CLAIMS

1. A composite comprising a polyethylene and within a range from 1 wt% to 10 wt% of at least one cyclic-olefin copolymer by weight of the composition, wherein the cyclic-olefin copolymer has a glass transition temperature (Tg) of at least 30°C, wherein the polyethylene is a LLDPE, a blend of LLDPEs, or a blend of LLDPE and LDPE, wherein the LLDPE has a branching index (g'_{vis}) of 0.85 to 1.

2. The composite of claim 1, where the cyclic-olefin copolymer comprises at least 50 wt% cyclic olefin derived units, by weight of the copolymer.

3. The composite of claims 1 or 2, wherein the cyclic-olefin copolymer has a Tg value within a range from 30°C to 180°C.

4. The composite of any one of the preceding claims, wherein the wherein the polyethylene has a g'vis of greater than 0.95, and the composite has a melt strength (σz) within a range from 100 kPa to 1000 kPa.

5. The composite of any one of the preceding claims, wherein the polyethylene has a density within a range from 0.90 g/cm^3 to 0.94 g/cm^3.

6. The composite of any one of the preceding claims, having a crystallization temperature (Tc) of at least 100°C.

7. The composite of any one of the preceding claims, having a heat of fusion (ΔH) of less than 120 J/g.

8. The composite of any one of the preceding claims, wherein inorganic fillers and/or fibers are absent.

9. The composite of any one of the preceding claims, wherein polymeric compatibilizers are absent.

10. The composite of any one of the preceding claims, comprising rods having an average length of at least 4 μm, and at least 5 nm in average diameter.

11. An oriented article comprising the composite of any one of the preceding claims.

12. A method for forming a composite of any one of the preceding claims 1 to 10 comprising combining a polyethylene and within a range from 1 wt% to 25 wt% of at least one cyclic-olefin copolymer by weight of the composition; and orienting the composite.

13. The method of claim 12, wherein the orienting step comprises melt blending, film forming, thermoforming, rotomolding, blow molding, injection molding, extrusion coating, and/or foaming.