PP Compound Series	Filler Content (wt%)		Flex E (GPa, Span 25.4, 1mm/min)	Max Flex Strength (MPa)	Tensile E (GPa, 1mm/min)	Max Tensile Strength (MPa)	Impact Strength (kJ/m²)
	Glass fiber	Nanofiller					
Neat PP	0	0	2.00 ± 0.04	44.5 ± 3.76	1.32 ± 0.08	28.0 ± 0.35	6.86 ± 0.41
Comparative Sample 1	0	0	1.98 ± 0.09	46.3 ± 1.24	1.53 ± 0.03	28.4 ± 0.18	7.00 ± 0.26
Comparative Sample 2	10	0	2.88 ± 0.03	62.0 ± 0.2	2.22 ± 0.11	32.9 ± 1.0	5.85 ± 0.50
	15	0	3.39 ± 0.17	67.5 ± 1.2	2.76 ± 0.03	37.8 ± 0.21	5.58 ± 0.40
	20	0	3.85 ± 0.04	73.8 ± 0.8	2.93 ± 0.04	39.0 ± 0.6	5.42 ± 0.23
	30	0	5.09 ± 0.07	88.3 ± 0.4	4.00 ± 0.06	47.4 ± 0.9	4.96 ± 0.37
Example 1	10	5	2.89 ± 0.05	54.6 ± 1.5	2.41 ± 0.02	32.5 ± 0.3	4.60 ± 0.47
	10	10	2.82 ± 0.09	54.0 ± 1.2	2.56 ± 0.05	33.9 ± 0.7	4.61 ± 0.39
Example 2	10	5	3.14 ± 0.06	48.7 ± 0.6	2.80 ± 0.05	29.0 ± 0.6	3.32 ± 0.18
	10	10	3.59 ± 0.04	48.1 ± 0.4	3.17 ± 0.07	28.5 ± 0.3	3.48 ± 0.12
Example 3	10	5	3.50 ± 0.10	67.1 ± 0.6	2.73 ± 0.02	35.8 ± 0.4	4.35 ± 0.26
	10	10	3.83 ± 0.07	69.1 ± 1.2	3.29 ± 0.08	36.6 ± 0.4	4.04 ± 0.41

FIG. 1



FIG. 2

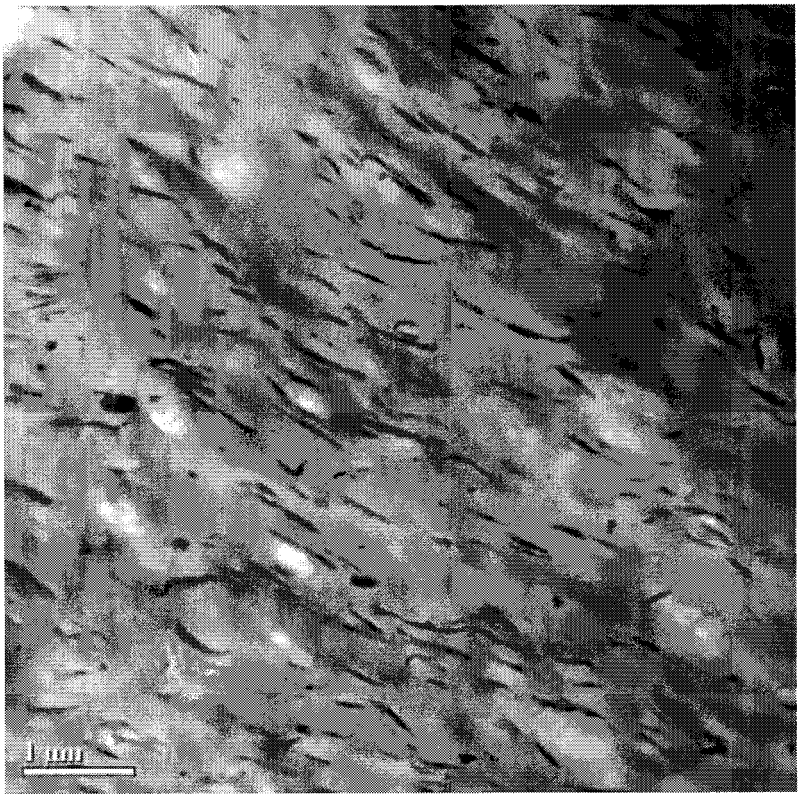


FIG. 3

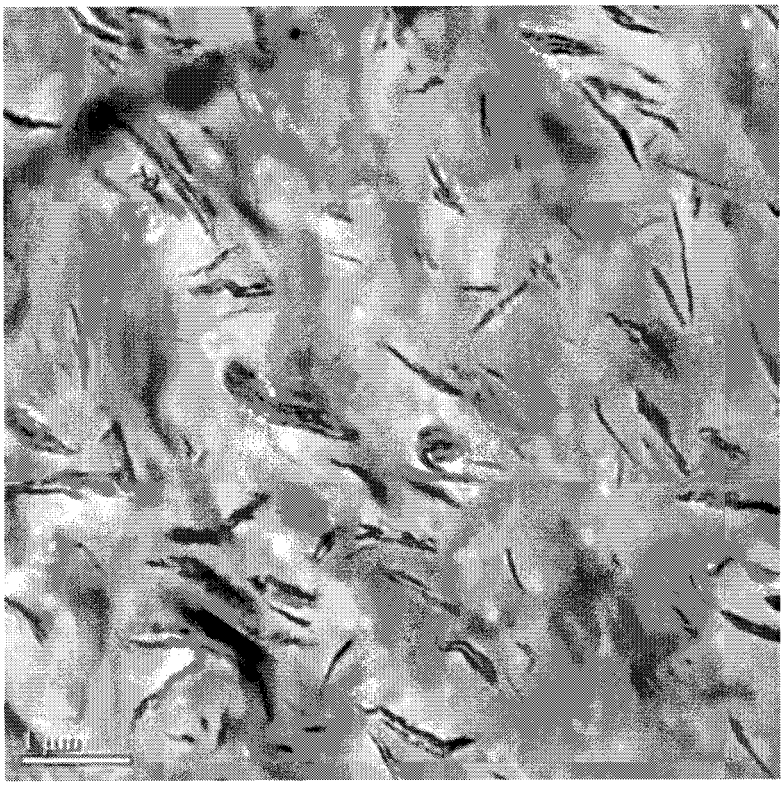


FIG. 4