CLAIMS

What is claimed is:

1. A feedback information transmission method, performed by a terminal device, comprising:

receiving at least one piece of transmission information transmitted on at least one physical sidelink channel;

determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information; and

transmitting corresponding feedback information on at least one physical sidelink feedback channel resource based on the power information corresponding to each piece of feedback information;

wherein before the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information, the method further comprises:

determining feedback information for which transmission needs to be dropped;

wherein the determining feedback information for which transmission needs to be dropped comprises:

determining, based on fourth attribute information of the transmission information, the feedback information for which transmission needs to be dropped, wherein the fourth attribute information comprises a priority;

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining power information corresponding to each piece of feedback information for which transmission has not been dropped;wherein the determining power information corresponding to each piece of feedback information for which transmission has not been dropped comprises:

determining that the power information corresponding to each piece of feedback information for which transmission has not been dropped is preset power information; or

determining that the power information corresponding to each piece of feedback information for which transmission has not been dropped is an arithmetic mean of total power information divided by a quantity of feedback information.

2. The method according to claim 1, wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on first attribute information, wherein the first attribute information comprises any one of the following:

channel state information of a monitored link, a reference signal received power of the monitored link, a distance to a device transmitting the transmission information, or a location of the device transmitting the transmission information; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on second attribute information of the transmission information, wherein the second attribute information comprises any one of the following:

quality of service, a priority, a modulation and coding scheme, a size of a resource occupied, or a quantity of layers.

3. The method according to claim 1, wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a transmission mode for transmitting the transmission information, wherein the transmission mode comprises:

transmitting the transmission information using a beam, or transmitting the transmission information without using a beam; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a transmission type of the at least one piece of transmission information; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a physical sidelink feedback channel format corresponding to each piece of feedback information.

4. The method according to claim 1, wherein the determining feedback information for which transmission needs to be dropped comprises:

determining feedback information for which transmission needs to be dropped, until a quantity of feedback information for which transmission has not been dropped reaches a first quantity, wherein the first quantity is a quantity of simultaneously transmitted feedback information that can be supported by a transmit power of a transmitting device.

5. The method according to claim 1, wherein before the transmitting corresponding feedback information on at least one physical sidelink feedback channel resource based on the power information corresponding to each piece of feedback information, the method further comprises:

performing a logical operation on feedback information for one transmit end, to obtain a logical operation result of the feedback information for the one transmit end; and

transmitting the logical operation result of the feedback information for the one transmit end on a predefined or preconfigured physical sidelink feedback channel resource.

6. The method according to claim 1, wherein before the receiving at least one piece of transmission information transmitted on at least one physical sidelink channel, the method further comprises:

transmitting indication information to each transmit end, wherein the indication information is used to indicate a physical sidelink channel resource that is used for transmission by each transmit end.

7. A terminal device, comprising a processor, a memory, and a computer program stored on the memory and capable of running on the processor, wherein when the computer program is executed by the processor, the steps of a feedback information transmission method are implemented, wherein the feedback information transmission method comprises:

receiving at least one piece of transmission information transmitted on at least one physical sidelink channel;

determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information; and

transmitting corresponding feedback information on at least one physical sidelink feedback channel resource based on the power information corresponding to each piece of feedback information;

wherein before the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information, the method further comprises:

determining feedback information for which transmission needs to be dropped;

wherein the determining feedback information for which transmission needs to be dropped comprises:

determining, based on fourth attribute information of the transmission information, the feedback information for which transmission needs to be dropped, wherein the fourth attribute information comprises a priority;

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining power information corresponding to each piece of feedback information for which transmission has not been dropped;

wherein the determining power information corresponding to each piece of feedback information for which transmission has not been dropped comprises:

determining that the power information corresponding to each piece of feedback information for which transmission has not been dropped is preset power information; or

determining that the power information corresponding to each piece of feedback information for which transmission has not been dropped is an arithmetic mean of total power information divided by a quantity of feedback information.

8. The terminal device according to claim 7, wherein the determining feedback information for which transmission needs to be dropped comprises:

determining feedback information for which transmission needs to be dropped, until a quantity of feedback information for which transmission has not been dropped reaches a first

quantity, wherein the first quantity is a quantity of simultaneously transmitted feedback information that can be supported by a transmit power of a transmitting device.

9. A non-transitory computer-readable storage medium, wherein the non-transitory computer-readable storage medium stores a program, and when the computer program is executed by a processor, the steps of a feedback information transmission method are implemented, wherein the feedback information transmission method comprises:

receiving at least one piece of transmission information transmitted on at least one physical sidelink channel;

determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information; and

transmitting corresponding feedback information on at least one physical sidelink feedback channel resource based on the power information corresponding to each piece of feedback information;

wherein before the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information, the method further comprises:

determining feedback information for which transmission needs to be dropped;

wherein the determining feedback information for which transmission needs to be dropped comprises:

determining, based on fourth attribute information of the transmission information, the feedback information for which transmission needs to be dropped, wherein the fourth attribute information comprises a priority;

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining power information corresponding to each piece of feedback information for which transmission has not been dropped;

wherein the determining power information corresponding to each piece of feedback information for which transmission has not been dropped comprises:

determining that the power information corresponding to each piece of feedback information for which transmission has not been dropped is preset power information; or

determining that the power information corresponding to each piece of feedback information for which transmission has not been dropped is an arithmetic mean of total power information divided by a quantity of feedback information.

10. The terminal device according to claim 7, wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on first attribute information, wherein the first attribute information comprises any one of the following:

channel state information of a monitored link, a reference signal received power of the monitored link, a distance to a device transmitting the transmission information, or a location of the device transmitting the transmission information; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on second attribute information of the transmission information, wherein the second attribute information comprises any one of the following:

quality of service, a priority, a modulation and coding scheme, a size of a resource occupied, or a quantity of layers.

11. The terminal device according to claim 7, wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a transmission mode for transmitting the transmission information, wherein the transmission mode comprises:

transmitting the transmission information using a beam, or transmitting the transmission information without using a beam; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a transmission type of the at least one piece of transmission information; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a physical sidelink feedback channel format corresponding to each piece of feedback information.

12. The terminal device according to claim 7, wherein before the transmitting corresponding feedback information on at least one physical sidelink feedback channel resource based on the power information corresponding to each piece of feedback information, the method further comprises:

performing a logical operation on feedback information for one transmit end, to obtain a logical operation result of the feedback information for the one transmit end; and

transmitting the logical operation result of the feedback information for the one transmit end on a predefined or preconfigured physical sidelink feedback channel resource.

13. The terminal device according to claim 7, wherein before the receiving at least one piece of transmission information transmitted on at least one physical sidelink channel, the method further comprises:

transmitting indication information to each transmit end, wherein the indication information is used to indicate a physical sidelink channel resource that is used for transmission by each transmit end.

14. The non-transitory computer-readable storage medium according to claim 9, wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on first attribute information, wherein the first attribute information comprises any one of the following:

channel state information of a monitored link, a reference signal received power of the monitored link, a distance to a device transmitting the transmission information, or a location of the device transmitting the transmission information; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on second attribute information of the transmission information, wherein the second attribute information comprises any one of the following:

quality of service, a priority, a modulation and coding scheme, a size of a resource occupied, or a quantity of layers.

15. The non-transitory computer-readable storage medium according to claim 9, wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a transmission mode for transmitting the transmission information, wherein the transmission mode comprises:

transmitting the transmission information using a beam, or transmitting the transmission information without using a beam; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a transmission type of the at least one piece of transmission information; or,

wherein the determining power information corresponding to each of at least one piece of feedback information that corresponds to the at least one piece of transmission information comprises:

determining the power information corresponding to each piece of feedback information based on a physical sidelink feedback channel format corresponding to each piece of feedback information.