

**Table A.2:** Table of parameters for Gabor set G2 (optimized on TIMIT phoneme inter-/within group discrimination). # denotes the filter number as in Figure A.4,  $f_0$  the number of the center frequency channel (on a scale from 1 to 23, low channel number equals low center frequency),  $\omega_f$  and  $\omega_t$  the spectral and temporal radian modulation frequency, respectively,  $\sigma_f$  and  $\sigma_t$  the widths of the Gaussian envelope, and  $\Delta_f$  and  $\Delta_t$  the extends of the support to both sides of the center. 'mode' specifies whether a filter is real with zero phase ('real') or  $\pi/2$  phase ('imag') or complex ('mag'). 'type' highlights whether a filter is purely temporal, spectral or spectro-temporal ('ST'). See Chapter 7 for further description.

#	$f_0$	$\omega_f/2\pi$		$\omega_t/2\pi$		$\sigma_f$		$\sigma_t$		$\Delta_f$	$\Delta_t$	mode	type
		[cycl./chan.]	[100Hz]	[chan]	[10ms]	[chan]	[10ms]	[chan]	[10ms]				
1	5	0.000	0.116	1.182	4.309	2	5			imag	temporal		
2	19	0.000	0.021	1.590	23.657	3	33			real	temporal		
3	17	0.000	0.051	1.685	9.793	2	13			mag	temporal		
4	22	0.406	0.000	1.233	1.401	3	3			mag	spectral		
5	9	0.000	0.060	1.172	8.290	2	16			mag	temporal		
6	12	0.044	0.000	11.392	2.418	21	4			mag	spectral		
7	14	0.070	0.000	7.096	1.638	13	4			imag	spectral		
8	12	0.053	0.000	9.429	1.800	11	4			imag	spectral		
9	8	0.000	0.112	0.538	4.459	1	8			mag	temporal		
10	9	0.095	0.000	5.257	2.589	8	4			imag	spectral		
11	6	0.000	0.039	1.463	12.847	2	24			imag	temporal		
12	17	0.166	0.000	3.013	2.005	6	4			real	spectral		
13	4	0.000	0.044	2.280	11.301	4	21			mag	temporal		
14	5	0.000	0.034	0.863	14.778	2	22			real	temporal		
15	15	0.064	0.000	7.873	2.887	10	6			imag	spectral		
16	9	0.074	0.000	6.716	2.972	9	4			imag	spectral		
17	19	0.000	0.163	1.896	3.066	3	4			mag	temporal		
18	1	0.000	0.022	0.575	22.854	2	24			imag	temporal		
19	4	0.000	0.075	1.058	6.629	2	11			mag	temporal		
20	3	0.000	0.075	0.977	6.684	2	12			mag	temporal		
21	12	0.060	0.000	8.272	2.359	16	3			mag	spectral		
22	16	0.076	0.000	6.600	2.327	11	3			imag	spectral		
23	1	0.000	0.153	0.532	3.270	1	6			mag	temporal		
24	15	0.057	0.000	8.703	1.998	16	3			imag	spectral		
25	5	0.000	0.048	2.772	10.456	4	16			imag	temporal		
26	12	0.047	0.000	10.561	1.760	15	3			imag	spectral		
27	12	0.044	0.053	11.450	9.517	23	19			mag	STdown		
28	12	0.000	0.077	1.345	6.453	2	7			mag	temporal		
29	9	0.080	0.000	6.264	2.813	10	6			real	spectral		
30	11	0.052	0.000	9.551	1.574	11	3			mag	spectral		
31	10	0.000	0.023	2.272	21.552	4	34			real	temporal		
32	11	0.120	0.000	4.170	2.725	8	4			mag	spectral		
33	12	0.091	0.073	5.473	6.877	10	8			STdown			
34	8	0.068	0.000	7.355	2.241	13	4			mag	spectral		
35	12	0.088	0.000	5.670	0.870	11	2			mag	spectral		
36	9	0.060	0.000	8.362	1.934	11	3			imag	spectral		
37	11	0.178	0.000	2.804	2.542	4	4			real	spectral		
38	11	0.062	0.000	8.118	2.621	11	3			real	spectral		
39	10	0.193	0.072	2.592	6.964	5	14			mag	STdown		
40	12	0.053	-0.037	9.473	13.623	15	17			mag	STup		
41	15	0.170	0.000	2.947	0.795	6	2			mag	spectral		
42	7	0.000	0.070	2.795	7.114	4	10			real	temporal		
43	8	0.000	0.109	1.546	4.587	4	9			mag	temporal		
44	9	0.061	0.000	8.242	0.863	16	2			mag	spectral		
45	15	0.084	0.000	5.965	1.598	11	2			imag	spectral		
46	16	0.142	0.000	3.519	1.607	7	4			imag	spectral		
47	11	0.064	0.000	7.760	0.822	16	2			real	spectral		
48	15	0.172	0.000	2.912	1.863	4	3			imag	spectral		
49	14	0.094	0.000	5.301	2.168	7	4			imag	spectral		
50	18	0.224	0.000	2.230	2.435	3	5			mag	spectral		
51	3	0.000	0.048	0.725	10.441	1	13			real	temporal		
52	5	0.000	0.040	1.519	12.485	2	19			mag	temporal		
53	3	0.000	0.143	1.817	3.503	3	7			mag	temporal		
54	22	0.000	0.060	1.145	8.328	2	12			mag	temporal		
55	13	0.056	0.000	8.920	2.846	15	4			real	spectral		
56	20	0.202	0.000	2.470	1.906	4	4			imag	spectral		
57	10	0.060	0.000	8.287	2.343	17	3			mag	spectral		
58	20	0.129	0.000	3.867	1.883	5	2			imag	spectral		
59	14	0.128	0.000	3.913	1.939	6	3			mag	spectral		
60	16	0.127	0.000	3.937	1.481	7	3			imag	spectral		