



# Video Abstracts

Video abstracts are an accompanying feature for IOP ebooks. Their aim, through video media, is to enable authors to go beyond the constraints of their written material to personally explain the importance of their work to the book's global audience. It is envisaged that video abstracts will provide an engaging and creatively presented overview of the book to potential readers and enhance a reader's understanding and appreciation of a work. To maximize engagement and visibility, authors are encouraged to combine footage of themselves with other relevant material of interest—such as imagery, animations, footage of an experiment running or a lab tour.

In a video abstract you can demonstrate your experiments physically, illustrate complex theoretical phenomena through practical demonstrations, introduce viewers to the equipment and tools used in the field and engage with your audience in a more informal manner. If you have visual data such as simulations or animations, video abstracts are a good place to showcase them and explain their implications in real time. As such, your video should be engaging and interesting and offer viewers more than you could write in an abstract. The key is to be creative and make full use of the audio-visual medium.

## Editorial guidelines

Unfortunately, we **no longer allow the use of any music in video abstracts**. Clearing rights to use music is incredibly complicated as there are often many rights holders, in both the master recording and the underlying song. Attaching music to images, such as overlaying a piece of music with the images in the video abstract, also requires us to obtain a separate synchronisation licence. Licences (i.e. permissions) generally must be negotiated with the copyright owners, usually the record company and the publishing company. Unfortunately, music taken from royalty free sites is not an answer to the problem as generally these sites cannot guarantee that the music has not been copied from elsewhere. Therefore, we cannot include music taken from royalty free sites or stated to be in the public domain. The risk to IOP Publishing, our partners and our authors in getting this wrong is too high, as we do not want anyone to be sued for copyright infringement. We appreciate that this may be disappointing for authors, but this is the safest option for everyone.

In producing a video abstract, authors are asked to adhere to the following basic guidelines.

1. A video abstract should not last longer than four minutes.
2. A video abstract should introduce the topic of the book and highlight the main features and key points readers will get from reading your work.

3. The presentation should be understandable and accessible to users outside of the immediate field of the book.
4. Inclusion of additional relevant material such as images, animations and lab footage are strongly encouraged. Please be aware of copyright issues surrounding such material, as per our advice below.
5. A video abstract must include a soundtrack providing a clear verbal narration of the visual content.
6. No music can be used in the video abstract, whether performed by the author or anyone else.
7. Presentations should not include small text that will be difficult to read.
8. As your book will have a broad and international readership, and to comply with accessibility guidelines authors are encouraged to accompany their video abstract with a transcript (as a .txt file).
9. Terms and conditions regarding the use and distribution of video abstracts will apply in line with IOP's copyright statement.

**Authors should be aware that use of material from previously published work requires appropriate permission from the publisher. If you are planning to use images that are not your own work, you should ensure that this does not violate any copyright agreements. We will require evidence that permission has been obtained or is not required.**

Please note that all video abstracts will be assessed for editorial suitability and quality. Video abstracts that do not meet the criteria laid out in this guide will not be published.

Technical specifications relating to file formats and minimum standards for both video and audio components can be found below

### **Tips and suggestions - How to make a good video abstract**

#### *What to film*

Video abstracts should be three to four minutes in length. To ensure your audience watches to the end you must hold their attention. Structuring your abstract to tell a story about the book's subject is a good way to do this. To maximize engagement and visibility, authors are encouraged to combine footage of themselves with other relevant material of interest such as imagery, animations, footage of an experiment running or a lab tour.

#### *Be creative*

- We welcome creativity and you can include practical demonstrations, animations, interviews and anything else you can think of. Alternatively, you can keep the structure very simple but always try to engage with your audience.
- You can have one or multiple presenters and film group discussions.
- Within reason, you can film at any location you like if you have obtained the right to do so.

#### *Before you begin*

Many research institutions have a press department that may be able to offer assistance. They may be able to lend cameras and microphone equipment and may even be able to

edit your video footage. Be sure to contact your university press officer for more advice before you start filming to see how they can help you.

### *On the web*

All our abstracts are hosted on the web. As such it is essential to design one that can be viewed on the web: when uploaded the video will be compressed to ensure file sizes are small and download times as short as possible. Your video will not have the same quality as one viewed on a television screen. However, there are several ways to ensure it looks and sounds good on the web, as described below.

### *Audio-visual quality*

Whether your video abstract contains lots of edited footage or a very simple single shot, audio-visual quality is essential to ensure your audience gets the most out of your efforts. If it is difficult to follow because of poor visual or sound quality, it will not be watched.

## **Tips for improving visual quality**

### *Lighting*

- Do try to ensure that you have as much light as possible when filming your video. Natural light gives better results and filming your piece outside is a good way of ensuring even lighting conditions. Sometimes your own office or laboratory can be the best place to discuss your research. If you are sitting in your office, ensure the lighting is adequate. Try to use multiple light sources to avoid creating too much contrast.
- *Don't* sit directly in front of a window or any other light sources.

### *Vibration*

- Do try to reduce vibration to a minimum by using a tripod or use a camcorder with a stabilizer. This will make the overall quality of the video look better after compression.
- *Don't* attempt to film while walking and don't zoom in and out too often.

### *Background*

- *Do* ensure the background behind the presenter in your video is suitable if they are performing a piece in front of the camera.
- *Do* make sure there is nothing moving in the background that might distract the viewer's attention. The simpler the background, the better it will look on a computer screen.
- *Don't* use blank walls, empty whiteboards or blackboards as a backdrop. Stationary backdrops are better for compression but colored backgrounds, or the bookshelf in your office might be better, more interesting alternatives.

### *Exposure*

- *Do* use a slight overexposure when filming as this reduces intricate details, resulting in less information to process during video compression. Also, some computer screens tend to make videos look darker, so added brightness can improve image quality.

- *Don't* underexpose your subject too much as the resultant video may appear even darker and more difficult to discern on screen.

### *Frame*

- *Do* keep your frame simple. Trying to incorporate too much action or movement in a frame will make the eventual file compression more difficult. If a person is speaking to the camera, try filming them from the shoulders up to avoid catching too much body movement.
- *Don't* film in areas where people or traffic are likely to appear in the frame.
- Addressing your audience
- *Do* maintain eye contact with the camera if addressing your audience directly.
- *Do* choose to have someone standing off camera at whom you can look to maintain a constant eye level if filming your piece in the style of an interview.
- *Don't* get distracted by activity off-camera.

### *Equations*

- *Do* use equations to describe your work where relevant. If you wish to display or write equations on a whiteboard or blackboard, ensure that the characters are large enough to discern and are legible.
- *Don't* use bright lights to illuminate your writing surface: white- and blackboards can reflect light and obscure the surface for the viewer, so please be aware of this and alter the position of your light source accordingly. A room with plenty of natural light is best.

### *Animations*

- *Do* incorporate data, animations or simulations into your video to further illustrate your work and engage your audience. Please ensure you comply with our advice on copyright and permissions.
- *Don't* display animations by filming them on a computer screen or a wall projection while you present to camera. This method makes animations very difficult for viewers to discern. If you want to use presentation slides, there are many ways you can convert them into online Flash movies.

### *Accessibility*

- *Do* include a transcript for your video abstract. Your book has an international readership and while we publish all research in English, it is not the first language of many of our readers. A transcript will allow anyone to follow your video abstract and help them get the most out of your efforts.
- *Do* speak clearly always.
- *Do* speak to your audience. Silent films with no narration are far less engaging.

### *Transcript*

- *Do* ensure that your transcript is written in correct English.
- *Don't* submit a transcript that differs from the narrative on your video.

## Audio quality

### *Noise*

- *Do* ensure that background noise is kept to a minimum if you film in your lab: loud extractor fans/motors etc. will reduce the sound quality and will be very difficult to edit out.
- *Don't* film next to busy roads or in high wind if you film outside.

### *Microphones*

- *Do* use a lapel microphone if possible. However, if you do not have such equipment, ensuring that the background noise is reduced as much as possible will improve the sound quality.

### *Music*

- We do not allow the use of any background music in video abstracts. If you have included music, it could delay publication of your video abstract as we will need you to remove it.

## Permissions and video abstracts

Please note that you must obtain express written permission from the copyright owner to use any third-party content within your video abstract. This applies to any third-party images, screenshots or screengrabs, text or any other form of third party content. You must also ensure you cite the source of any third-party content and follow any attribution requirements set out in the written permission. Images and animations that are claimed as being 'free to use' or 'in the public domain', such as Wikimedia material, must be cleared with our editorial team before it can be published. As such material can cause delays we encourage you to send us a link to the source of the material before you use it, to avoid delays or rejection of your video. It must be emphasized that the responsibility for obtaining copyright permissions is solely that of the authors. We encourage your queries regarding this matter and have a dedicated team who can help you to resolve any ambiguities regarding copyright and permission to reuse material.

If you have obtained permission to use the third party content in your book, and wish to use it in your video abstract, you must obtain the express right to do so by ensuring that the permission covers **perpetual 'multimedia/digital uses' worldwide** or **'all uses' worldwide** and that **the copyright owner is aware that it will be used in the video abstract**.

It is the responsibility of authors to ensure that they have the relevant permissions. We encourage authors to send us the sources of their materials for us to confirm their suitability before using them in the video abstracts.

## Video and video abstract technical specifications

Animation and video files must meet minimum standards of quality for both video and audio components. In creating a video, authors are asked to meet the following specifications.

- Frame rate: 25–30 frames per second
- Aspect ratio: 16:9 or 4:3, square pixels, deinterlaced

- Frame size: (minimum) 320×240 pixels
- Format: .mov, .mpg, or .mp4
- Video codec: H.264, mp2, mp4
- Video encoding: 2 pass H.264 preferred
- Keyframe: at least every six seconds
- Video bitrate: 480–2672 kbps
- Audio bitrate: 16-bit AAC audio at a sampling frequency of 44.1kHz
- Bitrate of 192 kbps
- Maximum file size: 100 MB

### **Submitting your abstract**

Your commissioning editor can provide details of how to submit and given their size it is recommended that video abstracts are submitted using DropBox or similar.

Authors should aim to submit their video abstracts at the same time as submitting their manuscript or at the latest when returning proof corrections.