

Supporting Information

for

Theoretical Study on the Ground State Structure of a Uranofullerene $U@C_{82}$

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Table S1. Absolute Total Energies (E) and Relative Energies (E_{rel}) for Neutral C_{82} and $\text{C}_{82}^{3\ominus}$ Calculated with the BLYP/3-21G Method^a

sequence number	neutral C_{82}		$\text{C}_{82}^{3\ominus}$	
	E	E_{rel}	E	E_{rel}
9	-3106.2415	17.6	-3106.2850	0.0
8	-3106.2271	26.6	-3106.2832	1.2
6	-3106.2500	12.2	-3106.2788	3.9
5	-3106.2564	8.2	-3106.2678	10.8
4	-3106.2639	3.5	-3106.2612	15.0
3	-3106.2695	0.0	-3106.2546	19.1
7	-3106.2321	23.5	-3106.2530	20.1
39704	-3106.2182	32.2	-3106.2518	20.8
1	-3106.2597	6.2	-3106.2496	22.2
39686	-3106.2243	28.4	-3106.2482	23.1
39662	-3106.2084	38.3	-3106.2397	28.4
39656	-3106.2105	37.0	-3106.2394	28.6
39663	-3106.2043	40.9	-3106.2392	28.7
2	-3106.2609	5.4	-3106.2381	29.4
36458	-3106.2246	28.2	-3106.2381	29.5
39546	-3106.2251	27.9	-3106.2368	30.3
37788	-3106.2255	27.6	-3106.2359	30.8
39486	-3106.2207	30.6	-3106.2359	30.8
37359	-3106.2120	36.1	-3106.2315	33.6
37897	-3106.2395	18.8	-3106.2312	33.8
35776	-3106.2018	42.5	-3106.2309	34.0
39638	-3106.2161	33.5	-3106.2307	34.1
37786	-3106.2434	16.4	-3106.2303	34.3
36459	-3106.2246	28.2	-3106.2299	34.6
37349	-3106.2183	32.2	-3106.2297	34.7
39706	-3106.2098	37.5	-3106.2278	35.9
39547	-3106.2183	32.2	-3106.2272	36.3
37380	-3106.2145	34.5	-3106.2271	36.4
35769	-3106.2184	32.0	-3106.2267	36.6
39487	-3106.2168	33.1	-3106.2263	36.8
38839	-3106.2315	23.9	-3106.2257	37.2
37539	-3106.2099	37.4	-3106.2245	38.0
38586	-3106.2107	36.9	-3106.2242	38.2
39171	-3106.2056	40.1	-3106.2230	38.9
39350	-3106.2095	37.7	-3106.2226	39.2
38914	-3106.2191	31.6	-3106.2223	39.4
39155	-3106.2280	26.1	-3106.2221	39.5

37767	-3106.2324	23.3	-3106.2213	40.0
37044	-3106.2132	35.3	-3106.2201	40.7
38421	-3106.2179	32.4	-3106.2198	40.9
37566	-3106.2245	28.2	-3106.2192	41.3
35275	-3106.2115	36.4	-3106.2173	42.5
36026	-3106.1968	45.6	-3106.2145	44.3
34655	-3106.1978	45.0	-3106.2131	45.1
38576	-3106.2225	29.5	-3106.2131	45.2
37870	-3106.2292	25.3	-3106.2129	45.3
36919	-3106.2220	29.8	-3106.2119	45.9
37373	-3106.2070	39.2	-3106.2093	47.5
38620	-3106.2004	43.4	-3106.2092	47.6
39353	-3106.2279	26.1	-3106.2080	48.4
37051	-3106.2011	42.9	-3106.2075	48.6
35061	-3106.2047	40.7	-3106.2064	49.4
39173	-3106.1990	44.3	-3106.2029	51.5
37872	-3106.2180	32.3	-3106.1987	54.2
35413	-3106.1940	47.4	-3106.1936	57.4
34464	-3106.1762	58.5	-3106.1909	59.0
38913	-3106.2092	37.9	-3106.1904	59.4
39156	-3106.2053	40.3	-3106.1839	63.4
39269	-3106.1966	45.8	-3106.1749	69.1
36844	-3106.1927	48.2	-3106.1721	70.9
39053	-3106.1937	47.6	-3106.1711	71.5
39054	-3106.1872	51.7	-3106.1711	71.5
34388	not converged		not converged	
35045	not converged		not converged	
35052	not converged		not converged	
37549	not converged		not converged	
37896	-3106.2340	22.3	not converged	
38471	not converged		not converged	
38472	not converged		not converged	
39548	-3106.2094	37.7	not converged	
39667	not converged		not converged	
39687	-3106.2181	32.2	not converged	
39701	not converged		not converged	
39705	not converged		not converged	
39709	-3106.2199	31.1	not converged	

^a The energies of C_{82}^3 were obtained by single-point energy calculations based on the optimized neutral C_{82} geometries.

Table S2. Total Energies (E) and Cartesian Coordinates of $U@C_{82}$ Calculated with the BLYP/BS Method in the Triplet State^a

species	total energy (a.u.)	Cartesian coordinates
$U@^{#5}C_{82}(A)$	-3601.48920134	83 C 4.3060542039 0.4059119147 0.5248617868 C 4.3168520557 -0.7540520337 -0.3190399433 C 4.0626604432 1.5565069102 -0.3174748466 C 4.050395125 -0.3293092281 -1.6713842638 C 3.8378892864 1.0914172993 -1.6707824418 C 3.7979170238 0.355933749 1.8587719977 C 3.7732205385 -1.9664692742 0.1464052212 C 3.3962216959 2.7011694125 0.1811964334 C 3.3042259358 -1.1392885508 -2.5321928679 C 3.2079906607 -2.0324324865 1.4587760744 C 3.237660936 -0.9129196842 2.3443436474 C 3.2631136049 1.5681035606 2.3880514883 C 2.9648689555 -2.7692666716 -0.7282256215 C 3.0494002011 2.7176707228 1.567080967 C 2.8434337523 1.6950043913 -2.4954076349 C 2.7667535882 -2.3791433108 -2.047645669 C 2.5658121851 3.4253641902 -0.7255572042 C 2.316687007 -0.5370888487 -3.40332711 C 2.2896237461 2.9208324549 -2.0362818246 C 2.0528524525 -2.9014806039 1.388584937 C 2.1974267079 1.5507971198 3.3663496623 C 1.8630627386 -3.3430193723 0.0283319519 C 2.0212316259 0.8514896456 -3.3808607316 C 2.230715158 -0.8902662006 3.3492759446 C 1.8477609308 3.3853674148 2.01869126 C 1.4476449442 -2.5796486947 -2.6165833481 C 1.7073895512 0.3531784237 3.8539192866 C 1.2590833309 -1.5036004201 -3.5622822005 C 1.2985143735 2.6392936696 3.1175002317 C 1.4005216203 4.133519358 -0.2664273322 C 1.142798301 -1.8337374265 3.3391604649 C 0.9744894635 -2.803928836 2.3072880503 C 0.960558201 3.3399264572 -2.398968506 C 1.0017152505 4.0661613636 1.101305292 C 0.5593109173 -3.675772034 -0.5153158207 C 0.6615424221 1.2877212196 -3.7517162285 C 0.4222023486 4.1049660191 -1.3128157462

		C 0.3552351123 -3.1827301644 -1.9227579912 C 0.2916528897 0.2086008554 4.1195039777 C 0.1304804693 2.5502670533 -3.2351048786 C -0.004495738 -1.1748744569 3.9043762957 C 0.0003510904 -1.0944597349 -3.9311755659 C -0.116225838 2.4837838105 3.2838821868 C -0.2888127783 0.2948340999 -4.1172447427 C -0.3697603127 -3.2230835034 1.8552277119 C -0.3998962488 4.0791543336 1.3939885569 C -0.6537977064 1.2136583023 3.774471288 C -0.5761852283 -3.6852746791 0.4373645434 C -0.9794015774 4.0931775919 -1.0203768802 C -0.9422574847 3.2947295947 2.4642304436 C -0.9866296221 -2.7492102863 -2.3668317507 C -1.150373538 -1.7588245259 -3.3795995468 C -1.3779604128 4.1343470783 0.3485115278 C -1.2834009942 2.709537975 -3.0653924226 C -1.2651288177 -1.5700534821 3.5268528697 C -1.7038936728 0.4411800972 -3.8486878527 C -1.4590462635 -2.6261716529 2.5600088471 C -1.8288815618 3.4356575307 -1.9514853141 C -2.2336443546 -0.8098015898 -3.3700156923 C -2.0155467377 0.7920585953 3.3946585178 C -1.8780167651 -3.3327171602 -0.0997294456 C -2.1878424185 1.6309663363 -3.336609429 C -2.0653334 -2.8612091525 -1.4502726407 C -2.2734136531 2.8900495782 2.0930729531 C -2.3180467253 -0.595331431 3.3882594243 C -2.5468971786 3.4228729194 0.793001572 C -2.7775838279 -2.4067685738 1.9954878187 C -2.8335311637 1.6578132397 2.52688956 C -3.0339402219 2.7649272497 -1.5136162621 C -2.9774381256 -2.7687128238 0.6683667261 C -3.253349351 1.6335148479 -2.357978011 C -3.2402638672 -0.8479104317 -2.3655414414 C -3.2159767942 -1.9853863486 -1.5026311753 C -3.3087186121 -1.1745758301 2.505406096 C -3.3808534664 2.721616324 -0.1284027439 C -3.7814499747 -1.9438390729 -0.1894255294 C -3.7941947474 0.4134365581 -1.8537582419 C -3.8310187637 1.0763236029 1.690126702 C -4.0510883606 -0.3430823314 1.6615224408 C -4.0532467654 1.5703592482 0.3466546694 C -4.3193481872 -0.7384681629 0.3009631516
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		C -4.3021663377 0.4385500299 -0.5190402947 U -0.0077128206 -1.3615984616 -0.0061796989
U@ ^{#5} C ₈₂ (B)	-3601.5663323	83 C -4.29416200 0.21424900 0.30221900 C -4.23224300 1.39259900 -0.52204600 C -4.02580500 -0.92496500 -0.54912700 C -3.89977700 0.98279700 -1.87269100 C -3.70889700 -0.43997300 -1.87810600 C -3.86340500 0.23717200 1.65612800 C -3.71555800 2.58303300 -0.01341300 C -3.40857300 -2.08394900 -0.02684400 C -3.09545700 1.77998000 -2.67629700 C -3.23069400 2.63081600 1.34036100 C -3.32448400 1.49470900 2.19924200 C -3.38609400 -1.00033200 2.20555600 C -2.84781800 3.39648700 -0.83327500 C -3.14059600 -2.13382000 1.36675300 C -2.68058600 -1.03014300 -2.65996100 C -2.56757500 3.02991600 -2.14698500 C -2.51174400 -2.80881200 -0.88542500 C -2.10322400 1.19380400 -3.53446100 C -2.14425500 -2.26408700 -2.15545600 C -2.08034500 3.49358800 1.36190800 C -2.38801400 -1.01629600 3.23798800 C -1.79522600 3.90837700 -0.00400900 C -1.82513200 -0.20751900 -3.50661900 C -2.36886700 1.43926900 3.25105100 C -1.97310400 -2.84505000 1.85532900 C -1.25689600 3.22497500 -2.66968600 C -1.89450300 0.17093500 3.77427100 C -1.02954000 2.15071300 -3.63010500 C -1.48468600 -2.10167600 3.00999200 C -1.44225600 -3.65792800 -0.40532300 C -1.29045900 2.37635400 3.33896500 C -1.05498900 3.34079500 2.30941300 C -0.84063100 -2.73266400 -2.48012200 C -1.13113600 -3.64323000 1.02093500 C -0.47187300 4.05525100 -0.47214700 C -0.46006500 -0.65485700 -3.81308200 C -0.38979400 -3.63195300 -1.42633500 C -0.19120700 3.71793000 -1.87256500 C -0.51266700 0.29213700 4.11479700

		C 0.03320400 -1.92498400 -3.28678700
		C -0.18181200 1.68903900 3.94708200
		C 0.24050200 1.73734700 -3.92566500
		C -0.09343900 -1.96905200 3.25611100
		C 0.52571300 0.33305000 -4.11351100
		C 0.31505500 3.68266300 1.92188300
		C 0.27357200 -3.66519300 1.37322900
		C 0.44054300 -0.72290700 3.80032600
		C 0.60703500 4.03040400 0.52619500
		C 1.01440300 -3.65889600 -1.07424700
		C 0.75383300 -2.79528600 2.43991400
		C 1.16691000 3.33685400 -2.26522400
		C 1.37104700 2.37954400 -3.30802200
		C 1.32433600 -3.70635600 0.35081600
		C 1.41918000 -2.10670900 -3.04338400
		C 1.10135400 2.06472300 3.65731600
		C 1.90280200 0.16200400 -3.77510100
		C 1.36382300 3.14416700 2.71172500
		C 1.88288700 -2.88103900 -1.89939300
		C 2.41830900 1.40704300 -3.23407500
		C 1.81964500 -0.31608100 3.50023100
		C 1.92501300 3.84728900 0.05600800
		C 2.35747200 -1.04789900 -3.25616400
		C 2.19654200 3.44230900 -1.31583500
		C 2.07164100 -2.36338300 2.12081500
		C 2.14307200 1.07483400 3.54783800
		C 2.42096400 -2.90062500 0.84246700
		C 2.66784500 2.91416500 2.18624900
		C 2.64783800 -1.15452000 2.64199500
		C 3.07236400 -2.21526200 -1.40061200
		C 2.96006200 3.28999600 0.87769200
		C 3.35539400 -1.07890300 -2.22364100
		C 3.37503300 1.41634900 -2.18187200
		C 3.31788600 2.54254100 -1.30693500
		C 3.15430700 1.64041400 2.69752300
		C 3.34072600 -2.19383300 -0.00650300
		C 3.80067600 2.45992400 0.04627100
		C 3.87236500 0.13426300 -1.65678800
		C 3.69492600 -0.58710100 1.86807800
		C 3.93200400 0.82863400 1.88271900
		C 3.99544900 -1.06282800 0.53203700
		C 4.27786200 1.24644900 0.53775700
		C 4.30141000 0.07822900 -0.30315200
		U -0.03374400 -1.59521800 -0.00366500

U@ ^{#8} C ₈₂	-3601.583284	83 C -0.97189900 4.53303300 0.69217000 C 0.28870900 4.44722200 1.42132900 C -0.97189900 4.53303300 -0.69217000 C 0.28870900 4.44722200 -1.42132900 C 1.48383800 4.36701200 0.72925900 C 1.48383800 4.36701200 -0.72925900 C -1.96158900 3.78222400 1.40304800 C 0.08543200 3.64197600 2.58833400 C -1.96158900 3.78222400 -1.40304800 C 0.08543200 3.64197600 -2.58833400 C 2.51015800 3.47716100 1.18419200 C 2.51015800 3.47716100 -1.18419200 C -1.33485500 3.34765000 2.63826700 C -1.33485500 3.34765000 -2.63826700 C 3.22330100 3.03829400 0.00000000 C -2.91973900 2.97043300 0.73422400 C -2.91973900 2.97043300 -0.73422400 C 1.05136200 2.69722400 3.03274700 C 2.32056600 2.61145700 2.29796400 C 1.05136200 2.69722400 -3.03274700 C 2.32056600 2.61145700 -2.29796400 C -1.78572900 2.22744100 3.28496500 C -1.78572900 2.22744100 -3.28496500 C 3.88780900 1.83870400 0.00000000 C -3.43310100 1.80318500 1.46180600 C -3.43310100 1.80318500 -1.46180600 C 0.55539900 1.52799000 3.77175900 C 3.08088300 1.35625900 2.30762000 C 0.55539900 1.52799000 -3.77175900 C 3.08088300 1.35625900 -2.30762000 C -2.88848100 1.47504400 2.74330600 C -0.85300800 1.33549600 3.92262700 C -2.88848100 1.47504400 -2.74330600 C -0.85300800 1.33549600 -3.92262700 C 3.88360000 1.01168600 1.17802500 C 3.88360000 1.01168600 -1.17802500 C -3.98431200 0.72623600 0.72275500 C -3.98431200 0.72623600 -0.72275500 C 1.35488500 0.35680800 3.81537500 C 2.60067600 0.27238800 3.09190600 C 1.35488500 0.35680800 -3.81537500
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		C 2.60067600 0.27238800 -3.09190600 C -2.70648100 0.12200400 3.16279500 C -1.44582600 0.03449000 3.89394000 C -2.70648100 0.12200400 -3.16279500 C -1.44582600 0.03449000 -3.89394000 C 4.01115800 -0.34203300 0.72847000 C 4.01115800 -0.34203300 -0.72847000 C -3.86583300 -0.62955300 1.16717800 C -3.86583300 -0.62955300 -1.16717800 C 0.77062100 -0.95111500 3.85168200 C 2.78100900 -1.08533800 2.68182700 C 0.77062100 -0.95111500 -3.85168200 C 2.78100900 -1.08533800 -2.68182700 C -3.15952400 -0.95230500 2.35835100 C -0.63996700 -1.12792500 3.82364800 C -3.15952400 -0.95230500 -2.35835100 C -0.63996700 -1.12792500 -3.82364800 C 3.42601300 -1.40160000 1.45788700 C 3.42601300 -1.40160000 -1.45788700 C -3.77614900 -1.47528200 0.00000000 C 1.64151900 -1.85424100 3.13618700 C 1.64151900 -1.85424100 -3.13618700 C -2.38307800 -2.16087300 2.36212400 C -1.14728000 -2.25112800 3.08540900 C -2.38307800 -2.16087300 -2.36212400 C -1.14728000 -2.25112800 -3.08540900 C 2.90485600 -2.52083400 0.71371700 C 2.90485600 -2.52083400 -0.71371700 C -2.95971800 -2.63297900 0.00000000 C 1.12877300 -2.94459100 2.38452900 C 1.12877300 -2.94459100 -2.38452900 C -2.29144200 -3.00237800 1.21544700 C -0.28931500 -3.16415600 2.39595200 C -2.29144200 -3.00237800 -1.21544700 C -0.28931500 -3.16415600 -2.39595200 C 1.81606500 -3.33563500 1.16964400 C 1.81606500 -3.33563500 -1.16964400 C -0.99728800 -3.67557200 1.22092700 C -0.99728800 -3.67557200 -1.22092700 C 1.13440300 -3.90778700 0.00000000 C -0.32188300 -4.07866900 0.00000000 U 0.10034900 -1.71082000 0.00000000
U@ ^{#9} C ₈₂ (A)	-3601.537999	83

		C -0.4167785613 4.0067676002 -1.0660260342 C -0.0476725247 4.0211787451 1.3315620257 C -0.9699864923 3.9612880941 0.253464976 C 1.0058641491 3.9419340112 -1.2956143788 C 1.3752736863 3.9364806474 1.1084625823 C 1.9235584534 3.8731055147 -0.2094058224 C -1.0359361018 3.302229711 -2.1359308472 C -0.3161192097 3.3267330023 2.5581669724 C 1.2406976381 3.1864012954 -2.5024959062 C 1.9676024239 3.1867657689 2.1903522322 C -2.2313353472 3.2437255848 0.4601057574 C 3.1333107624 3.131033208 -0.3917501187 C -0.0309371538 2.7432878222 -2.9964309306 C 0.9092750482 2.7540428781 3.0593963295 C -2.2448924865 2.6197267481 -1.9556281257 C -1.5178994008 2.6746381965 2.771935364 C -2.8616473444 2.6062727924 -0.663857009 C -2.5023006947 2.651451073 1.7229887069 C 3.3769805674 2.3976147361 -1.6023130582 C 3.73459106 2.4064322224 0.6916304397 C 2.3998214599 2.3693098992 -2.637759259 C 3.1174987518 2.3774641079 1.973968027 C -0.2147313015 1.4523443281 -3.5856294515 C 0.9150691566 1.4640265638 3.6633259214 C -2.5617554144 1.4077291833 -2.6581801219 C -1.5441767447 1.4064630413 3.4654300038 C -3.6644585963 1.4091635698 -0.5687507586 C -3.2445331736 1.4125635819 1.835593792 C 4.1480304769 1.2255778304 -1.2715105958 C 4.3585699747 1.229040142 0.1472659477 C 2.2572010079 1.1583457254 -3.3832085947 C 3.2089483954 1.1711710821 2.7343983311 C -1.4927278413 0.7213794274 -3.3981037745 C -0.3503495628 0.7332382016 3.8405943854 C -3.5541506935 0.7059050633 -1.8423477191 C -2.6764105894 0.686998269 2.9499339396 C -3.7759428861 0.730694012 0.7103555246 C 0.96494278 0.7152356893 -3.8543751206 C 2.1238404111 0.7261166328 3.5463204028 C 3.9718193859 0.0040511379 -1.9822146413 C 4.4104984665 0.0047442517 0.8883690509 C 3.0450031345 0.0029601681 -3.0849664828 C 3.869613071 0.0042975377 2.2028971941 C 0.9665004515 -0.7139052775 -3.8542122702
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		C 2.1253637266 -0.7212430902 3.5463437196 C -3.7742667795 -0.73915354 0.7104529974 C -3.5523659577 -0.7141303775 -1.8422184527 C -2.6749469113 -0.6928654358 2.9501227194 C -1.4910678935 -0.7253076902 -3.3979363387 C -0.3487853792 -0.7338632437 3.840799463 C 2.2596970857 -1.1540825867 -3.3828435977 C 3.2112885537 -1.1640271804 2.7345515729 C 4.1505880632 -1.2170818782 -1.2712249365 C 4.3610795131 -1.2198514069 0.1474763536 C -3.6611853904 -1.4175238438 -0.5684394776 C -3.241537042 -1.4198259382 1.8358653892 C -2.5585547321 -1.4138333612 -2.6577779654 C -1.5412413357 -1.4097759444 3.4658206915 C -0.2115449755 -1.4535145614 -3.5853165332 C 0.9181109151 -1.4618684947 3.6636401188 C 2.404971953 -2.3647681899 -2.637176714 C 3.1225339104 -2.3707351939 1.9743800607 C 3.3821983275 -2.3908732079 -1.601882842 C 3.7397787918 -2.3986436337 0.692083428 C -2.855975859 -2.61289866 -0.6634243201 C -2.4966030981 -2.6569704255 1.7233340223 C -2.239190098 -2.6251301848 -1.9551968248 C -1.512145766 -2.6779032253 2.7724998213 C -0.0249554074 -2.7440377488 -2.9960275854 C 0.9152069153 -2.7518948694 3.0599227484 C 3.1401226182 -3.1246570366 -0.3911008701 C -2.2244014514 -3.2489514148 0.4606533973 C 1.247585381 -3.1842848817 -2.5019414568 C 1.9744885383 -3.1825136121 2.1910327502 C -1.0286990227 -3.3048456235 -2.1353251796 C -0.3090081995 -3.3273418585 2.5587170654 C 1.9319256409 -3.8692073132 -0.2086768164 C 1.0142994188 -3.9401012843 -1.2948666136 C 1.3836465536 -3.9334825748 1.1091303565 C -0.9614620678 -3.9637452875 0.2541130584 C -0.408109947 -4.0081265784 -1.0653213281 C -0.0390467917 -4.0214687278 1.332250259 U -1.4664702685 -0.0008919777 -0.7956153156
U@ ^{#9} C ₈₂ (B)	-3601.5921176	83 C 1.2866235358 4.012542241 -0.8829442377 C -1.1383047211 4.0194486438 -0.84898796 C 0.0645913415 3.9660743185 -1.6151816436

		C 1.3127025561 3.9363149243 0.5444123582 C -1.1187110818 3.9423167301 0.5790647645 C 0.1070377921 3.8611566047 1.2916731678 C 2.4640085999 3.3211124343 -1.3591275799 C -2.327029687 3.3278838136 -1.2913220809 C 2.4873119701 3.1754062344 0.9433685766 C -2.2760428414 3.1822366109 1.0195160815 C 0.0459479654 3.2605835355 -2.9050351043 C 0.1203947522 3.0800424116 2.4994460249 C 3.1727759907 2.7518177405 -0.2433786331 C -2.9941785458 2.7530459795 -0.156043766 C 2.4529096908 2.6618750337 -2.5671983169 C -2.3496154847 2.661339018 -2.4998894622 C 1.2453052076 2.6484007738 -3.374483852 C -1.1644241792 2.64860396 -3.3418757019 C 1.2835022557 2.3572402737 2.9072381475 C -1.0308295731 2.3847190294 2.9855213952 C 2.4739634547 2.3595939731 2.0990255941 C -2.2261305709 2.3782019618 2.1836628542 C 3.7817770767 1.4636790858 -0.339061931 C -3.5871144517 1.46463022 -0.2370647532 C 3.1411870776 1.402984491 -2.7171574884 C -3.0383712252 1.405682356 -2.6309440175 C 1.2330324278 1.4238982276 -4.1073343155 C -1.1717297143 1.4247847421 -4.0770418863 C 0.8647450456 1.2193625746 3.6726738131 C -0.5994389784 1.230483033 3.7691179691 C 3.2401742283 1.1631794598 2.0730343544 C -2.9745390268 1.1605829561 2.1863380641 C 3.7336929508 0.7338873997 -1.6100810459 C -3.5916131558 0.7338194438 -1.5041435407 C 2.4334558789 0.6864036661 -3.7403565244 C -2.3588759578 0.6859313401 -3.67583445 C 0.0269346999 0.737143348 -4.4104979702 C 3.8777743878 0.7196830706 0.8696886503 C -3.6079573839 0.7132349467 0.979490335 C 1.6257979774 0. 3.5908049069 C -1.3825652534 0. 3.817638997 C 2.8230624959 0. 2.8206520527 C -2.5753961902 0. 2.976590563 C 3.8777743878 -0.7196830706 0.8696886503 C -3.6079573839 -0.7132349467 0.979490335 C 0.0269346999 -0.737143348 -4.4104979702 C 2.4334558789 -0.6864036661 -3.7403565244
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		C -2.3588759578 -0.6859313401 -3.67583445 C 3.7336929508 -0.7338873997 -1.6100810459 C -3.5916131558 -0.7338194438 -1.5041435407 C 3.2401742283 -1.1631794598 2.0730343544 C -2.9745390268 -1.1605829561 2.1863380641 C 0.8647450456 -1.2193625746 3.6726738131 C -0.5994389784 -1.230483033 3.7691179691 C 1.2330324278 -1.4238982276 -4.1073343155 C -1.1717297143 -1.4247847421 -4.0770418863 C 3.1411870776 -1.402984491 -2.7171574884 C -3.0383712252 -1.405682356 -2.6309440175 C 3.7817770767 -1.4636790858 -0.339061931 C -3.5871144517 -1.46463022 -0.2370647532 C 2.4739634547 -2.3595939731 2.0990255941 C -2.2261305709 -2.3782019618 2.1836628542 C 1.2835022557 -2.3572402737 2.9072381475 C -1.0308295731 -2.3847190294 2.9855213952 C 1.2453052076 -2.6484007738 -3.374483852 C -1.1644241792 -2.64860396 -3.3418757019 C 2.4529096908 -2.6618750337 -2.5671983169 C -2.3496154847 -2.661339018 -2.4998894622 C 3.1727759907 -2.7518177405 -0.2433786331 C -2.9941785458 -2.7530459795 -0.156043766 C 0.1203947522 -3.0800424116 2.4994460249 C 0.0459479654 -3.2605835355 -2.9050351043 C 2.4873119701 -3.1754062344 0.9433685766 C -2.2760428414 -3.1822366109 1.0195160815 C 2.4640085999 -3.3211124343 -1.3591275799 C -2.327029687 -3.3278838136 -1.2913220809 C 0.1070377921 -3.8611566047 1.2916731678 C 1.3127025561 -3.9363149243 0.5444123582 C -1.1187110818 -3.9423167301 0.5790647645 C 0.0645913415 -3.9660743185 -1.6151816436 C 1.2866235358 -4.012542241 -0.8829442377 C -1.1383047211 -4.0194486438 -0.84898796 U -0.4407836487 0. 1.6030317026
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