Graphical Abstract Description and Specifications

(11 July 2013 Revised)

The graphical abstract must be a concise, illustrative reflection of the content of your article. It should:

- Be a visual or audio highlight of the main point of your article. It should represent a microcosm of the full article.
- Include a caption or explanatory note about the visual or audio highlight.
- Follow the requirements for submitting multimedia as provided at http://www.ieee.org/documents/MMdocumentation.pdf.

The graphical abstract is considered a part of the technical content of the article, and authors must provide it for peer review during the article submission process.

A guide for specifically preparing a video graphical abstract is provided at http://www.ieee.org/publications standards/publications/authors/mm_video.pdf

If the graphical abstract is a PowerPoint slideshow, please convert it to a movie (.mov) and set the time for each frame to display from 3 to 5 seconds.

All images for the graphical abstract will be converted to JPEG, and most image file formats are accepted such as TIFF, PNG, GIF, Word, PDF, PS, EPS, PICT, and BMP. When preparing the graphical abstract, the following general specifications should be adhered to for image/video/audio files.

Image Specifications for the Graphical Abstract

Dimensions: 660x295 Preferred File Type: JPG Recommended Size: <45 KB

Video Specifications for the Graphical Abstract

Frame Rate: 29.97 FPS (frames per second) Resolution: 16:9 screen aspect ratio File types: .mp4 (.mov, .wmv, and .avi can be provided and converted to mp4) File Size: < 100 M

Audio Specifications for the Graphical Abstract

Recommended File Types: Audio Types: .MP3 .AIFF .mov (Quicktime Audio) .ra (Real Audio) .wav (Windows Audio) Recommended Size: <3 MB