CLAIMS

1. A method for determining a photographing mode, comprising:

acquiring at least two consecutive image frames captured by an image photographing apparatus;

determining whether the at least two consecutive image frames include two image frames having an image similarity less than a preset threshold; and

switching the photographing mode of the image photographing apparatus from a non-high-dynamic range mode to a high-dynamic range mode in response to determining that the at least two consecutive image frames do not include two image frames having the image similarity less than the preset threshold;

wherein in a case that the image photographing apparatus is in the high-dynamic range mode, an image captured and output by the image photographing apparatus is a high-dynamic range image.

2. The method according to claim 1, wherein the determining whether the at least two consecutive image frames include two image frames having the image similarity less than the preset threshold comprises:

determining two target image frames that are separated by a target number of frames from the at least two consecutive image frames;

determining whether the image similarity between the two target image frames is less than the preset threshold; and

determining that the at least two consecutive image frames do not include two image frames having the image similarity less than the preset threshold if the image similarity between the two target image frames is not less than the preset threshold.

3. The method according to claim 2, wherein after determining whether the image similarity between the two target image frames is less than the preset threshold, the method further comprises:

setting, based on at least one of the two target image frames, a number of frames for image synthesis in a process of synthesizing the high-dynamic range image in the high-dynamic range

mode if the image similarity between the two target image frames is not less than the preset threshold.

4. The method according to claim 3, wherein the setting, based on at least one of the two target image frames, the number of frames for image synthesis in the process of synthesizing the high-dynamic range image in the high-dynamic range mode comprises:

inputting at least one of the two target image frames into an exposure value determination model, and outputting an upper limit value and a lower limit value for an exposure value of the image photographing apparatus; and

setting, based on the upper limit value and the lower limit value for the exposure value, the number of frames for image synthesis in the process of synthesizing the high-dynamic range image in the high-dynamic range mode.

5. The method according to claim 4, wherein a process for training the exposure value determination model comprises:

acquiring a sample image and labeling of the upper limit value and the lower limit value for the exposure value of the image photographing apparatus corresponding to the sample image; and

training the exposure value determination model by taking the sample image as an input and taking the labeling of the upper limit value and the lower limit value for the exposure value of the image photographing apparatus corresponding to the sample image as an output.

6. The method according to claim 3, wherein after switching the photographing mode of the image photographing apparatus from the non-high-dynamic range mode to the high-dynamic range mode, the method further comprises:

in response to a photographing instruction, calling the image photographing apparatus to capture image frames in quantity equal to the number of frames for image synthesis, synthesizing the captured images, and outputting the high-dynamic range image.

7. The method according to claim 1, wherein before switching the photographing mode of the image photographing apparatus from the non-high-dynamic range mode to the high-dynamic range mode, the method further comprises:

determining whether the at least two consecutive image frames include an image whose

brightness information fulfilling target brightness information; wherein the target brightness information is used to define an image brightness condition for triggering the high-dynamic range mode; and

the switching the photographing mode of the image photographing apparatus from the non-high-dynamic range mode to the high-dynamic range mode if the at least two consecutive image frames do not include two image frames having the image similarity less than the preset threshold comprises:

switching the photographing mode of the image photographing apparatus to the high-dynamic range mode if the at least two consecutive image frames include the image whose brightness information fulfilling the target brightness information and the at least two consecutive image frames do not include two image frames having the image similarity less than the preset threshold.

8. An apparatus for determining a photographing mode, comprising:

an image acquisition module configured to acquire at least two consecutive image frames captured by an image photographing apparatus;

an image similarity determination module configured to determine whether the at least two consecutive image frames include two image frames having an image similarity less than a preset threshold; and

a mode setting module configured to switch the photographing mode of the image photographing apparatus from a non-high-dynamic range mode to a high-dynamic range mode in response to determining that the at least two consecutive image frames do not include two image frames having the image similarity less than the preset threshold;

wherein in a case that the image photographing apparatus is in the high-dynamic range mode, an image captured and output by the image photographing apparatus is a high-dynamic range image.

9. An electronic device, comprising:

a processor;

a memory configured to store processor-executable instructions, and

a camera for capture images;

wherein the processor is configured to read the executable instructions from the memory and execute the executable instructions to implement the method for determining the photographing mode according to any one of claims 1 to 7.

10. A computer readable storage medium storing a computer program, wherein the computer program, when executed by a processor, causes the processor to implement the method for determining the photographing mode according to any one of claims 1 to 7.