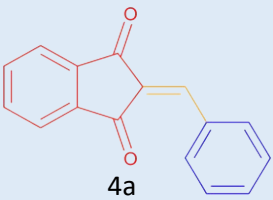
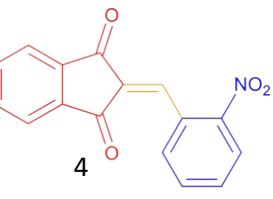
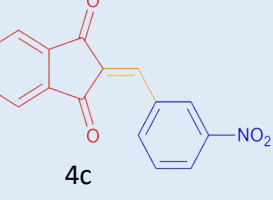
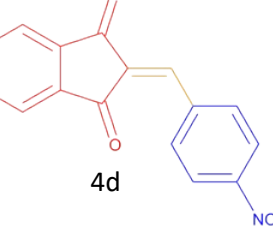
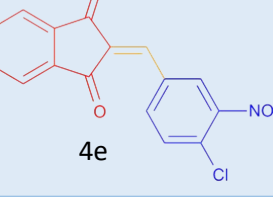
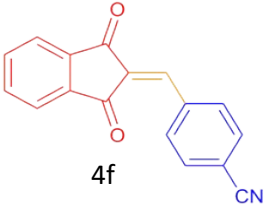
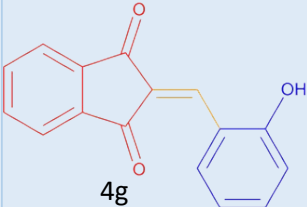
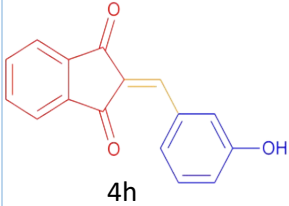
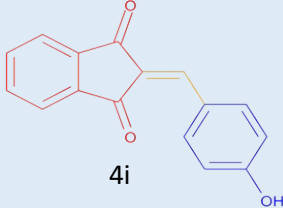
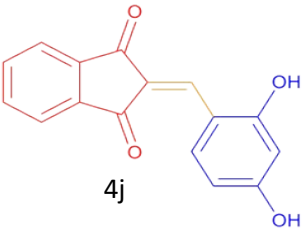
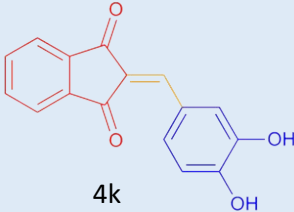
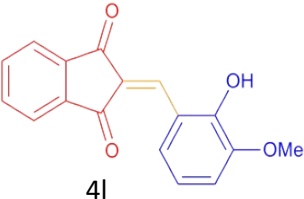
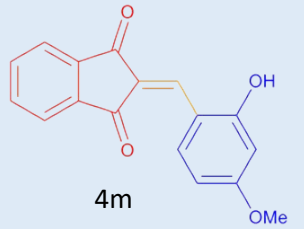
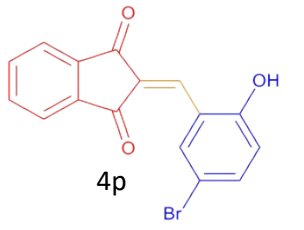
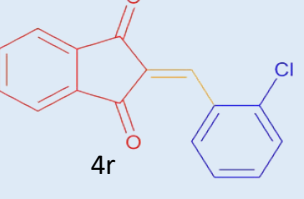
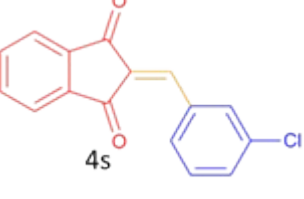
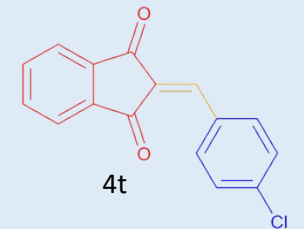
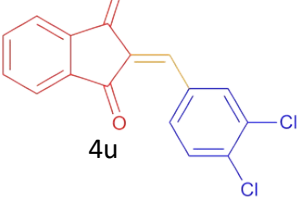
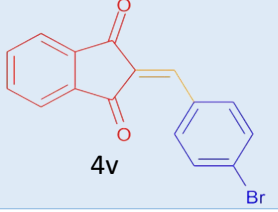
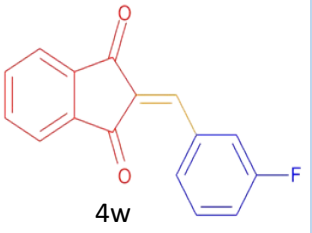
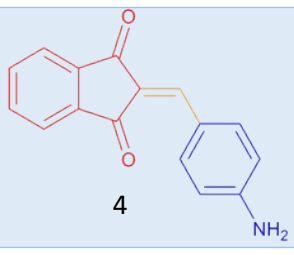
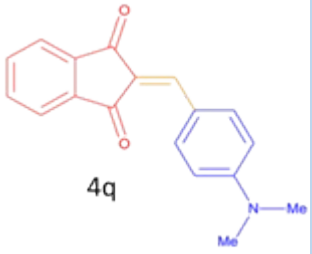
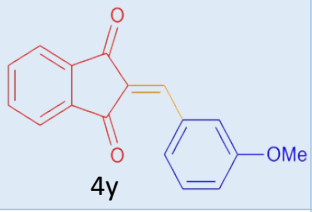
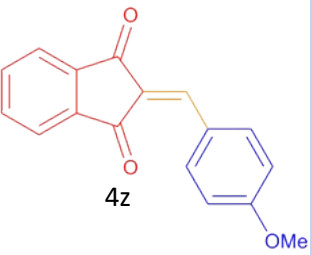
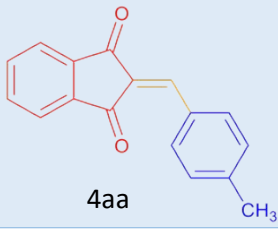


Table S1. Recorded weights of starting materials, isolated products, and corresponding yields for all synthesized compounds.

Entry	Product	MW (g/mol)	Weight of Aldehyde (mg)	Weight of 1H-indene-1,3(2H)-dione (mg)	Weight of Product (mg)	Yield (%)
1	 4a	234	127.4	146	182	77
2	 4	279	181.2	146	255	91
3	 4c	279	181.2	146	258	93
4	 4d	279	181.2	146	262	94
5	 4e	313	222.6	146	304	97

6	 4f	259	157.2	146	239	92
7	 4g	250	146.4	146	230	92
8	 4h	250	146.4	146	201	80
9	 4i	250	146.4	146	205	82
10	 4j	266	165.6	146	235	88
11	 4k	266	165.6	146	229	86

12	 4l	280	182.4	146	247	88
13	 4m	280	182.4	146	239	85
14	 4p	329	241.2	146	322	98
15	 4r	268	168	146	212	79
16	 4s	268	168	146	218	81
17	 4t	268	168	146	217	81
18	 4u	303	210	146	234	77

19	 4v	313	222	146	251	80
20	 4w	252	148.8	146	195	77
21	 4	249	145.2	146	242	97
22	 4q	277	180	146	222	80
23	 4y	264	163.2	146	206	78
24	 4z	264	163.2	146	212	80
25	 4aa	248	144	146	191	77

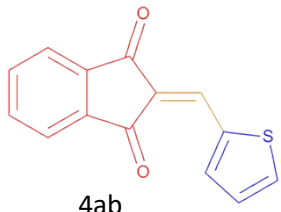
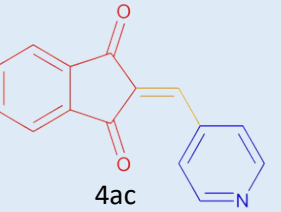
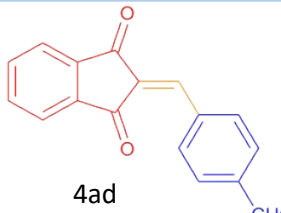
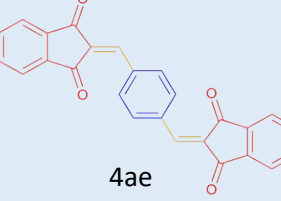
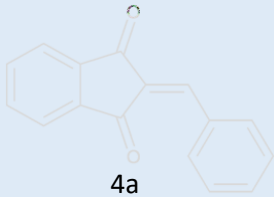
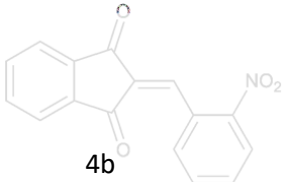
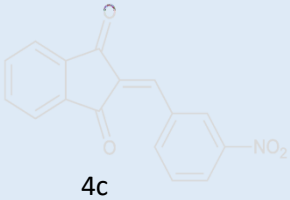
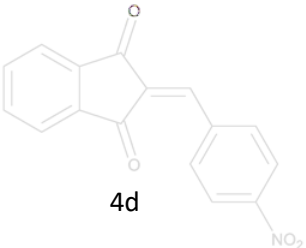
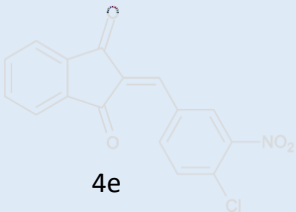
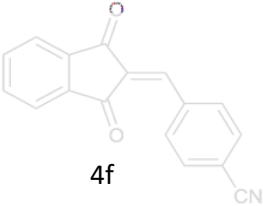
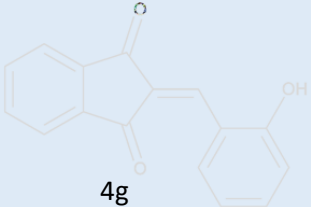
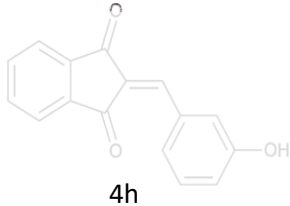
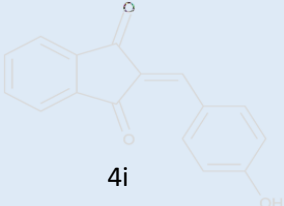
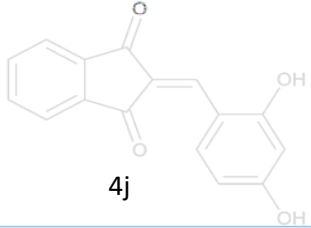
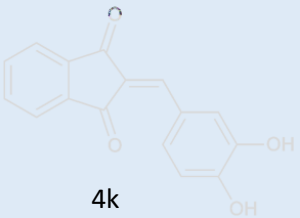
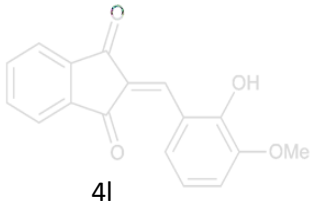
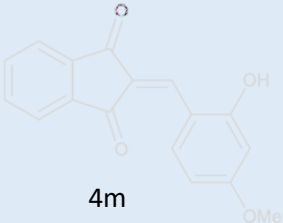
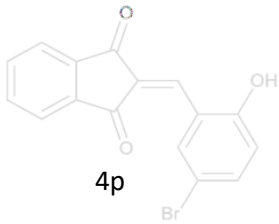
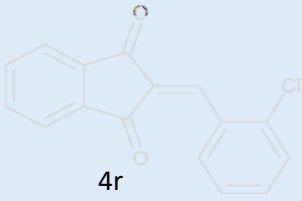
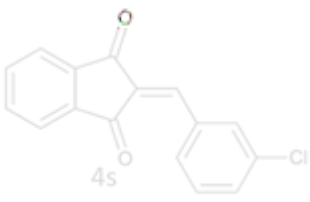
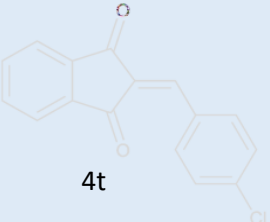
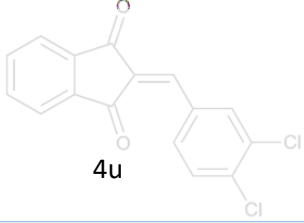
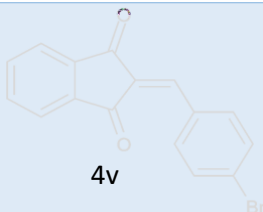
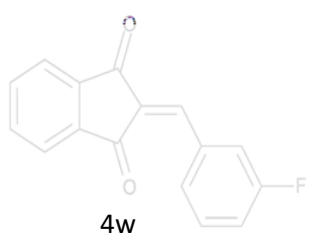
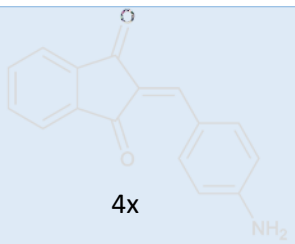
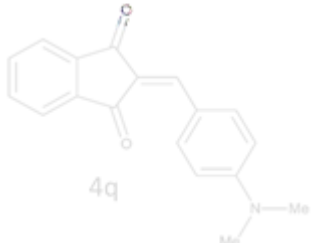
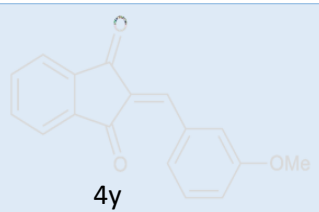
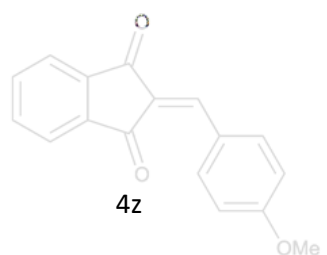
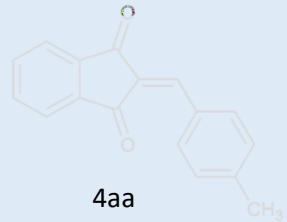
26	 4ab	240	134.4	146	182	76
27	 4ac	235	128.4	146	174	74
28	 4ad	262	160.1	146	244	93
29	 4ae	390	160.1	292	351	91

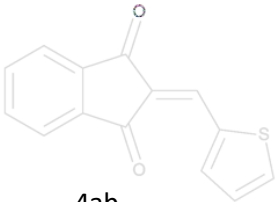
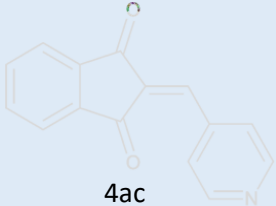
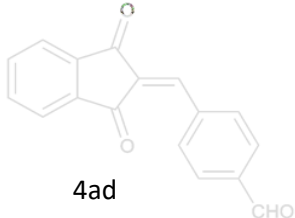
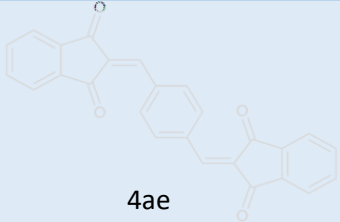
Table 2. Recorded solar irradiance, reaction mixture temperatures, and ambient temperatures during all CSR-assisted optimization and substrate-scope reactions.

Entry	Product	irradiance (W/m ²)	Temperature of the reaction mixture
1	 4a	924	128
2	 4b	895	127
3	 4c	890	125
4	 4d	857	134
5	 4e	883	131

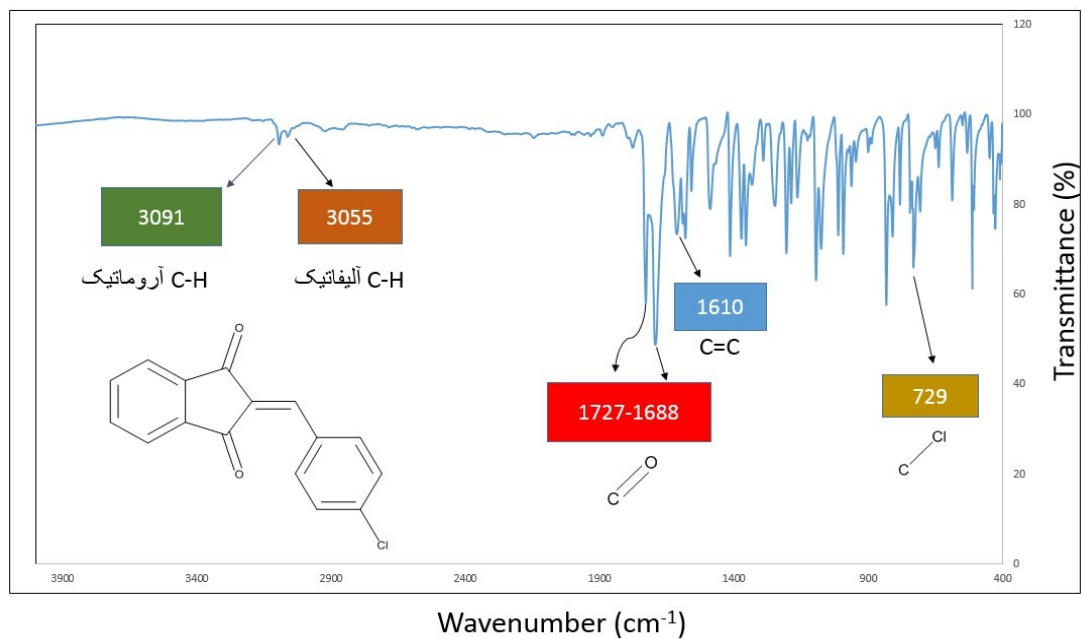
6	 4f	926	128
7	 4g	902	139
8	 4h	964	131
9	 4i	889	141
10	 4j	873	134
11	 4k	855	128

12	 4l	985	95
13	 4m	892	122
14	 4p	906	126
15	 4r	1000	131
16	 4s	864	138
17	 4t	880	136
18	 4u	926	134

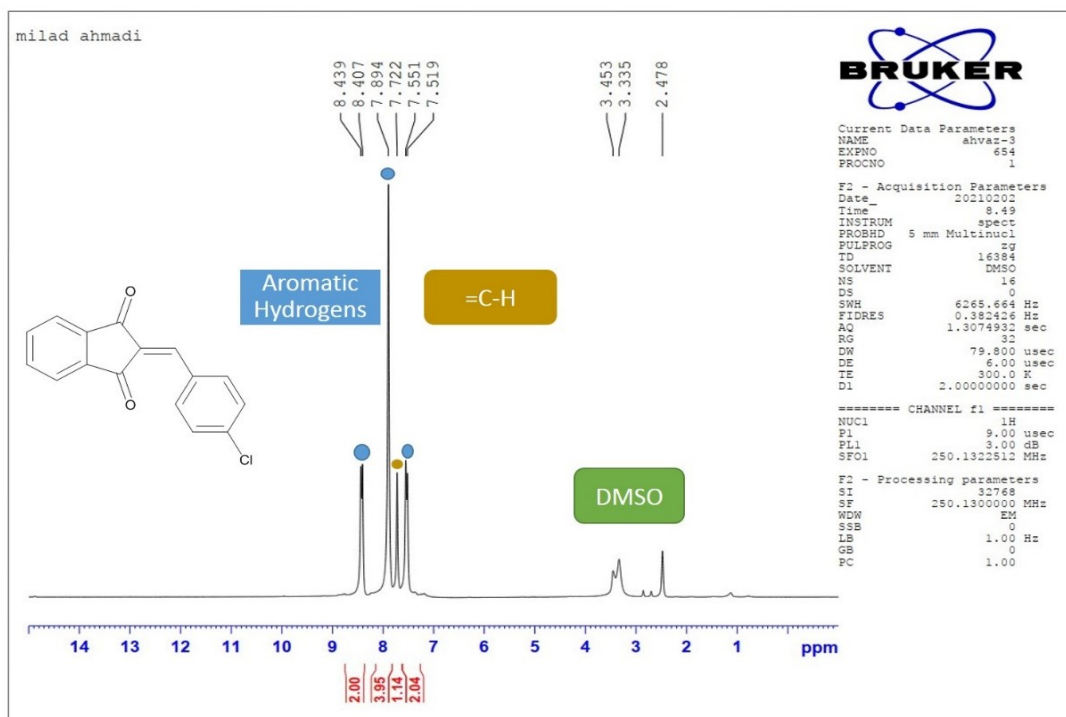
19	 4v	989	134
20	 4w	861	126
21	 4x	872	145
22	 4q	863	160
23	 4y	872	127
24	 4z	908	150
25	 4aa	938	153

26	 4ab	911	136
27	 4ac	871	124
28	 4ad	925	115
29	 4ae	923	132

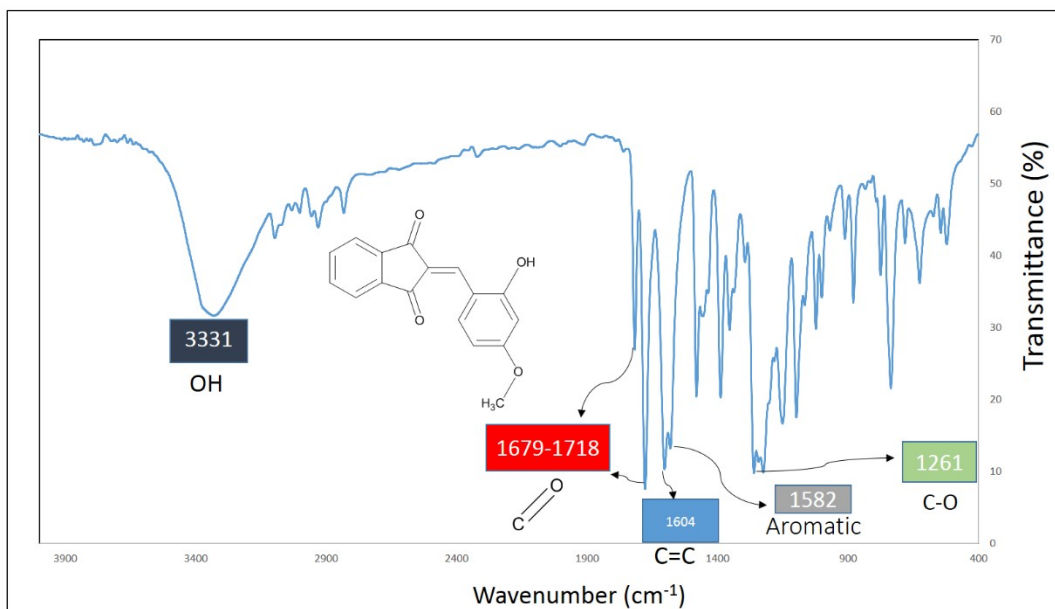
Spectra:



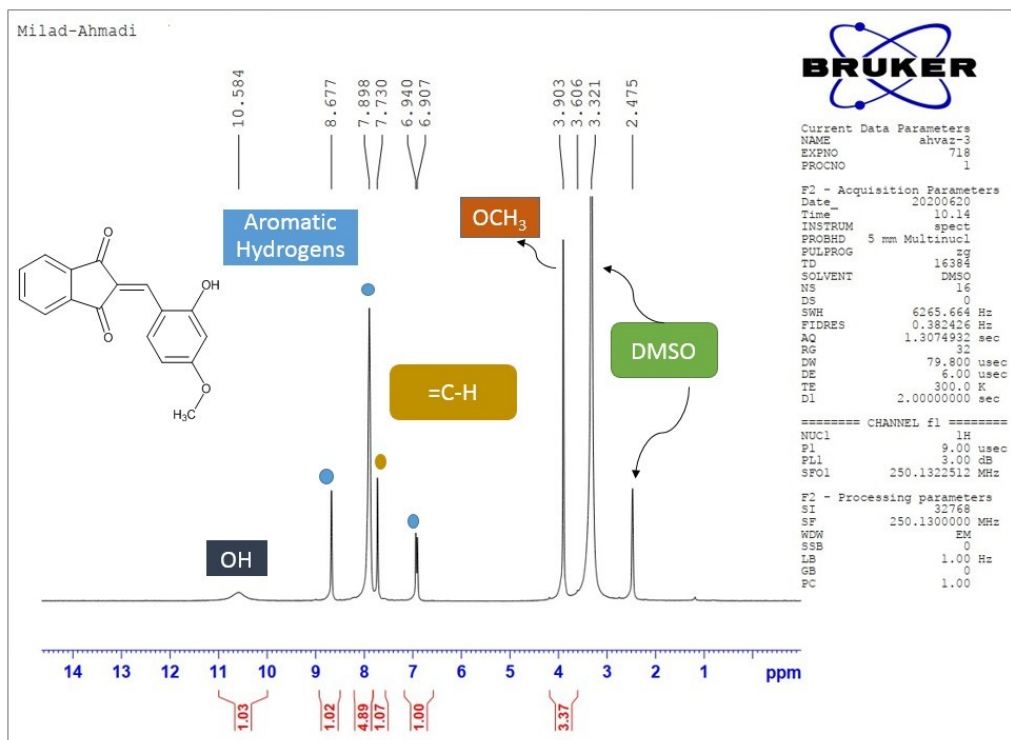
Spectrum 1: FT-IR spectrum of 2-(4-chlorobenzylidene)-2H-indene-1, 3-dione.



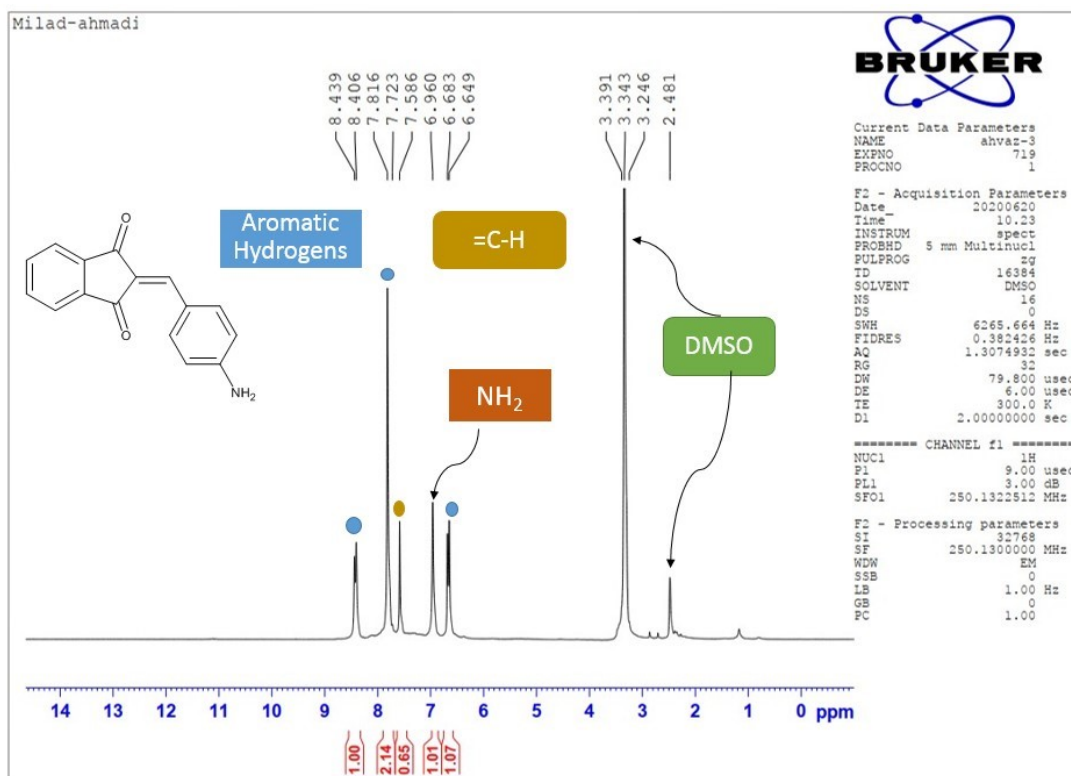
Spectrum 2: ¹H NMR spectrum of 2-(4-chlorobenzylidene)-2H-indene-1, 3-dione.



Spectrum 3: FT-IR spectrum of 2-(2-hydroxy- 4-methoxybenzylidene)-2H-indene-1, 3-dione.



Spectrum 4: The ¹H NMR spectrum of 2-(2-hydroxy- 4-methoxybenzylidene)-2H-indene-1, 3-dione.



Spectrum 5: The ¹H NMR spectrum of 2-(4-aminobenzylidene)-2H-indene-1,3-dione.