What is claimed is:

1. an instant communication method, comprising the steps of:

(a) obtaining the fingerprint information of an instant communication receiving terminal, and performing identity authentication on the instant communication receiving terminal utilizing the fingerprint information at an instant communication transmitting terminal;

(b) generating and encrypting audio and video information to obtain encrypted audio and video information at the instant communication transmitting terminal, after successful authentication of the instant communication receiving terminal; and

(c) transmitting the encrypted audio and video information from the instant communication transmitting terminal to the instant communication receiving terminal, and receiving and decrypting the encrypted audio and video information at the instant communication receiving terminal to obtain and display the audio and video information.

2. The method as claimed in claim 1, wherein before the step of obtaining the fingerprint information of the instant communication receiving terminal at the instant communication transmitting terminal the method further comprises the steps of:

(a_1) transmitting a key exchange request and the fingerprint information of the instant communication transmitting terminal from the instant communication transmitting terminal to the instant communication receiving terminal ; and

(a_2) receiving the key exchange confirmation information and the fingerprint information of the instant communication receiving terminal from the instant communication receiving terminal at the instant communication transmitting terminal.

3. The method as claimed in claim 1, wherein the step of generating and

encrypting audio and video information to obtain encrypted audio and video information at the instant communication transmitting terminal comprises:

(b_1) starting a audio and video application after obtaining an enabled instruction, to perform audio and video operation and generate the audio and video information at the instant communication transmitting terminal; and

(b_2) encrypting the audio and video information using the fingerprint information of the instant communication transmitting terminal to obtain the encrypted audio and video information at the instant communication transmitting terminal.

4. The method as claimed in claim 3, wherein the step (b_2) further comprises the steps of:

(b_{21}) encrypting the whole audio and video information generated at the instant communication transmitting terminal using the fingerprint information of the instant communication transmitting terminal to obtain fully encrypted audio and video information at the instant communication transmitting terminal; or

(b_{22}) encrypting a part of the audio and video information generated at the instant communication transmitting terminal using the fingerprint information of the instant communication transmitting terminal to obtain partially encrypted audio and video information at the instant communication transmitting terminal.

5. The method as claimed in any one of claims 1-4, wherein before the step of receiving and decrypting the encrypted audio and video information at the instant communication receiving terminal the method also comprises the steps of:

(c_1) obtaining the fingerprint information of the instant communication transmitting terminal, and performing identity authentication on the instant communication transmitting terminal using the fingerprint information of the instant communication transmitting terminal at the instant communication receiving terminal; and

(c_2) starting the step of receiving and decrypting the audio and video

encrypted information at the instant communication receiving terminal, after successful authentication of the instant communication transmitting terminal.

6. an instant communication system comprising an instant communication transmitting terminal, wherein the instant communication transmitting terminal comprises:

a transmitting terminal fingerprint sensor, which is used for obtaining the fingerprint information of the instant communication receiving terminal and performing identity authentication on the instant communication receiving terminal using the fingerprint information of the instant communication receiving terminal;

an audio and video information generator electrically coupled to the transmitting terminal fingerprint sensor, which is used for generating audio and video information after the transmitting terminal fingerprint sensor accomplishing successful authentication of the instant communication receiving terminal;

a transmitting terminal real-time monitoring processor electrically coupled to the audio and video information generator, which is used for encrypting the audio and video information to obtain encrypted audio and video information after the audio and video information being generated by the audio and video information generator; and

an audio and video information transmitter electrically coupled to the transmitting terminal real-time monitoring processor, which is used for transmitting the encrypted audio and video information obtained by the transmitting terminal real-time monitoring processor to the instant communication receiving terminal, such that the instant communication receiving terminal receives and decrypts the encrypted audio and video information to obtain and display the audio and video information.

7. The system as claimed in claim 6, wherein the transmitting terminal fingerprint sensor is also used for extracting the fingerprint information of a user

corresponding to the instant communication transmitting terminal to obtain the fingerprint information of the instant communication transmitting terminal,

correspondingly the instant communication transmitting terminal also comprising:

a fingerprint information transmitter electrically coupled to the transmitting terminal fingerprint sensor, which is used for sending a key exchange request and the fingerprint information of the instant communication transmitting terminal extracted by the transmitting terminal fingerprint sensor to the instant communication receiving terminal; and

a fingerprint information receiver electrically coupled to a memory of the instant communication transmitting terminal or to a memory of a server, which is used for receiving a key exchange confirmation information and the fingerprint information of the instant communication receiving terminal from the instant communication receiving terminal, and for storing the fingerprint information of the instant communication receiving terminal in the memory of the instant communication transmitting terminal or in the memory of the server.

8. The system as claimed in claim 6, wherein the audio and video information generator is specifically used for obtaining an enabled instruction for starting a audio and video application, to perform audio and video operation and generate the audio and video information, and the transmitting terminal real-time monitoring processor being specifically used for encrypting the audio and video information using the fingerprint information of the instant communication transmitting terminal to obtain the encrypted audio and video information.

9. The system as claimed in claim 8, wherein the transmitting terminal real-time monitoring processor comprises:

a first real-time monitoring sub-processor electrically coupled to the audio and video information generator, which is used for encrypting the whole audio and video information generated by the instant communication transmitting terminal

by utilizing the fingerprint information of the instant communication transmitting terminal, to obtain the fully encrypted audio and video information of the instant communication transmitting terminal; or

a second real-time monitoring sub-processor electrically coupled to the audio and video information generator, which is used for encrypting a part of the audio and video information generated by the instant communication transmitting terminal by utilizing the fingerprint information of the instant communication transmitting terminal, to obtain the partially encrypted audio and video information of the instant communication transmitting terminal.

10. The system as claimed in any one of claims 6-9, wherein the system further comprises an instant communication receiving terminal, which comprises:

a audio and video information receiver electrically coupled to the audio and video information transmitter, which is used for receiving the encrypted audio and video information from the audio and video information transmitter;

a receiving terminal fingerprint sensor electrically coupled to the audio and video information receiver, which is used for obtaining the fingerprint information of the instant communication transmitting terminal and performing identity authentication on the instant communication transmitting terminal by utilizing the fingerprint information of the instant communication transmitting terminal, after the audio and video information receiver receiving the encrypted audio and video information from the audio and video information transmitter; and

a receiving terminal real-time monitoring processor electrically coupled to the receiving terminal fingerprint sensor, which is used for decrypting the encrypted audio and video information to obtain and display the audio and video information, after the receiving terminal fingerprint sensor accomplishing successful authentication of the instant communication transmitting terminal.