Claims

1. A device for promoting the release of adenosine in an organism, characterized in that it comprises a stimulus generator for generating a sound of 1-100 Hz and/or for generating a light flicker of 1-100 Hz and/or a full-screen visual stimulus.

2. The device according to claim 1, wherein the stimulus generator comprises visual stimulus generator and/or acoustic stimulus generator;

optionally, the visual generator emits a visual stimulus of 20-80 Hz; optionally, the frequency of the visual stimulus comprises one or more of 20 Hz, 25 Hz, 30 Hz, 35 Hz, 40 Hz, 45 Hz, 50 Hz, 55 Hz, 60 Hz, 65 Hz, 70 Hz, 75 Hz and 80 Hz;

optionally, the frequency of the visual stimulus comprises 30-60 Hz;

optionally, the frequency of the visual stimulus comprises one or more of 30 Hz, 35 Hz, 40 Hz, 45 Hz, 50 Hz, 55 Hz, and 60 Hz;

optionally, the frequency of the visual stimulus comprises 35-45 Hz;

optionally, the frequency of the visual stimulus comprises one or more of 35 Hz, 40 Hz, and 45 Hz;

optionally, the frequency of the visual stimulus is 40 Hz;

optionally, the white light illuminance of the visual stimulus is 2000 lux or more;

optionally, the wavelength of the monochromatic light of the visual stimulus is 480~530 nm;

optionally, the duty ratio of the visual stimulus is 20%-80%, preferably 30%-70%, or 40%-70%, or 45-55%;

optionally, the duty ratio of the visual stimulus is selected from one or more of 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, and 80%;

optionally, the duty ratio of the visual stimulus is 50%.

3. The device according to claim 2, wherein the visual stimulus generator comprises a lamp and/or a display screen;

optionally, the lamp comprises cold cathode fluorescent lamp (CCFL), light-emitting diode (LED) lamp and/or organic light-emitting diode (OLED) lamp;

optionally, the display screen comprises CCFL display screen, LED display screen, and/or OLED display screen.

4. The device according to claim 3, wherein the lamp emits white light and/or monochromatic light;

optionally, the monochromatic light comprises one or more of ultraviolet light, blue light, green light, red light and near-infrared ray, preferably blue light and/or green light;

optionally, the center wavelength of the ultraviolet light is 315-400 nm, 320-395 nm, or 325-390 nm, or 330-385 nm; preferably 380 nm;

optionally, the center wavelength of the blue light is 450~490 nm, or 455~488 nm, or 460~485 nm; preferably 480 nm;

optionally, the center wavelength of the green light is 500 nm~560 nm, or 505 nm~555 nm, or 510 nm~550 nm, or 515 nm~545 nm, or 520 nm~540 nm, or 525 nm~545 nm, or 530 nm~535 nm; preferably 530 nm;

optionally, the center wavelength of the red light is 600~680 nm, or 595~675 nm, or 590~670 nm, or 585~665 nm, or 580~650 nm; preferably 650 nm;

optionally, the center wavelength of the near-infrared ray is 780~1100 nm, or 790~1090 nm, or 800~1080 nm, or 810~1070 nm, or 820~1060 nm, or 830~1050 nm, or 840~1040 nm, or 850~1030 nm; preferably 850 nm;

optionally, the white light illuminance is 2-6000 Lux, and the monochromatic light illuminance is 2-500 Lux;

optionally, the white light illuminance emitted by the lamp is 500-3000 Lux, optionally, the white light illuminance emitted by the lamp comprises one or more of 500 Lux, 1000 Lux, 2000 Lux and 3000 Lux.

5. The device according to claim 3 or 4, wherein the display screen displays a grating image; optionally, the contrast ratio of the grating image is 10%-100%; optionally, the grating image comprises one or more of moving grating image, flickering grating image, flickering raster image and flipping grating image; optionally, the contrast ratio of the moving grating is 10%-100%; optionally, the orientation of the moving grating is 0-180°; optionally, the spatial frequency of the moving grating image is 0.05-30 cycle/deg; e.g., 0.05-10 cycle/deg;

optionally, the moving speed of the moving grating image is 1-10 Hz;

optionally, the contrast ratio of the flipping grating is 10%-100%; optionally, the flipping frequency of the flipping grating is 20-60 Hz or 30-50 Hz, preferably 40 Hz; optionally, the spatial frequency of the flipping grating is 0.1-30 cpd, or 0.1 cpd; optionally, the contrast ratio of the flipping grating is 10%-100%, 70-90%, preferably 80%; optionally, the average brightness of the flipping grating is 100-500 cd/m^2, or 140-180 cd/m^2, or 150-170 cd/m^2, or 160 cd/m^2;

optionally, the contrast ratio of the flickering raster image is 10%-100%; optionally, the frequency of the flickering raster image is 1-100 Hz; optionally, the raster size of the flickering raster image is 0.5-10 deg.

6. The device according to any one of claims 1-5, wherein the device comprises mobile phone, tablet, or portable wearable device.

7. The device according to claim 6, wherein the portable wearable device is selected from glasses, blinder, mask, hat, headband, helmet, bracelet or watch; optionally, the glasses comprise VR glasses.

8. The device according to claim 7, wherein the portable wearable device comprises glasses frame; optionally, the portable wearable device also comprises glasses temples or hair band;

optionally, a lamp is provided at the edge of the lens enclosed by the glasses frame; optionally, the lamp comprises CCFL lamp, LED lamp and/or OLED

lamp;

optionally, a display screen is provided at the center of the lens enclosed by the glasses frame; optionally, the display screen comprises CCFL display screen, LED display screen, and/or OLED display screen.

9. The device according to claim 8, wherein the lamp comprises monochromatic light lamp and white light lamp;

optionally, the illuminance of the monochromatic light lamp is 2-500 lux; optionally, the illuminance of the white light is 2-6000 lux;

optionally, the lamp comprises blue light lamp, green light lamp, red light lamp and white light lamp.

10. The device according to claim 8 or 9, wherein the display screen displays a grating image which comprises vertical moving grating, horizontal moving grating and/or flickering raster;

optionally, the vertical moving grating is parameterized to be oriented at 0°; optionally, the spatial frequency of the vertical moving grating is 0.2 cpd; optionally, the time frequency of the vertical moving grating is 1 Hz;

optionally, the contrast ratio of the vertical moving grating is 50%;

optionally, the horizontal moving grating is parameterized to be oriented at 90°; optionally, the spatial frequency of the horizontal moving grating is 0.2 cpd; optionally, the time frequency of the horizontal moving grating is 1 Hz; optionally,

the contrast ratio of the horizontal motion grating is 50%.