Artiflex (brand name)) that comprises a light transmission part through which ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm is transmitted and ultraviolet light with a wavelength of 315 nm or less is not transmitted. The myopia prevention article may be an article that comprises a light transmission part through which ultraviolet light with a wavelength of 360 nm to 400 nm inclusive is transmitted and ultraviolet light with a wavelength of 360 nm or less is not transmitted.

[0007]

Another embodiment of the present invention is a myopia prevention article that comprises a light emission part which emits ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm or 360 nm to 400 nm inclusive.

[0008]

Yet another embodiment of the present invention is a method for investigating if ultraviolet light with a predetermined wavelength within a range of more than 315 nm and not more than 400 nm or 360 nm to 400 nm inclusive can prevent myopia, and includes a step of irradiating ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm or 360 nm to 400 nm inclusive on an animal.

[0009]

Yet another embodiment of the present invention is a myopia prevention method that includes a step of irradiating ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm or 360 nm to 400 nm inclusive on an animal.

[0010]

Yet another embodiment of the present invention is a set of a myopia prevention article (excluding Artiflex (brand name)) that comprises the light transmission part through which ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm is transmitted and ultraviolet light with a wavelength of 315 nm or less is not transmitted, or the light transmission part through which ultraviolet light with a wavelength of 360 nm to 400 nm inclusive is transmitted and ultraviolet light with a wavelength of less than 360 nm ~~or less~~ is not transmitted, and a myopia prevention article that comprises the light emission part which emits ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm or 360 nm to 400 nm inclusive. The set may comprise a myopia prevention article selected from the group including an eyesight correcting tool, an eye protection tool, a face protection tool, a sunshade, a display device, a window, a wall, a light source covering, and a coating material, and a myopia prevention article selected from the group including lighting equipment, a display device, and an ultraviolet light irradiation device.

[0011]

Cross-reference with related literature

The present application claims priority on the basis of Japanese Patent Application 2014-115286 filed on June 3, 2014, the basic application of which is hereby incorporated by reference.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

Fig. 1 is a graph showing a spectral transmission curve of an intraocular lens used in one example of the present invention.

Fig. 2 is a graph showing a spectral transmission curve of an intraocular lens used in one

example of the present invention.
Fig. 3 is a graph showing degrees of elongation of an axial length of control eyes and eyes into which one of two types of intraocular lenses was inserted in one example of the present invention.
Fig. 4 is a graph showing the relationship between a strength and a wavelength of ultraviolet light emitted by a UVA irradiation device used in one example of the present invention.
Fig. 5 is a table showing the relationship between the strength of ultraviolet light emitted by the UVA irradiation device and a distance from the UVA irradiation device, used in one example of the present invention.
Fig. 6 is a graph showing refractive values of eyes of chicks irradiated with UVA and eyes of chicks not irradiated with UVA in one example of the present invention.
Fig. 7 is a graph showing axial lengths of eyes of chicks irradiated with UVA and eyes of chicks not irradiated with UVA in one example of the present invention.
Fig. 8 is a graph showing the relationship between a strength and a wavelength of short wavelength light having a peak at 305 nm and emitted by the UVA irradiation device, used in one example of the present invention.
Fig. 9 is an example of an optical spectrum of an LED lamp that does not emit short wavelength light with a wavelength of more than 315 nm and not more than 400 nm and does not have a myopia suppression effect.
Fig. 10 is an example of a transmittance light spectrum of eyeglass lenses through which short wavelength light with a wavelength of more than 315 nm and not more than 400 nm is not transmitted, and by which there is no myopia suppression effect.
Fig. 11 is an optical spectrum of a lamp that emits short wavelength light with a wavelength of ~~more than~~ 360 nm ~~and not more than~~ to 400 nm inclusive in one example of the present invention.
Fig. 12 is a lamp having the optical spectrum shown in Fig. 13 in one example of the present invention.
Fig. 13 is a transmittance spectrum of eyeglass lenses through which short wavelength light with a wavelength of more than 315 nm and not more than 400 nm is transmitted in one example of the present invention.

Embodiments of the Invention
[0013]

The following describes in detail embodiments of the present invention that were completed on the basis of the discovery described above while providing examples. Note that the object, features, advantages, and ideas of the present invention are apparent to those skilled in the art from the descriptions herein. Furthermore, those skilled in the art can easily reproduce the present invention from these descriptions. The embodiments and the specific examples described below represent preferable modes of the present invention, which are given for the purpose of illustration or description. The present invention is not limited thereto. It is obvious to those skilled in the art that various changes and modifications may be made according to the descriptions of the present specification without departing from the spirit and scope of the present invention disclosed herein.
[0014]

In the present specification, "to prevent myopia" means to prevent the occurrence of myopia and to delay the progression of myopia.

material is capable of performing processing so that ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm, and preferably 360 nm to 400 nm inclusive is transmitted, and ultraviolet light with a wavelength of 315 nm or less or 360 nm or less, respectively, is not transmitted. Examples include glass and plastic. Further, a known ultraviolet absorber, ultraviolet scattering agent, or the like may be used.

[0022]

In the case of "ultraviolet light is not transmitted," the ultraviolet transmission rate is preferably 1% or less, and more preferably 0.1% or less. Methods for measuring the ultraviolet transmission rate are well known to those skilled in the art, and measurement can be performed using any known measuring device and method.

[0023]

The transmission rate of ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm, and preferably 360 nm to 400 nm inclusive, may be selected as appropriate according to the amount of surrounding ultraviolet light, but is preferably 21% or greater, and more preferably 30% or greater.

[0024]

A strength of transmitted ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm, and preferably 360 nm to 400 nm inclusive, is preferably not more than 5.0 mW/cm^2, more preferably not more than 3.0 mW/cm^2, more preferably not more than 1.0 mW/cm^2, more preferably not more than 0.5 mW/cm^2, and more preferably not more than 0.25 mW/cm^2. The strength can be measured using a known method.

[0025]

The myopia prevention article that comprises the light transmission part according to the present invention may transmit light with a wavelength of more than 400 nm as well. The transmission rate thereof is not particularly limited.

[0026]

(2) Myopia prevention article comprising light emission part

Specific examples of the myopia prevention article that comprises the light emission part that emits ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm, and preferably 360 nm to 400 nm inclusive, according to the present invention include lighting equipment (room lights, lights inside vehicles, lights inside airplanes, street lights, floor lamps, spotlights, and the like), display screens provided to various display devices (for example, televisions, PC monitors, gaming devices, portable media players, cell phones, tablet terminals, wearable devices, 3D glasses, virtual glasses, mobile book readers, car navigation systems, digital cameras, monitors inside vehicles, monitors inside airplanes, and the like), and ultraviolet light irradiation devices used for myopia prevention, but the present invention is not limited thereto.

[0027]

The light emission part may further produce light with a wavelength of more than 400 nm, but a light emission part that does not produce such light is preferred. Further, the light emission part preferably does not produce ultraviolet light with a wavelength of 315 nm or less (in a case where the light emission part that emits ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm is included) or ultraviolet light with a wavelength of less than 360 nm ~~or less~~ (in a case where the light emission part that emits ultraviolet light with a wavelength of 360 nm to 400 nm inclusive is included).

What is claimed is:

1. A myopia prevention article (excluding Artiflex (brand name)), comprising a light transmission part through which ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm is transmitted and ultraviolet light with a wavelength of 315 nm or less is not transmitted.

2. A myopia prevention article (excluding Artiflex (brand name)), comprising a light transmission part through which ultraviolet light with a wavelength of 360 nm to 400 nm inclusive is transmitted and ultraviolet light with a wavelength of less than 360 nm ~~or less~~ is not transmitted.

3. The myopia prevention article according to claim 1 or 2, wherein
the light transmission part further transmits light with a wavelength of more than 400 nm.

4. The myopia prevention article according to any one of claims 1 to 3, wherein
a transmission rate of the ultraviolet light with the wavelength of 315 nm or less is 1% or less.

5. The myopia prevention article according to claim 1, wherein
a strength of the transmitted ultraviolet light with the wavelength of more than 315 nm and not more than 400 nm is 5.0 mW/cm^2 or less.

6. The myopia prevention article according to claim 2, wherein
a strength of the transmitted ultraviolet light with the wavelength of 360 nm to 400 nm inclusive is 5.0 mW/cm^2 or less.

7. The myopia prevention article according to any one of claims 1 to 6, wherein
the myopia prevention article is an eyesight correcting tool, an eye protection tool, a face protection tool, a sunshade, a display device, a window, a wall, a light source covering, or a coating material.

8. A myopia prevention article, comprising a light emission part that emits ultraviolet light with a wavelength of more than 315 nm and not more than 400 nm.

9. A myopia prevention article, comprising a light emission part that emits ultraviolet light with a wavelength of 360 nm to 400 nm inclusive.

10. The myopia prevention article according to claim 8 or 9, wherein
the light emission part further emits light with a wavelength of more than 400 nm.

11. The myopia prevention article according to any one of claims 8 to 10, wherein
a strength of the ultraviolet light emitted from the light emission part is 5.0 mW/cm^2 or less.