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Raman mapping of piezoelectric poly (L-Lactic acid) films for force sensors

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Table S1 Wavenumber of PLLA films obtained at the varied time treatment

Raman (cm^{-1})				ATR-FTIR (cm^{-1})				Ref. [Kister]
0h	3h	12h	24h	0h	3h	12h	24h	Assignment
2948	2949	2948	2948 W*	2952 VS*	2952	2952	2952	$\nu_s CH_3$
-	-	-	-	2922 VS	2924	2922	2923	$\nu_{as} CH_3$
2878	2878	2878	2878 M*	2864 VS	2868	2864	2866	νCH
-	-	-	-	2361 M	2361	2361	2361	-
-	-	-	-	2337 M	2337	2337	2337	-
1776	1777	1777	1777 S*	-	-	-	-	$\nu(C=O)$
1766	1765	1765	1765 S	-	-	-	-	$\nu(C=O)$
1749	1749	1749	1749 M	1747 S	1724	1747	1749	$\nu(C=O)$
-	-	-	-	1649 W	1649	1649	1649	$\nu(C=C)$
1455	1454	1453	1455 S	1454 S	1452	1454	1453	$\delta_{as} CH_3$
1388	1389	1388	1389 M	-	-	-	-	$\delta_s CH_3$
-	-	-	-	1379 M	1377	1377	1377	$\delta_1 CH_+ \delta_s CH_3$
1365	1364	1365	1365 M	1361 M	-	1361	1361	$\delta_1 CH_+ \delta_s CH_3$
1346	1346	1346	1346 M	-	-	-	-	$\delta_s CH_3$
1315	1312	1312	1312	-	-	-	-	$\delta_2 CH$
1303	1302	1303	1303	-	-	-	-	$\delta_2 CH$
1294	1294	1294	1294 M	1299 W	1310	1299	1299	$\delta_2 CH$
-	-	-	1218 W	-	1236 S	-	-	$\nu_{as} COC$
-	-	-	-	1205 W	-	1205	1205	$\nu(C-OH)$
1182	1182	1182	1182 W	1182 M	-	1182	1182	$\nu_{as} COC$
					1171			δCH_3
1130	1131	1129	1130 S	1128 M	1120	1128	1128	$r_{as} CH_3$
1094	1094	1093	1093 M	-	-	-	-	$\nu_s COC$
				1081 S	-	1081	1081	$\nu(C-OH)$
-	-	-	-	-	1059	-	-	νCOC
1044	1044	1043	1044 S	1041 M	1036	1041	1041	$\nu C-CH_3$
-	-	-	-	-	974	-	-	$\delta(C-H)$ deformation
924	924	924	924 W	-	-	-	-	$rCH_3 + \nu C-C$
-	-	-	-	910 W	905	918	918	$\nu_s COC$
-	-	-	-	-	891	-	-	$\delta(C-H)$ deformation
875	875	875	875 VS	-	-	-	-	$\nu C-COO$
-	-	-	-	-	827	-	-	$\delta(C-H)$ deformation
737	737	737	737 M	754 W	754	754	754	$\delta C=O$
710	713	713	713 M	-	-	-	-	$\gamma C=O$
-	-	679	679 W	689 W	698	689	689	$\gamma C=O$
-	-	577	579 W	-	-	-	-	$\delta_1 C-CH_3 + \delta CCO$
-	515	515	515 W	-	-	-	-	$\delta_1 C-CH_3 + \delta CCO$
413	413	413	413 VS	-	-	-	-	δCCO
398	398	398	398 VS	-	-	-	-	δCCO
347	347	347	347 W	-	-	-	-	$\delta_2 C-CH_3 + \delta COC$
305	308	307	306 S	-	-	-	-	$\delta_s C-CH_3 + \delta COC$
239	240	-	241 W	-	-	-	-	τCC
206	207	207	206 S	-	-	-	-	τCC
159	159	159	159 S	-	-	-	-	Skeletal torsion
116	116	116	116 S	-	-	-	-	Skeletal torsion

*VS – very strong intensity, S – strong, M – medium, W – weak, s – symmetric, as – asymmetric

Reference

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