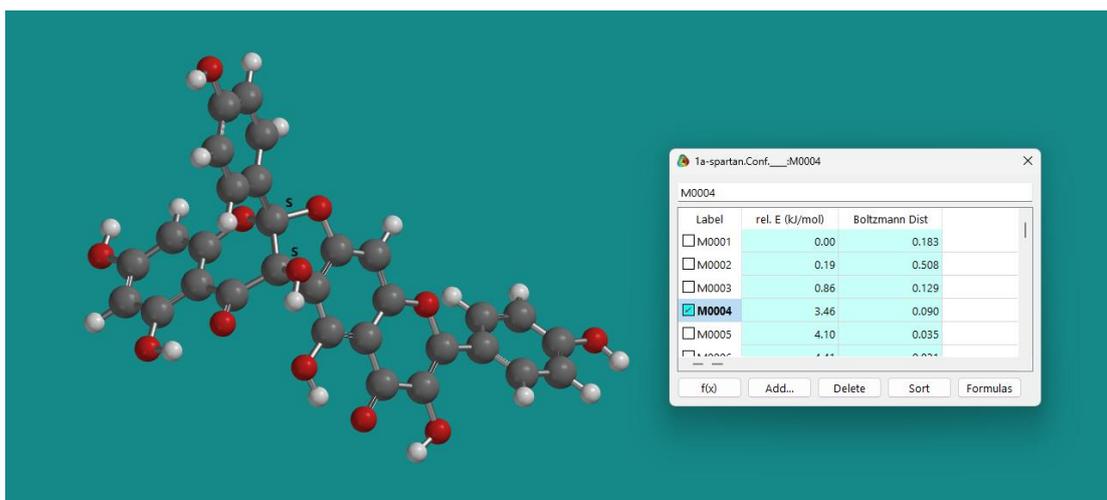
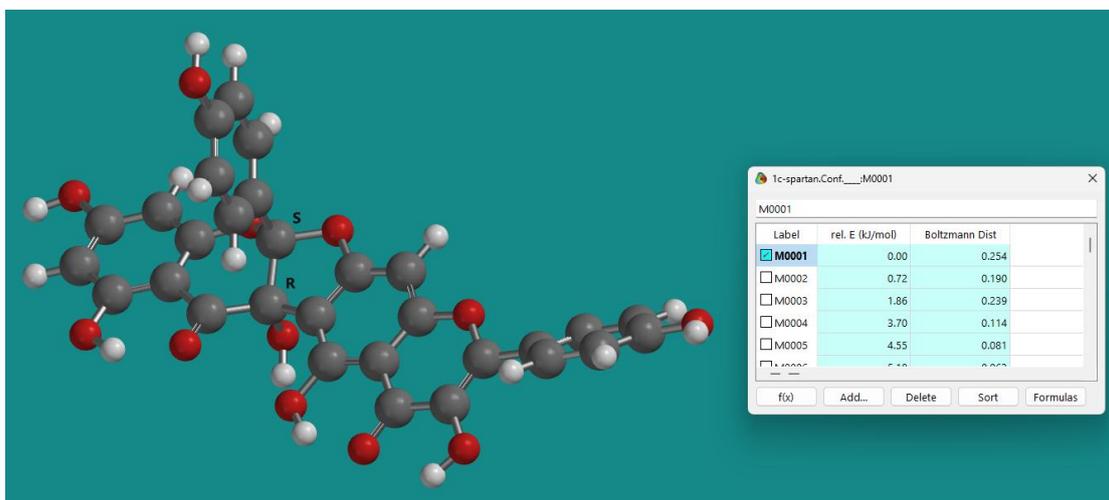
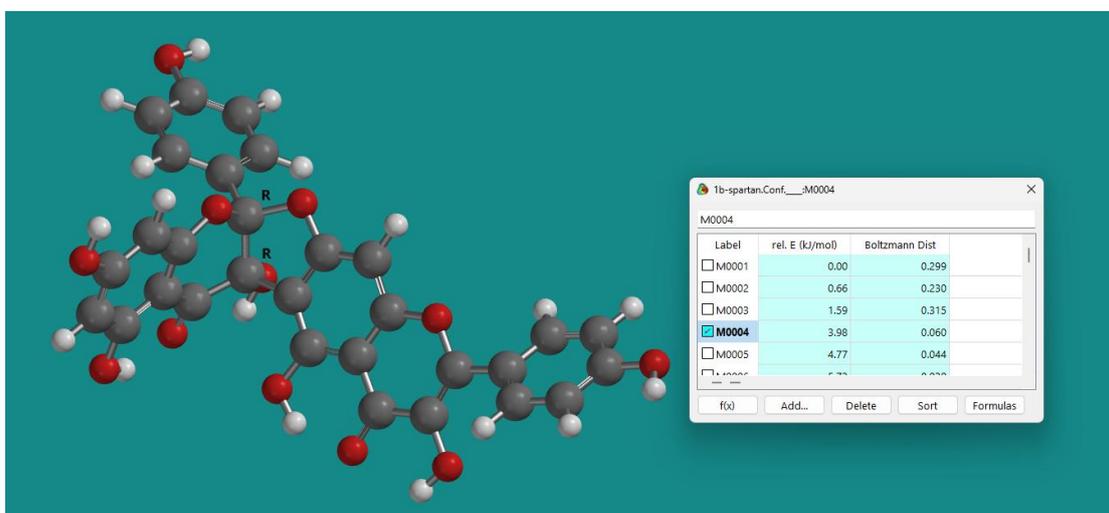
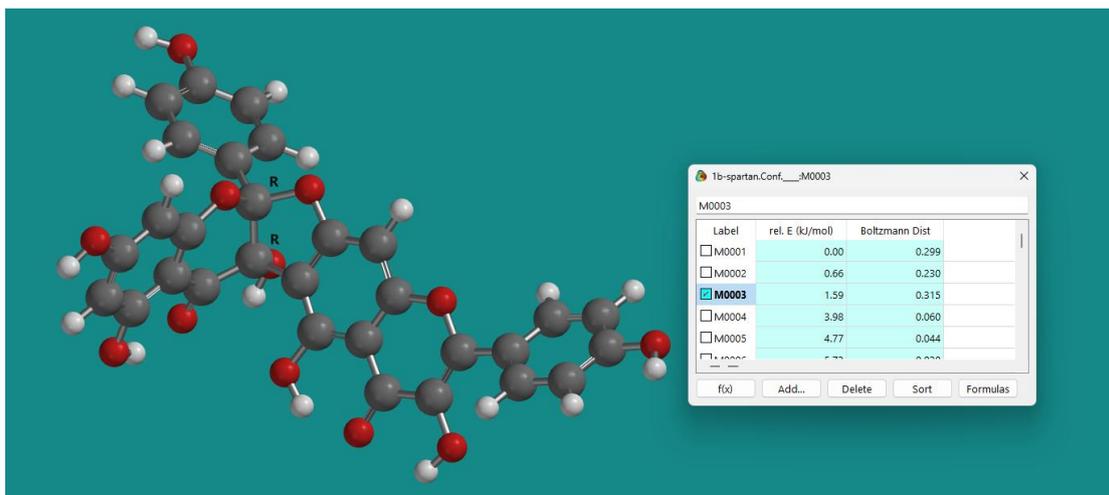
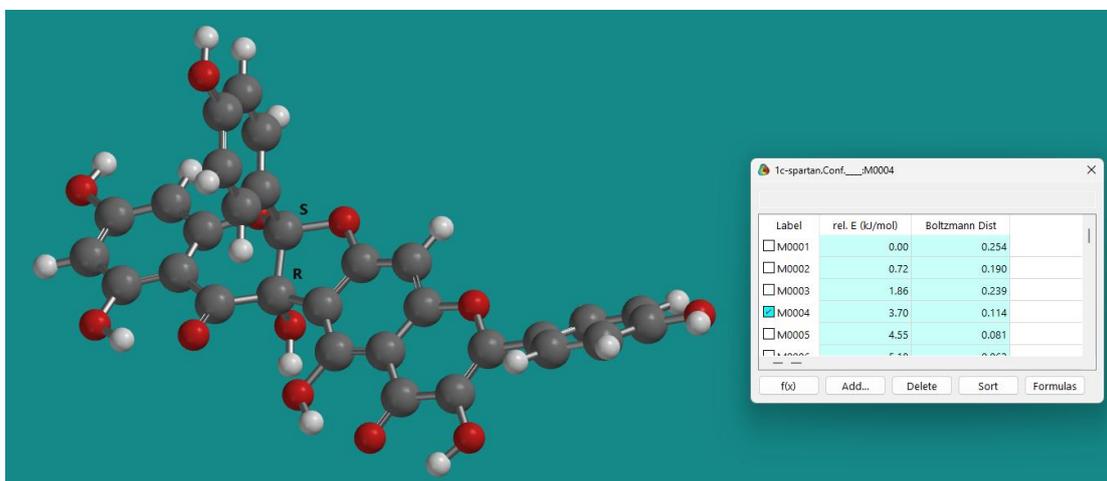
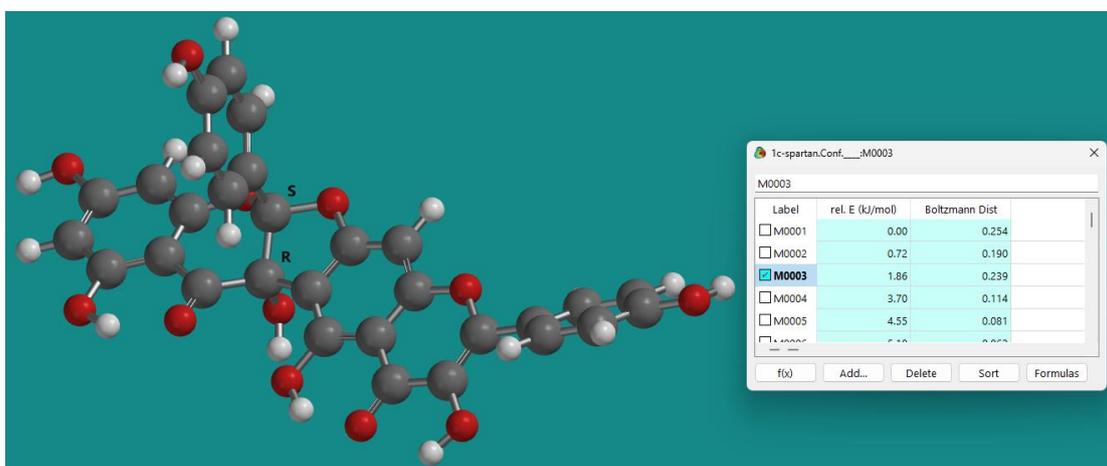
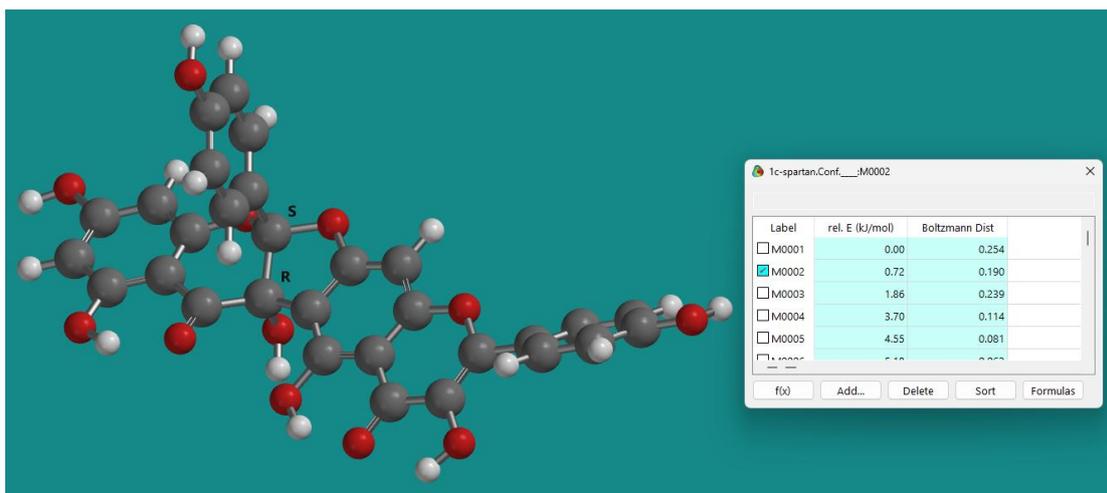


图18 化合物2b的ECD图谱









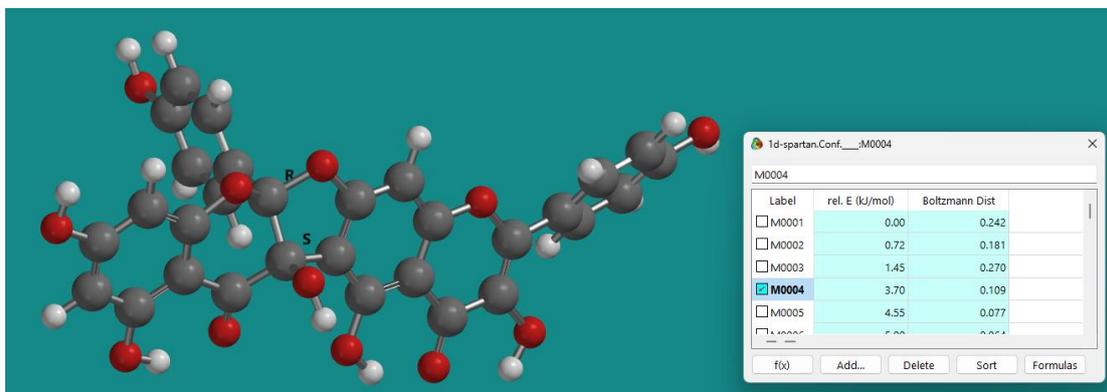
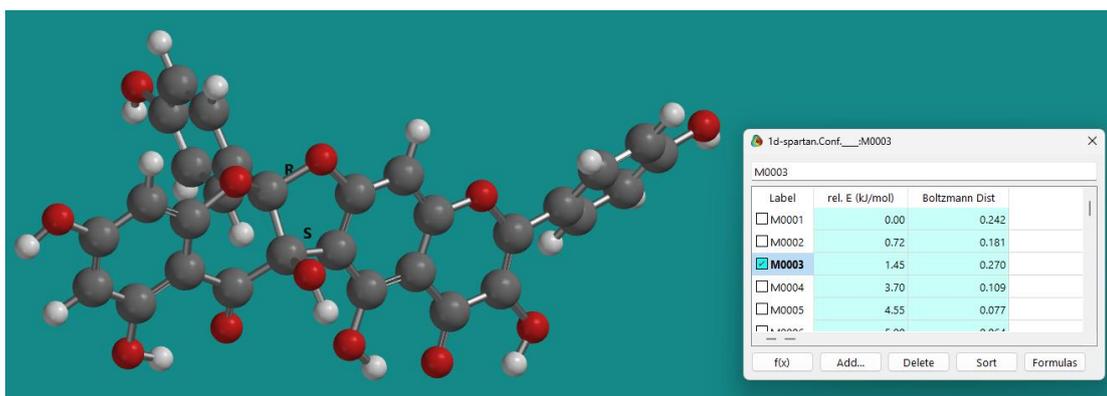
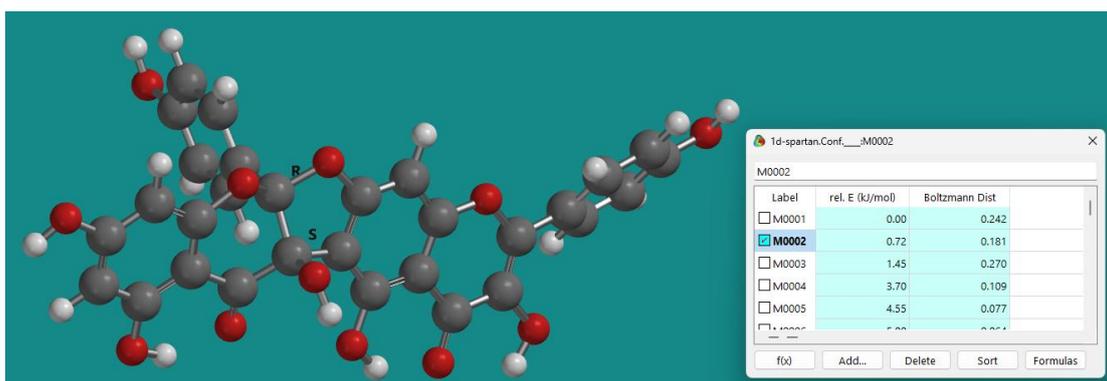
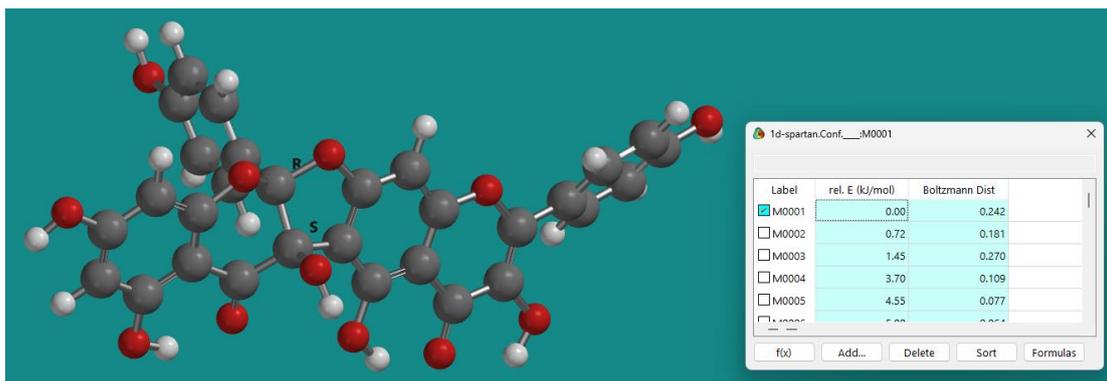
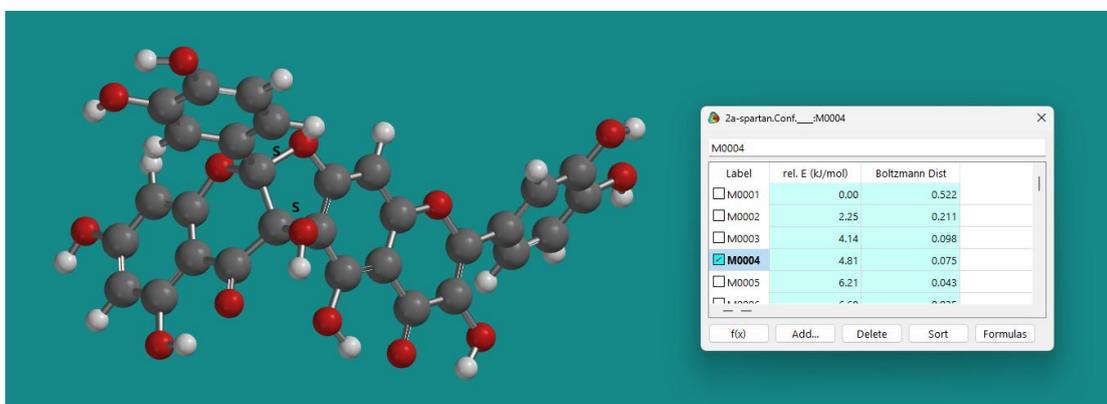
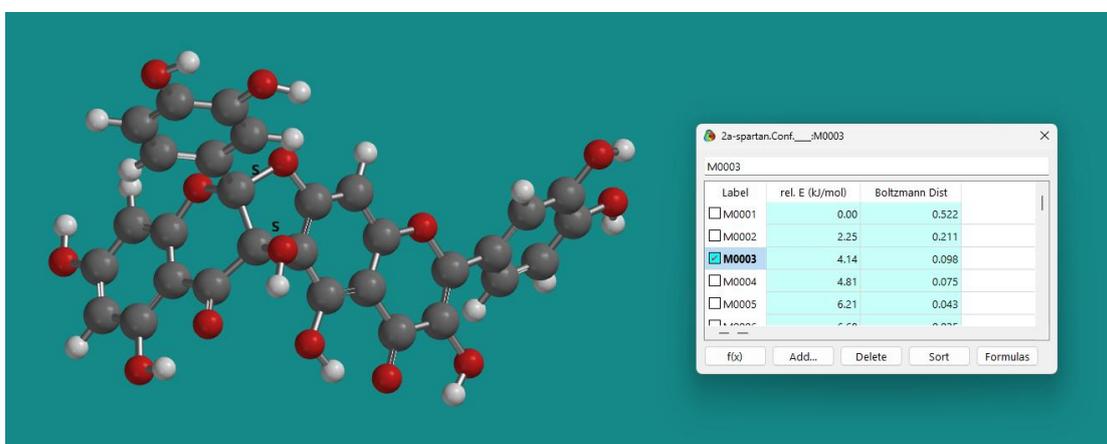
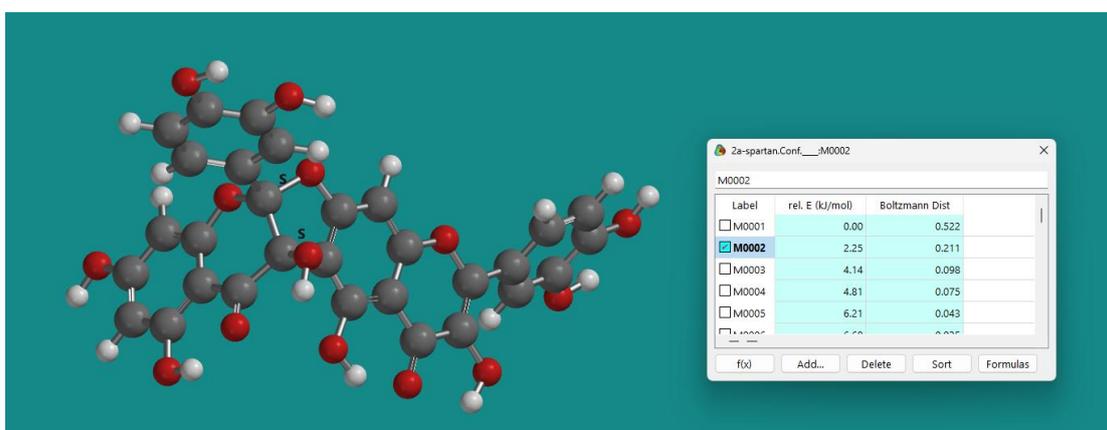
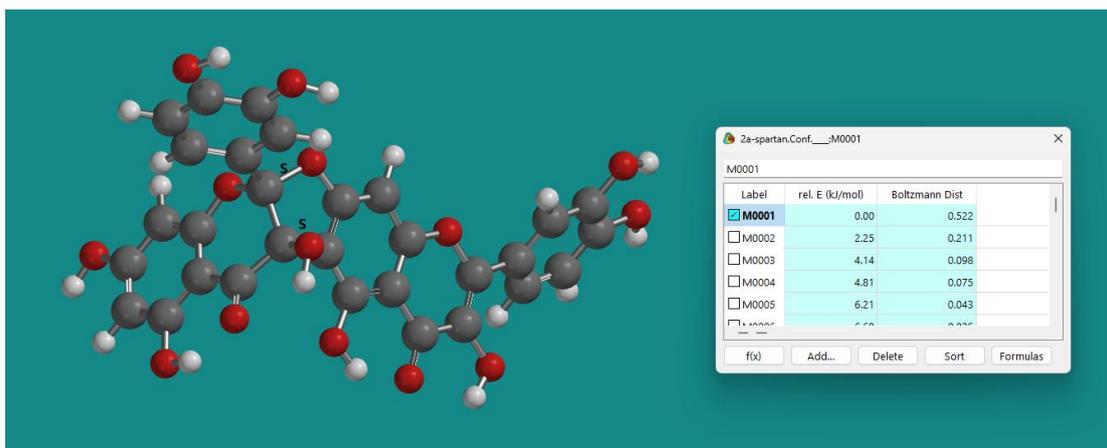
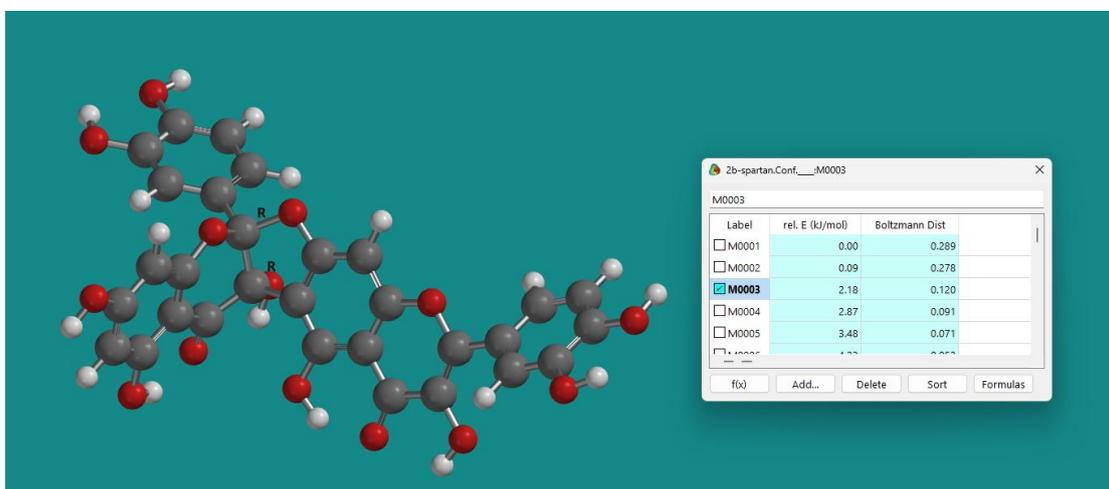
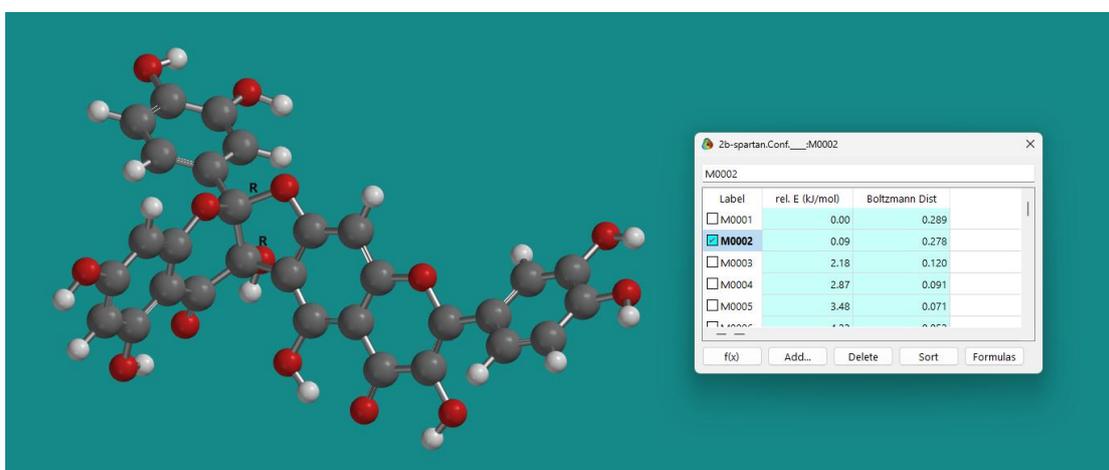
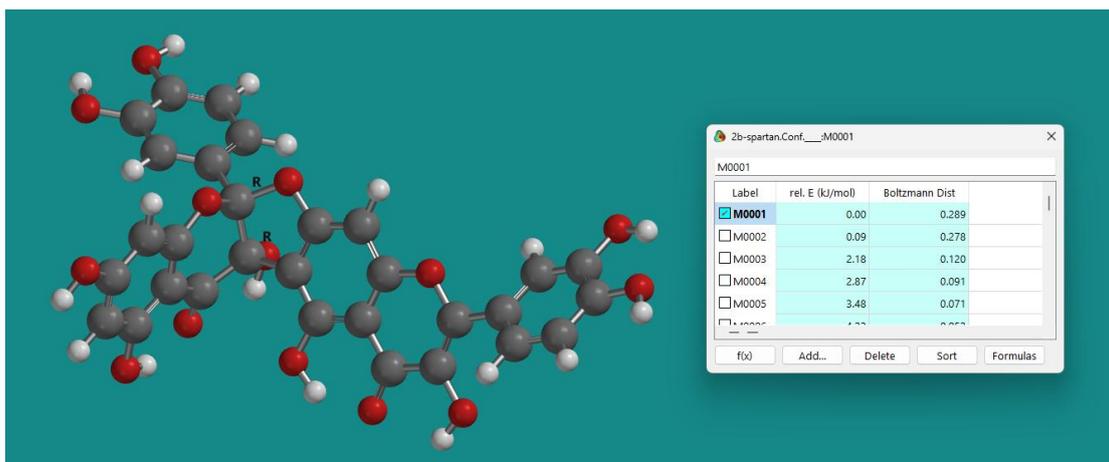
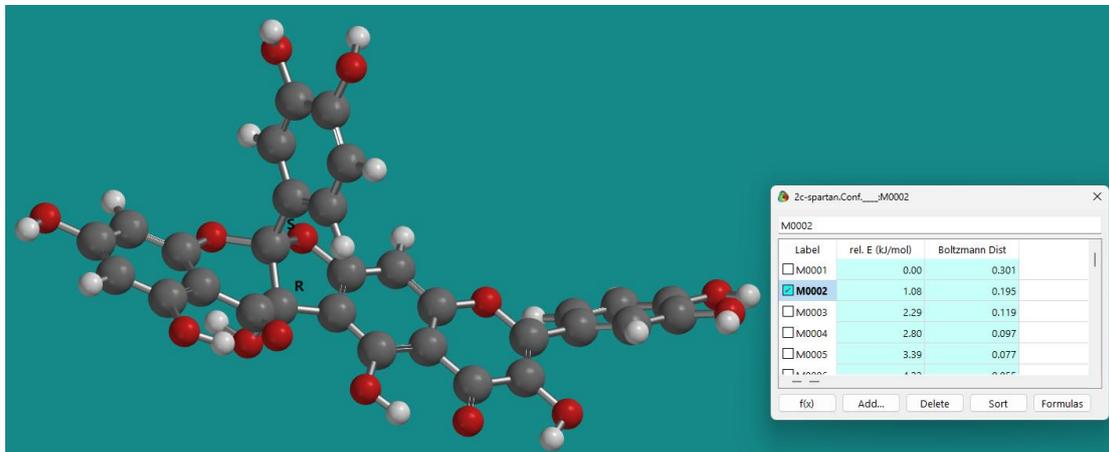
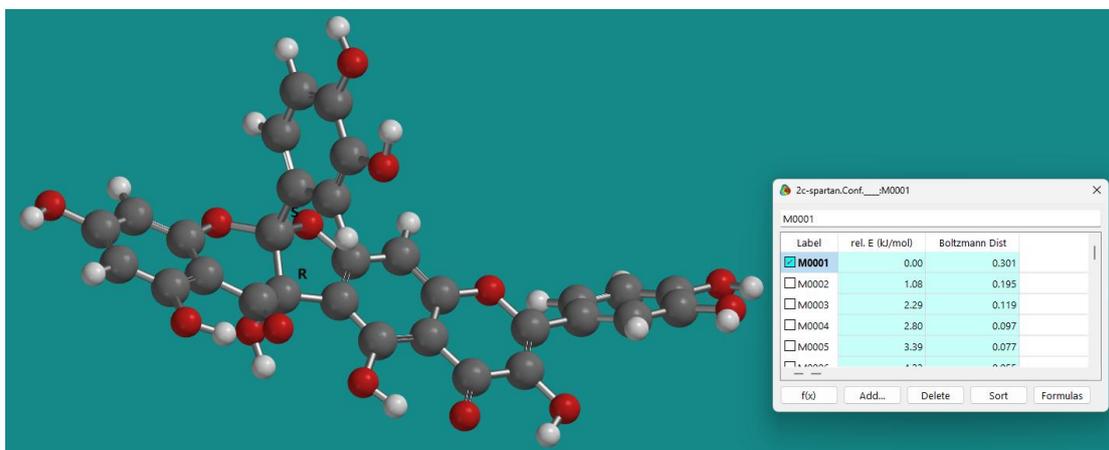
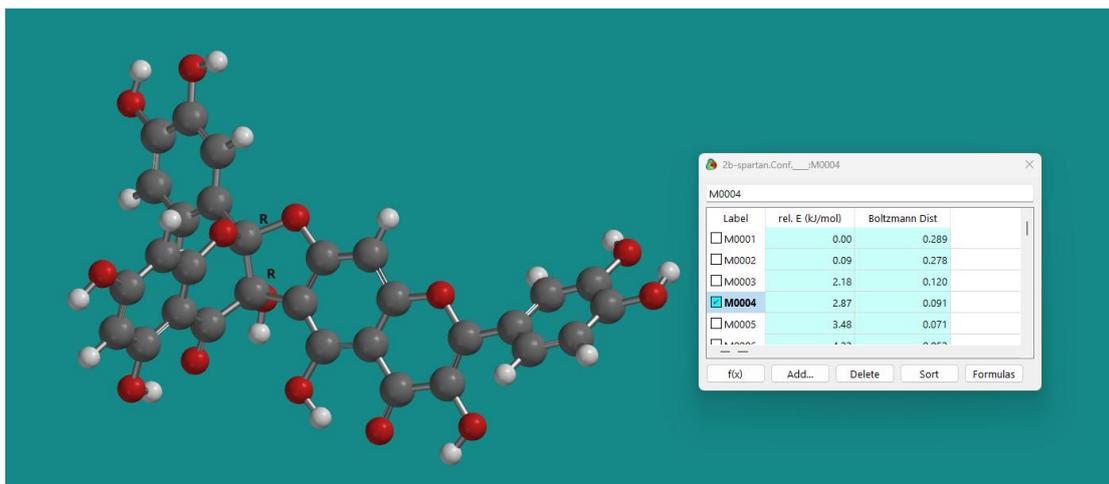
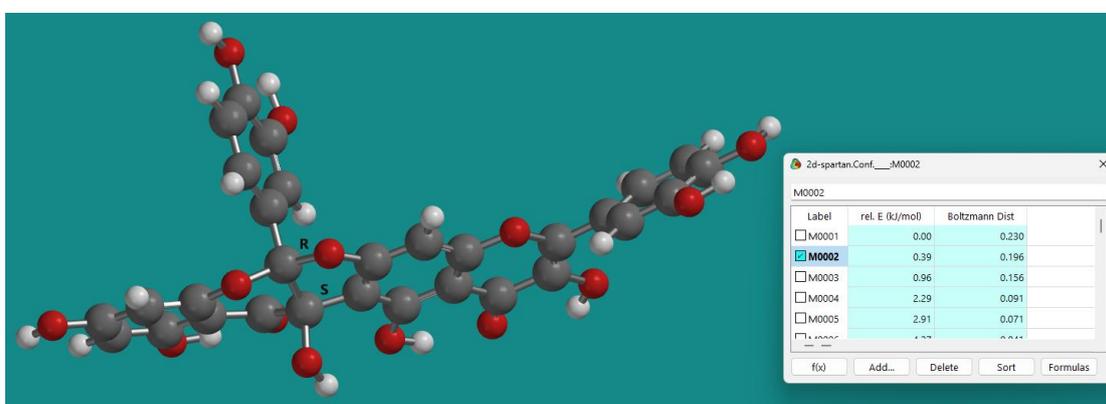
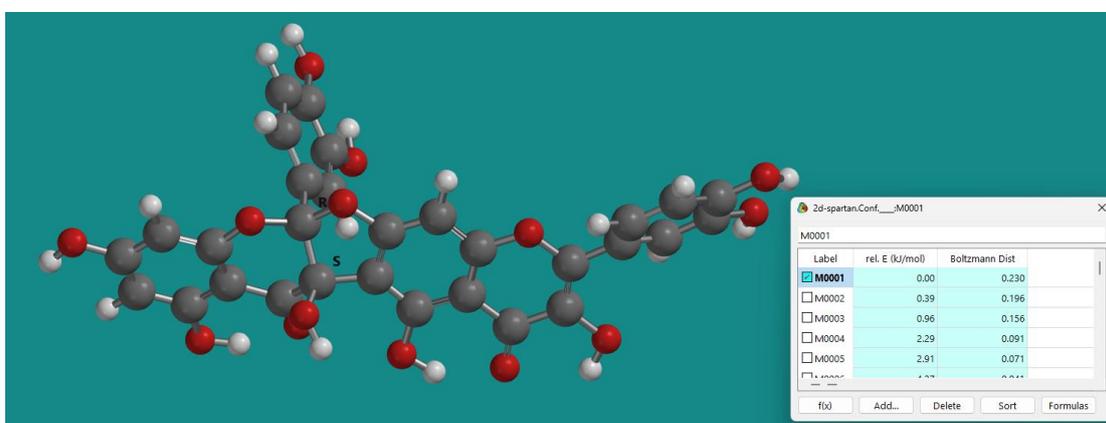
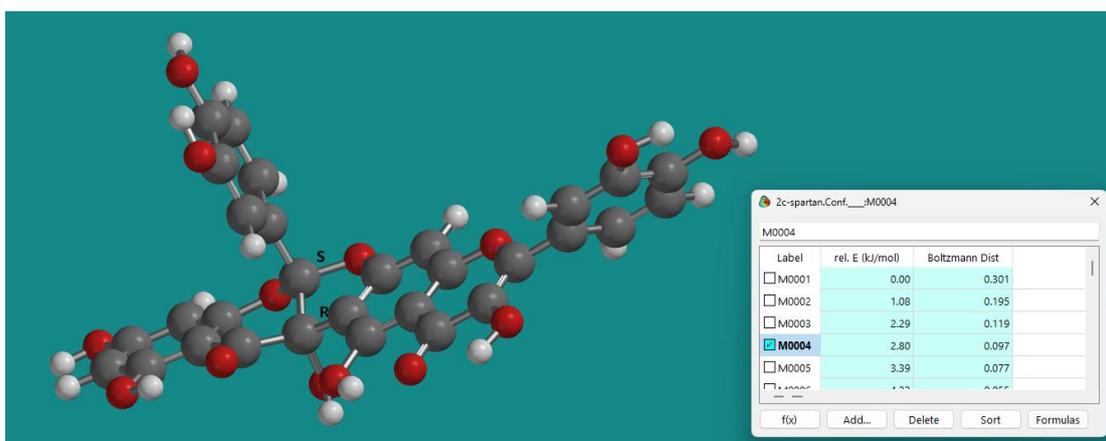
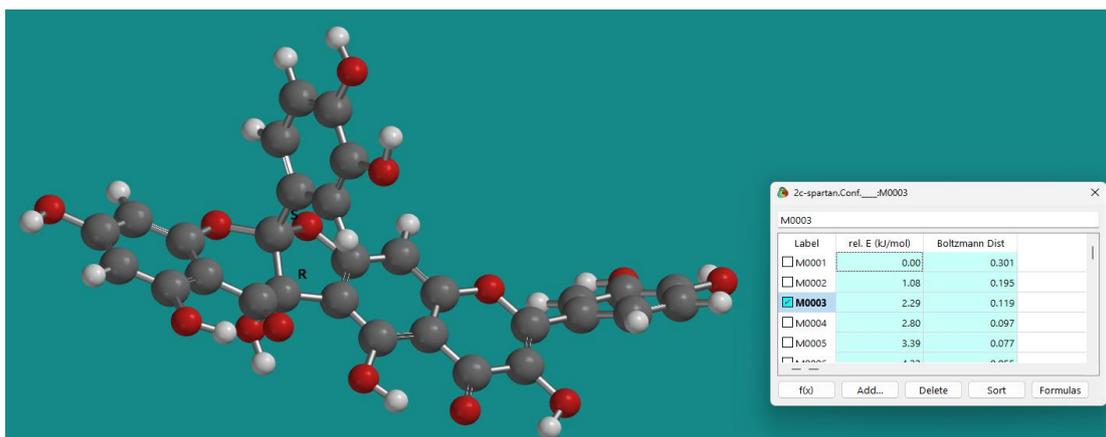


图19 化合物1的波兹曼分布图









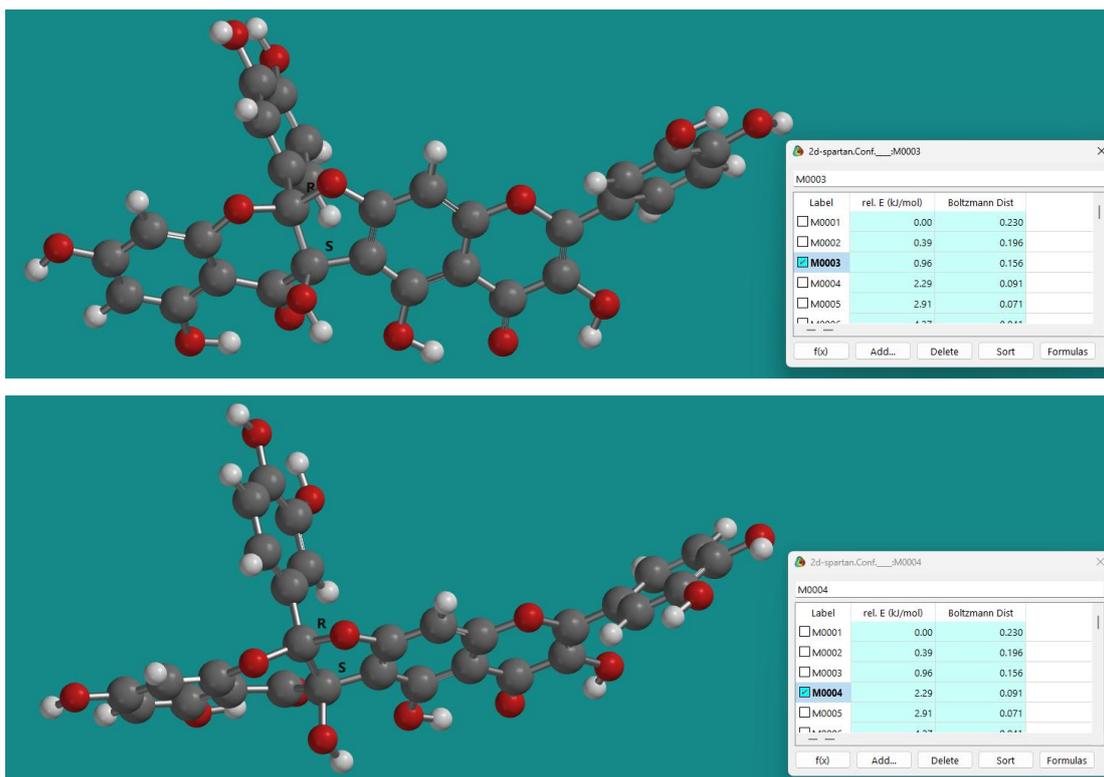


图20 化合物2的波兹曼分布图