

Supporting Information

Synthesis of palladium and copper nanoparticles supported on TiO₂ for oxidation solvent-free aerobic oxidation of benzyl alcohol

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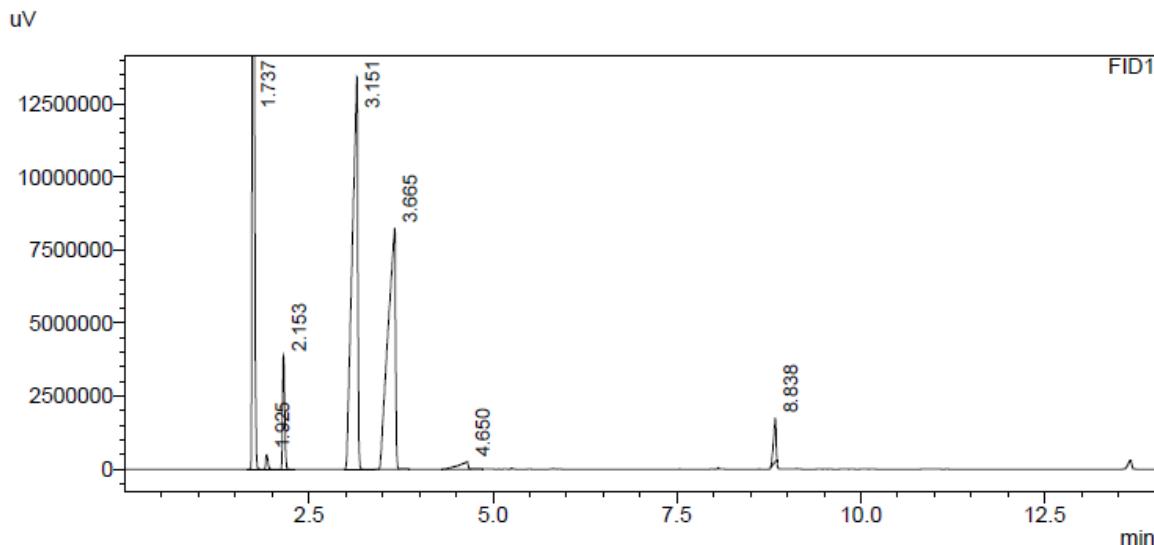
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Section S1. GC data

<Sample Information>

Sample Name : Pd-Cu/TiO2
Sample ID : Pd-Cu
Data Filename : Pd-Cu_TiO2.gcd
Method Filename : Benzylalcohol 2020.gcm
Batch Filename : Pd-Cu-TiO2.gcb
Vial # : 7 Sample Type : Unknown
Injection Volume : 1 uL
Date Acquired : 2/17/2021 12:12:33 PM Acquired by : System Administrator
Date Processed : 2/17/2021 12:26:36 PM Processed by : System Administrator

<Chromatogram>



<Peak Table>

FID1

Peak#	Ret. Time	Name	Area	Height	Conc.	Unit
1	1.737		58695690	27545786	0.000	
2	1.925	Benzene	982462	494681	0.000	ppm
3	2.153	Toluene	7950687	3820946	0.000	ppm
4	3.151	Benzaldehyde	69672717	13223258	0.000	ppm
5	3.665	Benzyl alcohol	58634784	8168983	0.000	ppm
6	4.650	Benzoic acid	2318545	246000	0.000	ppm
7	8.838		3542533	1477536	0.000	
Total			201797418	54977191		

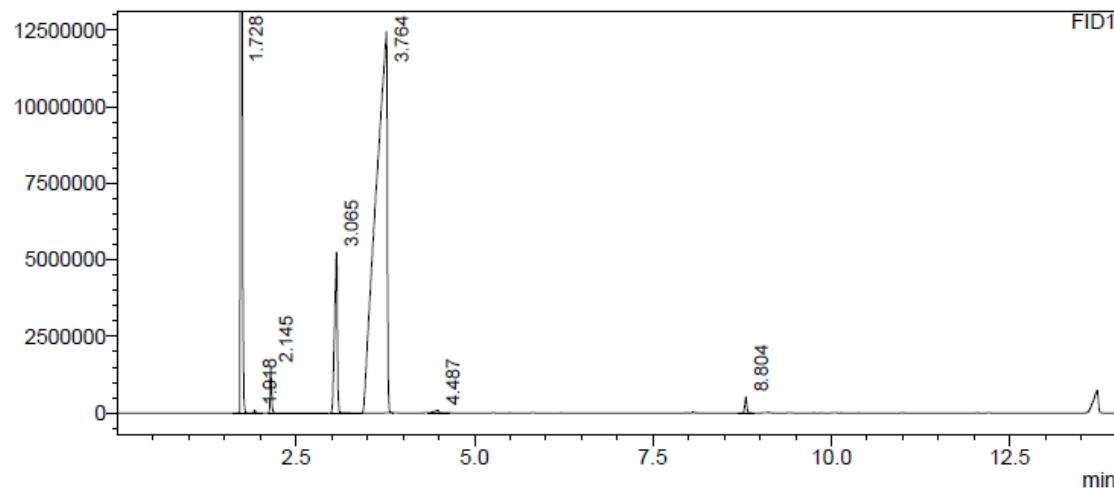
UOH-

<Sample Information>

Sample Name : Pd0.25-Cu0.75/TiO₂
Sample ID : cat 4
Data Filename : cat 4.gcd
Method Filename : Benzyl alcohol 2020.gcm
Batch Filename : Pd-Cu-TiO₂ different ratios.gcb
Vial # : 9 Sample Type : Unknown
Injection Volume : 1 μ L
Date Acquired : 2/24/2021 1:55:01 PM Acquired by : System Administrator
Date Processed : 2/24/2021 3:56:51 PM Processed by : System Administrator

<Chromatogram>

uV



<Peak Table>

FID1

Peak#	Ret. Time	Name	Area	Height	Conc.	Unit
1	1.728		49510552	29996035	0.000	
2	1.918	Benzene	112460	77655	0.000	ppm
3	2.145	Toluene	2142985	1451414	0.000	ppm
4	3.065	Benzaldehyde	13923541	5181541	0.000	ppm
5	3.764	Benzyl alcohol	136112142	12407153	0.000	ppm
6	4.487	Benzoic acid	394630	80155	0.000	ppm
7	8.804	Benzylbenzoate	976551	508605	0.000	ppm
Total			203172861	49702558		

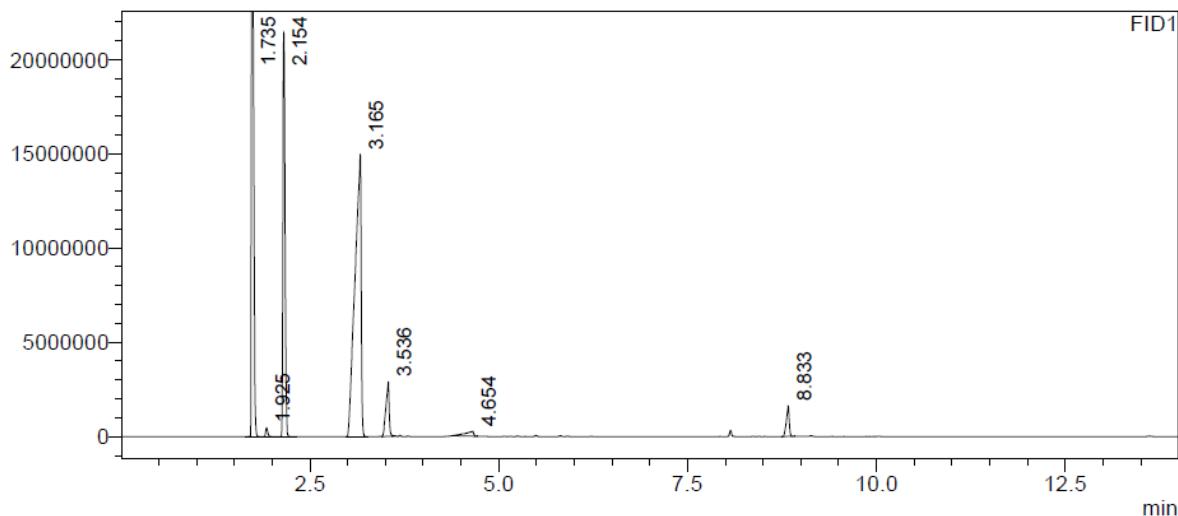
UOH-

<Sample Information>

Sample Name : Pd/TiO₂
Sample ID : cat 1
Data Filename : cat1.gcd
Method Filename : Benzyl alcohol 2020.gcm
Batch Filename : Pd-Cu-TiO₂ different ratios.gcb
Vial # : 6 Sample Type : Unknown
Injection Volume : 1 uL
Date Acquired : 2/24/2021 12:57:00 PM Acquired by : System Administrator
Date Processed : 2/24/2021 1:11:02 PM Processed by : System Administrator

<Chromatogram>

uV



<Peak Table>

FID1

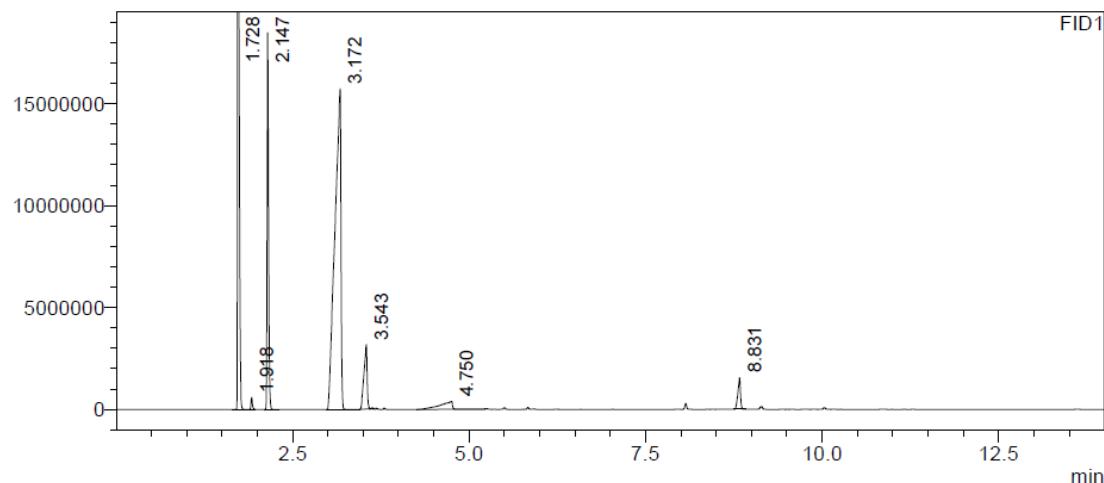
Peak#	Ret. Time	Name	Area	Height	Conc.	Unit
1	1.735		59351630	29451339	0.000	
2	1.925	Benzene	885897	459621	0.000	ppm
3	2.154	Toluene	42539368	21293887	0.000	ppm
4	3.165	Benzaldehyde	85437981	14872129	0.000	ppm
5	3.536	Benzyl alcohol	8593556	2876054	0.000	ppm
6	4.654	Benzoic acid	2138796	258271	0.000	ppm
7	8.833	Benzylbenzoate	4185764	1589481	0.000	ppm
Total			203132993	70800782		

<Sample Information>

Sample Name : Pd0.75-Cu0.25/TiO₂
Sample ID : cat 3
Data Filename : cat 3.gcd
Method Filename : Benzyl alcohol 2020.gcm
Batch Filename : Pd-Cu-TiO₂ different ratios.gcb
Vial # : 8 Sample Type : Unknown
Injection Volume : 1 μ L
Date Acquired : 2/24/2021 1:35:41 PM Acquired by : System Administrator
Date Processed : 2/24/2021 3:54:30 PM Processed by : System Administrator

<Chromatogram>

uV



<Peak Table>

FID1

Peak#	Ret. Time	Name	Area	Height	Conc.	Unit
1	1.728		50156280	30057821	0.000	
2	1.918	Benzene	810745	547665	0.000	ppm
3	2.147	Toluene	27829932	18049766	0.000	ppm
4	3.172	Benzaldehyde	92980037	15657086	0.000	ppm
5	3.543	Benzyl alcohol	9823296	3107453	0.000	ppm
6	4.750	Benzoic acid	4719239	383685	0.000	ppm
7	8.831	Benzylbenzoate	3989474	1550526	0.000	ppm
Total			190309004	69354003		

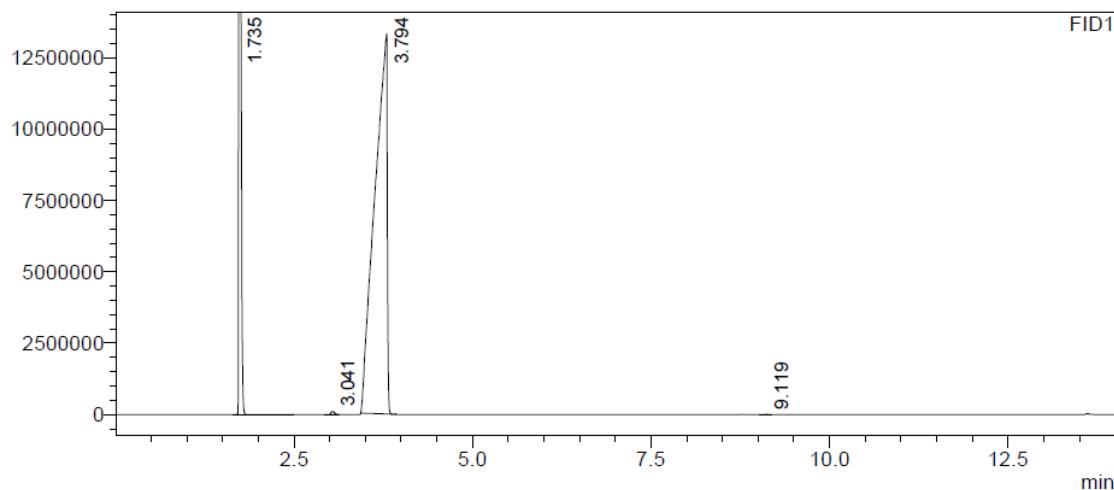
<Sample Information>

Sample Name : Cu/TiO2
Sample ID : cat 2
Data Filename : cat 2.gcd
Method Filename : Benzyl alcohol 2020.gcm
Batch Filename : Pd-Cu-TiO2 different ratios.gcb
Vial # : 7
Injection Volume : 1 uL
Date Acquired : 2/24/2021 1:16:19 PM
Date Processed : 2/24/2021 1:30:23 PM

Sample Type : Unknown
Acquired by : System Administrator
Processed by : System Administrator

<Chromatogram>

uV



<Peak Table>

FID1

Peak#	Ret. Time	Name	Area	Height	Conc.	Unit
1	1.735		59240788	28604318	0.000	
2	3.041	Benzaldehyde	322844	106274	0.000	ppm
3	3.794	Benzyl alcohol	160953621	13266701	0.000	ppm
4	9.119	Benzylbenzoate	4521	1852	0.000	ppm
Total			220521773	41979143		