

**Table S4. Enriched gene ontology (GO) terms of high-confidence SPCH targets**

Annotated number in query list: 1471 (high-confidence SPCH targets)

Annotated number in genome: 28352

\*: Ontology categories: P, biological process; F, molecular function; C, cellular function

<b>GO term</b>	<b>Ontology*</b>	<b>Description</b>	<b>Number in c</b>
GO:0050896	P	response to stimulus	530
GO:0010033	P	response to organic substance	298
GO:0042221	P	response to chemical stimulus	373
GO:0009628	P	response to abiotic stimulus	278
GO:0009719	P	response to endogenous stimulus	201
GO:0065007	P	biological regulation	490
GO:0009725	P	response to hormone stimulus	168
GO:0050789	P	regulation of biological process	422
GO:0009743	P	response to carbohydrate stimulus	112
GO:0010200	P	response to chitin	76
GO:0009737	P	response to abscisic acid stimulus	92
GO:0050794	P	regulation of cellular process	366
GO:0009753	P	response to jasmonic acid stimulus	77
GO:0071495	P	cellular response to endogenous stimulus	104
GO:0006950	P	response to stress	330
GO:0009611	P	response to wounding	61
GO:0070887	P	cellular response to chemical stimulus	147
GO:0007242	P	intracellular signaling cascade	135
GO:0009651	P	response to salt stress	97
GO:0009605	P	response to external stimulus	122
GO:0006970	P	response to osmotic stress	99
GO:0009987	P	cellular process	889
GO:0044283	P	small molecule biosynthetic process	174
GO:0051716	P	cellular response to stimulus	205
GO:0009416	P	response to light stimulus	125
GO:0007165	P	signal transduction	160
GO:0023052	P	signaling	207
GO:0071310	P	cellular response to organic substance	128
GO:0023046	P	signaling process	165
GO:0023060	P	signal transmission	165
GO:0009314	P	response to radiation	128
GO:0009755	P	hormone-mediated signaling pathway	77
GO:0032870	P	cellular response to hormone stimulus	80
GO:0009415	P	response to water	60
GO:0023033	P	signaling pathway	70
GO:0009414	P	response to water deprivation	59
GO:0009723	P	response to ethylene stimulus	54
GO:0019222	P	regulation of metabolic process	250

GO:0031323	P	regulation of cellular metabolic process	234
GO:0080090	P	regulation of primary metabolic process	223
GO:0048583	P	regulation of response to stimulus	79
GO:0031326	P	regulation of cellular biosynthetic process	214
GO:0009889	P	regulation of biosynthetic process	214
GO:0009733	P	response to auxin stimulus	59
GO:0044238	P	primary metabolic process	729
GO:0006575	P	cellular amino acid derivative metabolic process	81
GO:0048731	P	system development	174
GO:0048513	P	organ development	174
GO:0009751	P	response to salicylic acid stimulus	62
GO:0023034	P	intracellular signaling pathway	59
GO:0032502	P	developmental process	295
GO:0006633	P	fatty acid biosynthetic process	46
GO:0031347	P	regulation of defense response	65
GO:0009867	P	jasmonic acid mediated signaling pathway	44
GO:0071395	P	cellular response to jasmonic acid stimulus	44
GO:0080134	P	regulation of response to stress	66
GO:0009607	P	response to biotic stimulus	149
GO:0006972	P	hyperosmotic response	40
GO:0007275	P	multicellular organismal development	277
GO:0048367	P	shoot development	78
GO:0048856	P	anatomical structure development	249
GO:0044237	P	cellular metabolic process	709
GO:0045087	P	innate immune response	93
GO:0022621	P	shoot system development	78
GO:0032501	P	multicellular organismal process	284
GO:0010556	P	regulation of macromolecule biosynthetic process	197
GO:0060255	P	regulation of macromolecule metabolic process	217
GO:0002376	P	immune system process	96
GO:0006955	P	immune response	96
GO:0051252	P	regulation of RNA metabolic process	190
GO:0009058	P	biosynthetic process	513
GO:0010468	P	regulation of gene expression	208
GO:0051707	P	response to other organism	125
GO:0031407	P	oxylipin metabolic process	31
GO:0045088	P	regulation of innate immune response	53
GO:0009694	P	jasmonic acid metabolic process	30
GO:0046394	P	carboxylic acid biosynthetic process	105
GO:0016053	P	organic acid biosynthetic process	105
GO:0009626	P	plant-type hypersensitive response	52
GO:0034050	P	host programmed cell death induced by symbiont	52
GO:0006355	P	regulation of transcription, DNA-dependent	188

GO:0002682	P	regulation of immune system process	53
GO:0050776	P	regulation of immune response	53
GO:0045449	P	regulation of transcription	188
GO:0019219	P	regulation of nucleobase, nucleoside, nucleoti	195
GO:0010363	P	regulation of plant-type hypersensitive respon	49
GO:0043067	P	regulation of programmed cell death	51
GO:0051171	P	regulation of nitrogen compound metabolic pro	195
GO:0012501	P	programmed cell death	55
GO:0010941	P	regulation of cell death	51
GO:0080135	P	regulation of cellular response to stress	49
GO:0042398	P	cellular amino acid derivative biosynthetic proc	61
GO:0006612	P	protein targeting to membrane	50
GO:0006631	P	fatty acid metabolic process	65
GO:0031408	P	oxylipin biosynthetic process	27
GO:0009612	P	response to mechanical stimulus	18
GO:0009266	P	response to temperature stimulus	91
GO:0007623	P	circadian rhythm	29
GO:0048511	P	rhythmic process	29
GO:0009695	P	jasmonic acid biosynthetic process	26
GO:0008152	P	metabolic process	809
GO:0033554	P	cellular response to stress	125
GO:0044281	P	small molecule metabolic process	284
GO:0009791	P	post-embryonic development	168
GO:0034976	P	response to endoplasmic reticulum stress	45
GO:0008219	P	cell death	56
GO:0016265	P	death	56
GO:0010016	P	shoot morphogenesis	58
GO:0042538	P	hyperosmotic salinity response	27
GO:0044249	P	cellular biosynthetic process	488
GO:0048364	P	root development	60
GO:0022622	P	root system development	60
GO:0006519	P	cellular amino acid and derivative metabolic pi	112
GO:0006952	P	defense response	132
GO:0009617	P	response to bacterium	59
GO:0009863	P	salicylic acid mediated signaling pathway	43
GO:0071446	P	cellular response to salicylic acid stimulus	43
GO:0042402	P	cellular biogenic amine catabolic process	22
GO:0006725	P	cellular aromatic compound metabolic process	91
GO:0051704	P	multi-organism process	140
GO:0010817	P	regulation of hormone levels	50
GO:0032787	P	monocarboxylic acid metabolic process	121
GO:0009698	P	phenylpropanoid metabolic process	46
GO:0043436	P	oxoacid metabolic process	160

GO:0019752	P	carboxylic acid metabolic process	160
GO:0006351	P	transcription, DNA-dependent	192
GO:0006082	P	organic acid metabolic process	160
GO:0009741	P	response to brassinosteroid stimulus	21
GO:0006350	P	transcription	192
GO:0032774	P	RNA biosynthetic process	192
GO:0042180	P	cellular ketone metabolic process	161
GO:0009888	P	tissue development	88
GO:0009310	P	amine catabolic process	30
GO:0010374	P	stomatal complex development	30
GO:0009409	P	response to cold	61
GO:0009738	P	abscisic acid mediated signaling pathway	33
GO:0006984	P	ER-nuclear signaling pathway	28
GO:0009639	P	response to red or far red light	45
GO:0071215	P	cellular response to abscisic acid stimulus	34
GO:0030968	P	endoplasmic reticulum unfolded protein response	27
GO:0006807	P	nitrogen compound metabolic process	364
GO:0006986	P	response to unfolded protein	27
GO:0034620	P	cellular response to unfolded protein	27
GO:0007030	P	Golgi organization	26
GO:0009620	P	response to fungus	51
GO:0006066	P	alcohol metabolic process	95
GO:0048585	P	negative regulation of response to stimulus	40
GO:0009627	P	systemic acquired resistance	47
GO:0009913	P	epidermal cell differentiation	48
GO:0071216	P	cellular response to biotic stimulus	28
GO:0010218	P	response to far red light	18
GO:0000160	P	two-component signal transduction system (pt	25
GO:0008544	P	epidermis development	48
GO:0007398	P	ectoderm development	48
GO:0048466	P	androecium development	25
GO:0048443	P	stamen development	25
GO:0070838	P	divalent metal ion transport	27
GO:0071445	P	cellular response to protein stimulus	27
GO:0000165	P	MAPKKK cascade	28
GO:0042219	P	cellular amino acid derivative catabolic process	22
GO:0005975	P	carbohydrate metabolic process	163
GO:0044282	P	small molecule catabolic process	80
GO:0048366	P	leaf development	46
GO:0009699	P	phenylpropanoid biosynthetic process	37
GO:0048519	P	negative regulation of biological process	98
GO:0009862	P	systemic acquired resistance, salicylic acid me	31
GO:0048827	P	phyllome development	49

GO:0009641	P	shade avoidance	7
GO:0009873	P	ethylene mediated signaling pathway	20
GO:0006576	P	cellular biogenic amine metabolic process	25
GO:0009814	P	defense response, incompatible interaction	52
GO:0051179	P	localization	253
GO:0006790	P	sulfur metabolic process	62
GO:0065008	P	regulation of biological quality	122
GO:0046777	P	protein amino acid autophosphorylation	21
GO:0007243	P	protein kinase cascade	28
GO:0031348	P	negative regulation of defense response	32
GO:0009825	P	multidimensional cell growth	18
GO:0002679	P	respiratory burst during defense response	19
GO:0071369	P	cellular response to ethylene stimulus	21
GO:0045730	P	respiratory burst	19
GO:0044106	P	cellular amine metabolic process	79
GO:0006810	P	transport	237
GO:0010015	P	root morphogenesis	42
GO:0009411	P	response to UV	29
GO:0009308	P	amine metabolic process	84
GO:0010103	P	stomatal complex morphogenesis	21
GO:0048767	P	root hair elongation	24
GO:0008610	P	lipid biosynthetic process	91
GO:0009642	P	response to light intensity	31
GO:0009850	P	auxin metabolic process	20
GO:0048509	P	regulation of meristem development	26
GO:0009813	P	flavonoid biosynthetic process	27
GO:0009693	P	ethylene biosynthetic process	19
GO:0009692	P	ethylene metabolic process	19
GO:0021700	P	developmental maturation	34
GO:0010075	P	regulation of meristem growth	22
GO:0006833	P	water transport	21
GO:0042044	P	fluid transport	21
GO:0016052	P	carbohydrate catabolic process	52
GO:0043449	P	cellular alkene metabolic process	19
GO:0043450	P	alkene biosynthetic process	19
GO:0006520	P	cellular amino acid metabolic process	73
GO:0046700	P	heterocycle catabolic process	30
GO:0042445	P	hormone metabolic process	34
GO:0051234	P	establishment of localization	238
GO:0032880	P	regulation of protein localization	10
GO:0019438	P	aromatic compound biosynthetic process	59
GO:0032879	P	regulation of localization	25
GO:0009851	P	auxin biosynthetic process	18

GO:0009653	P	anatomical structure morphogenesis	126
GO:0042436	P	indole derivative catabolic process	14
GO:0043481	P	anthocyanin accumulation in tissues in respon	17
GO:0043480	P	pigment accumulation in tissues	17
GO:0043473	P	pigmentation	17
GO:0000096	P	sulfur amino acid metabolic process	44
GO:0043476	P	pigment accumulation	17
GO:0043478	P	pigment accumulation in response to UV light	17
GO:0043479	P	pigment accumulation in tissues in response to	17
GO:0019748	P	secondary metabolic process	95
GO:0035266	P	meristem growth	22
GO:0006979	P	response to oxidative stress	52
GO:0042434	P	indole derivative metabolic process	20
GO:0042430	P	indole and derivative metabolic process	20
GO:0009963	P	positive regulation of flavonoid biosynthetic pro	16
GO:0009812	P	flavonoid metabolic process	28
GO:0000038	P	very-long-chain fatty acid metabolic process	11
GO:0071489	P	cellular response to red or far red light	10
GO:0048507	P	meristem development	45
GO:0010017	P	red or far-red light signaling pathway	10
GO:0044262	P	cellular carbohydrate metabolic process	127
GO:0006605	P	protein targeting	73
GO:0009965	P	leaf morphogenesis	35
GO:0048469	P	cell maturation	32
GO:0048765	P	root hair cell differentiation	32
GO:0048764	P	trichoblast maturation	32
GO:0009074	P	aromatic amino acid family catabolic process	14
GO:0009063	P	cellular amino acid catabolic process	22
GO:0006629	P	lipid metabolic process	126
GO:0051789	P	response to protein stimulus	37
GO:0034641	P	cellular nitrogen compound metabolic process	102
GO:0009056	P	catabolic process	150
GO:0009684	P	indoleacetic acid biosynthetic process	16
GO:0008104	P	protein localization	92
GO:0006598	P	polyamine catabolic process	9
GO:0048589	P	developmental growth	63
GO:0009683	P	indoleacetic acid metabolic process	16
GO:0009072	P	aromatic amino acid family metabolic process	27
GO:0048608	P	reproductive structure development	120
GO:0042335	P	cuticle development	10
GO:0043069	P	negative regulation of programmed cell death	21
GO:0044248	P	cellular catabolic process	144
GO:0009704	P	de-etiolation	5

GO:0048523	P	negative regulation of cellular process	62
GO:0042446	P	hormone biosynthetic process	29
GO:0006569	P	tryptophan catabolic process	13
GO:0046218	P	indolalkylamine catabolic process	13
GO:0043170	P	macromolecule metabolic process	540
GO:0009962	P	regulation of flavonoid biosynthetic process	17
GO:0071482	P	cellular response to light stimulus	12
GO:0071478	P	cellular response to radiation	12
GO:0060548	P	negative regulation of cell death	21
GO:0006568	P	tryptophan metabolic process	15
GO:0006586	P	indolalkylamine metabolic process	15
GO:0048878	P	chemical homeostasis	28
GO:0040007	P	growth	72
GO:0010035	P	response to inorganic substance	82
GO:0042435	P	indole derivative biosynthetic process	18
GO:0009646	P	response to absence of light	8
GO:0010054	P	trichoblast differentiation	33
GO:0051246	P	regulation of protein metabolic process	25
GO:0051865	P	protein autoubiquitination	5
GO:0048528	P	post-embryonic root development	17
GO:0050832	P	defense response to fungus	33
GO:0016126	P	sterol biosynthetic process	20
GO:0071555	P	cell wall organization	51
GO:0055080	P	cation homeostasis	23
GO:0044275	P	cellular carbohydrate catabolic process	47
GO:0019318	P	hexose metabolic process	51
GO:0019439	P	aromatic compound catabolic process	15
GO:0048527	P	lateral root development	16
GO:0048653	P	anther development	13
GO:0010053	P	root epidermal cell differentiation	33
GO:0043401	P	steroid hormone mediated signaling pathway	8
GO:0009742	P	brassinosteroid mediated signaling pathway	8
GO:0048545	P	response to steroid hormone stimulus	8
GO:0071383	P	cellular response to steroid hormone stimulus	8
GO:0042743	P	hydrogen peroxide metabolic process	32
GO:0016051	P	carbohydrate biosynthetic process	80
GO:0030003	P	cellular cation homeostasis	20
GO:0032268	P	regulation of cellular protein metabolic process	23
GO:0034754	P	cellular hormone metabolic process	20
GO:0006816	P	calcium ion transport	16
GO:0071367	P	cellular response to brassinosteroid stimulus	8
GO:0016125	P	sterol metabolic process	20
GO:0034613	P	cellular protein localization	79

GO:0015674	P	di-, tri-valent inorganic cation transport	31
GO:0019751	P	polyol metabolic process	17
GO:0007166	P	cell surface receptor linked signaling pathway	19
GO:0070727	P	cellular macromolecule localization	81
GO:0010310	P	regulation of hydrogen peroxide metabolic pro	21
GO:0044255	P	cellular lipid metabolic process	99
GO:0080010	P	regulation of oxygen and reactive oxygen spec	21
GO:0051239	P	regulation of multicellular organismal process	54
GO:0007017	P	microtubule-based process	30
GO:0006796	P	phosphate metabolic process	111
GO:0009739	P	response to gibberellin stimulus	19
GO:0008356	P	asymmetric cell division	6
GO:0006793	P	phosphorus metabolic process	111
GO:0006800	P	oxygen and reactive oxygen species metabolic	32
GO:0042742	P	defense response to bacterium	34
GO:0046907	P	intracellular transport	100
GO:0009269	P	response to desiccation	8
GO:0040008	P	regulation of growth	28
GO:0046164	P	alcohol catabolic process	42
GO:0006886	P	intracellular protein transport	77
GO:0030528	F	transcription regulator activity	156
GO:0003700	F	transcription factor activity	149
GO:0003677	F	DNA binding	188
GO:0005515	F	protein binding	193
GO:0044464	C	cell part	1236
GO:0005623	C	cell	1236
GO:0005634	C	nucleus	583
GO:0005886	C	plasma membrane	260
GO:0030312	C	external encapsulating structure	60
GO:0005618	C	cell wall	59
GO:0009505	C	plant-type cell wall	33
GO:0044459	C	plasma membrane part	86
GO:0016020	C	membrane	379



Number in	p-value	FDR
6237	8.40E-33	6.10E-29
2732	1.60E-32	6.10E-29
3936	9.80E-30	2.10E-26
2568	1.10E-29	2.10E-26
1595	1.70E-28	2.50E-25
6148	1.20E-23	1.40E-20
1356	4.30E-23	4.50E-20
5178	1.80E-21	1.70E-18
811	1.10E-18	9.20E-16
421	1.50E-18	1.10E-15
612	1.40E-17	9.60E-15
4547	1.90E-17	1.20E-14
471	1.20E-16	6.80E-14
800	8.00E-16	4.20E-13
4091	1.00E-15	5.20E-13
337	3.40E-15	1.60E-12
1395	9.40E-15	4.10E-12
1237	1.20E-14	4.80E-12
765	3.10E-14	1.20E-11
1083	3.30E-14	1.20E-11
815	1.80E-13	6.00E-11
14380	1.80E-13	6.00E-11
1854	3.80E-13	1.20E-10
2316	4.30E-13	1.30E-10
1171	5.00E-13	1.40E-10
1658	4.90E-13	1.40E-10
2353	5.50E-13	1.50E-10
1215	5.90E-13	1.60E-10
1755	1.50E-12	3.60E-10
1755	1.50E-12	3.60E-10
1246	2.90E-12	7.00E-10
587	3.30E-12	7.80E-10
627	4.40E-12	1.00E-09
399	6.50E-12	1.40E-09
515	7.80E-12	1.60E-09
391	8.60E-12	1.80E-09
352	3.80E-11	7.60E-09
3156	4.50E-11	8.90E-09

2907	5.40E-11	1.00E-08
2741	6.90E-11	1.30E-08
660	9.90E-11	1.80E-08
2619	1.30E-10	2.20E-08
2622	1.40E-10	2.40E-08
426	1.80E-10	3.00E-08
11699	2.40E-10	4.00E-08
703	3.00E-10	4.70E-08
2028	3.10E-10	4.70E-08
2027	3.00E-10	4.70E-08
468	3.10E-10	4.70E-08
434	3.40E-10	5.10E-08
3983	5.50E-10	8.00E-08
301	1.20E-09	1.70E-07
524	1.30E-09	1.80E-07
282	1.50E-09	2.10E-07
282	1.50E-09	2.10E-07
540	1.60E-09	2.20E-07
1698	1.70E-09	2.20E-07
245	2.70E-09	3.40E-07
3757	3.30E-09	4.20E-07
709	4.20E-09	5.10E-07
3304	4.20E-09	5.10E-07
11501	4.70E-09	5.60E-07
914	4.90E-09	5.70E-07
712	5.00E-09	5.80E-07
3909	7.70E-09	8.60E-07
2487	7.70E-09	8.60E-07
2808	7.90E-09	8.70E-07
968	8.80E-09	9.40E-07
968	8.80E-09	9.40E-07
2386	1.00E-08	1.10E-06
7932	1.10E-08	1.20E-06
2678	1.20E-08	1.20E-06
1393	1.20E-08	1.20E-06
167	1.20E-08	1.20E-06
412	1.40E-08	1.40E-06
159	1.50E-08	1.50E-06
1108	1.50E-08	1.50E-06
1108	1.50E-08	1.50E-06
401	1.60E-08	1.50E-06
402	1.70E-08	1.60E-06
2373	1.80E-08	1.60E-06

416	1.90E-08	1.70E-06
416	1.90E-08	1.70E-06
2377	2.00E-08	1.70E-06
2489	2.00E-08	1.80E-06
372	2.60E-08	2.20E-06
398	3.00E-08	2.60E-06
2505	3.10E-08	2.60E-06
449	3.50E-08	2.90E-06
403	4.30E-08	3.60E-06
380	4.70E-08	3.80E-06
530	4.90E-08	4.00E-06
394	5.40E-08	4.30E-06
585	5.90E-08	4.70E-06
141	6.00E-08	4.70E-06
63	6.30E-08	4.90E-06
943	6.80E-08	5.20E-06
163	8.00E-08	6.00E-06
163	8.00E-08	6.00E-06
135	9.50E-08	7.00E-06
13613	1.00E-07	7.40E-06
1454	1.10E-07	8.00E-06
4042	1.40E-07	1.00E-05
2139	1.90E-07	1.30E-05
353	2.20E-07	1.60E-05
495	2.90E-07	2.00E-05
495	2.90E-07	2.00E-05
524	3.40E-07	2.30E-05
158	4.50E-07	3.00E-05
7706	4.70E-07	3.10E-05
566	7.90E-07	5.30E-05
567	8.40E-07	5.50E-05
1318	8.70E-07	5.70E-05
1628	9.40E-07	6.10E-05
556	9.50E-07	6.10E-05
350	9.90E-07	6.30E-05
351	1.10E-06	6.70E-05
117	1.30E-06	8.00E-05
1015	1.30E-06	8.10E-05
1771	1.60E-06	9.70E-05
447	1.60E-06	0.0001
1476	1.70E-06	0.0001
396	1.70E-06	0.0001
2097	1.90E-06	0.00011

2097	1.90E-06	0.00011
2621	2.00E-06	0.00012
2099	2.00E-06	0.00012
111	2.00E-06	0.00012
2623	2.10E-06	0.00012
2624	2.10E-06	0.00012
2119	2.20E-06	0.00012
986	2.30E-06	0.00013
213	3.80E-06	0.00021
216	4.90E-06	0.00027
617	5.00E-06	0.00027
252	5.20E-06	0.00029
194	5.30E-06	0.00029
403	5.60E-06	0.0003
266	6.10E-06	0.00032
186	7.00E-06	0.00037
5657	7.40E-06	0.00039
188	8.40E-06	0.00043
188	8.40E-06	0.00043
178	9.30E-06	0.00048
494	1.00E-05	0.00052
1135	1.10E-05	0.00054
350	1.10E-05	0.00056
444	1.20E-05	0.00062
458	1.30E-05	0.00064
205	1.30E-05	0.00065
97	1.30E-05	0.00066
171	1.40E-05	0.00066
460	1.40E-05	0.00068
460	1.40E-05	0.00068
172	1.50E-05	0.0007
172	1.50E-05	0.0007
195	1.50E-05	0.00071
195	1.50E-05	0.00071
210	2.00E-05	0.00092
142	2.00E-05	0.00092
2245	2.00E-05	0.00093
932	2.40E-05	0.0011
444	2.50E-05	0.0011
325	2.50E-05	0.0011
1211	2.70E-05	0.0012
252	3.00E-05	0.0013
489	3.00E-05	0.0013

13	3.10E-05	0.0014
125	3.10E-05	0.0014
181	3.20E-05	0.0014
532	3.20E-05	0.0014
3810	4.00E-05	0.0017
681	4.20E-05	0.0018
1609	4.40E-05	0.0019
141	5.10E-05	0.0021
224	5.50E-05	0.0023
274	5.60E-05	0.0023
110	5.90E-05	0.0024
122	6.70E-05	0.0027
144	6.60E-05	0.0027
122	6.70E-05	0.0027
950	7.10E-05	0.0029
3566	7.00E-05	0.0029
413	8.10E-05	0.0032
244	9.20E-05	0.0037
1036	9.30E-05	0.0037
148	9.40E-05	0.0037
185	0.00011	0.0043
1152	0.00011	0.0044
273	0.00011	0.0045
140	0.00013	0.0049
212	0.00013	0.0051
225	0.00014	0.0053
130	0.00014	0.0054
130	0.00014	0.0054
316	0.00014	0.0054
165	0.00015	0.0055
154	0.00016	0.0058
154	0.00016	0.0058
571	0.00017	0.0062
132	0.00017	0.0062
132	0.00017	0.0062
886	0.00017	0.0062
267	0.00017	0.0063
320	0.00018	0.0064
3641	0.00018	0.0064
42	0.0002	0.007
679	0.0002	0.0071
206	0.0002	0.0072
123	0.00021	0.0073

1742	0.00021	0.0075
81	0.00023	0.0077
113	0.00023	0.0077
113	0.00023	0.0077
113	0.00023	0.0077
463	0.00022	0.0077
113	0.00023	0.0077
113	0.00023	0.0077
113	0.00023	0.0077
1242	0.00023	0.0077
171	0.00023	0.0077
580	0.00024	0.0079
148	0.00025	0.0081
148	0.00025	0.0081
103	0.00025	0.0083
248	0.00026	0.0086
53	0.00027	0.0088
44	0.00027	0.0088
482	0.00027	0.0088
44	0.00027	0.0088
1772	0.00028	0.0091
903	0.00028	0.0091
345	0.00032	0.01
305	0.00033	0.01
305	0.00033	0.01
305	0.00033	0.01
85	0.00035	0.011
177	0.00036	0.011
1767	0.00036	0.011
377	0.00039	0.012
1376	0.00039	0.012
2173	0.00039	0.012
108	0.0004	0.012
1216	0.0004	0.012
38	0.00042	0.013
762	0.00042	0.013
109	0.00044	0.013
245	0.00047	0.014
1682	0.00049	0.015
48	0.00049	0.015
171	0.00055	0.016
2091	0.00056	0.016
10	0.00057	0.017

756	0.00057	0.017
275	0.00057	0.017
79	0.00057	0.017
79	0.00057	0.017
9230	0.00057	0.017
124	0.0006	0.017
69	0.0006	0.017
69	0.0006	0.017
173	0.00063	0.018
102	0.00065	0.018
102	0.00065	0.018
265	0.00068	0.019
918	0.00068	0.019
1078	0.00071	0.02
139	0.00077	0.021
33	0.00077	0.021
336	0.00077	0.021
228	0.0008	0.022
11	0.0008	0.022
128	0.00082	0.022
338	0.00085	0.023
165	0.00085	0.023
602	0.00088	0.024
204	0.0009	0.024
543	0.00092	0.024
603	0.00091	0.024
106	0.00092	0.024
118	0.00095	0.025
84	0.00095	0.025
342	0.001	0.027
35	0.0011	0.027
35	0.0011	0.027
35	0.0011	0.027
35	0.0011	0.027
329	0.0011	0.027
1064	0.0011	0.028
169	0.0011	0.028
208	0.0011	0.029
170	0.0012	0.03
121	0.0012	0.031
36	0.0012	0.031
172	0.0014	0.034
1057	0.0014	0.035

321	0.0014	0.035
135	0.0014	0.035
160	0.0014	0.035
1091	0.0014	0.036
187	0.0015	0.038
1390	0.0016	0.038
188	0.0016	0.04
668	0.0017	0.041
311	0.0017	0.041
1594	0.0017	0.041
163	0.0017	0.041
21	0.0017	0.041
1595	0.0017	0.041
342	0.0019	0.045
371	0.0019	0.045
1417	0.0019	0.046
39	0.0019	0.046
286	0.0019	0.046
491	0.002	0.048
1042	0.0021	0.049
1738	1.50E-10	1.70E-07
1680	8.90E-10	4.80E-07
2394	3.20E-08	1.20E-05
2618	1.30E-06	0.00034
22365	6.60E-07	0.00014
22365	6.60E-07	0.00014
9463	5.70E-07	0.00014
3727	9.60E-07	0.00015
614	8.30E-06	0.001
611	1.40E-05	0.0014
268	1.70E-05	0.0015
1065	8.80E-05	0.0062
6099	8.60E-05	0.0062