

What is Claimed:

1. A composite article comprising:
 - a lattice structure formed by additive manufacturing methods and including a plurality of members that form an open-mesh frame defining a plurality of voids between adjacent members of the frame; and
 - an elastomeric section formed of an elastomer disposed at least partially about the lattice structure and within the voids of the lattice structure.
2. The article according to claim 1, wherein the lattice structure is monolithically formed.
3. The article according to claim 1, wherein each void of the plurality of voids sized in a range of 0.05 mm to 5 mm.
4. The article according to claim 1, wherein the elastomeric section comprises a thermoset elastomer.
5. The article according to claim 4, wherein the thermoset elastomer comprises silicone.
6. The article according to claim 1, wherein the elastomeric section comprises a thermoplastic elastomer.

7. The article according to claim 6, wherein the elastomeric section comprises a block polymer of styrene-isobutylene-styrene or a polyurethane.
8. The article according to claim 1, further comprising a body integrally formed with the lattice structure, the body forming a ring and the lattice structure extending inward from an inner surface of the ring.
9. The article according to claim 8, wherein the elastomeric section includes a flange that extends inward from the lattice structure.
10. The article according to claim 9, wherein the elastomeric section includes a rib having a thickness greater than the flange, the rib disposed between the flange and the body.
11. The article according to claim 8, wherein the elastomeric section extends over the body.
12. The article according to claim 8, wherein the body is monolithically formed with the lattice.
13. The article according to claim 8, wherein the body includes one or more grips extending in a direction away from a surface thereof.

14. The article according to claim 1, wherein the article is selected from the group consisting of: a circular gasket, a gasket with a grip, a rectangular gasket, a vessel cap, a flask stand, and a handle for a hand tool.
15. A composite article comprising:
a lattice including a plurality of members that form an open-mesh frame defining a plurality of voids between adjacent members of the frame; and
an elastomeric section formed of an elastomer disposed about the lattice structure and within the voids of the lattice structure.
16. The article according to claim 15, wherein each void of the plurality of voids sized in a range of 0.05 mm to 5 mm.
17. The article according to claim 15, wherein the lattice structure is monolithically formed.
18. The article according to claim 15, wherein the elastomer of the elastomeric section is disposed about the entire lattice structure.
19. The article according to claim 15, wherein the elastomeric section comprises a thermoset elastomer or a thermoplastic elastomer.

20. The article according to claim 15, further comprising a body integrally formed with the lattice structure, the body forming a ring and the lattice structure extending inward from an inner surface of the ring.
21. The article according to claim 20, wherein the elastomeric section includes a flange that extends inward from the lattice structure.
22. The article according to claim 21, wherein the elastomeric section includes a rib having a thickness greater than the flange, the rib disposed between the flange and the body.
23. The article according to claim 20, wherein the elastomeric section extends over the body.
24. The article according to claim 20, wherein the body is monolithically formed with the lattice.
25. The article according to claim 20, wherein the body includes one or more grips extending in a direction away from a surface thereof.
26. The article according to claim 15, wherein the article is selected from the group consisting of: a circular gasket, a gasket with a grip, a rectangular gasket, a vessel cap, a flask stand, and a handle for a hand tool.