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DATA ON
“A COMPARATIVE *ab initio* STUDY OF COLLECTIVE
DYNAMICS IN $\text{Al}_{90}\text{Si}_{10}$ AND $\text{Al}_{90}\text{Mg}_{10}$ LIQUID ALLOYS”

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Дані до «Порівнювальне першопринципне дослідження колективної динаміки в рідких сплавах $\text{Al}_{90}\text{Si}_{10}$ і $\text{Al}_{90}\text{Mg}_{10}$ »

Т. Брик, Н. Жакс

Анотація. Даний препринт містить таблиці числових даних статті T. Bryk, N. Jakse, J. Phys.: Condens. Matter, v. 38, 075101 (2026).

Data on “A comparative *ab initio* study of collective dynamics in $\text{Al}_{90}\text{Si}_{10}$ and $\text{Al}_{90}\text{Mg}_{10}$ liquid alloys”

T. Bryk, N. Jakse

Abstract. This preprint contains tables of numerical data of the paper T. Bryk, N. Jakse, J. Phys.: Condens. Matter, v. 38, 075101 (2026).

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Тарас Михайлович Брик, Ноель Жакс

ДАНІ ДО «ПОРІВНЮВАЛЬНЕ ПЕРШОПРИНЦИПНЕ ДОСЛІДЖЕННЯ КОЛЕКТИВНОЇ ДИНАМІКИ В РІДКИХ СПЛАВАХ $AL_{90}Si_{10}$ І $AL_{90}MG_{10}$ »

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Затверджено до друку Вченою радою ІФКС ім. І.Р. Юхновського НАН України

Рекомендовано до друку відділу комп'ютерного моделювання багаточастинкових систем

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Table 1: Partial pair distribution functions $g_{AB}(r)$ for Al-Mg (columns 2–4) and Al-Si (columns 5–7) liquid alloys (Fig. 1 in [1]).

0.0125	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1.9875	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2.0125	0.000000	0.000000	0.000000	0.000000	0.000000	0.001068
2.0375	0.000000	0.000000	0.000000	0.000000	0.000000	0.002605
2.0625	0.000012	0.000000	0.000000	0.000000	0.000072	0.006102
2.0875	0.000017	0.000000	0.000000	0.000000	0.000449	0.007695
2.1125	0.000060	0.000000	0.000000	0.000031	0.001438	0.017451
2.1375	0.000145	0.000012	0.000000	0.000163	0.005045	0.048768
2.1625	0.000573	0.000048	0.000000	0.000334	0.011923	0.090205
2.1875	0.001486	0.000070	0.000000	0.001132	0.030573	0.177441
2.2125	0.004205	0.000264	0.000000	0.003264	0.067616	0.309786
2.2375	0.009682	0.000494	0.000000	0.007587	0.128881	0.445064
2.2625	0.021057	0.001350	0.000000	0.018456	0.229990	0.619115
2.2875	0.044697	0.003059	0.000570	0.038397	0.376502	0.864043
2.3125	0.084409	0.005913	0.001115	0.073341	0.574038	1.074222
2.3375	0.148404	0.012438	0.001637	0.128329	0.831582	1.286148
2.3625	0.243404	0.023397	0.003205	0.210590	1.124904	1.443563
2.3875	0.373336	0.042125	0.007496	0.330964	1.456670	1.615580
2.4125	0.543813	0.073846	0.014342	0.486936	1.794146	1.626129
2.4375	0.756212	0.117310	0.023583	0.671853	2.109815	1.665218
2.4625	1.008527	0.179296	0.038347	0.895911	2.417119	1.720051
2.4875	1.288123	0.268454	0.066328	1.153695	2.657619	1.765363
2.5125	1.574010	0.387883	0.087053	1.422572	2.847925	1.716185
2.5375	1.861643	0.518924	0.133189	1.691030	2.982513	1.663385
2.5625	2.144389	0.690736	0.204304	1.946903	3.051475	1.582658
2.5875	2.393971	0.880625	0.262121	2.191196	3.068247	1.516520
2.6125	2.610131	1.061426	0.348710	2.402245	3.061786	1.432960
2.6375	2.780828	1.270345	0.466697	2.576867	2.983594	1.321805
2.6625	2.901076	1.492810	0.585820	2.710982	2.895194	1.235761
2.6875	2.986868	1.708177	0.739250	2.795647	2.762801	1.149979
2.7125	3.014812	1.908677	0.914232	2.841513	2.625794	1.035382
2.7375	3.003292	2.082504	1.109249	2.859010	2.486136	0.963875
2.7625	2.966369	2.252412	1.294745	2.834400	2.322769	0.946083
2.7875	2.889776	2.382238	1.497737	2.788415	2.171603	0.896476
2.8125	2.792962	2.476090	1.708541	2.702954	2.024996	0.859551
2.8375	2.680715	2.560195	1.811125	2.614353	1.884335	0.792213
2.8625	2.556657	2.621188	1.951478	2.504819	1.752488	0.761011

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Table 1 – continued from previous page.

2.8875	2.421830	2.653407	2.188982	2.390818	1.636241	0.719739
2.9125	2.290425	2.629835	2.327523	2.263623	1.521072	0.700806
2.9375	2.162252	2.613122	2.380205	2.140988	1.414968	0.683663
2.9625	2.025343	2.573993	2.560998	2.017282	1.326119	0.671434
2.9875	1.900391	2.516040	2.561294	1.904960	1.243471	0.642307
3.0125	1.772335	2.458795	2.633059	1.798837	1.161554	0.627519
3.0375	1.658375	2.374705	2.625438	1.687907	1.101212	0.620281
3.0625	1.546541	2.266653	2.605953	1.582324	1.036510	0.649637
3.0875	1.444687	2.183253	2.592069	1.487516	0.981133	0.651640
3.1125	1.349581	2.086690	2.554802	1.397298	0.941883	0.662428
3.1375	1.265929	1.975610	2.543627	1.317986	0.897017	0.616313
3.1625	1.186472	1.880920	2.481314	1.239485	0.863245	0.624560
3.1875	1.114946	1.789825	2.398140	1.176174	0.829671	0.638222
3.2125	1.049284	1.694872	2.308000	1.111275	0.798361	0.655788
3.2375	0.987055	1.600778	2.234854	1.049126	0.772587	0.625472
3.2625	0.932904	1.514445	2.192705	0.991335	0.746720	0.617956
3.2875	0.886626	1.428127	2.175942	0.943931	0.725745	0.620603
3.3125	0.840618	1.355826	2.118407	0.901747	0.700729	0.629211
3.3375	0.800804	1.279381	1.986781	0.862961	0.681906	0.640115
3.3625	0.767803	1.204133	1.881761	0.824480	0.676357	0.647469
3.3875	0.733896	1.149544	1.816678	0.789834	0.663140	0.651333
3.4125	0.706164	1.093144	1.734178	0.761786	0.650761	0.639595
3.4375	0.676699	1.031930	1.631422	0.737115	0.641645	0.663645
3.4625	0.655596	0.985239	1.546778	0.709746	0.635437	0.688832
3.4875	0.633088	0.940426	1.456540	0.689631	0.634502	0.675523
3.5125	0.617688	0.896371	1.387392	0.671873	0.630740	0.706795
3.5375	0.602760	0.853795	1.301940	0.654627	0.626200	0.747405
3.5625	0.590672	0.819376	1.236752	0.640921	0.629225	0.726384
3.5875	0.578540	0.781357	1.180196	0.625808	0.627886	0.717136
3.6125	0.568369	0.752787	1.128205	0.615950	0.633486	0.739404
3.6375	0.560292	0.720269	1.100057	0.607179	0.638190	0.784210
3.6625	0.556097	0.694948	1.059310	0.600803	0.641052	0.776443
3.6875	0.550235	0.675230	1.024898	0.593571	0.648211	0.819963
3.7125	0.544504	0.653476	0.996144	0.586086	0.656743	0.839249
3.7375	0.541917	0.632998	0.933847	0.582855	0.663405	0.864995
3.7625	0.540924	0.616492	0.878097	0.580891	0.665912	0.867444
3.7875	0.541149	0.607214	0.855736	0.581422	0.673839	0.906399
3.8125	0.542208	0.590056	0.797923	0.581511	0.686667	0.910103
3.8375	0.545166	0.576863	0.762931	0.582214	0.693857	0.923624

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Table 1 – continued from previous page.

3.8625	0.546860	0.562458	0.718783	0.582195	0.702857	0.946652
3.8875	0.551293	0.553932	0.697534	0.587489	0.711565	0.952194
3.9125	0.556082	0.550380	0.681443	0.591824	0.730314	0.988113
3.9375	0.564804	0.542380	0.672881	0.597374	0.745096	0.996745
3.9625	0.573744	0.536527	0.678911	0.604162	0.758081	1.024162
3.9875	0.586250	0.535664	0.647425	0.611501	0.773902	1.041565
4.0125	0.593031	0.531427	0.632038	0.619298	0.783236	1.048176
4.0375	0.604742	0.535820	0.629416	0.626786	0.798214	1.073521
4.0625	0.619220	0.539568	0.597729	0.635226	0.816188	1.102687
4.0875	0.635701	0.541513	0.594246	0.649100	0.829522	1.067035
4.1125	0.651555	0.543684	0.572002	0.661760	0.844464	1.099125
4.1375	0.665329	0.547233	0.561221	0.676508	0.862496	1.113368
4.2125	0.717900	0.555081	0.535534	0.725933	0.913241	1.107296
4.2375	0.739285	0.568783	0.551869	0.743750	0.923742	1.115231
4.2625	0.759536	0.581023	0.532233	0.760156	0.939097	1.075755
4.2875	0.783388	0.593510	0.527342	0.782163	0.950054	1.057775
4.3125	0.807459	0.609188	0.539413	0.799626	0.970380	1.026295
4.3375	0.831947	0.625735	0.530466	0.821210	0.979965	1.089928
4.3625	0.855277	0.639825	0.540643	0.838937	0.989456	1.077699
4.3875	0.881815	0.657446	0.549315	0.857061	1.006348	1.087591
4.4125	0.905046	0.674232	0.557858	0.879966	1.010193	1.089468
4.4375	0.930027	0.692354	0.548815	0.901952	1.025866	1.072778
4.4625	0.951655	0.714700	0.570827	0.924024	1.039600	1.045909
4.4875	0.978190	0.734860	0.562955	0.945446	1.053065	1.042989
4.5125	1.000965	0.756536	0.570497	0.969001	1.055828	1.051863
4.5375	1.026539	0.783425	0.623016	0.990497	1.067022	1.019184
4.5625	1.045776	0.814139	0.629048	1.009445	1.067975	1.005500
4.5875	1.065940	0.837816	0.634913	1.027878	1.080008	1.002383
4.6125	1.084857	0.865414	0.641642	1.049660	1.085194	1.036032
4.6375	1.104999	0.891154	0.663806	1.066386	1.091889	1.016141
4.6625	1.119981	0.921294	0.689666	1.084139	1.101006	1.003382
4.6875	1.134142	0.946453	0.702590	1.096481	1.106243	0.997286
4.7125	1.148249	0.975691	0.728716	1.114626	1.108200	1.004803
4.7375	1.165882	1.003057	0.755449	1.133628	1.112541	1.031913
4.7625	1.176700	1.024460	0.767867	1.144107	1.116692	1.045238
4.7875	1.186466	1.053099	0.778686	1.154042	1.120288	1.043695
4.8125	1.192266	1.071368	0.820646	1.166480	1.127756	1.054549
4.8375	1.201112	1.099898	0.863654	1.174160	1.123019	1.021676
4.8625	1.206961	1.122847	0.887579	1.178191	1.128753	1.034392

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Table 1 – continued from previous page.

4.8875	1.211635	1.142528	0.899198	1.185671	1.136796	1.027505
4.9125	1.216433	1.154636	0.930794	1.190793	1.137043	1.031326
4.9375	1.219673	1.174307	0.973079	1.198038	1.146465	1.031291
4.9625	1.226783	1.191939	0.997801	1.203947	1.146268	1.027998
4.9875	1.226796	1.207247	1.007078	1.205843	1.150171	1.032415
5.0125	1.226893	1.223831	1.019998	1.212170	1.153460	1.053095
5.0375	1.228755	1.237474	1.043811	1.217075	1.154758	1.079453
5.0625	1.227899	1.246446	1.054349	1.217722	1.157749	1.061517
5.0875	1.231079	1.259846	1.077377	1.218909	1.158086	1.055122
5.1125	1.230295	1.267830	1.095001	1.219386	1.158291	1.043628
5.1375	1.229420	1.274376	1.121568	1.221226	1.162060	1.063781
5.1625	1.226582	1.275903	1.133850	1.220973	1.160338	1.055573
5.1875	1.223713	1.280834	1.127047	1.219988	1.156567	1.055351
5.2125	1.222578	1.286604	1.127527	1.217374	1.159302	1.031597
5.2375	1.219217	1.289030	1.171237	1.213290	1.148778	1.030329
5.2625	1.215485	1.287005	1.184212	1.209090	1.144207	1.025601
5.2875	1.207811	1.284945	1.226215	1.206827	1.132304	1.009929
5.3125	1.201424	1.281036	1.236321	1.201464	1.125585	1.011714
5.3375	1.192981	1.277941	1.202722	1.194654	1.115166	1.039467
5.3625	1.187726	1.279887	1.225158	1.185702	1.107901	1.024080
5.3875	1.181951	1.272965	1.222031	1.176185	1.101552	1.020374
5.4125	1.172840	1.271693	1.225320	1.168508	1.091558	1.007351
5.4375	1.161113	1.263191	1.190383	1.159096	1.082708	1.007146
5.4625	1.146574	1.255834	1.204423	1.148116	1.073252	1.001682
5.4875	1.136932	1.246583	1.187468	1.135195	1.062986	0.990923
5.5125	1.124392	1.239110	1.198076	1.123569	1.050902	1.001248
5.5375	1.111547	1.228906	1.213728	1.112305	1.040649	0.982457
5.5625	1.100356	1.212445	1.216845	1.097393	1.033610	0.982945
5.5875	1.083674	1.202436	1.183413	1.084313	1.023188	0.957539
5.6125	1.069423	1.189850	1.191854	1.072263	1.012452	0.981545
5.6375	1.057524	1.171918	1.207540	1.055778	1.000187	1.007063
5.6625	1.041881	1.157749	1.181560	1.039712	0.989028	0.986856
5.6875	1.027530	1.148875	1.176848	1.028972	0.976661	0.979971
5.7125	1.014573	1.134538	1.163768	1.016628	0.968972	0.972109
5.7375	1.002361	1.118243	1.126148	1.003733	0.957283	0.958694
5.7625	0.987739	1.104103	1.104038	0.993107	0.951621	0.959286
5.7875	0.972244	1.093250	1.097191	0.980098	0.945080	0.958896
5.8125	0.958613	1.078521	1.086037	0.966157	0.938392	0.938467
5.8375	0.947696	1.061577	1.074655	0.953982	0.931387	0.938350

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Table 1 – continued from previous page.

5.8625	0.936230	1.050060	1.075138	0.941538	0.926555	0.947862
5.8875	0.922050	1.033388	1.062615	0.933133	0.921007	0.949222
5.9125	0.911612	1.013695	1.046456	0.921789	0.916991	0.937685
5.9375	0.902775	0.999333	1.029206	0.913614	0.914129	0.929375
5.9625	0.890593	0.985269	1.024926	0.904824	0.910036	0.937328
5.9875	0.882395	0.970813	1.025671	0.899919	0.908047	0.942943

Table 2: Bhatia–Thornton (BT) “number-number” $S_{NN}(k)$ and normalized “concentration-concentration” $S_{CC}(k)$ static structure factors for Al-Mg (columns 1–3) and Al-Si liquid alloys (columns 4–6) (Fig. 2 of [1]).

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
0.374801	0.034933	0.906889	0.377957	0.026878	0.717530
0.530048	0.033927	1.165561	0.534512	0.019694	0.870403
0.749601	0.038746	1.133133	0.755914	0.033617	0.900832
0.838080	0.032949	0.998396	0.845138	0.026990	0.836302
0.918070	0.032179	0.944749	0.925802	0.029151	0.865051
1.060096	0.046418	1.051394	1.069024	0.038571	0.935379
1.124402	0.040566	0.958937	1.133871	0.039779	0.965568
1.185224	0.045842	0.974742	1.195205	0.045923	0.976593
1.243073	0.043239	1.004655	1.253542	0.040947	0.996334
1.351363	0.057448	0.962243	1.362744	0.058046	0.976057
1.402376	0.059283	1.008855	1.414186	0.060059	1.008243
1.499203	0.066066	0.910891	1.603536	0.084394	1.036650
1.545343	0.071632	0.953894	1.647477	0.091452	1.003771
1.590145	0.079621	0.996991	1.690276	0.101910	1.068121
1.633718	0.096352	1.018472	1.732017	0.117737	1.046073
1.676160	0.095255	1.027933	1.772776	0.115504	1.059661
1.717553	0.108522	0.957410	1.851604	0.151836	1.049966
1.757971	0.107304	1.003765	1.889786	0.166024	1.086147
1.836141	0.149859	1.002462	1.927211	0.191470	1.050986
1.874003	0.148539	0.998407	1.963923	0.217992	1.119142
1.911116	0.177077	1.017348	2.035361	0.254595	1.058061
1.947521	0.202257	1.050342	2.070156	0.315979	1.043989
2.018363	0.237252	1.012104	2.138048	0.356987	1.014420
2.052868	0.288004	0.996398	2.171198	0.426994	1.062331

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
2.120193	0.364742	1.022516	2.203850	0.462603	1.046272
2.153066	0.397184	1.022991	2.236025	0.539551	1.017152
2.185445	0.436332	1.042988	2.267743	0.585967	1.048513
2.217351	0.511103	0.993594	2.299023	0.701951	1.033977
2.248804	0.563819	1.021213	2.329884	0.794300	1.031257
2.279824	0.635223	1.024395	2.390411	1.051421	1.012280
2.310427	0.739882	1.013001	2.420106	1.157130	1.014239
2.370448	0.956235	1.040719	2.449442	1.237516	1.046819
2.399895	1.085272	0.989940	2.478431	1.456884	0.988276
2.428986	1.210716	1.009843	2.507084	1.595003	1.005447
2.457732	1.393759	1.039731	2.535413	1.753025	0.990940
2.486147	1.600132	0.979920	2.563430	1.860564	0.999329
2.514239	1.728376	0.974213	2.618564	2.213997	0.975594
2.542022	1.905427	1.000235	2.645700	2.364527	1.008747
2.596695	2.314230	0.957923	2.672560	2.406750	0.966816
2.623605	2.401678	0.960411	2.699154	2.395402	0.973095
2.650241	2.550011	0.961349	2.725488	2.420165	0.967738
2.702726	2.662989	0.955941	2.751569	2.430480	0.968277
2.754211	2.555227	0.963064	2.777406	2.372027	0.959289
2.804752	2.409426	0.956669	2.828372	2.178440	0.949309
2.829683	2.296851	0.971682	2.853514	2.149336	0.945879
2.854397	2.055585	0.953635	2.878436	1.997049	0.949785
2.878899	1.997627	0.995049	2.903144	1.883117	0.954412
2.927287	1.776799	0.983650	2.951940	1.718331	0.941539
2.951184	1.679187	0.994521	2.976037	1.631160	0.934864
3.021740	1.412054	0.997984	3.047188	1.444467	0.933786
3.044895	1.349567	1.015150	3.070538	1.350116	0.944336
3.067876	1.298178	0.991642	3.093712	1.244383	0.950262
3.090686	1.191510	0.998659	3.116714	1.280337	0.929115
3.113328	1.132151	1.004612	3.139547	1.163754	0.939349
3.135808	1.098303	1.021952	3.162216	1.201236	0.966553
3.180289	1.009579	1.012347	3.207072	1.053493	0.953686
3.202298	0.975454	1.024078	3.229267	1.028785	0.965143
3.224158	0.927415	1.028362	3.251310	0.984746	0.969039
3.245869	0.888746	1.029108	3.273205	0.939238	0.954495
3.267437	0.840431	1.024710	3.294954	0.946470	0.976140
3.288863	0.822168	1.041695	3.316560	0.897804	0.968471
3.310150	0.793110	1.026465	3.338027	0.845959	0.960804

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
3.352319	0.752053	1.025422	3.380551	0.809148	0.975973
3.373206	0.702289	1.010506	3.401614	0.778625	0.987324
3.393965	0.676050	1.047314	3.422547	0.746182	1.001746
3.414597	0.662593	1.032717	3.443353	0.727818	0.985134
3.435105	0.647513	1.016118	3.464034	0.708817	0.999633
3.455492	0.633408	1.014791	3.484592	0.682960	0.986859
3.475759	0.622973	1.013747	3.505030	0.673597	0.997541
3.515942	0.590570	1.021724	3.545552	0.644709	1.006322
3.535863	0.587941	1.014169	3.565640	0.632605	0.998965
3.555671	0.581232	1.012703	3.585616	0.620142	1.002830
3.575371	0.570067	1.011489	3.605481	0.607783	1.015165
3.614447	0.572248	1.000533	3.644887	0.598065	1.004510
3.633828	0.562335	1.004923	3.664430	0.588247	1.014405
3.672282	0.558955	0.987296	3.703208	0.586985	1.002574
3.691359	0.550076	1.003305	3.722446	0.585243	1.004928
3.710338	0.558728	1.008821	3.741585	0.582879	1.014721
3.729220	0.563753	1.003642	3.760626	0.583691	0.999315
3.748007	0.566970	1.016661	3.779571	0.580017	1.006482
3.766700	0.563499	1.002093	3.798422	0.582121	1.014083
3.785301	0.565254	1.006230	3.817180	0.581551	1.025089
3.822232	0.577077	0.997965	3.854421	0.586512	1.018262
3.840564	0.579647	1.011056	3.872908	0.589431	1.025095
3.858809	0.582152	1.007539	3.891307	0.592695	1.015749
3.876968	0.594898	1.007227	3.909619	0.598825	1.026016
3.895043	0.600982	0.990504	3.927845	0.602961	1.023469
3.913034	0.609049	1.002351	3.945988	0.606450	1.020742
3.930943	0.612713	0.990779	3.964048	0.613391	1.017916
3.984186	0.631928	1.004720	4.017739	0.630426	1.027843
4.001776	0.643615	1.004602	4.035478	0.643095	1.021784
4.019290	0.648107	1.002311	4.053139	0.648882	1.029307
4.036727	0.659071	1.007118	4.070723	0.658695	1.024650
4.054090	0.670396	1.004401	4.088231	0.676429	1.017914
4.071378	0.680505	1.008675	4.105665	0.675930	1.030047
4.105736	0.710783	1.012754	4.140313	0.691149	1.010706
4.122808	0.716197	0.991041	4.157528	0.699041	1.034691
4.139809	0.729539	1.002286	4.174673	0.717111	1.028617
4.156741	0.729266	0.997440	4.191747	0.727876	1.023137
4.190399	0.763497	0.996521	4.225689	0.750880	1.026931

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
4.207127	0.781329	0.993920	4.242558	0.761104	1.029455
4.240386	0.839173	0.979576	4.276097	0.808495	0.998428
4.256918	0.818675	0.996244	4.292768	0.801089	1.025169
4.273385	0.841493	0.988519	4.309374	0.822815	1.035153
4.289790	0.846612	0.992812	4.325917	0.831590	1.018917
4.306132	0.860945	1.000121	4.342397	0.857801	1.021949
4.322412	0.877553	1.006852	4.358814	0.858092	1.039363
4.338632	0.893498	0.990545	4.375170	0.873416	1.030266
4.370890	0.920130	0.978759	4.407699	0.914171	1.024172
4.386930	0.945632	0.991249	4.423875	0.928225	1.034372
4.402911	0.957717	0.980816	4.439991	0.921267	1.024905
4.418835	0.977362	0.985365	4.456049	0.950666	1.021358
4.434702	1.005081	0.971785	4.472049	0.962103	1.017256
4.450512	1.012404	0.987502	4.487992	0.985219	1.024604
4.466266	1.018404	0.985258	4.503879	0.981603	1.038188
4.497608	1.062195	0.998129	4.535485	1.015572	1.017021
4.513198	1.074375	0.987759	4.551206	1.042283	1.012016
4.528734	1.079088	0.990353	4.566873	1.054443	1.014580
4.544217	1.102952	0.984764	4.582486	1.051008	1.024300
4.559647	1.126251	0.994100	4.598047	1.067847	1.001086
4.575025	1.116416	0.983910	4.613555	1.084196	1.016079
4.590352	1.142227	0.983976	4.629011	1.097906	1.013792
4.620853	1.152589	0.986266	4.659768	1.125550	1.017427
4.636029	1.172006	0.988001	4.675071	1.141071	1.008708
4.651154	1.174625	0.989253	4.690325	1.151415	1.010649
4.666231	1.197001	0.990231	4.705528	1.161040	1.003151
4.696239	1.202216	0.992711	4.735789	1.181808	1.009405
4.711172	1.205596	0.991663	4.750847	1.202773	1.004150
4.740896	1.252200	1.006264	4.780821	1.225421	1.020591
4.755688	1.232390	0.996968	4.795738	1.212202	1.006368
4.770434	1.227890	0.981424	4.810609	1.216029	1.002031
4.785135	1.271881	0.996393	4.825433	1.217207	1.011775
4.799791	1.244943	0.988251	4.840213	1.222693	1.000626
4.814402	1.257760	0.990379	4.854947	1.232849	0.999049
4.828969	1.247833	0.989644	4.869637	1.236283	1.002836
4.857972	1.257305	0.998331	4.898884	1.273085	0.998864
4.872409	1.258049	0.987848	4.913443	1.247433	0.992083
4.886803	1.254533	0.992011	4.927958	1.257815	0.995067

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
4.901155	1.252856	0.993577	4.942430	1.250683	0.989385
4.915465	1.256565	0.995451	4.956861	1.253935	0.992500
4.929734	1.256393	0.996508	4.971250	1.256250	0.986880
4.943961	1.255129	0.989614	4.985597	1.267102	0.994488
4.972293	1.255205	1.000633	5.014168	1.271945	0.989447
4.986399	1.244866	0.991082	5.028392	1.256449	1.001998
5.000465	1.254542	0.995923	5.042577	1.246869	0.993603
5.014492	1.249502	0.996518	5.056722	1.255506	0.984323
5.028479	1.240361	1.001192	5.070827	1.251870	0.984386
5.042428	1.247341	0.992064	5.084893	1.242474	0.985987
5.056338	1.253932	0.994703	5.098920	1.255630	0.992164
5.084044	1.240251	0.994578	5.126860	1.246479	0.988952
5.097841	1.230654	0.994623	5.140773	1.240557	0.983758
5.111600	1.233553	0.998349	5.154648	1.241606	0.982557
5.125322	1.235736	0.991144	5.168486	1.230692	0.989311
5.152658	1.212680	1.001606	5.196051	1.231544	0.986399
5.166271	1.207618	1.009759	5.209779	1.199298	0.988008
5.193391	1.179259	1.007109	5.237127	1.231269	0.957370
5.206898	1.185667	1.003713	5.250748	1.212185	0.991015
5.220370	1.197433	0.999368	5.264334	1.214065	0.978117
5.233807	1.190504	1.003539	5.277884	1.207004	0.980462
5.247210	1.191977	1.007385	5.291400	1.198870	0.981984
5.260578	1.184415	0.997675	5.304881	1.199758	0.980324
5.273913	1.178286	1.007077	5.318328	1.193435	0.983641
5.300482	1.172663	0.996964	5.345121	1.181286	0.983770
5.313717	1.165385	1.000603	5.358467	1.173587	0.982548
5.326919	1.152660	1.005463	5.371780	1.153579	0.982786
5.340088	1.151173	0.995670	5.385060	1.141432	0.968714
5.353225	1.138032	0.988090	5.398307	1.152665	0.988179
5.366329	1.143081	1.005556	5.411523	1.141088	0.983815
5.379402	1.137788	1.005190	5.424705	1.141531	0.979874
5.405452	1.087701	0.995760	5.450975	1.118629	0.987992
5.418431	1.112837	0.998847	5.464063	1.116736	0.978662
5.431378	1.100889	1.001388	5.477119	1.113685	0.990190
5.444295	1.098760	1.002070	5.490144	1.095941	0.982600
5.457181	1.093627	1.008319	5.503139	1.091797	0.984751
5.470036	1.088532	1.000191	5.516103	1.089188	0.981877
5.482861	1.081081	1.003195	5.529036	1.085219	0.984616

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
5.508423	1.052274	1.008327	5.554813	1.078708	0.980473
5.521159	1.050597	1.008345	5.567656	1.062508	0.980010
5.533866	1.052153	1.002178	5.580470	1.063257	0.978147
5.546544	1.044013	1.005147	5.593255	1.040002	0.976419
5.571813	1.036728	1.009338	5.618737	1.034234	0.979696
5.584405	1.022852	1.011867	5.631434	1.026152	0.977616
5.609503	1.001544	1.012758	5.656744	1.018437	0.986114
5.622010	0.998523	1.012757	5.669357	1.002849	0.978983
5.634490	0.998661	1.013596	5.681941	1.018729	0.989284
5.646942	0.999253	1.014077	5.694498	0.999371	0.982324
5.659366	1.000157	1.007399	5.707027	1.002502	0.992090
5.671764	0.987578	1.013987	5.719529	0.993034	0.985266
5.684134	0.973996	1.013391	5.732003	0.979190	0.986184
5.708794	0.960402	1.024425	5.756871	0.969426	0.983582
5.721084	0.948482	1.003988	5.769265	0.958317	0.977921
5.733348	0.949005	1.010018	5.781632	0.960158	0.986056
5.745586	0.953227	1.015753	5.793973	0.961014	0.997889
5.757797	0.937093	1.014058	5.806287	0.949158	0.990471
5.769983	0.929311	1.009607	5.818576	0.937949	0.989524
5.782144	0.929625	1.012701	5.830839	0.947200	0.986768
5.818471	0.912778	1.011935	5.867472	0.918723	0.991858
5.830530	0.910884	1.019368	5.879633	0.915919	0.993537
5.842565	0.898581	1.015448	5.891768	0.907382	0.986651
5.854574	0.892975	1.013328	5.903879	0.907626	0.992004
5.866559	0.890348	1.013153	5.915965	0.903888	0.988083
5.878519	0.893658	1.014467	5.928026	0.903843	0.991386
5.902367	0.878102	1.012912	5.952075	0.888219	0.992196
5.914255	0.878262	1.015758	5.964063	0.890685	0.994666
5.926119	0.875632	1.009386	5.976027	0.884228	0.991549
5.937960	0.871801	1.008051	5.987967	0.884669	0.997671
5.961570	0.869311	1.005040	6.011776	0.882318	0.998894
5.973340	0.859276	1.010777	6.023645	0.874574	0.993144
5.996811	0.851972	1.025152	6.047314	0.854888	0.981129
6.008512	0.860354	1.007363	6.059114	0.867189	0.992708
6.020190	0.851036	1.011442	6.070890	0.868120	0.998995
6.031846	0.854141	1.010596	6.082644	0.864740	1.006835
6.043480	0.851545	1.010912	6.094375	0.861126	1.001758
6.055091	0.846180	1.008283	6.106084	0.855518	0.998154

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
6.066680	0.850685	1.009969	6.117771	0.852223	1.001670
6.089791	0.844958	1.004921	6.141077	0.851293	1.004217
6.101313	0.841131	1.008032	6.152696	0.843726	0.996233
6.112815	0.841550	1.010204	6.164294	0.855583	1.001733
6.124294	0.834743	1.008617	6.175871	0.853692	1.004529
6.135752	0.842752	1.008797	6.187424	0.832072	1.015570
6.147189	0.840728	1.002818	6.198958	0.852598	1.002891
6.158604	0.844281	1.005886	6.210469	0.847242	1.006429
6.181371	0.844327	1.008336	6.233428	0.845989	1.002271
6.192724	0.843380	1.004006	6.244876	0.844933	1.006301
6.204056	0.841121	1.000803	6.256304	0.853107	1.001997
6.215366	0.840956	1.001323	6.267710	0.846510	1.010299
6.226657	0.838283	1.010441	6.279095	0.848152	1.008158
6.237927	0.837664	1.005248	6.290460	0.851571	1.013032
6.249177	0.844752	0.999419	6.301805	0.850099	1.008601
6.271615	0.843990	1.001779	6.324432	0.851102	1.013131
6.282804	0.852058	1.000862	6.335716	0.847610	1.012527
6.293974	0.852989	0.995971	6.346980	0.845171	1.014643
6.305123	0.851697	1.004105	6.358223	0.855688	1.008797
6.327364	0.853642	0.997714	6.380650	0.854937	1.015118
6.338455	0.855122	1.005129	6.391835	0.854460	1.009952
6.360578	0.856921	1.002179	6.414145	0.857508	1.016771
6.371612	0.865208	1.001256	6.425271	0.860126	1.008080
6.382626	0.865599	0.999270	6.436378	0.863483	1.011765
6.393621	0.869256	1.000093	6.447465	0.861915	1.010262
6.404597	0.875204	0.990831	6.458534	0.860752	1.018971
6.415555	0.871211	0.996138	6.469584	0.873437	1.012078
6.426494	0.875228	0.995533	6.480615	0.870279	1.016413
6.448315	0.883806	0.999181	6.502620	0.877767	1.014083
6.459198	0.881291	0.995673	6.513595	0.880202	1.015642
6.470063	0.884516	0.994272	6.524551	0.888289	1.019356
6.480910	0.885236	0.991742	6.535490	0.886296	1.014561
6.491739	0.895975	0.993839	6.546410	0.893946	1.017921
6.502549	0.904620	0.989187	6.557311	0.882779	1.020553
6.513342	0.897910	0.997876	6.568194	0.892004	1.011276
6.534874	0.915998	1.007931	6.589908	0.899543	1.027367
6.545613	0.910353	0.992253	6.600737	0.901168	1.014370
6.556334	0.912674	0.992531	6.611549	0.909043	1.015851

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Table 2 – continued from previous page.

$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$	$k[\text{\AA}^{-1}]$	$S_{NN}(k)$	$S_{CC}(k)$
6.567039	0.919196	0.988199	6.622344	0.919016	1.012025
6.577725	0.917544	0.993275	6.633120	0.909637	1.019096
6.588395	0.923167	0.986401	6.643880	0.920358	1.013969
6.599047	0.927387	0.994045	6.654622	0.923332	1.017222
6.620300	0.945667	0.993620	6.676053	0.921960	1.014528
6.630902	0.934475	0.990141	6.686744	0.930391	1.013353
6.641485	0.939474	0.994047	6.697417	0.935561	1.020037
6.652053	0.947470	0.991322	6.708073	0.941353	1.014492
6.673136	0.952836	0.995301	6.729335	0.946870	1.021483
6.683654	0.958147	0.992906	6.739941	0.948410	1.013507
6.704639	0.969335	0.983718	6.761103	0.955737	1.016577
6.715107	0.972208	0.988457	6.771659	0.956229	1.018960
6.725558	0.973079	0.986579	6.782198	0.964429	1.019296
6.735993	0.976235	0.985304	6.792721	0.975535	1.023086
6.746413	0.976982	0.991596	6.803228	0.964147	1.021308
6.756815	0.982151	0.987511	6.813719	0.972300	1.015447
6.767203	0.987715	0.987805	6.824193	0.980019	1.016394
6.787930	0.994980	0.989698	6.845095	0.981300	1.008337
6.798269	1.001261	0.988046	6.855521	0.992081	1.016224
6.808592	1.000423	0.991966	6.865932	0.996341	1.018279
6.818901	1.003280	0.989678	6.876327	0.988466	1.011685
6.829194	1.003976	0.989950	6.886706	0.998007	1.017578
6.839471	1.013102	0.988864	6.897070	1.005360	1.014386
6.849733	1.013588	0.988804	6.907419	1.009416	1.009162
6.870210	1.018932	0.991697	6.928069	1.009116	1.014687
6.880426	1.022797	0.985138	6.938370	1.022186	1.009742
6.890627	1.028334	0.985836	6.948657	1.014886	1.011087
6.900813	1.028566	0.990120	6.958929	1.018957	1.011251
6.910983	1.034327	0.993761	6.969185	1.020737	1.008027
6.921139	1.034963	0.991770	6.979426	1.032102	1.010217
6.931280	1.033715	0.989905	6.989653	1.034614	1.013021
6.951517	1.044672	0.991702			
6.961614	1.042342	0.991724			
6.971696	1.050620	0.994693			
6.981763	1.054344	0.987949			

Table 3: Normalized velocity autocorrelation functions in Al-Mg (columns 2, 3) and Al-Si (columns 4, 5) liquid alloys (Fig. 3 of [1]).

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.0000	0.100000E+01	0.100000E+01	0.100000E+01	0.100000E+01
0.0015	0.998120E+00	0.998369E+00	0.998123E+00	0.998040E+00
0.0030	0.992498E+00	0.993482E+00	0.992506E+00	0.992172E+00
0.0045	0.983182E+00	0.985370E+00	0.983199E+00	0.982456E+00
0.0060	0.970252E+00	0.974089E+00	0.970284E+00	0.968993E+00
0.0075	0.953818E+00	0.959715E+00	0.953873E+00	0.951920E+00
0.0090	0.934018E+00	0.942342E+00	0.934108E+00	0.931408E+00
0.0105	0.911018E+00	0.922086E+00	0.911158E+00	0.907663E+00
0.0120	0.885006E+00	0.899078E+00	0.885215E+00	0.880914E+00
0.0135	0.856193E+00	0.873467E+00	0.856494E+00	0.851417E+00
0.0150	0.824808E+00	0.845416E+00	0.825229E+00	0.819448E+00
0.0165	0.791095E+00	0.815100E+00	0.791667E+00	0.785297E+00
0.0180	0.755312E+00	0.782704E+00	0.756070E+00	0.749265E+00
0.0195	0.717723E+00	0.748426E+00	0.718707E+00	0.711659E+00
0.0210	0.678602E+00	0.712467E+00	0.679852E+00	0.672789E+00
0.0225	0.638223E+00	0.675035E+00	0.639785E+00	0.632966E+00
0.0240	0.596862E+00	0.636341E+00	0.598781E+00	0.592493E+00
0.0255	0.554793E+00	0.596600E+00	0.557116E+00	0.551665E+00
0.0270	0.512284E+00	0.556022E+00	0.515059E+00	0.510768E+00
0.0285	0.469595E+00	0.514822E+00	0.472869E+00	0.470074E+00
0.0300	0.426979E+00	0.473205E+00	0.430798E+00	0.429838E+00
0.0315	0.384676E+00	0.431378E+00	0.389085E+00	0.390299E+00
0.0330	0.342913E+00	0.389536E+00	0.347956E+00	0.351677E+00
0.0345	0.301906E+00	0.347872E+00	0.307621E+00	0.314172E+00
0.0360	0.261852E+00	0.306568E+00	0.268275E+00	0.277966E+00
0.0375	0.222934E+00	0.265799E+00	0.230098E+00	0.243218E+00
0.0390	0.185318E+00	0.225729E+00	0.193251E+00	0.210065E+00
0.0405	0.149152E+00	0.186513E+00	0.157877E+00	0.178627E+00
0.0420	0.114569E+00	0.148293E+00	0.124104E+00	0.149000E+00
0.0435	0.816805E-01	0.111201E+00	0.920402E-01	0.121263E+00
0.0450	0.505841E-01	0.753576E-01	0.617761E-01	0.954736E-01
0.0465	0.213585E-01	0.408718E-01	0.333859E-01	0.716716E-01
0.0480	-0.593413E-02	0.783981E-02	0.692643E-02	0.498791E-01
0.0495	-0.312482E-01	-0.236537E-01	-0.175617E-01	0.301018E-01
0.0510	-0.545539E-01	-0.535362E-01	-0.400534E-01	0.123296E-01
0.0525	-0.758364E-01	-0.817465E-01	-0.605389E-01	-0.346219E-02

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Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.0540	-0.950955E-01	-0.108235E+00	-0.790223E-01	-0.173115E-01
0.0555	-0.112345E+00	-0.132965E+00	-0.955211E-01	-0.292686E-01
0.0570	-0.127610E+00	-0.155908E+00	-0.110065E+00	-0.393947E-01
0.0585	-0.140929E+00	-0.177047E+00	-0.122696E+00	-0.477610E-01
0.0600	-0.152351E+00	-0.196378E+00	-0.133466E+00	-0.544475E-01
0.0615	-0.161935E+00	-0.213902E+00	-0.142436E+00	-0.595416E-01
0.0630	-0.169748E+00	-0.229632E+00	-0.149677E+00	-0.631374E-01
0.0645	-0.175867E+00	-0.243590E+00	-0.155266E+00	-0.653341E-01
0.0660	-0.180374E+00	-0.255805E+00	-0.159287E+00	-0.662355E-01
0.0675	-0.183358E+00	-0.266314E+00	-0.161830E+00	-0.659485E-01
0.0690	-0.184913E+00	-0.275161E+00	-0.162990E+00	-0.645822E-01
0.0705	-0.185137E+00	-0.282395E+00	-0.162866E+00	-0.622473E-01
0.0720	-0.184132E+00	-0.288073E+00	-0.161557E+00	-0.590546E-01
0.0735	-0.182001E+00	-0.292257E+00	-0.159168E+00	-0.551147E-01
0.0750	-0.178849E+00	-0.295011E+00	-0.155803E+00	-0.505368E-01
0.0765	-0.174782E+00	-0.296406E+00	-0.151566E+00	-0.454284E-01
0.0780	-0.169906E+00	-0.296514E+00	-0.146561E+00	-0.398940E-01
0.0795	-0.164325E+00	-0.295412E+00	-0.140891E+00	-0.340348E-01
0.0810	-0.158142E+00	-0.293178E+00	-0.134658E+00	-0.279482E-01
0.0825	-0.151459E+00	-0.289891E+00	-0.127959E+00	-0.217268E-01
0.0840	-0.144372E+00	-0.285633E+00	-0.120891E+00	-0.154585E-01
0.0855	-0.136977E+00	-0.280485E+00	-0.113546E+00	-0.922568E-02
0.0870	-0.129365E+00	-0.274529E+00	-0.106011E+00	-0.310493E-02
0.0885	-0.121621E+00	-0.267847E+00	-0.983700E-01	0.283322E-02
0.0900	-0.113826E+00	-0.260518E+00	-0.907018E-01	0.852461E-02
0.0915	-0.106057E+00	-0.252623E+00	-0.830799E-01	0.139116E-01
0.0930	-0.983854E-01	-0.244240E+00	-0.755723E-01	0.189431E-01
0.0945	-0.908752E-01	-0.235443E+00	-0.682416E-01	0.235750E-01
0.0960	-0.835860E-01	-0.226308E+00	-0.611445E-01	0.277696E-01
0.0975	-0.765710E-01	-0.216905E+00	-0.543317E-01	0.314962E-01
0.0990	-0.698774E-01	-0.207301E+00	-0.478482E-01	0.347306E-01
0.1005	-0.635463E-01	-0.197563E+00	-0.417328E-01	0.374550E-01
0.1020	-0.576125E-01	-0.187752E+00	-0.360185E-01	0.396580E-01
0.1035	-0.521051E-01	-0.177925E+00	-0.307324E-01	0.413341E-01
0.1050	-0.470471E-01	-0.168139E+00	-0.258960E-01	0.424837E-01
0.1065	-0.424558E-01	-0.158442E+00	-0.215252E-01	0.431125E-01
0.1080	-0.383429E-01	-0.148883E+00	-0.176304E-01	0.432316E-01
0.1095	-0.347147E-01	-0.139504E+00	-0.142171E-01	0.428565E-01

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Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.1110	-0.315726E-01	-0.130344E+00	-0.112857E-01	0.420072E-01
0.1125	-0.289131E-01	-0.121438E+00	-0.883212E-02	0.407075E-01
0.1140	-0.267282E-01	-0.112817E+00	-0.684803E-02	0.389849E-01
0.1155	-0.250057E-01	-0.104509E+00	-0.532110E-02	0.368698E-01
0.1170	-0.237298E-01	-0.965359E-01	-0.423541E-02	0.343951E-01
0.1185	-0.228811E-01	-0.889180E-01	-0.357178E-02	0.315960E-01
0.1200	-0.224371E-01	-0.816709E-01	-0.330812E-02	0.285093E-01
0.1215	-0.223727E-01	-0.748070E-01	-0.341984E-02	0.251731E-01
0.1230	-0.226605E-01	-0.683352E-01	-0.388017E-02	0.216263E-01
0.1245	-0.232711E-01	-0.622613E-01	-0.466055E-02	0.179081E-01
0.1260	-0.241738E-01	-0.565877E-01	-0.573100E-02	0.140578E-01
0.1275	-0.253364E-01	-0.513143E-01	-0.706047E-02	0.101143E-01
0.1290	-0.267262E-01	-0.464382E-01	-0.861717E-02	0.611574E-02
0.1305	-0.283099E-01	-0.419539E-01	-0.103689E-01	0.209904E-02
0.1320	-0.300541E-01	-0.378536E-01	-0.122834E-01	-0.190011E-02
0.1335	-0.319257E-01	-0.341276E-01	-0.143287E-01	-0.584777E-02
0.1350	-0.338920E-01	-0.307641E-01	-0.164732E-01	-0.971192E-02
0.1365	-0.359212E-01	-0.277497E-01	-0.186861E-01	-0.134627E-01
0.1380	-0.379824E-01	-0.250697E-01	-0.209376E-01	-0.170725E-01
0.1395	-0.400463E-01	-0.227079E-01	-0.231992E-01	-0.205162E-01
0.1410	-0.420848E-01	-0.206472E-01	-0.254438E-01	-0.237715E-01
0.1425	-0.440716E-01	-0.188696E-01	-0.276458E-01	-0.268186E-01
0.1440	-0.459822E-01	-0.173564E-01	-0.297815E-01	-0.296404E-01
0.1455	-0.477943E-01	-0.160885E-01	-0.318288E-01	-0.322229E-01
0.1470	-0.494874E-01	-0.150465E-01	-0.337677E-01	-0.345544E-01
0.1485	-0.510433E-01	-0.142108E-01	-0.355805E-01	-0.366266E-01
0.1500	-0.524461E-01	-0.135620E-01	-0.372510E-01	-0.384333E-01
0.1515	-0.536822E-01	-0.130805E-01	-0.387658E-01	-0.399714E-01
0.1530	-0.547402E-01	-0.127475E-01	-0.401131E-01	-0.412402E-01
0.1545	-0.556110E-01	-0.125445E-01	-0.412836E-01	-0.422414E-01
0.1560	-0.562879E-01	-0.124533E-01	-0.422698E-01	-0.429790E-01
0.1575	-0.567660E-01	-0.124567E-01	-0.430666E-01	-0.434591E-01
0.1590	-0.570432E-01	-0.125381E-01	-0.436707E-01	-0.436901E-01
0.1605	-0.571188E-01	-0.126819E-01	-0.440807E-01	-0.436817E-01
0.1620	-0.569944E-01	-0.128733E-01	-0.442972E-01	-0.434457E-01
0.1635	-0.566735E-01	-0.130984E-01	-0.443224E-01	-0.429951E-01
0.1650	-0.561611E-01	-0.133445E-01	-0.441602E-01	-0.423440E-01
0.1665	-0.554641E-01	-0.135998E-01	-0.438161E-01	-0.415078E-01

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Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.1680	-0.545905E-01	-0.138538E-01	-0.432968E-01	-0.405026E-01
0.1695	-0.535498E-01	-0.140968E-01	-0.426105E-01	-0.393452E-01
0.1710	-0.523527E-01	-0.143205E-01	-0.417663E-01	-0.380526E-01
0.1725	-0.510109E-01	-0.145174E-01	-0.407745E-01	-0.366424E-01
0.1740	-0.495367E-01	-0.146812E-01	-0.396461E-01	-0.351320E-01
0.1755	-0.479435E-01	-0.148068E-01	-0.383927E-01	-0.335388E-01
0.1770	-0.462449E-01	-0.148899E-01	-0.370269E-01	-0.318798E-01
0.1785	-0.444550E-01	-0.149272E-01	-0.355612E-01	-0.301717E-01
0.1800	-0.425882E-01	-0.149165E-01	-0.340088E-01	-0.284306E-01
0.1815	-0.406589E-01	-0.148562E-01	-0.323828E-01	-0.266717E-01
0.1830	-0.386816E-01	-0.147457E-01	-0.306966E-01	-0.249096E-01
0.1845	-0.366704E-01	-0.145853E-01	-0.289634E-01	-0.231580E-01
0.1860	-0.346393E-01	-0.143757E-01	-0.271961E-01	-0.214294E-01
0.1875	-0.326019E-01	-0.141184E-01	-0.254076E-01	-0.197355E-01
0.1890	-0.305710E-01	-0.138155E-01	-0.236101E-01	-0.180865E-01
0.1905	-0.285593E-01	-0.134694E-01	-0.218156E-01	-0.164920E-01
0.1920	-0.265783E-01	-0.130833E-01	-0.200354E-01	-0.149600E-01
0.1935	-0.246390E-01	-0.126603E-01	-0.182802E-01	-0.134975E-01
0.1950	-0.227516E-01	-0.122043E-01	-0.165602E-01	-0.121103E-01
0.1965	-0.209253E-01	-0.117190E-01	-0.148846E-01	-0.108032E-01
0.1980	-0.191685E-01	-0.112085E-01	-0.132620E-01	-0.957972E-02
0.1995	-0.174885E-01	-0.106770E-01	-0.117002E-01	-0.844250E-02
0.2010	-0.158918E-01	-0.101286E-01	-0.102062E-01	-0.739308E-02
0.2025	-0.143838E-01	-0.956778E-02	-0.878592E-02	-0.643209E-02
0.2040	-0.129691E-01	-0.899857E-02	-0.744472E-02	-0.555925E-02
0.2055	-0.116510E-01	-0.842514E-02	-0.618698E-02	-0.477351E-02
0.2070	-0.104323E-01	-0.785150E-02	-0.501623E-02	-0.407303E-02
0.2085	-0.931444E-02	-0.728147E-02	-0.393520E-02	-0.345534E-02
0.2100	-0.829832E-02	-0.671871E-02	-0.294579E-02	-0.291734E-02
0.2115	-0.738383E-02	-0.616665E-02	-0.204914E-02	-0.245542E-02
0.2130	-0.657011E-02	-0.562850E-02	-0.124561E-02	-0.206551E-02
0.2145	-0.585554E-02	-0.510717E-02	-0.534875E-03	-0.174316E-02
0.2160	-0.523783E-02	-0.460534E-02	0.840764E-04	-0.148363E-02
0.2175	-0.471406E-02	-0.412537E-02	0.612880E-03	-0.128193E-02
0.2190	-0.428072E-02	-0.366934E-02	0.105375E-02	-0.113289E-02
0.2205	-0.393383E-02	-0.323903E-02	0.140943E-02	-0.103125E-02
0.2220	-0.366895E-02	-0.283591E-02	0.168314E-02	-0.971701E-03
0.2235	-0.348126E-02	-0.246118E-02	0.187853E-02	-0.948949E-03

Continued on next page.

Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.2250	-0.336563E-02	-0.211571E-02	0.199960E-02	-0.957776E-03
0.2265	-0.331669E-02	-0.180011E-02	0.205070E-02	-0.993086E-03
0.2280	-0.332886E-02	-0.151468E-02	0.203640E-02	-0.104996E-02
0.2295	-0.339645E-02	-0.125950E-02	0.196150E-02	-0.112369E-02
0.2310	-0.351366E-02	-0.103435E-02	0.183095E-02	-0.120982E-02
0.2325	-0.367470E-02	-0.838821E-03	0.164981E-02	-0.130421E-02
0.2340	-0.387380E-02	-0.672252E-03	0.142320E-02	-0.140300E-02
0.2355	-0.410525E-02	-0.533800E-03	0.115625E-02	-0.150270E-02
0.2370	-0.436346E-02	-0.422442E-03	0.854057E-03	-0.160019E-02
0.2385	-0.464301E-02	-0.336991E-03	0.521659E-03	-0.169272E-02
0.2400	-0.493866E-02	-0.276130E-03	0.163985E-03	-0.177793E-02
0.2415	-0.524542E-02	-0.238423E-03	-0.214173E-03	-0.185388E-02
0.2430	-0.555852E-02	-0.222343E-03	-0.608186E-03	-0.191901E-02
0.2445	-0.587350E-02	-0.226290E-03	-0.101362E-02	-0.197215E-02
0.2460	-0.618620E-02	-0.248615E-03	-0.142625E-02	-0.201254E-02
0.2475	-0.649277E-02	-0.287639E-03	-0.184208E-02	-0.203976E-02
0.2490	-0.678971E-02	-0.341677E-03	-0.225737E-02	-0.205377E-02
0.2505	-0.707385E-02	-0.409051E-03	-0.266863E-02	-0.205484E-02
0.2520	-0.734238E-02	-0.488111E-03	-0.307264E-02	-0.204354E-02
0.2535	-0.759286E-02	-0.577250E-03	-0.346645E-02	-0.202072E-02
0.2550	-0.782321E-02	-0.674917E-03	-0.384737E-02	-0.198745E-02
0.2565	-0.803168E-02	-0.779631E-03	-0.421302E-02	-0.194502E-02
0.2580	-0.821691E-02	-0.889990E-03	-0.456127E-02	-0.189488E-02
0.2595	-0.837785E-02	-0.100468E-02	-0.489025E-02	-0.183862E-02
0.2610	-0.851380E-02	-0.112249E-02	-0.519837E-02	-0.177792E-02
0.2625	-0.862439E-02	-0.124232E-02	-0.548429E-02	-0.171449E-02
0.2640	-0.870954E-02	-0.136315E-02	-0.574692E-02	-0.165007E-02
0.2655	-0.876946E-02	-0.148409E-02	-0.598540E-02	-0.158636E-02
0.2670	-0.880463E-02	-0.160435E-02	-0.619909E-02	-0.152502E-02
0.2685	-0.881579E-02	-0.172326E-02	-0.638759E-02	-0.146759E-02
0.2700	-0.880388E-02	-0.184024E-02	-0.655069E-02	-0.141549E-02
0.2715	-0.877008E-02	-0.195481E-02	-0.668835E-02	-0.137001E-02
0.2730	-0.871572E-02	-0.206659E-02	-0.680074E-02	-0.133224E-02
0.2745	-0.864230E-02	-0.217530E-02	-0.688817E-02	-0.130307E-02
0.2760	-0.855146E-02	-0.228074E-02	-0.695114E-02	-0.128319E-02
0.2775	-0.844493E-02	-0.238277E-02	-0.699024E-02	-0.127308E-02
0.2790	-0.832452E-02	-0.248136E-02	-0.700623E-02	-0.127297E-02
0.2805	-0.819212E-02	-0.257652E-02	-0.699997E-02	-0.128290E-02

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Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.2820	-0.804962E-02	-0.266830E-02	-0.697243E-02	-0.130266E-02
0.2835	-0.789895E-02	-0.275683E-02	-0.692467E-02	-0.133186E-02
0.2850	-0.774202E-02	-0.284227E-02	-0.685783E-02	-0.136990E-02
0.2865	-0.758068E-02	-0.292482E-02	-0.677314E-02	-0.141602E-02
0.2880	-0.741676E-02	-0.300469E-02	-0.667186E-02	-0.146930E-02
0.2895	-0.725199E-02	-0.308214E-02	-0.655533E-02	-0.152868E-02
0.2910	-0.708802E-02	-0.315743E-02	-0.642491E-02	-0.159300E-02
0.2925	-0.692639E-02	-0.323084E-02	-0.628198E-02	-0.166104E-02
0.2940	-0.676852E-02	-0.330265E-02	-0.612795E-02	-0.173150E-02
0.2955	-0.661569E-02	-0.337314E-02	-0.596425E-02	-0.180306E-02
0.2970	-0.646903E-02	-0.344261E-02	-0.579227E-02	-0.187440E-02
0.2985	-0.632953E-02	-0.351133E-02	-0.561341E-02	-0.194420E-02
0.3000	-0.619800E-02	-0.357958E-02	-0.542905E-02	-0.201121E-02
0.3015	-0.607510E-02	-0.364761E-02	-0.524052E-02	-0.207422E-02
0.3030	-0.596131E-02	-0.371568E-02	-0.504911E-02	-0.213211E-02
0.3045	-0.585695E-02	-0.378400E-02	-0.485605E-02	-0.218386E-02
0.3060	-0.576216E-02	-0.385278E-02	-0.466252E-02	-0.222856E-02
0.3075	-0.567693E-02	-0.392222E-02	-0.446962E-02	-0.226543E-02
0.3090	-0.560109E-02	-0.399247E-02	-0.427839E-02	-0.229380E-02
0.3105	-0.553430E-02	-0.406365E-02	-0.408976E-02	-0.231315E-02
0.3120	-0.547610E-02	-0.413589E-02	-0.390459E-02	-0.232310E-02
0.3135	-0.542588E-02	-0.420924E-02	-0.372364E-02	-0.232340E-02
0.3150	-0.538293E-02	-0.428377E-02	-0.354757E-02	-0.231396E-02
0.3165	-0.534642E-02	-0.435946E-02	-0.337696E-02	-0.229479E-02
0.3180	-0.531543E-02	-0.443630E-02	-0.321226E-02	-0.226607E-02
0.3195	-0.528897E-02	-0.451424E-02	-0.305385E-02	-0.222806E-02
0.3210	-0.526599E-02	-0.459316E-02	-0.290199E-02	-0.218117E-02
0.3225	-0.524538E-02	-0.467296E-02	-0.275687E-02	-0.212588E-02
0.3240	-0.522604E-02	-0.475346E-02	-0.261856E-02	-0.206277E-02
0.3255	-0.520682E-02	-0.483446E-02	-0.248706E-02	-0.199251E-02
0.3270	-0.518662E-02	-0.491574E-02	-0.236229E-02	-0.191580E-02
0.3285	-0.516434E-02	-0.499703E-02	-0.224408E-02	-0.183343E-02
0.3300	-0.513893E-02	-0.507805E-02	-0.213220E-02	-0.174619E-02
0.3315	-0.510939E-02	-0.515848E-02	-0.202636E-02	-0.165491E-02
0.3330	-0.507480E-02	-0.523799E-02	-0.192621E-02	-0.156044E-02
0.3345	-0.503433E-02	-0.531621E-02	-0.183134E-02	-0.146364E-02
0.3360	-0.498722E-02	-0.539278E-02	-0.174131E-02	-0.136534E-02
0.3375	-0.493283E-02	-0.546730E-02	-0.165566E-02	-0.126639E-02

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Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.3390	-0.487064E-02	-0.553937E-02	-0.157388E-02	-0.116762E-02
0.3405	-0.480023E-02	-0.560858E-02	-0.149546E-02	-0.106982E-02
0.3420	-0.472131E-02	-0.567451E-02	-0.141988E-02	-0.973768E-03
0.3435	-0.463371E-02	-0.573675E-02	-0.134662E-02	-0.880206E-03
0.3450	-0.453740E-02	-0.579489E-02	-0.127516E-02	-0.789839E-03
0.3465	-0.443243E-02	-0.584850E-02	-0.120500E-02	-0.703333E-03
0.3480	-0.431902E-02	-0.589720E-02	-0.113566E-02	-0.621301E-03
0.3495	-0.419747E-02	-0.594058E-02	-0.106669E-02	-0.544311E-03
0.3510	-0.406822E-02	-0.597828E-02	-0.997665E-03	-0.472874E-03
0.3525	-0.393177E-02	-0.600992E-02	-0.928212E-03	-0.407441E-03
0.3540	-0.378876E-02	-0.603516E-02	-0.857989E-03	-0.348393E-03
0.3555	-0.363990E-02	-0.605368E-02	-0.786704E-03	-0.296042E-03
0.3570	-0.348598E-02	-0.606518E-02	-0.714111E-03	-0.250624E-03
0.3585	-0.332786E-02	-0.606936E-02	-0.640022E-03	-0.212301E-03
0.3600	-0.316645E-02	-0.606598E-02	-0.564296E-03	-0.181153E-03
0.3615	-0.300274E-02	-0.605479E-02	-0.486849E-03	-0.157182E-03
0.3630	-0.283772E-02	-0.603558E-02	-0.407651E-03	-0.140310E-03
0.3645	-0.267243E-02	-0.600819E-02	-0.326724E-03	-0.130377E-03
0.3660	-0.250794E-02	-0.597245E-02	-0.244145E-03	-0.127155E-03
0.3675	-0.234530E-02	-0.592825E-02	-0.160041E-03	-0.130347E-03
0.3690	-0.218559E-02	-0.587549E-02	-0.745868E-04	-0.139588E-03
0.3705	-0.202985E-02	-0.581411E-02	0.119950E-04	-0.154457E-03
0.3720	-0.187912E-02	-0.574410E-02	0.994397E-04	-0.174485E-03
0.3735	-0.173438E-02	-0.566544E-02	0.187442E-03	-0.199157E-03
0.3750	-0.159658E-02	-0.557817E-02	0.275660E-03	-0.227924E-03
0.3765	-0.146663E-02	-0.548235E-02	0.363721E-03	-0.260212E-03
0.3780	-0.134537E-02	-0.537808E-02	0.451220E-03	-0.295429E-03
0.3795	-0.123356E-02	-0.526549E-02	0.537732E-03	-0.332975E-03
0.3810	-0.113189E-02	-0.514473E-02	0.622811E-03	-0.372249E-03
0.3825	-0.104096E-02	-0.501600E-02	0.705996E-03	-0.412656E-03
0.3840	-0.961297E-03	-0.487951E-02	0.786818E-03	-0.453613E-03
0.3855	-0.893301E-03	-0.473552E-02	0.864802E-03	-0.494555E-03
0.3870	-0.837283E-03	-0.458429E-02	0.939473E-03	-0.534933E-03
0.3885	-0.793448E-03	-0.442615E-02	0.101036E-02	-0.574221E-03
0.3900	-0.761886E-03	-0.426144E-02	0.107701E-02	-0.611928E-03
0.3915	-0.742581E-03	-0.409052E-02	0.113897E-02	-0.647595E-03
0.3930	-0.735401E-03	-0.391380E-02	0.119581E-02	-0.680798E-03
0.3945	-0.740106E-03	-0.373171E-02	0.124715E-02	-0.711150E-03

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Table 3 – continued from previous page.

$t[ps]$	$\psi_{Al}(t)$	$\psi_{Mg}(t)$	$\psi_{Al}(t)$	$\psi_{Si}(t)$
0.3960	-0.756348E-03	-0.354472E-02	0.129261E-02	-0.738295E-03
0.3975	-0.783676E-03	-0.335333E-02	0.133185E-02	-0.761912E-03
0.3990	-0.821538E-03	-0.315807E-02	0.136457E-02	-0.781722E-03

Table 4: Fourier spectra of normalized velocity autocorrelation functions in Al-Mg (columns 2, 3) and Al-Si (columns 4, 5) liquid alloys (Fig. 4 of [1]).

$\omega[ps^{-1}]$	$Z_{Al}(\omega)$	$Z_{Mg}(\omega)$	$Z_{Al}(\omega)$	$Z_{Si}(\omega)$
0.0000E+00	0.1637E-01	0.1338E-01	0.2189E-01	0.3019E-01
0.2095E+01	0.1508E-01	0.1138E-01	0.1824E-01	0.2374E-01
0.4191E+01	0.1702E-01	0.1275E-01	0.1907E-01	0.2483E-01
0.6286E+01	0.1860E-01	0.1424E-01	0.2075E-01	0.2754E-01
0.8382E+01	0.2079E-01	0.1801E-01	0.2175E-01	0.2586E-01
0.1048E+02	0.2217E-01	0.1952E-01	0.2349E-01	0.2884E-01
0.1257E+02	0.2376E-01	0.2133E-01	0.2409E-01	0.2669E-01
0.1467E+02	0.2551E-01	0.2257E-01	0.2473E-01	0.2699E-01
0.1676E+02	0.2657E-01	0.2517E-01	0.2624E-01	0.2727E-01
0.1886E+02	0.2786E-01	0.2872E-01	0.2698E-01	0.2663E-01
0.2095E+02	0.2794E-01	0.2953E-01	0.2728E-01	0.2536E-01
0.2305E+02	0.2790E-01	0.3136E-01	0.2615E-01	0.2545E-01
0.2515E+02	0.2817E-01	0.3178E-01	0.2668E-01	0.2249E-01
0.2724E+02	0.2746E-01	0.3405E-01	0.2680E-01	0.2386E-01
0.2934E+02	0.2729E-01	0.3442E-01	0.2658E-01	0.2136E-01
0.3143E+02	0.2640E-01	0.3384E-01	0.2587E-01	0.2151E-01
0.3353E+02	0.2611E-01	0.3262E-01	0.2502E-01	0.2122E-01
0.3562E+02	0.2483E-01	0.3167E-01	0.2477E-01	0.2034E-01
0.3772E+02	0.2420E-01	0.3268E-01	0.2409E-01	0.1911E-01
0.3981E+02	0.2380E-01	0.3146E-01	0.2319E-01	0.1888E-01
0.4191E+02	0.2347E-01	0.2940E-01	0.2275E-01	0.1835E-01
0.4400E+02	0.2284E-01	0.2755E-01	0.2248E-01	0.1905E-01
0.4610E+02	0.2224E-01	0.2594E-01	0.2191E-01	0.1900E-01
0.4820E+02	0.2172E-01	0.2368E-01	0.2155E-01	0.1847E-01
0.5029E+02	0.2118E-01	0.2187E-01	0.2084E-01	0.1819E-01
0.5239E+02	0.1985E-01	0.1869E-01	0.1979E-01	0.1909E-01

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Table 4 – continued from previous page.

$\omega[ps^{-1}]$	$Z_{Al}(\omega)$	$Z_{Mg}(\omega)$	$Z_{Al}(\omega)$	$Z_{Si}(\omega)$
0.5448E+02	0.1924E-01	0.1673E-01	0.1892E-01	0.1811E-01
0.5658E+02	0.1750E-01	0.1431E-01	0.1752E-01	0.1716E-01
0.5867E+02	0.1621E-01	0.1242E-01	0.1616E-01	0.1596E-01
0.6077E+02	0.1493E-01	0.1001E-01	0.1452E-01	0.1463E-01
0.6286E+02	0.1302E-01	0.8142E-02	0.1249E-01	0.1367E-01
0.6496E+02	0.1124E-01	0.7100E-02	0.1096E-01	0.1212E-01
0.6705E+02	0.9369E-02	0.5442E-02	0.9207E-02	0.1123E-01
0.6915E+02	0.7769E-02	0.4505E-02	0.7694E-02	0.9289E-02
0.7125E+02	0.6375E-02	0.3513E-02	0.6509E-02	0.7845E-02
0.7334E+02	0.5141E-02	0.2759E-02	0.5383E-02	0.6613E-02
0.7544E+02	0.4282E-02	0.2319E-02	0.4476E-02	0.5359E-02
0.7753E+02	0.3534E-02	0.1851E-02	0.3669E-02	0.4519E-02
0.7963E+02	0.2937E-02	0.1491E-02	0.3071E-02	0.3867E-02
0.8172E+02	0.2475E-02	0.1361E-02	0.2500E-02	0.3353E-02
0.8382E+02	0.2013E-02	0.1124E-02	0.2124E-02	0.2545E-02
0.8591E+02	0.1712E-02	0.9426E-03	0.1777E-02	0.2318E-02
0.8801E+02	0.1461E-02	0.7850E-03	0.1579E-02	0.2070E-02
0.9010E+02	0.1247E-02	0.6747E-03	0.1328E-02	0.1819E-02
0.9220E+02	0.1060E-02	0.6025E-03	0.1131E-02	0.1505E-02
0.9429E+02	0.9329E-03	0.4931E-03	0.9798E-03	0.1385E-02
0.9639E+02	0.7941E-03	0.4198E-03	0.8627E-03	0.1144E-02
0.9849E+02	0.6965E-03	0.3531E-03	0.7363E-03	0.1002E-02
0.1006E+03	0.6019E-03	0.3066E-03	0.6344E-03	0.9475E-03
0.1027E+03	0.5246E-03	0.2603E-03	0.5645E-03	0.7877E-03
0.1048E+03	0.4564E-03	0.2380E-03	0.4717E-03	0.6946E-03
0.1069E+03	0.4057E-03	0.1971E-03	0.4182E-03	0.6416E-03
0.1090E+03	0.3434E-03	0.1659E-03	0.3594E-03	0.5406E-03
0.1111E+03	0.3021E-03	0.1457E-03	0.3136E-03	0.4967E-03
0.1132E+03	0.2618E-03	0.1254E-03	0.2829E-03	0.4585E-03
0.1152E+03	0.2292E-03	0.1049E-03	0.2461E-03	0.3995E-03
0.1173E+03	0.1921E-03	0.9201E-04	0.2095E-03	0.3418E-03
0.1194E+03	0.1734E-03	0.8014E-04	0.1856E-03	0.2972E-03
0.1215E+03	0.1518E-03	0.7250E-04	0.1617E-03	0.2463E-03
0.1236E+03	0.1319E-03	0.5738E-04	0.1396E-03	0.2224E-03
0.1257E+03	0.1194E-03	0.5302E-04	0.1235E-03	0.1870E-03
0.1278E+03	0.1019E-03	0.4643E-04	0.1067E-03	0.1732E-03
0.1299E+03	0.8825E-04	0.4008E-04	0.9048E-04	0.1526E-03
0.1320E+03	0.7764E-04	0.3538E-04	0.7939E-04	0.1318E-03

Continued on next page.

Table 4 – continued from previous page.

$\omega[ps^{-1}]$	$Z_{Al}(\omega)$	$Z_{Mg}(\omega)$	$Z_{Al}(\omega)$	$Z_{Si}(\omega)$
0.1341E+03	0.6670E-04	0.3034E-04	0.7061E-04	0.1195E-03
0.1362E+03	0.5921E-04	0.2535E-04	0.6187E-04	0.1100E-03
0.1383E+03	0.5165E-04	0.2295E-04	0.5325E-04	0.9152E-04
0.1404E+03	0.4606E-04	0.1947E-04	0.4696E-04	0.8744E-04
0.1425E+03	0.3972E-04	0.1765E-04	0.4011E-04	0.7011E-04
0.1446E+03	0.3613E-04	0.1543E-04	0.3464E-04	0.6054E-04

Table 5: Dispersion of “bare” (undamped) collective modes in binary Al-Mg (columns 2, 3) and Al-Si (columns 5, 6) liquid alloys (Fig. 5 of [1]).

$k[\text{\AA}^{-1}]$	$z_1^0[ps^{-1}]$	$z_2^0[ps^{-1}]$	$k[\text{\AA}^{-1}]$	$z_1^0[ps^{-1}]$	$z_2^0[ps^{-1}]$
0.3738E+00	0.2311E+02	0.3838E+02	0.3779E+00	0.2277E+02	0.4241E+02
0.5286E+00	0.3203E+02	0.3881E+02	0.5345E+00	0.3319E+02	0.4261E+02
0.6474E+00	0.3687E+02	0.3912E+02	0.6546E+00	0.3803E+02	0.4263E+02
0.7476E+00	0.3926E+02	0.4184E+02	0.7559E+00	0.4191E+02	0.4275E+02
0.9156E+00	0.3965E+02	0.4905E+02	0.9258E+00	0.4250E+02	0.4971E+02
0.1057E+01	0.4024E+02	0.5198E+02	0.1069E+01	0.4257E+02	0.5314E+02
0.1121E+01	0.4011E+02	0.5442E+02	0.1195E+01	0.4275E+02	0.5537E+02
0.1182E+01	0.4028E+02	0.5488E+02	0.1309E+01	0.4258E+02	0.5701E+02
0.1239E+01	0.4060E+02	0.5680E+02	0.1414E+01	0.4297E+02	0.5799E+02
0.1294E+01	0.4074E+02	0.5801E+02	0.1511E+01	0.4329E+02	0.5624E+02
0.1398E+01	0.4106E+02	0.5731E+02	0.1603E+01	0.4353E+02	0.5771E+02
0.1495E+01	0.4128E+02	0.5675E+02	0.1690E+01	0.4410E+02	0.5640E+02
0.1585E+01	0.4162E+02	0.5742E+02	0.1772E+01	0.4414E+02	0.5578E+02
0.1671E+01	0.4219E+02	0.5604E+02	0.1851E+01	0.4475E+02	0.5471E+02
0.1753E+01	0.4227E+02	0.5560E+02	0.1963E+01	0.4495E+02	0.5225E+02
0.1831E+01	0.4237E+02	0.5360E+02	0.2070E+01	0.4545E+02	0.5009E+02
0.1942E+01	0.4300E+02	0.5170E+02	0.2171E+01	0.4563E+02	0.4831E+02
0.2047E+01	0.4329E+02	0.4963E+02	0.2267E+01	0.4552E+02	0.4761E+02
0.2147E+01	0.4372E+02	0.4785E+02	0.2390E+01	0.4369E+02	0.4757E+02
0.2242E+01	0.4374E+02	0.4654E+02	0.2449E+01	0.4319E+02	0.4816E+02
0.2364E+01	0.4314E+02	0.4567E+02	0.2563E+01	0.4194E+02	0.4874E+02
0.2422E+01	0.4236E+02	0.4596E+02	0.2645E+01	0.4155E+02	0.4884E+02
0.2535E+01	0.4151E+02	0.4629E+02	0.2725E+01	0.4155E+02	0.4959E+02
0.2616E+01	0.4111E+02	0.4652E+02	0.2828E+01	0.4173E+02	0.4985E+02
0.2695E+01	0.4112E+02	0.4721E+02	0.2951E+01	0.4288E+02	0.5095E+02
0.2797E+01	0.4162E+02	0.4786E+02			
0.2919E+01	0.4276E+02	0.4851E+02			

Table 6: Imaginary parts (dispersion) of propagating eigenmodes in binary Al-Mg and Al-Si liquid alloys obtained within the 8-variable thermo-viscoelastic dynamic model in the first pseudo-Brillouin zone: LA — longitudinal acoustic branch (columns 2 for Al-Mg and 6 for Al-Si), LO — longitudinal optic branch (columns 3 for Al-Mg and 7 for Al-Si), HW — non-hydrodynamic heat waves (columns 4 for Al-Mg and 8 for Al-Si) (Fig. 6 of [1]).

$k[\text{\AA}^{-1}]$	LA [ps^{-1}]	LO [ps^{-1}]	HW [ps^{-1}]	$k[\text{\AA}^{-1}]$	LA [ps^{-1}]	LO [ps^{-1}]	HW [ps^{-1}]
0.3738E+00	0.1980E+02	0.3784E+02	0.0000E+00	0.3779E+00	0.2067E+02	0.3724E+02	0.0000E+00
0.5286E+00	0.2968E+02	0.3900E+02	0.0000E+00	0.5345E+00	0.3135E+02	0.3845E+02	0.0000E+00
0.6474E+00	0.3464E+02	0.4062E+02	0.0000E+00	0.6546E+00	0.3601E+02	0.5118E+02	0.0000E+00
0.7476E+00	0.5057E+02	0.3969E+02	0.2577E+02	0.7559E+00	0.4037E+02	0.5108E+02	0.8826E+01
0.9156E+00	0.5202E+02	0.3882E+02	0.3198E+02	0.9258E+00	0.5022E+02	0.4734E+02	0.0000E+00
0.1057E+01	0.5524E+02	0.4014E+02	0.2930E+02	0.1069E+01	0.5515E+02	0.4365E+02	0.0000E+00
0.1121E+01	0.5835E+02	0.4134E+02	0.1843E+02	0.1195E+01	0.5983E+02	0.4393E+02	0.6701E+01
0.1182E+01	0.5845E+02	0.4185E+02	0.2028E+02	0.1309E+01	0.6034E+02	0.4279E+02	0.4724E+01
0.1239E+01	0.6138E+02	0.4340E+02	0.1904E+02				
0.1294E+01	0.6321E+02	0.4293E+02	0.2200E+02				
0.1398E+01	0.6129E+02	0.4362E+02	0.1643E+02				

Table 7: Lowest purely real eigenvalues corresponding to the relaxation mode due to mutual diffusivity of species in Al-Mg (column 2) and Al-Si (column 4) liquid alloys, obtained within the 8-variable thermo-viscoelastic dynamic model (Fig. 7 of [1]).

$k[\text{\AA}^{-1}]$	$d_1(k)[ps^{-1}]$	$k[\text{\AA}^{-1}]$	$d_1(k)[ps^{-1}]$
0.3738E+00	0.6851E-01	0.3779E+00	0.4679E-01
0.5286E+00	0.1130E+00	0.5345E+00	0.2273E+00
0.6474E+00	0.1387E+00	0.6546E+00	0.2871E+00
0.7476E+00	0.1840E+00	0.7559E+00	0.4992E+00
0.9156E+00	0.4428E+00	0.9258E+00	0.7274E+00
0.1057E+01	0.5261E+00	0.1069E+01	0.9472E+00
0.1121E+01	0.5510E+00	0.1195E+01	0.1087E+01
0.1182E+01	0.6264E+00		

References

1. T. Bryk, and N. Jakse, J. Phys.: Condens. Matter **38**, 075101 (2026).

