What is claimed is:

1. An optoelectronic module comprising:

a support substrate on which are mounted first and second optoelectronic devices;

a first planar transmissive cover over the first optoelectronic device but not over the second optoelectronic device, the first transmissive cover disposed at a first height above the support substrate, wherein the first optoelectronic device is a light emitting element operable to emit light through the first transmissive cover;

a second planar transmissive cover over the second optoelectronic device but not over the first optoelectronic device, the second transmissive cover disposed at a second height above the support substrate, the second height being different from the first height, wherein the second optoelectronic device is a light detecting element operable to detect light received through the second transmissive cover;

exterior walls laterally encircling the first and second optoelectronic devices, the exterior walls composed of a material that is non-transparent to one or more wavelengths of light emitted by or detectable by the first and second optoelectronic devices, wherein a respective outer side edge of each of the transmissive covers is substantially flush with a respective outer side of the exterior walls; and

an interior wall separating the first and second optoelectronic devices from one another, the interior wall being composed of a material that is nontransparent to one or more wavelengths of light emitted by or detectable by the first and second optoelectronic devices.

2. The optoelectronic module of claim 1 further including at least one respective passive optical element on at least one of the transmissive covers.

3. The optoelectronic module of claim 1 wherein at least one of the first or second transmissive covers is tilted at an angle with respect to the support substrate.

4. The optoelectronic module of claim 1 wherein the first transmissive cover has a different thickness from a thickness of the second transmissive cover.

5. The optoelectronic module of claim 1 wherein an optical channel for the first optoelectronic device defines a first focal length, and wherein an optical channel for the second optoelectronic device defines a second focal length different from the first focal length.

6. The optoelectronic module of claim 1 wherein the first optoelectronic device includes a light emitting element arranged to emit light through the first transmissive cover, and wherein the second optoelectronic device includes a light detecting element arranged to detect light received through the second transmissive cover.

7. The optoelectronic module of claim 1 wherein the exterior walls separate the support substrate and the transmissive covers from one another.

8. The optoelectronic module of claim 1 wherein a respective side edge of each of the transmissive covers is in contact with the interior wall.

9. The optoelectronic module of claim 1 wherein an outwardly facing side edge of each of the transmissive covers is covered by an exterior wall portion that is non-transparent to one or more wavelengths of light emitted by or detectable by the first and second optoelectronic devices.

10. The optoelectronic module of claim 9 wherein the exterior wall portions covering the outwardly facing side edges of the transmissive covers are composed of a material that is nontransparent to one or more wavelengths of light emitted by or detectable by the first and second optoelectronic devices.

11. The optoelectronic module of claim 1 further including a baffle over the transmissive covers, wherein the baffle is composed of a material that is nontransparent to one or more wavelengths of light emitted by or detectable by the first and second optoelectronic devices.