

The static local field response to the external field for the atoms of a monomer in the benzene dimer at 8 Å

1			2			3		
0.616612372557	-0.885626451254	0.0	1.29789625745	0.181047516148	0.0	1.28555259307	-0.148519655057	0.0
-0.86472338668	1.57625909011	0.0	0.161324108145	1.01824561381	0.0	-0.136365396642	1.03807315004	0.0
0.0	0.0	0.589995091183	0.0	0.0	0.363427154806	0.0	0.0	0.366661474079
4			5			6		
0.596703849031	0.934358936068	0.0	1.00362051006	-4.40281140669e-15	0.0	2.17943057388	1.06129452334e-15	0.0
0.909347570757	1.60236901637	0.0	-1.63717896242e-16	1.28915286356	0.0	-2.02624107475e-16	0.0406460070507	0.0
0.0	0.0	0.597776520712	0.0	0.0	0.36655387977	0.0	0.0	0.599113816974
7			8			9		
1.28555259307	0.148519655057	0.0	0.596703849031	-0.934358936068	0.0	1.29789625745	-0.181047516148	0.0
0.136365396642	1.03807315004	0.0	-0.909347570757	1.60236901637	0.0	-0.161324108145	1.01824561381	0.0
0.0	0.0	0.366661474079	0.0	0.0	0.597776520712	0.0	0.0	0.363427154806
10			11			12		
0.616612372557	0.885626451254	0.0	1.08412646013	4.63198644081e-15	0.0	2.34880642897	-9.39602666298e-16	0.0
0.86472338668	1.57625909011	0.0	4.26582059729e-16	1.27041005148	0.0	4.15659953866e-17	-0.0208966829453	0.0
0.0	0.0	0.589995091183	0.0	0.0	0.360467590015	0.0	0.0	0.56762942144

The reported values are $\begin{pmatrix} \partial E_{I,x}^{\text{loc}} / \partial E_x^{\text{ext}} & \partial E_{I,y}^{\text{loc}} / \partial E_x^{\text{ext}} & \partial E_{I,z}^{\text{loc}} / \partial E_x^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}} / \partial E_y^{\text{ext}} & \partial E_{I,y}^{\text{loc}} / \partial E_y^{\text{ext}} & \partial E_{I,z}^{\text{loc}} / \partial E_y^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}} / \partial E_z^{\text{ext}} & \partial E_{I,y}^{\text{loc}} / \partial E_z^{\text{ext}} & \partial E_{I,z}^{\text{loc}} / \partial E_z^{\text{ext}} \end{pmatrix}$

The local field response to the external field for the atoms of a monomer in the benzene dimer at 8 Å at the absorption frequency

1			2			3		
-0.537440857672	-3.52487608167	0.0	0.543192197677	-0.49108379588	0.0	0.460430034144	0.583826679506	0.0
-3.52586483618	3.33847279713	0.0	-0.502940035916	0.841070806839	0.0	0.599985505222	0.882130542047	0.0
0.0	0.0	0.623795735781	0.0	0.0	0.263088013237	0.0	0.0	0.273916457796
4			5			6		
-0.656666217261	3.68553321299	0.0	1.39652963571	$8.53103516308e-14$	0.0	5.63374593081	$-1.93906171149e-14$	0.0
3.67961265367	3.39721797703	0.0	$8.91791457319e-15$	-0.0915757871087	0.0	$1.04348414107e-14$	-2.90905427565	0.0
0.0	0.0	0.630197968892	0.0	0.0	0.267722156597	0.0	0.0	0.634540974461
7			8			9		
0.460430034145	-0.583826679506	0.0	-0.656666217261	-3.68553321299	0.0	0.543192197677	0.49108379588	0.0
-0.599985505222	0.882130542047	0.0	-3.67961265367	3.39721797703	0.0	0.502940035916	0.841070806839	0.0
0.0	0.0	0.273916457796	0.0	0.0	0.630197968892	0.0	0.0	0.263088013237
10			11			12		
-0.537440857672	3.52487608167	0.0	1.63507552046	$-7.82305882057e-14$	0.0	6.15142101616	$1.85506056222e-14$	0.0
3.52586483618	3.33847279713	0.0	$-5.53949098282e-15$	-0.179196144608	0.0	$-2.18853509608e-16$	-3.15078511398	0.0
0.0	0.0	0.623795735781	0.0	0.0	0.276378054159	0.0	0.0	0.58565771844

The reported values are $\begin{pmatrix} \partial E_{I,x}^{\text{loc}}/\partial E_x^{\text{ext}} & \partial E_{I,y}^{\text{loc}}/\partial E_x^{\text{ext}} & \partial E_{I,z}^{\text{loc}}/\partial E_x^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}}/\partial E_y^{\text{ext}} & \partial E_{I,y}^{\text{loc}}/\partial E_y^{\text{ext}} & \partial E_{I,z}^{\text{loc}}/\partial E_y^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}}/\partial E_z^{\text{ext}} & \partial E_{I,y}^{\text{loc}}/\partial E_z^{\text{ext}} & \partial E_{I,z}^{\text{loc}}/\partial E_z^{\text{ext}} \end{pmatrix}$

The static local field response to the external field for the atoms of a monomer in the azobenzene dimer at 13 Å

1			2			3		
1.15560043518	-1.42786444419	0.0696594402285	2.2175601446	0.12811190748	-0.0666973491919	1.8627134757	-1.44989272597	-0.0076636651696
-0.813484243893	1.31805573578	0.0230444296737	0.132779262578	0.818308463601	-0.0150997633195	-0.243303284773	0.688947422005	0.000442360667545
0.014474825669	0.0448416867734	0.56024168261	-0.0885106528524	-0.015679970509	0.360572203938	-0.0547948537273	0.0677625419746	0.338431035324
4			5			6		
-0.0203704224817	0.292895681647	0.020712542257	2.95583669559	-0.227181293096	-0.108044277688	4.49408861267	2.05956407927	-0.357030112379
0.655852245041	1.42095433384	-0.0568436709928	0.410798949297	1.15222570965	-0.038392951927	0.744613803139	0.545722712268	-0.0652863682875
0.00840656589081	-0.0364703919494	0.52611011797	-0.147815813323	-0.0102724786235	0.345530839989	-0.244234953766	-0.112085898145	0.435766934875
7			8			9		
1.28549437088	1.33979415006	-0.0901417540081	0.0448212181689	-0.441728221765	0.047170488616	1.8461970287	0.0354687931742	-0.0537761223541
0.354582170506	1.27909411538	-0.0566424678654	-1.02277395025	1.56631106461	0.00757001942698	0.121452149446	0.961531016991	-0.0246145712954
-0.0507537663417	-0.101943479535	0.351494284598	0.0672670101014	-0.0297420658348	0.542786475212	-0.0662659584188	-0.0337524656993	0.365751669273
10			11			12		
0.763132468671	1.21586051028	-0.0413635239223	1.8356790945	0.111256226697	-0.0412003225657	3.20709561193	-0.0385015828207	-0.030785760677
0.826642728466	1.76126620731	-0.089206103644	0.044076942001	1.04007310822	-0.0280273036744	0.0838535101507	-0.0320118046749	0.00959018093532
-0.0413594882849	-0.109026857141	0.58624440942	-0.052813569279	-0.0317788119402	0.350956809327	-0.0794902160752	0.0196363017685	0.539895605613
13			14			15		
0.115454299903	-0.361712032318	0.0697973015445	1.18248142157	1.35874093421	-0.215999765924	1.71707287081	0.142871163116	-0.0763902716409
-0.948752348935	1.52846415629	-0.0938896408648	0.369231453781	1.2842037863	-0.135270069319	0.14687607279	0.979751170379	-0.095504894082
0.148340504454	-0.109089654583	0.579893713041	-0.0818204382789	-0.174515072971	0.389321607357	-0.0728298802823	-0.0889304292885	0.376615027818
16			17			18		
0.695251849475	1.30833065867	-0.179034487172	1.56910437587	0.166877733219	-0.0725334440953	2.73474973728	0.119352977622	-0.101953433738
0.87049848059	1.77490299651	-0.194283208846	0.0991598930633	1.10253279533	-0.103177535057	0.214406695582	0.0704103180906	0.0604005900645
-0.118062598402	-0.211280806314	0.62877861018	-0.0588373793411	-0.104448241209	0.383766599461	-0.112317470568	0.064827902605	0.591064848436
19			20			21		
2.00964565644	0.104786040394	-0.0798112677704	0.945947314558	-1.44135033362	0.184052023878	1.70238133419	-1.42855944932	0.143219136681
0.122573881766	0.896142024035	-0.082821315421	-0.895614090423	1.38796511689	-0.0737622529961	-0.241289831132	0.695178777809	-0.0364918135887
-0.0761401124263	-0.0777912781577	0.375892478508	0.108456121674	-0.0549044276107	0.59739525916	-0.0165799632341	-0.00337764720963	0.357436213474
22			23			24		
0.0427980720171	0.222091453427	-0.00364571776622	2.88628836778	-0.189590201007	-0.0741346809457	4.46204320978	2.07042541497	-0.354865707556
0.593489996447	1.40534827188	-0.149089761917	0.415411271053	1.15983705854	-0.141364387864	0.761702705375	0.552601173591	-0.023506831278
-0.0673088525984	-0.133291609747	0.574800705789	-0.139086536327	-0.117382226082	0.351448633939	-0.229276133489	-0.0867319701448	0.433588940491

The reported values are $\begin{pmatrix} \partial E_{I,x}^{\text{loc}} / \partial E_x^{\text{ext}} & \partial E_{I,y}^{\text{loc}} / \partial E_x^{\text{ext}} & \partial E_{I,z}^{\text{loc}} / \partial E_x^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}} / \partial E_y^{\text{ext}} & \partial E_{I,y}^{\text{loc}} / \partial E_y^{\text{ext}} & \partial E_{I,z}^{\text{loc}} / \partial E_y^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}} / \partial E_z^{\text{ext}} & \partial E_{I,y}^{\text{loc}} / \partial E_z^{\text{ext}} & \partial E_{I,z}^{\text{loc}} / \partial E_z^{\text{ext}} \end{pmatrix}$

The local field response to the external field for the atoms of a monomer in the azobenzene dimer at 13 Å at the absorption frequency

1			2			3		
2.36657086314	-4.64758681803	0.246313778173	6.86013050126	-0.348152141279	-0.159036321771	3.48021105537	-8.04802467671	0.196217946758
-0.725777022315	0.767209002866	0.0600704344372	1.15183752	0.831542672401	-0.038868710634	0.327839263573	-0.833403770358	0.0275994523778
-0.0522311854743	0.241737960849	0.554114291811	-0.387782391845	0.00387690224721	0.342367241004	-0.174193737601	0.492044782607	0.323271071496
4			5			6		
-4.35894628244	-1.97522112398	0.385564789878	6.87140670946	-4.45020805538	-0.00551721323309	11.8658528661	10.3048767947	-1.39843275294
-0.204036253477	0.994163565751	0.0214291506041	1.37845560485	-0.1499184471	0.0149111069613	2.51692656114	2.48505991263	-0.342652760475
0.280600079258	0.104722051497	0.492365352467	-0.404567110951	0.283825651814	0.272918894776	-0.725144728555	-0.651814410726	0.46429396886
7			8			9		
-2.1215851319	3.84632498287	-0.0295675116567	-2.45240415678	1.25736453328	0.129372182034	1.97062307633	2.96661830306	-0.0984357598698
-0.429421777533	1.59629443357	-0.0418367893126	-1.50387469935	2.00030567985	0.0250686003035	0.035777164155	1.55860873161	-0.026086954315
0.170084143871	-0.241766627911	0.344771269163	0.215159033734	-0.140088967173	0.531199566259	-0.0627852470396	-0.219461806796	0.342587887325
10			11			12		
1.98996267391	3.90671426882	-0.156459895396	5.35584442628	2.32801806568	-0.185728340296	7.66516709514	-0.655622120445	-0.0115067405976
1.20172073323	2.31828440772	-0.121898328935	0.692933415928	1.55532227606	-0.0625152671918	0.895369517966	-0.320510067152	0.0199749701181
-0.123088221596	-0.274218582669	0.600163874873	-0.26614913693	-0.179287621756	0.349107620292	-0.346921973723	0.0661014214245	0.536682302791
13			14			15		
-2.37753915713	1.25482609434	-0.0517132557258	-2.25511267571	4.06743280131	-0.402108108533	1.66043121168	3.11166680069	-0.487363259853
-1.42641064643	1.94457589685	-0.138716466751	-0.411815300048	1.6459824664	-0.135927570897	0.035285495351	1.58581043831	-0.183777195398
0.308168087957	-0.221824672634	0.580397138592	0.138947863716	-0.328367650057	0.399727658967	-0.0667158302344	-0.276363957523	0.375315923414
16			17			18		
1.54297950901	4.24734217834	-0.603531469593	4.60699153276	2.437108117	-0.497881986071	6.49302918721	-0.0583888824318	-0.233261399537
1.18570874066	2.3781160847	-0.284845785629	0.66657762338	1.63266460268	-0.195185914169	0.911185511256	-0.122562333463	0.0560118596299
-0.188004694064	-0.399060714141	0.664320855444	-0.24531120553	-0.246380535474	0.398925948451	-0.341464740615	0.0950704901261	0.597904460988
19			20			21		
6.03481254758	-0.393060914526	-0.188915893583	1.58565328878	-4.80065041481	0.623575326969	2.93675407337	-7.92877705789	1.00747680078
1.02615275805	0.910657721367	-0.133376020608	-0.915608806475	0.824082437508	0.00764747499248	0.255235112456	-0.802211288753	0.161681081243
-0.330823505211	-0.0570599030646	0.357608686891	0.0872209212707	0.141435511292	0.578385968867	-0.112205361451	0.417079121446	0.302609788586
22			23			24		
-4.27058115599	-1.93906104141	0.442213007881	6.65810799132	-4.22831128223	0.236625397728	11.8819958267	10.2935655339	-1.38037064985
-0.268092758037	0.996202879532	-0.0715698477395	1.36228813827	-0.101776173692	-0.0597394197179	2.55058701456	2.49330156336	-0.244043342048
0.194825589424	-0.00632754876202	0.536299174509	-0.391564272469	0.163247365599	0.261396651864	-0.715866962595	-0.619035070158	0.462823377215

The reported values are $\begin{pmatrix} \partial E_{I,x}^{\text{loc}}/\partial E_x^{\text{ext}} & \partial E_{I,y}^{\text{loc}}/\partial E_x^{\text{ext}} & \partial E_{I,z}^{\text{loc}}/\partial E_x^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}}/\partial E_y^{\text{ext}} & \partial E_{I,y}^{\text{loc}}/\partial E_y^{\text{ext}} & \partial E_{I,z}^{\text{loc}}/\partial E_y^{\text{ext}} \\ \partial E_{I,x}^{\text{loc}}/\partial E_z^{\text{ext}} & \partial E_{I,y}^{\text{loc}}/\partial E_z^{\text{ext}} & \partial E_{I,z}^{\text{loc}}/\partial E_z^{\text{ext}} \end{pmatrix}$