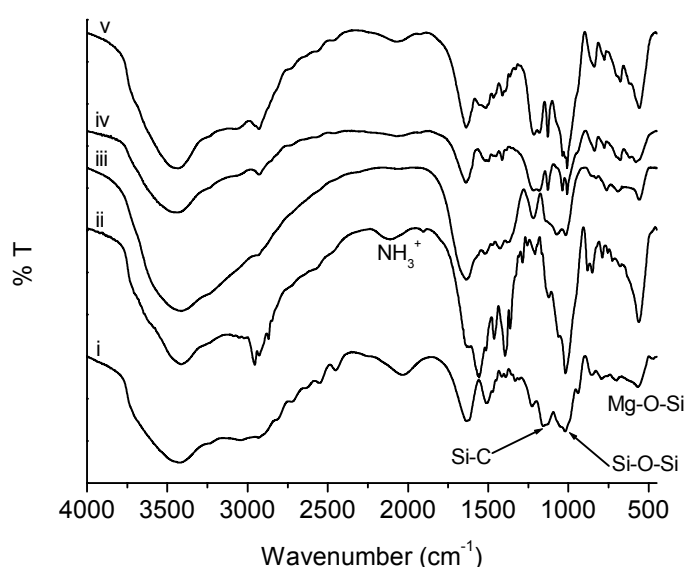


JMC B705158A Supplementary Information

Influence of polymer co-intercalation on guest release from aminopropyl-functionalized magnesium phyllosilicate mesolamellar nanocomposites

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	AMP	Ibf	EGCG	PSS	PAA	PMAPSA	Ibf-AMP	EGCG-AMP	Ibf/ PSS-AMP	EGCG/ PSS-AMP	Ibf/ PAA-AMP	EGCG/ PAA-AMP	Ibf/ PMAPSA-AMP	EGCG/ PMAPSA-AMP
NH₃⁺ str	2029						2112	2060	2073	2067	2099	2066	2089	2082
N-H def	1635 1512						1625 1514	1637 1520	1640 1513	1638 1517		1631	1647	1642
Si-C	1130 1020						1123 1019	1138 1017	1128 Masked by S=O (1008)	1128 Masked by S=O (1008)	1131 1015	1130 1013	1116 1016	1116 1015
Mg-O, Mg-O-Si	565-497						562-458	561-494	556-455	560-472	556-483	557-477	555-458	559-475
C=O str		1701												
CO₂⁻ str		1549 1412			1567 1457 1408		1557 1395		1556 1412		1566 1456 1407	1567 1453 1415	1554 1391	
S=O str				1220 1037 1008		1237 1043			1215	1210 1037 1008			1215	1215 1043
C-O str / O-H def			1447 1467					1427		1449		Masked by CO ₂ ⁻ (1453)		1448 1468

Fig. S1 FTIR spectra of various organoclay-based materials. (i) Organoclay; (ii) Ibuprofen-organoclay; (iii) EGCG-organoclay; (iv) PSS-organoclay; (v) Ibuprofen/PSS-organoclay. Table shows associated vibrational modes (cm⁻¹).

Supplementary Table S1 Concentrations of host and guest species contained in composite materials.

Composite	Organoclay	Guest Species	Polymer
Ibuprofen-organoclay	1 mL, 10 mgmL ⁻¹	Ibuprofen 1 mL, 10 mgmL ⁻¹	
EGCG-organoclay	1 mL, 10 mgmL ⁻¹	EGCG 1 mL, 3 mgmL ⁻¹	
PSS-organoclay	4 mL, 10 mgmL ⁻¹		PSS (M _w 70, 000) 1 mL, 10 mgmL ⁻¹
PAA-organoclay	4 mL, 10 mgmL ⁻¹		PAA (M _w 2,100) 1 mL, 10 mgmL ⁻¹
PMAPSA-organoclay	2 mL, 10 mgmL ⁻¹		PMAPSA (M _w 800, 000) 1 mL, 0.6 wt %
Ibuprofen/PSS-organoclay	4 mL, 10 mgmL ⁻¹	Ibuprofen 10 mg	PSS (M _w 70, 000) 1 mL, 10 mgmL ⁻¹
Ibuprofen/PAA-organoclay	4 mL, 10 mgmL ⁻¹	Ibuprofen 10 mg	PAA (M _w 2,100) 1 mL, 10 mgmL ⁻¹
Ibuprofen/PMAPSA-organoclay	2 mL, 10 mgmL ⁻¹	Ibuprofen 10 mg	PMAPSA (M _w 800, 000) 1 mL, 0.6 wt %
EGCG/PSS-organoclay	4 mL, 10 mgmL ⁻¹	EGCG 3 mg	PSS (M _w 70, 000) 1 mL, 10 mgmL ⁻¹
EGCG/PAA-organoclay	4 mL, 10 mgmL ⁻¹	EGCG 3 mg	PAA (M _w 2,100) 1 mL, 10 mgmL ⁻¹
EGCG/PMAPSA-organoclay	2 mL, 10 mgmL ⁻¹	EGCG 3 mg	PMAPSA (M _w 800, 000) 1 mL, 0.6 wt %