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 disposed within the internal voids of the lattice structure; and

a body monolithically formed with the lattice structure, a portion of the body extending from the lattice structure, the portion of the body disposed outside of the elastomeric section.

~~2. The article according to claim 1, wherein the lattice structure is monolithically formed.~~

~~3~~2. The article according to claim 1, wherein each void of the plurality of voids has a size ~~sized~~ in a range of 0.05 mm to 5 mm.

~~4~~3. The article according to claim 1, wherein the elastomeric section comprises a thermoset elastomer.

~~5~~4. The article according to claim 4, wherein the thermoset elastomer comprises silicone.

~~6~~5. The article according to claim 1, wherein the elastomeric section comprises a thermoplastic elastomer.

~~7~~6. The article according to claim 6, wherein the elastomeric section comprises a block polymer of styrene-isobutylene-styrene or a polyurethane.

~~8~~7. The article according to claim 1, ~~further comprising a body integrally formed with the lattice structure,~~ wherein the body forms ~~the body forming~~ a ring and the lattice structure extends ~~extending~~ inward from an inner surface of the ring.

~~9~~8. The article according to claim 8, wherein the elastomeric section includes a flange that extends inward from the lattice structure.

~~10~~9. 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~~10. 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~~11. The article according to claim 8, wherein the body includes one or more grips extending in a direction away from a surface thereof.

~~14~~12. 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~~13. A composite article comprising:

a lattice structure 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 elastomer filling the plurality of voids of the lattice structure; and

a body monolithically formed with the lattice structure, a portion of the body extending from the lattice structure, the portion of the body disposed outside of the elastomeric section.

~~16~~14. 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~~15. The article according to claim 15, wherein the elastomer of the elastomeric section is disposed about the entire lattice structure.

~~19~~16. The article according to claim 15, wherein the elastomeric section comprises a thermoset elastomer or a thermoplastic elastomer.

~~20~~17. The article according to claim 15, ~~further comprising a body integrally formed with the lattice structure, the body forming~~ wherein the body forms a ring and the lattice structure extends ~~extending~~ inward from an inner surface of the ring.

~~21~~18. The article according to claim 20, wherein the elastomeric section includes a flange that extends inward from the lattice structure.

~~22~~19. 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~~20. 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~~21. The article according to claim 20, wherein the body includes one or more grips extending in a direction away from a surface thereof.

~~26~~22. 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.