



ELSEVIER

# **VPAT/ACR Voluntary Product Accessibility Template ScienceDirect**

16 November 2023

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# Version History

Version	Authors	Description
19 Sep 2017	T Gies, J Nemchik	This PPT format replaces the legacy VPAT in Word. This VPAT uses the WCAG 2.1 A and AA standards.
10 Nov 2017	T Gies	Added: conformance claim, 508 chapter 302, chapter 6. Revised 3.1.2 to Partially Supports since the lang tag was added to articles.
7 Jun 2019	T Gies	Added: additional system pages. Top to bottom review based upon current SD Web application. Updated scores and evaluation based upon remediation efforts.
10 Dec 2020	T Gies	Added 12 A/AA WCAG 2.1 Criteria Evaluations. Fixed color contrast issues for reference collection branding colors, article highlights text. Provided many updates to fixes from past year. Added details as requested from 21 Sept demo to CSU Vendor Accessibility Demo. New tips for Bypass blocks. Removed all Personal Details pages as ID+ system now handles these pages in a separate VPAT. Upgraded checkpoints to fully supports: 1.4.1 Use of Color, 3.2.4 Consistent Identification.
24 August 2022	T Gies	1.2.2 Closed Captions – Switched to partially supports based upon new Science Talks journal. 1.3.1 Info and Relationships – Added updates on PDF tagging for articles. 1.3.2 Meaningful Sequence – Fixed issue with visually hidden forms being announced by AT. 1.4.3 Text Contrast – Darkened the orange hover states for links/buttons. Fixed other contrast issues. 2.4.3 Focus Order – Fixed search history maintaining focus issue. 2.5.3 Label in Name – Fixed Feedback button and publication link in search results. 3.1.2 Language of Parts – Non-English search results now identified correctly. 4.1.3 Search History – Saved message is now accessible.
16 November 2023	T. Gies	Captured new pages since last VPAT (Author Page redesign, Topics Index Page, Topics Subject Page, Landing page for 3 <sup>rd</sup> party content, Calls for papers). Link Purpose (2.4.4), Label in name (2.5.3), Labels or instructions (3.3.2), Name, role, value (4.1.2) upgraded to Supports. Removed all references to Enhanced Reader (a retired feature). Incorporated feedback from Clark Community College (through Deque Audit).

# Product Information and Scope

Name of Product	ScienceDirect
URL	<a href="http://www.sciencedirect.com">http://www.sciencedirect.com</a>
Date of Last Evaluation	10 November 2023
Completed by	Ted Gies Accessibility Manager, Certified DHS Section 508 Trusted Tester <a href="mailto:accessibility@elsevier.com">accessibility@elsevier.com</a>
Testing Tools and Methods	Hands-on keyboard operation Chrome DevTools Wave, PopeTech Color Contrast Analyzer JAWS 17, NVDA 2020.3 on Chrome V 95, Windows 10 HTML Validator for Firefox User Testing with people who use screen readers
Guidelines Used to Complete this VPAT	W3C WCAG 2.1 <a href="https://www.w3.org/TR/WCAG21/">https://www.w3.org/TR/WCAG21/</a> Elsevier Accessibility Checklist: <a href="http://romeo.elsevier.com/accessibility_checklist/">http://romeo.elsevier.com/accessibility_checklist/</a>
Pages Covered	Home, Mobile Menu/Spine, Quick Search, Journals & Books, Search Results, Journal Article, Book Home Page, Book Series, Handbook, MRW, Book Chapter, Journal Home Page, Recommended Articles, Shopping Cart, Check Out, Author Videos, Reference Modules, Browse Topics, Topic Page, Author Page, Topics Index, Topics Subject, 3 <sup>rd</sup> Party Landing Page, Calls for Papers Browse.
Notes	<a href="#">Conformance according to the W3C</a> : If there is no content to which a success criterion applies, the success criterion is satisfied. In this case where we conform due to no applicable content, we have marked the slide 5 with “Supports*” – note the asterisks.
Additional Information	ScienceDirect Accessibility Statement: <a href="https://service.elsevier.com/app/answers/detail/a_id/37160/c/10543/supporthub/sciencedirect/">https://service.elsevier.com/app/answers/detail/a_id/37160/c/10543/supporthub/sciencedirect/</a> Elsevier Accessibility policy: <a href="https://www.elsevier.com/about/accessibility">https://www.elsevier.com/about/accessibility</a> RELX accessibility policy: <a href="https://www.relx.com/~media/Files/R/RELX-Group/documents/responsibility/policies/accessibility-policy-2022.pdf">https://www.relx.com/~media/Files/R/RELX-Group/documents/responsibility/policies/accessibility-policy-2022.pdf</a>

## Conformance Claim

On 16 November 2023, all Web pages at <https://www.sciencedirect.com/> conform with level A and AA checkpoints of the WCAG 2.1 (Web Content Accessibility Guidelines) as described in this document. All current development and future page revisions target Level AA WCAG 2.1. When pages are not in full conformance, the specific violations are noted in the “Examples of Does not Support” section. PDF files are currently not conformant to the PDF UA spec, but contain machine readable text for compatibility with text to speech engines. A PDF workaround document is available upon request. Tagged PDFs on ScienceDirect for new journal articles started for some titles in 2022. There are 2 checkpoints rated as Does Not Support. This is scoped to video content, a minor part of the ScienceDirect corpus. Videos do not provide audio description (WCAG 1.2.5). The technologies that this content relies upon are HTML5, CSS 2.0, JavaScript 1.2, JPEG, SVG, ARIA 1.1 and mathML V3.0, MathJax.js v2.7.5. Users having any accessibility issues with ScienceDirect can contact the Elsevier Digital Accessibility Team at: [accessibility@elsevier.com](mailto:accessibility@elsevier.com).

## Current ScienceDirect WCAG 2.1 Individual Guideline Conformance (2023 November)

WCAG 2.1 Success Criterion		Evaluation
<a href="#">1.1.1</a> Non-text Content	A	Partially Supports
<a href="#">1.2.1</a> Audio-only and Video-only (Prerecorded)	A	Partially Supports
<a href="#">1.2.2</a> Captions (Prerecorded)	A	Partially Supports
<a href="#">1.2.3</a> Audio Description or Full Text Alternative	A	Partially Supports
<a href="#">1.2.4</a> Captions (Live)	AA	Supports (N/A)
<a href="#">1.2.5</a> Audio Description	AA	Does Not Support
<a href="#">1.3.1</a> Info and Relationships	A	Partially Supports
<a href="#">1.3.2</a> Meaningful Sequence	A	Supports
<a href="#">1.3.3</a> Sensory Characteristics	A	Supports
<a href="#">1.3.4</a> Orientation	AA	Supports
<a href="#">1.3.5</a> Identify Input Purpose	AA	Supports (N/A)
<a href="#">1.4.1</a> Use of Color	A	Supports
<a href="#">1.4.2</a> Audio Control	A	Supports (N/A)
<a href="#">1.4.3</a> Contrast (Minimum)	AA	Supports
<a href="#">1.4.4</a> Resize text	AA	Supports
<a href="#">1.4.5</a> Images of Text	AA	Supports
<a href="#">1.4.10</a> Reflow	AA	Supports
<a href="#">1.4.11</a> Non-text Contrast	AA	Supports
<a href="#">1.4.12</a> Text Spacing	AA	Supports
<a href="#">1.4.13</a> Content on Hover or Focus	AA	Supports (N/A)
<a href="#">2.1.1</a> Keyboard	A	Supports
<a href="#">2.1.2</a> No Keyboard Trap	A	Supports
<a href="#">2.1.4</a> Character Key Shortcuts	A	Supports (N/A)
<a href="#">2.2.1</a> Timing Adjustable	A	Supports (N/A)
<a href="#">2.2.2</a> Pause, Stop, Hide	A	Supports (N/A)

WCAG 2.1 Success Criterion		Evaluation
<a href="#">2.3.1</a> Three Flashes or Below Threshold	A	Supports (N/A)
<a href="#">2.4.1</a> Bypass Blocks	A	Supports
<a href="#">2.4.2</a> Page Titled	A	Supports
<a href="#">2.4.3</a> Focus Order	A	Supports
<a href="#">2.4.4</a> Link Purpose (In Context)	A	Supports
<a href="#">2.4.5</a> Multiple Ways	AA	Supports
<a href="#">2.4.6</a> Headings and Labels	AA	Supports
<a href="#">2.4.7</a> Focus Visible	AA	Supports
<a href="#">2.5.1</a> Pointer Gestures	A	Supports (N/A)
<a href="#">2.5.2</a> Pointer Cancellation	A	Supports
<a href="#">2.5.3</a> Label in Name	A	Supports
<a href="#">2.5.4</a> Motion Actuation	A	Supports (N/A)
<a href="#">3.1.1</a> Language of Page	A	Supports
<a href="#">3.1.2</a> Language of Parts	AA	Partially Supports
<a href="#">3.2.1</a> On Focus	A	Supports
<a href="#">3.2.2</a> On Input	A	Supports
<a href="#">3.2.3</a> Consistent Navigation	AA	Supports
<a href="#">3.2.4</a> Consistent Identification	AA	Supports
<a href="#">3.3.1</a> Error Identification	A	Supports
<a href="#">3.3.2</a> Labels or Instructions	A	Supports
<a href="#">3.3.3</a> Error Suggestion	AA	Supports
<a href="#">3.3.4</a> Error Prevention (Legal, Financial, Data)	AA	Supports
<a href="#">4.1.1</a> Parsing	A	Supports
<a href="#">4.1.2</a> Name, Role, Value	A	Supports
<a href="#">4.1.3</a> Status Messages	AA	Supports

## \*Previous\* ScienceDirect WCAG 2.1 Individual Guideline Conformance (2022 August)

WCAG 2.1 Success Criterion		Evaluation
<a href="#">1.1.1</a> Non-text Content	A	Partially Supports
<a href="#">1.2.1</a> Audio-only and Video-only (Prerecorded)	A	Partially Supports
<a href="#">1.2.2</a> Captions (Prerecorded)	A	Partially Supports
<a href="#">1.2.3</a> Audio Description or Full Text Alternative	A	Partially Supports
<a href="#">1.2.4</a> Captions (Live)	AA	Supports (N/A)
<a href="#">1.2.5</a> Audio Description	AA	Does Not Support
<a href="#">1.3.1</a> Info and Relationships	A	Partially Supports
<a href="#">1.3.2</a> Meaningful Sequence	A	Supports
<a href="#">1.3.3</a> Sensory Characteristics	A	Supports
<a href="#">1.3.4</a> Orientation	AA	Supports
<a href="#">1.3.5</a> Identify Input Purpose	AA	Supports (N/A)
<a href="#">1.4.1</a> Use of Color	A	Supports
<a href="#">1.4.2</a> Audio Control	A	Supports (N/A)
<a href="#">1.4.3</a> Contrast (Minimum)	AA	Supports
<a href="#">1.4.4</a> Resize text	AA	Supports
<a href="#">1.4.5</a> Images of Text	AA	Supports
<a href="#">1.4.10</a> Reflow	AA	Supports
<a href="#">1.4.11</a> Non-text Contrast	AA	Supports
<a href="#">1.4.12</a> Text Spacing	AA	Supports
<a href="#">1.4.13</a> Content on Hover or Focus	AA	Supports (N/A)
<a href="#">2.1.1</a> Keyboard	A	Supports
<a href="#">2.1.2</a> No Keyboard Trap	A	Supports
<a href="#">2.1.4</a> Character Key Shortcuts	A	Supports (N/A)
<a href="#">2.2.1</a> Timing Adjustable	A	Supports (N/A)
<a href="#">2.2.2</a> Pause, Stop, Hide	A	Supports (N/A)

WCAG 2.1 Success Criterion		Evaluation
<a href="#">2.3.1</a> Three Flashes or Below Threshold	A	Supports (N/A)
<a href="#">2.4.1</a> Bypass Blocks	A	Supports
<a href="#">2.4.2</a> Page Titled	A	Supports
<a href="#">2.4.3</a> Focus Order	A	Supports
<a href="#">2.4.4</a> Link Purpose (In Context)	A	Partially Supports
<a href="#">2.4.5</a> Multiple Ways	AA	Supports
<a href="#">2.4.6</a> Headings and Labels	AA	Supports
<a href="#">2.4.7</a> Focus Visible	AA	Supports
<a href="#">2.5.1</a> Pointer Gestures	A	Supports (N/A)
<a href="#">2.5.2</a> Pointer Cancellation	A	Supports
<a href="#">2.5.3</a> Label in Name	A	Partially Supports
<a href="#">2.5.4</a> Motion Actuation	A	Supports (N/A)
<a href="#">3.1.1</a> Language of Page	A	Supports
<a href="#">3.1.2</a> Language of Parts	AA	Partially Supports
<a href="#">3.2.1</a> On Focus	A	Supports
<a href="#">3.2.2</a> On Input	A	Supports
<a href="#">3.2.3</a> Consistent Navigation	AA	Supports
<a href="#">3.2.4</a> Consistent Identification	AA	Supports
<a href="#">3.3.1</a> Error Identification	A	Supports
<a href="#">3.3.2</a> Labels or Instructions	A	Partially Supports
<a href="#">3.3.3</a> Error Suggestion	AA	Supports
<a href="#">3.3.4</a> Error Prevention (Legal, Financial, Data)	AA	Supports
<a href="#">4.1.1</a> Parsing	A	Supports
<a href="#">4.1.2</a> Name, Role, Value	A	Partially Supports
<a href="#">4.1.3</a> Status Messages	AA	Supports

## \*PREVIOUS\* ScienceDirect WCAG 2.1 Individual Guideline Conformance (2020 December)

WCAG 2.1 Success Criterion		Evaluation
<a href="#">1.1.1</a> Non-text Content	A	Partially Supports
<a href="#">1.2.1</a> Audio-only and Video-only (Prerecorded)	A	Partially Supports
<a href="#">1.2.2</a> Captions (Prerecorded)	A	Does Not Support
<a href="#">1.2.3</a> Audio Description or Full Text Alternative	A	Partially Supports
<a href="#">1.2.4</a> Captions (Live)	AA	Supports (N/A)
<a href="#">1.2.5</a> Audio Description	AA	Does Not Support
<a href="#">1.3.1</a> Info and Relationships	A	Partially Supports
<a href="#">1.3.2</a> Meaningful Sequence	A	Supports
<a href="#">1.3.3</a> Sensory Characteristics	A	Supports
<a href="#">1.3.4</a> Orientation	AA	Supports
<a href="#">1.3.5</a> Identify Input Purpose	AA	Supports (N/A)
<a href="#">1.4.1</a> Use of Color	A	Supports
<a href="#">1.4.2</a> Audio Control	A	Supports (N/A)
<a href="#">1.4.3</a> Contrast (Minimum)	AA	Partially Supports
<a href="#">1.4.4</a> Resize text	AA	Supports
<a href="#">1.4.5</a> Images of Text	AA	Supports
<a href="#">1.4.10</a> Reflow	AA	Supports
<a href="#">1.4.11</a> Non-text Contrast	AA	Partially Supports
<a href="#">1.4.12</a> Text Spacing	AA	Supports
<a href="#">1.4.13</a> Content on Hover or Focus	AA	Supports (N/A)
<a href="#">2.1.1</a> Keyboard	A	Supports
<a href="#">2.1.2</a> No Keyboard Trap	A	Supports
<a href="#">2.1.4</a> Character Key Shortcuts	A	Supports (N/A)
<a href="#">2.2.1</a> Timing Adjustable	A	Supports (N/A)
<a href="#">2.2.2</a> Pause, Stop, Hide	A	Supports (N/A)

WCAG 2.1 Success Criterion		Evaluation
<a href="#">2.3.1</a> Three Flashes or Below Threshold	A	Supports (N/A)
<a href="#">2.4.1</a> Bypass Blocks	A	Supports
<a href="#">2.4.2</a> Page Titled	A	Supports
<a href="#">2.4.3</a> Focus Order	A	Supports
<a href="#">2.4.4</a> Link Purpose (In Context)	A	Supports
<a href="#">2.4.5</a> Multiple Ways	AA	Supports
<a href="#">2.4.6</a> Headings and Labels	AA	Supports
<a href="#">2.4.7</a> Focus Visible	AA	Supports
<a href="#">2.5.1</a> Pointer Gestures	A	Supports (N/A)
<a href="#">2.5.2</a> Pointer Cancellation	A	Supports
<a href="#">2.5.3</a> Label in Name	A	Partially Supports
<a href="#">2.5.4</a> Motion Actuation	A	Supports (N/A)
<a href="#">3.1.1</a> Language of Page	A	Supports
<a href="#">3.1.2</a> Language of Parts	AA	Partially Supports
<a href="#">3.2.1</a> On Focus	A	Supports
<a href="#">3.2.2</a> On Input	A	Supports
<a href="#">3.2.3</a> Consistent Navigation	AA	Supports
<a href="#">3.2.4</a> Consistent Identification	AA	Supports
<a href="#">3.3.1</a> Error Identification	A	Supports
<a href="#">3.3.2</a> Labels or Instructions	A	Partially Supports
<a href="#">3.3.3</a> Error Suggestion	AA	Supports
<a href="#">3.3.4</a> Error Prevention (Legal, Financial, Data)	AA	Supports
<a href="#">4.1.1</a> Parsing	A	Supports
<a href="#">4.1.2</a> Name, Role, Value	A	Partially Supports
<a href="#">4.1.3</a> Status Messages	AA	Partially Supports



# \*PREVIOUS\* ScienceDirect WCAG 2.0 Individual Guideline Conformance (2017 Nov)

WCAG 2.1 Success Criterion	Level	Evaluation
<a href="#">1.1.1</a> Non-text Content	A	Partially Supports
<a href="#">1.2.1</a> Audio-only and Video-only (Prerecorded)	A	Partially Supports
<a href="#">1.2.2</a> Captions (Prerecorded)	A	Does Not Support
<a href="#">1.2.3</a> Audio Description or Full Text Alternative	A	Partially Supports
<a href="#">1.2.4</a> Captions (Live)	AA	Supports (N/A)
<a href="#">1.2.5</a> Audio Description	AA	Does Not Support
<a href="#">1.3.1</a> Info and Relationships	A	Partially Supports
<a href="#">1.3.2</a> Meaningful Sequence	A	Supports
<a href="#">1.3.3</a> Sensory Characteristics	A	Supports
<a href="#">1.4.1</a> Use of Color	A	Partially Supports
<a href="#">1.4.2</a> Audio Control	A	Supports (N/A)
<a href="#">1.4.3</a> Contrast (Minimum)	AA	Partially Supports
<a href="#">1.4.4</a> Resize text	AA	Supports
<a href="#">1.4.5</a> Images of Text	AA	Supports
<a href="#">2.1.1</a> Keyboard	A	Partially Supports
<a href="#">2.1.2</a> No Keyboard Trap	A	Supports
<a href="#">2.2.1</a> Timing Adjustable	A	Supports (N/A)
<a href="#">2.2.2</a> Pause, Stop, Hide	A	Supports (N/A)
<a href="#">2.3.1</a> Three Flashes or Below Threshold	A	Supports (N/A)
<a href="#">2.4.1</a> Bypass Blocks	A	Supports
<a href="#">2.4.2</a> Page Titled	A	Supports
<a href="#">2.4.3</a> Focus Order	A	Supports
<a href="#">2.4.4</a> Link Purpose (In Context)	A	Supports
<a href="#">2.4.5</a> Multiple Ways	AA	Supports
<a href="#">2.4.6</a> Headings and Labels	AA	Supports
<a href="#">2.4.7</a> Focus Visible	AA	Partially Supports
<a href="#">3.1.1</a> Language of Page	A	Partially Supports
<a href="#">3.1.2</a> Language of Parts	AA	Partially Supports
<a href="#">3.2.1</a> On Focus	A	Supports
<a href="#">3.2.2</a> On Input	A	Supports
<a href="#">3.2.3</a> Consistent Navigation	AA	Supports
<a href="#">3.2.4</a> Consistent Identification	AA	Partially Supports
<a href="#">3.3.1</a> Error Identification	A	Supports
<a href="#">3.3.2</a> Labels or Instructions	A	Partially Supports
<a href="#">3.3.3</a> Error Suggestion	AA	Supports
<a href="#">3.3.4</a> Error Prevention (Legal, Financial, Data)	AA	Supports
<a href="#">4.1.1</a> Parsing	A	Partially Supports
<a href="#">4.1.2</a> Name, Role, Value	A	Partially Supports

# WCAG 2.1 1.1.1 – Non-text Content

Provide text alternatives for non-text content (e.g. images).

## Level A W3C Guideline



Partially Supports

**OVERALL RATING: Partially Supports.** Most images have text alternatives. No video audio description.

### Examples of Supports ✓

- Inline figures are accompanied by a text caption and in some cases meaningful descriptive text in the adjacent body text.
- A small number of articles and book chapters contain alt text created by authors.
- Math equations are provided in gif as well as mathML.
- SVG link icons and buttons (site logo, help, social media, search) have either title attributes, aria-labels, or have adjacent HTML link text.
- Icons using color to encode information such as publication access types have meaningful title text.
- Some articles provide images of chemical structures which have alt text such as: “chemical structure for dipropargyl but-2-yndioate”.

### Examples of Does Not Support ✗

- Image ads contain text not in the alt text.
- Some journal or book figures including the graphical abstract and images of tables/data may not be fully described in the surrounding body text.
- A minority of journal and book content contain supplementary multimedia clips which could be an animation with audio + video, just audio or just animation These videos lack text equivalents.
- Supplementary files may be PDF documents that contain graphical charts with no alt text, (e.g. [a chromatogram of a breakfast cereal sample](#))
- Some topic page figures have alt="" which is incorrect.

### Workarounds and User Tips 🛠️

- Author contact information is provided in case users wanted to request an alternative format of figure.
- Math equations are announced by JAWS, NVDA, and VoiceOver screen readers.

# WCAG 2.1 1.2.1 – Audio-only and Video-only (Prerecorded)

Provide alternatives for pre-recorded audio-only or video-only content.

## Level A W3C Guideline



Partially Supports

**OVERALL RATING: Partially Supports.** Some article video/audio includes adjacent body text description.

### Examples of Supports ✓

- Sound clip (e.g. [MP3 of whistling techniques](#)) includes descriptive caption text and descriptive background information in the adjacent article text.
- Video with no sound (e.g. [MP4 of a robotic hardware experiment](#)) includes an adjacent description of the experiment and a timeline of what happens in the visual scene, e.g. *In 0-5 s, both two robots compressed their arms.*

### Examples of Does Not Support ✗

- An article contains a video of Supplementary Data in the Appendix. The video does not have sound. (e.g. [MP4 showing 4 dough baking results from an experiment around redox agents](#)). The data collected on height and volume is displayed in a table graphic. The video does not have an audio track (audio description) and there is not a text alternative for time-based media.

### Workarounds and User Tips 🔧

- Author contact information is provided in case users wanted to request a description of an audio only or video only.
- Video clips can be downloaded by users and edited to add captioning or audio description.

# WCAG 2.1 1.2.2 – Captions (Prerecorded)

Provide captions for pre-recorded video with audio.

Level A W3C Guideline



Partially Supports

## OVERALL RATING: Partially Supports

### Examples of Supports ✓

- The journal Science Talks provides professionally produced closed captions for all presented audio narrations.
- [An example of a Closed-Captioned video](#)

### Examples of Does Not Support ✗

- Inline video files of a medical procedure, e.g. [Minimally Invasive Transverse Colectomy](#) AVI file is narrated but there is not closed captioning.
- [Author videos](#), e.g. 3 authors talking about String Theories in front of a chalk board are not closed captioned.

### Workarounds and User Tips 🔧

Video clips can be downloaded by users and edited to add captioning. The Able Player is the accessible media player used for ScienceDirect. With the Able Player users can customize the display of the closed captions text. Users may also use the interactive transcript which highlights the caption text in a searchable window. [MAGpie](#) (Media Access Generator) is a free tool to help add captions and descriptions to multimedia.

# WCAG 2.1 1.2.3-Audio Description or Media Alternative



Partially Supports

Provide either audio description or a text screen play for videos.

## Level A W3C Guideline

**OVERALL RATING: Partially Supports**

### Examples of Supports ✓

- Article contains a video with no sound (e.g. [MP4 file of a robotic hardware experiment](#)). The article text includes an adjacent description of the experiment and what happens by timeline, e.g. *In 0-5 s, both two robots compressed their arms.*
- Article contains a video with no sound (e.g. [MP4 file of a 3D model of a CT-scanned human cranium](#)). The caption contains a description of the number, shape, and colors of landmarks in the model.

### Examples of Does Not Support ✗

- An article contains a video of Supplementary Data in the Appendix. The video does not have sound. (e.g. [MP4 showing 4 dough baking results from an experiment around redox agents](#)). The data collected on height and volume is displayed in a table graphic. The video does not have an audio track (audio description) and there is not a text alternative for time-based media.

### Workarounds and User Tips 🛠️

Video clips can be downloaded by users and edited to add audio description. [MAGpie](#) (Media Access Generator) is a free tool to help add captions and descriptions to multimedia.

## WCAG 2.1 1.2.4 Captions (Live)

Captions are provided for all live audio content in synchronized media.

[Level AA W3C Guideline](#)



**OVERALL RATING: Supports** (*no content to which this success criterion applies*)

- ScienceDirect does not contain live video so the success criterion is satisfied according to the [W3C's Understanding Conformance](#).



# WCAG 2.1 1.2.5 Audio Description (Prerecorded)

Audio description is provided for prerecorded videos in synchronized media.

## Level AA W3C Guideline

**OVERALL RATING: Does Not Support**

### Examples of Supports ✓

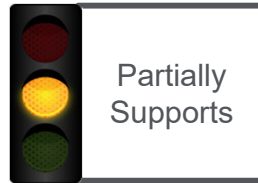
- No supporting examples of video with audio description

### Examples of Does Not Support ✗

- Inline video files of a medical procedure, e.g. [Minimally Invasive Transverse Colectomy](#) AVI file is narrated and there is not an audio description track.
- [Author videos](#), e.g. a MP4 video of 3 authors talking about String Theories in front of a chalk board does not have an audio description track.
- [Supplementary files](#), e.g. a MP4 video shows a 3D model of a CT-scanned human cranium and rotating around a vertical axis. There is a descriptive caption but not an audio description track.

### Workarounds and User Tips 🔧

Video clips can be downloaded by users and edited to add audio description.



Partially Supports

# WCAG 2.1 1.3.1 Info and Relationships

Information, structure, and can be programmatically determined.

## Level A W3C Guideline

**OVERALL RATING: Partially Supports.** Good headings, semantic structure, form labels. PDFs are lacking.

### Examples of Supports ✓

- Well-constructed landmarks are used on all pages.
- Logically ordered headings are used on all pages.
- Areas of repeated links are contained in unordered or ordered lists, for example lists of journals, books, chapters, and articles.
- Groups of related inputs are labelled using <fieldset> and <legend> tags, e.g. Advanced Search.
- Table data within articles utilize proper table structure with headers defined.
- Quick search provides aria-labels for form inputs.
- Pages are still usable with styles disabled.
- Some journals provide PDF tagging such as [Addiction Neuroscience](#).

### Examples of Does Not Support ✗

- Many journal titles and book chapters do not yet have PDF tagging.
- In auto search suggestions for journals and books, the heading for content type is visible but not announced to AT.
- Article page article metrics needs H3 headings for metrics sections.

### Workarounds and User Tips

- Screen reader users (e.g. JAWS) can benefit from:
  - Relying on the HTML article and book chapter pages.
  - headings navigation to skim through search results quickly.
  - regions navigation to skip around to main functions and page areas.
- Send an email to [accessibility@elsevier.com](mailto:accessibility@elsevier.com) for any specific format needs including HTML, PDFs, EPUBs, etc.





# WCAG 2.1 1.3.2 Meaningful Sequence

The correct reading sequence can be programmatically determined.

## Level A W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

- HTML text is in a meaningful sequence.
- The DOM order matches the visual order.
- Content is positioned based on structural markup and style sheets.
- Articles utilize left-justified text.
- Ordered lists are used to convey a meaningful sequence with sorted search results.
- There is not just one reading order that makes sense, for instance users can go between independent functions such as search and search results.

#### Examples of Does Not Support ✗

#### Workarounds and User Tips 🔧

Note: For reading journal articles and book chapters, we recommend using the default HTML full text view.



# WCAG 2.1 1.3.3 Sensory Characteristics

Do not rely on sensory characteristics such as size, visual location, etc.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- ScienceDirect does not use any content that relies on sensory characteristics alone to communicate information. Any graphical symbols such as green circles for full text access are also accompanied by descriptive text labels.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🛠️

None



# WCAG 2.1 1.3.4 Orientation

Do not restrict a page’s view to portrait or landscape, unless essential.

[Level AA W3C Guideline](#)

**OVERALL RATING: Supports**

## Examples of Supports ✓

All page content on ScienceDirect allows users to go between portrait and landscape views.

## Examples of Does Not Support ✗

No violations found by reviewers

## Workarounds and User Tips 🛠️

None



# WCAG 2.1 1.3.5 Identify Input Purpose

For text input elements, the autocomplete attribute should be in place.

## Level AA W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

ScienceDirect does not have many inputs relevant to autocomplete.

Our Elsevier common authentication system ID+ provides all the relevant fields such as user name, password, name, address, etc.

Elsevier ID+ has its own VPAT/ACR to reference for this checkpoint.

#### Examples of Does Not Support ✗

No violations found by reviewers

#### Workarounds and User Tips 🔧

Some browsers such as Chrome provide Autofill settings which help suggest commonly used fields such as Name, Address.



# WCAG 2.1 1.4.1 Use of Color

Color is not used as the only visual means of conveying information.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- Links are identified using color but also with a cursor change, and visual hover and focus states with color change and either a border or underline.
- Blue non-underlined links (#0C7DBB) within article Highlights text (#2E2E2E) have 3:1 contrast relative.
- Subscribed, Open Access, and Abstract-only icons are designated through color, which is supplemented sometimes by text, and always with a title attribute.
- Error messages such as No search results found utilize an icon in addition to red color and an alert role to denote the error state.
- Disabled links like Next Chapter in book are shown in gray but also coded with aria-disabled or disabled.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

- If users are having trouble identifying links, disable style sheets or apply a custom style sheet which provides stronger indication (e.g. underlined) links.
- Links are always identified with an underline if users hover or tab to a link.

## WCAG 2.1 1.4.2 Audio Control

Audio can be paused and stopped, or the audio volume can be changed.

### Level A W3C Guideline



#### OVERALL RATING: Supports

- ScienceDirect does not have any auto-playing audio, or any embedded content which uses audio, so the success criterion is satisfied according to the [W3C's Understanding Conformance](#).

#### Workarounds and User Tips

Content with audio including sound clips and videos may be downloaded and played by a native operating system application such as Windows Media player where volume may be independently controlled.



# WCAG 2.1 1.4.3 Contrast (Minimum)

Text has enough contrast with the background (4.5:1 ratio for small text).

## Level AA W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

Text and background colors including links and content text have at least a 4.5:1 contrast ratio with background colors.

- Blue links (#0C7DBB), (#007398) passes contrast ratios on a white background and gray #007398.
- Dark gray text used on content text (#2E2E2E, #737373, and #505050) pass contrast ratios on a white background.
- Red error text #c83727 against white background such as in the registration and login error messages.

Large Text (>24 px) provides at least 3:1 contrast ratio:

- Orange text #eb6500 against white background for the A-Z letter headings on Browse Journals and Books.

### Examples of Does Not Support ✗

No violations found by reviewers.

### Workarounds and User Tips 🔧

Users can disable styles or apply their own style sheets that can show their own preferred color contrast values.



# WCAG 2.1 1.4.4 Resize Text

Text can be enlarged up to 200% without loss of functionality.

Level AA W3C Guideline

## OVERALL RATING: Supports

### Examples of Supports ✓

- ScienceDirect is fully responsive. This view remains accessible to mouse and keyboard users.
- Multiple column layouts become are responsive, becoming two-column, and single-column layouts as text magnification increases.

### Examples of Does Not Support ✗

No violations found by reviewers.

### Workarounds and User Tips 🛠️

- Text magnification options can be found in all browser options.
- Keyboard shortcut for Windows browser zoom is (CTRL + PLUS), and (CTRL + MINUS).
- When using browser zoom, left side navigation and top navigation collapse down into expandable “hamburger menus”.





# WCAG 2.1 1.4.5 Images of Text

Text is used rather than images of text.

## Level AA W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

- No images of text are used on ScienceDirect.
- NOTE: Figures created by authors are images which contain text. However the W3C exempts “pictures that contain other significant other visual content including graphs and diagrams”. Therefore the figure content in books and journals which contain text are exempt from this requirement.
- NOTE: product logos such as “PLUMX” and “Elsevier” and society logos are images of text but exempt from being required to be HTML text. Additionally, there are some image ads which contain stylized images of text.

#### Examples of Does Not Support ✗

No violations found by reviewers.

#### Workarounds and User Tips 🔧

None



# WCAG 2.1 1.4.10 Reflow

When page is zoomed, content adapts with scrolling in only one direction.

[Level AA W3C Guideline](#)

**OVERALL RATING: Supports**

**Examples of Supports ✓**

All pages in ScienceDirect are fully responsive and can be zoomed to 400% without any horizontal scrolling.

**Examples of Does Not Support ✗**

No violations found by reviewers.

**Workarounds and User Tips 🔧**

We recommend the HTML view for article and book chapter pages when zooming content using browser controls.

To magnify math equations within a book chapter or article, right click on a math equation, select math settings, then zoom trigger and zoom factor.



# WCAG 2.1 1.4.11 Non-Text Contrast

Visual objects must have a contrast ratio of 3:1 against adjacent color(s).

Level AA W3C Guideline

**OVERALL RATING: Supports**

**Examples of Supports ✓**

Green buttons such as search on white background pass at 3.2:1. Petrol blue buttons on white pass at 5.4:1. Orange icons such as search and help in the global nav (focus and hover states) on white background pass at 3.1:1. Similarly the orange underlines used to identify hovered and focused link states pass at 3.1:1.

**Examples of Does Not Support ✗**

No violations found by reviewers.

**Workarounds and User Tips 🔧**



# WCAG 2.1 1.4.12 Text Spacing

Text-based CSS settings can be changed to certain minimum values without loss of content or functionality.

Level AA W3C Guideline

**OVERALL RATING: Supports**

**Examples of Supports ✓**

Using the text spacing bookmarklet across core pages, the layout remained intact with no clipping, overlaying, or loss of functionality.

The bookmarklet applies the W3C 1.4.12 criteria:

- Line height (line spacing) to at least 1.5 times the font size;
- Spacing following paragraphs to at least 2 times the font size;
- Letter spacing (tracking) to at least 0.12 times the font size;
- Word spacing to at least 0.16 times the font size.

**Examples of Does Not Support ✗**

No violations found by reviewers.

**Workarounds and User Tips 🔧**

None

## WCAG 2.1 1.4.13 Content on Hover or Focus

Content that appears on mouse hover or keyboard focus must be dismissible, hoverable, and persistent.

[Level AA W3C Guideline](#)



**OVERALL RATING: Supports** (*no content to which this success criterion applies*)

- ScienceDirect does not provide any content which appears on mouse hover or keyboard focus.



# WCAG 2.1 2.1.1 Keyboard

All functionality is available from a keyboard.

## Level A W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

- All functionality in ScienceDirect is operable using the keyboard alone.
- This includes text links, mobile hamburger menu, image links, and hide/show controls.
- The Author Video media player provides keyboard friendly controls.
- Inline media player for playing audio provides keyboard friendly play/pause buttons and seek slider.

#### Examples of Does Not Support ✗

No violations found by reviewers.

#### Workarounds and User Tips 🔧

- When using JAWS, if a link takes you to a place which opens a window or anchors away, use the K hot key to return to the original link.
- Use the Tab key to move focus forward from one element to the next. Use Shift-Tab to move backwards.
- Use the Escape key to close out of any panel or dialog window.
- Expand/collapse buttons such as Article Metrics on a journal article page can be opened and closed with the Enter key.



# WCAG 2.1 2.1.2 No Keyboard Trap

User does not become trapped on any elements when using the keyboard.

Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- There are no keyboard traps on ScienceDirect.

### Examples of Does Not Support ✗

No violations found by reviewers.

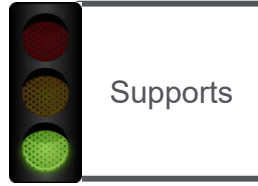
### Workarounds and User Tips 🔧

Users can hit the escape key to cancel out of any dialog or user interface overlay or menu.

## WCAG 2.1 2.1.4 Character Key Shortcuts

Single character key shortcuts can either be turned off, remapped, or are only active when the shortcut for a UI component has focus.

[Level A W3C Guideline](#)



**OVERALL RATING: Supports** (*no content to which this success criterion applies*)

- ScienceDirect does not provide any single character key shortcuts.



## WCAG 2.1 2.2.1 Timing Adjustable

Users are warned of time limits and time limits can be turned off or extended.

### Level A W3C Guideline



**OVERALL RATING: Supports** *(no content to which this success criterion applies)*

- ScienceDirect does not contain any time limits, so the success criterion is satisfied according to the [W3C's Understanding Conformance](#).

## WCAG 2.1 2.2.2 Pause, Stop, Hide

Users can stop, pause, or hide moving or scrolling information.

### Level A W3C Guideline



#### **OVERALL RATING: Supports** *(no content to which this success criterion applies)*

- ScienceDirect does not contain any moving, blinking, scrolling, or auto-updating content, so the success criterion is satisfied according to the [W3C's Understanding Conformance](#).

## WCAG 2.1 2.3.1 Three Flashes or Below Threshold

No more than three flashes in a 1-second period.

Level A W3C Guideline



**OVERALL RATING: Supports** (*no content to which this success criterion applies*)

- ScienceDirect does not contain any content that flashes, so the success criterion is satisfied according to the [W3C's Understanding Conformance](#).



# WCAG 2.1 2.4.1 Bypass Blocks

Users can bypass repetitive blocks of content, such as navigation menus.

## Level A W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

- A “Skip to main content” link has been implemented to allow keyboard users to reach main content easily.
- Logical headings exist on all pages to allow for screen reader users to utilize heading navigation.
- Landmarks are applied in many areas to allow for landmark navigation by screen readers. Regions roles are applied to several areas of content and are properly labeled.

#### Examples of Does Not Support ✗

No violations found by reviewers.

#### Workarounds and User Tips 🔧

Screen reader users (e.g. JAWS) can utilize headings navigation, landmark navigation, lists navigation, link navigation, etc. as ways to bypass repetitive links.

For example, on search results pages JAWS users can use the 2 key to quickly navigate between results.

On article/book chapter pages:

- Users can quick link from the article outline to a specific section in an article.
- Users can select the skip to article link to go straight to the main article content.
- JAWS users can hit the 1 key to go straight to the article title and subsequent article text.



# WCAG 2.1 2.4.2 Page Titled

The page has a title describing its topic or purpose.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

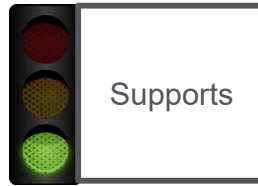
- A unique title has been applied to all pages, providing a similar page description to the h1 of each page. These titles are descriptive and informative (e.g. “1,517,391 Search Results – Keywords (heart) – ScienceDirect”).

### Examples of Does Not Support ✗

No violations found by reviewers.

### Workarounds and User Tips 🛠️

Screen reader users (e.g. JAWS) can bring up the title of a web page using INSERT + T. The descriptive page title provides a detailed bookmark text for each page.



# WCAG 2.1 2.4.3 Focus Order

Users can tab through the elements of a page in a logical order.

Level A W3C Guideline

**OVERALL RATING: Supports**

**Examples of Supports ✓**

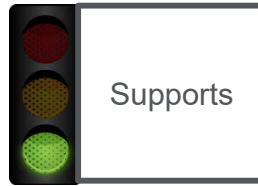
- A logical keyboard focus order is maintained throughout ScienceDirect.
- Focus order follows left to right, top to bottom.
- Dialog windows and fly out panels receive focus when opened.
- Within a book chapter or article, activating a TOC outline section or reference sets the user’s focus into the article to the associated spot.
- When dialog windows and panels close, focus is put back on the invoking controls, e.g.
- Focus remains on “Show More/Less” links when being activated.

**Examples of Does Not Support ✗**

No violations found by reviewers

**Workarounds and User Tips 🔧**

- The HTML article or book chapter outline will place focus into the article section itself. This will be useful for screen reader users and for sighted keyboard users who like to scroll the article using up and down arrow keys.



Supports

# WCAG 2.1 2.4.4 Link Purpose (In Context)

The purpose of each link can be determined from the link text or context.

## Level A W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

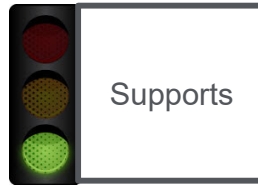
- Most all links provide a description of the destination or the action.
- For example: “View more documents authored by Doe, J”
- For repeated links where there is some ambiguity (e.g. Download PDF, Abstract, Export Citation) we apply aria references to clarify the container document.
- This is also done for “Show more” within the results filter function. Any ambiguously labelled links are within the same list structure, under a heading, or within a sentence which provides context.

#### Examples of Does Not Support ✗

No violations found by reviewers

#### Workarounds and User Tips 🛠️

Screen reader users receive extra context from some links, e.g. “PDF” by using arrow navigation instead of tab navigation. Arrow navigation will in some cases yield aria-describedby references such as the parent article of the “PDF” link. For example on topic pages using arrow key navigation will help screen reader users know which PDF or chapter will be opened.



# WCAG 2.1 2.4.5 Multiple Ways

More than one way is available to navigate to other web pages.

[Level AA W3C Guideline](#)

**OVERALL RATING: Supports**

**Examples of Supports ✓**

- Journal Articles and Book Chapters can be found through the search functionality or through the Journals and Books pages.
- Alerts can be accessed through the logged in profile panel or through a link on the home page.
- Recommendations, History, and Alerts can be accessed through the logged in profile panel or through the main Search History page.
- Search history can be accessed through logged in profile panel, Advanced Search, and the main Search History page.

**Examples of Does Not Support ✗**

No violations found by reviewers

**Workarounds and User Tips 🔍**

Users are able to bookmark any page, book, journal, article, chapter etc. because ScienceDirect utilizes well formed URLs.





# WCAG 2.1 2.4.6 Headings and Labels

Headings and labels are clear, consistent, and accurate.

## Level AA W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

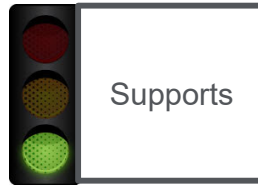
- When headings and labels are provided they are descriptive, concise, and accurate across ScienceDirect.
- Each section of content within ScienceDirect is supplemented by an associated descriptive heading.
- Lists of journals, books, and articles, are displayed consistently across ScienceDirect.
- Form fields are labelled clearly.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

Screen reader users can bring up a list of headings or form fields for the page. Descriptive headings and labels help make this list more usable and precise.



# WCAG 2.1 2.4.7 Focus Visible

All interactive elements on a page have a visible focus indicator.

Level AA W3C Guideline

**OVERALL RATING: Supports**

## Examples of Supports ✓

- On focus, all text links get underlined, change color, and receive the browser default outline.
- Buttons and form elements change color on focus.
- The browser default focus ring is in place.

## Examples of Does Not Support ✗

No violations found by reviewers

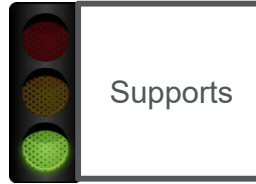
## Workarounds and User Tips 🔧

- Links are always identified with an underline if users hover or tab to a link.

## WCAG 2.1 2.5.1 Pointer Gestures

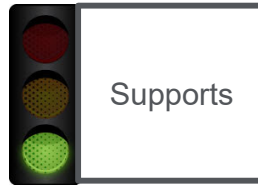
If complex gestures exist, a single touch or click alternative must be given.

### Level A W3C Guideline



**OVERALL RATING: Supports** *(no content to which this success criterion applies)*

- ScienceDirect does not contain any inputs or interactions which require complex gestures.



# WCAG 2.1 2.5.2 Pointer Cancellation

Allow users to recover from accidental pointer input (touch screen taps, mouse clicks).

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

Links and buttons are activated on the Up event not down event. This means if users click or tap a button and want to abort, they can simply move the mouse away from the link or button. Or they can move their finger on a touchscreen away from the selected link or button to abort.

### Examples of Does Not Support ✗

No violations found by reviewers.

### Workarounds and User Tips 🔧



# WCAG 2.1 2.5.3 Label in Name

For user interface components with visible text, ensure that the accessible name includes the visible text.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

User interface components are labelled to include the visible label text.

Text links such as journal names have an accessible name that matches the visible text exactly. Form elements such as refine checkboxes and buttons provide a form label (accessible name) matching the visible text label.

Note: in some cases, the accessible name appends contextual information to the beginning or end of the visible text. Such as for “View details” on recommended articles, the accessible name appends the name of the particular article. Such as for the Logged in profile button – The user’s first and last name link has an accessible name of “<first name last name> Profile information”.

### Examples of Does Not Support ✗

No violations found by reviewers.

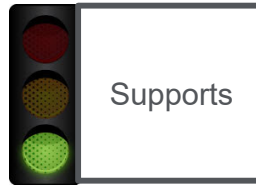
### Workarounds and User Tips



## WCAG 2.1 2.5.4 Motion Actuation

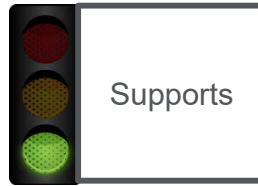
Motion input (shaking, orientation change, tilting, etc.) must be accompanied by another means of input (such as a button)

### Level A W3C Guideline



**OVERALL RATING: Supports** *(no content to which this success criterion applies)*

- ScienceDirect does not have any features which require motion input.



# WCAG 2.1 3.1.1 Language of Page

The language of the web page is specified.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- All pages either have lang="en-us" or lang="en" in the <html> tag (e.g. Homepage, Search Results, Journal Articles).

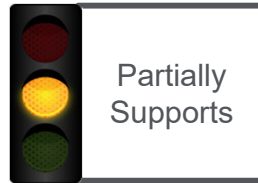
### Examples of Does Not Support ✗

NOTE: Some PDF documents are currently not tagged with a language.

### Workarounds and User Tips 🔧

Most content is in English where page content should be read fine by a screen reader set to use an English synthesizer.

ScienceDirect help system is available in English, Chinese (simplified), Japanese, and Korean.



# WCAG 2.1 3.1.2 Language of Parts

The language of passages of text that differ from the default are specified.  
[Level AA W3C Guideline](#)

## OVERALL RATING: Partially Supports

### Examples of Supports ✓

- [Non-English HTML articles](#) have the appropriate lang attributes on:
  - Article outline
  - Article body text
  - Search Result article titles
  - Recommended articles
- [Non-English HTML book chapters](#) have the appropriate lang attributes on:
  - Chapter body text
  - Book Contents TOC
  - Chapter Contents TOC
  - Book descriptions
  - Book home pages

NOTE: There may be English UI text interspersed with non-English article text such as: “Next Chapter” and “Pages”.

### Examples of Does Not Support ✗

- Non-English Publication Titles on Journals & Books
- Non-English content on book home, e.g. Book descriptions.

### Workarounds and User Tips

None





# WCAG 2.1 3.2.1 On Focus

Elements that receive focus do not cause unexpected changes in context.

Level A W3C Guideline

**OVERALL RATING: Supports**

## Examples of Supports ✓

- No components trigger changes in context when they receive focus.

## Examples of Does Not Support ✗

No violations found by reviewers.

## Workarounds and User Tips 🛠️

None



# WCAG 2.1 3.2.2 On Input

Changing an input or UI element does not cause unexpected changes.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- Search filter changes automatically filter results upon changing the setting of a checkbox. This is notified to screen reader users with an aria-label on a region – “filters immediately refine results after selection”.

### Examples of Does Not Support ✗

No violations found by reviewers.

### Workarounds and User Tips 🔧

Downloading a PDF article or book chapter opens a new browser with the PDF. The original browser window displays a suggested articles dialog window and focus is set to this dialog window. Users may turn off suggested articles by selecting “Don’t show this again”.



# WCAG 2.1 3.2.3 Consistent Navigation

Navigation menus are in the same location and order on all pages.

Level AA W3C Guideline

**OVERALL RATING: Supports**

## Examples of Supports ✓

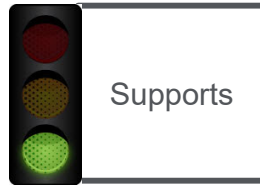
- Header navigation is the same across all pages.
- A main landmark consistently marks the main content of pages.
- Navigation menus change depending upon logged in state and mobile view versus desktop view.
- Once in a particular view/state the menus are in the same location and order on all pages.

## Examples of Does Not Support ✗

No violations found by reviewers.

## Workarounds and User Tips 🔧

Screen reader users may navigate directly to the main content using regions navigation.



# WCAG 2.1 3.2.4 Consistent Identification

UI components used across all pages are identified consistently.

[Level AA W3C Guideline](#)

**OVERALL RATING: Supports**

## Examples of Supports ✓

- UI components are consistent across pages in ScienceDirect.

## Examples of Does Not Support ✗

No violations found by reviewers

## Workarounds and User Tips 🛠️

None



# WCAG 2.1 3.3.1 Error Identification

Input errors are clearly marked and described to the user.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- Sign In and Register pages show specific and descriptive input error messages below the associated input in red text.
- Error text below the inputs is connected to the input itself through the use of aria-describedby attributes.
- Errors on the sign in pages are communicated to assistive technology through aria alerts.
- Quick Search/Advanced Search: fields that show dynamic validation (title, volume, issue, page) are communicated to assistive technology through aria alerts.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

None



# WCAG 2.1 3.3.2 Labels or Instructions

Items requiring user input are clearly labeled or have clear instructions.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- Most input elements are programmatically labeled through the use of plain text <label> or aria-labels. (e.g. Quick search inputs, Refine result checkboxes).
- Query examples are provided in the Expert search field.
- Fieldset/Legends are provided on Advanced Search

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

Note: All account related forms such as username and password are covered by the ID+ VPAT.



Supports

# WCAG 2.1 3.3.3 Error Suggestion

When a user makes an input error, give suggestions for valid input.

## Level AA W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- The error messages given in the Login and Register pages serve as acceptable error suggestions.
- For example a user who does not have a valid email address will get “User E-mail address may be invalid.”
- Required fields that are left blank will result in an error message indicating that the field must be completed.
- Password guidelines which are not met clearly state acceptable lengths of passwords. Additionally there is a link to the password guidelines page adjacent to the password input field.
- Invalid search entry for titles, volumes, issues, and pages trigger contextual suggestions for valid inputs.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🕒

None

# WCAG 2.1 3.3.4 Error Prevention (legal, financial, data)



For web pages with legal or financial commitments, users can review and correct information.

## Level AA W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- The Shopping cart feature provides a way to review and modify a purchase before submitting.
- User account data such as name, email, and address information can be changed/corrected at any time by logging in and going to My Account & Privacy.
- Note: All account related forms to manage user-controllable data such as user name and password are covered by the ID+ VPAT.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

ScienceDirect customer support is available from email, live chat, and phone. Please see the below page with several customer support contact options:

[https://service.elsevier.com/app/answers/detail/a\\_id/11436/supporthub/sciencedirect/](https://service.elsevier.com/app/answers/detail/a_id/11436/supporthub/sciencedirect/)





# WCAG 2.1 4.1.1 Parsing

Use valid, error-free HTML, including unique element IDs.

## Level A W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

- Elements have complete start and end tags
- Elements are nested according to their specifications
- Elements do not contain duplicate attributes
- IDs are unique on all New pages.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🛠️

None



# WCAG 2.1 4.1.2 Name, Role, Value

The name, role, and value of all UI elements can be programmatically determined.

## Level A W3C Guideline

### OVERALL RATING: Supports

#### Examples of Supports ✓

- Hide/show buttons are given aria-expanded attribute to indicate expanded or collapsed content.
- Aria landmark roles are in extensive use on all pages, including banner, main, navigation, search, and labeled region roles.
- Repeated links are given aria-describedby attributes to give context to associated result (Download PDF, Abstract, Export Citation).
- Journals & Books - Refine publications by Domain/Subdomain – buttons to open and close list are labelled and provide expanded/collapsed value information. Domain list box provides role="listbox".
- Actions for selected chapters: Disabled elements/grayed out are given aria-disabled="true".
- Frames with ads are titled with "3<sup>rd</sup> party ad content".
- The Usabilla (3<sup>rd</sup> party) feedback button is a HTML page with an image within an iFrame but should be a button or link with an accessible name.

#### Examples of Does Not Support ✗

No violations found by reviewers

#### Workarounds and User Tips 🛠️

Screen reader users receive extra context from some links, e.g. "PDF" by using arrow navigation instead of tab navigation. Arrow navigation will yield aria-describedby references such as the parent article of the "PDF" link.



# WCAG 2.1 4.1.3 Status Messages

Status Messages must be available to AT such as screen readers. This does not include context changes (e.g. alert or dialogs).

## Level AA W3C Guideline

**OVERALL RATING: Supports**

### Examples of Supports ✓

Advanced search provides immediate feedback when there are form input errors such as an invalid date text entry. These messages are role="alert", aria-live="assertive".

Book Table of Contents provides role="status" around heading to indicated number of selected chapters.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

None

# US 508: Chapter 3: Functional Support Criteria

Criteria	Conformance Level	Remarks and Explanations
<b>302.1 Without Vision</b>	Partially Supports	ScienceDirect User Interface and HTML Journal and Book content is compatible with screen readers. Many PDFs lack tagging/semantic structure. Videos do not have audio description. Many figures have alt text from either the surrounding text and/or captions.
<b>302.2 With Limited Vision</b>	Supports	Style sheets separate presentation from content. Personal style sheets and Operating System contrast can be applied. Browser Zoom and Screen magnification apps are supported. ScienceDirect is responsive/mobile friendly.
<b>302.3 Without Perception of Color</b>	Supports	ScienceDirect does not require color perception.
<b>302.4 Without Hearing</b>	Does not Support	Videos do not provide closed captions.
<b>302.5 With Limited Hearing</b>	Supports	Independent volume control is provided in the media player for video content.
<b>302.6 Without Speech</b>	Supports	ScienceDirect does not require speech input. Customer support offers live text chat or email.
<b>302.7 With Limited Manipulation</b>	Supports	ScienceDirect provides labels to make form controls easier to select. Elements have accessible name and can be operated using speech input.
<b>302.8 With Limited Reach and Strength</b>	Supports	Does not apply
<b>302.9 With Limited Language, Cognitive, and Learning Abilities</b>	Supports	ScienceDirect offers compatibility with text to speech literacy programs (e.g. Read and Write Gold). Articles are provided with summaries to highlight main points in simple English. Book content is broken up into smaller sections. Screen may be magnified to simplify user interface.

# US 508: Chapter 6: Support Documentation and Services

508 Criterion	Conformance Level	Remarks and Explanations
602 Support Documentation	N/A	Heading cell – no response required
602.2 Accessibility and Compatibility Features		Supports
602.3 Electronic Support Documentation	N/A	Heading cell – no response required
602.3.1 Documentation is WCAG 2 Conformant		Partially Supports
602.3.2 Alternate Formats		Supports
603 Support Services	N/A	Heading cell – no response required
603.2 Information on Accessibility and Compatibility Features		Supports
603.3 Accommodation of Communication Needs		Supports



# 508 602.2 Accessibility and Compatibility Features

Documentation shall list and explain how to use the accessibility and compatibility features.

## 508 Chapter 6

### OVERALL RATING: Supports

#### Examples of Supports ✓

- This VPAT provides descriptions of accessibility features as well as work arounds and user tips for users of assistive technology.
- Details on accessibility features grouped by functional area (e.g. Screen Reader, Keyboard) are on the web accessibility support page: <https://www.elsevier.com/solutions/sciencedirect/support/web-accessibility>

#### Examples of Does Not Support ✗

No violations found by reviewers

#### Workarounds and User Tips 🛠️

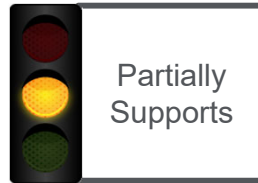
- Send an email to [accessibility@elsevier.com](mailto:accessibility@elsevier.com) for any additional questions on accessibility and assistive technology compatibility features.

# 508 602.3 Electronic Support Documentation

## 602.3.1 WCAG Conformant

Documentation in electronic format shall conform to all Level A and Level AA

### 508 Chapter 6



#### OVERALL RATING: Partially Supports

#### Examples of Supports ✓

- The ScienceDirect Support Center is a set of searchable HTML pages organized by topic.
- Most content in the Support Center is WCAG AA compliant.

#### Examples of Does Not Support ✗

- A few minor exceptions can be found on the next page of WCAG requirements.

#### Workarounds and User Tips 🔧

- The helps system is called the ScienceDirect Support Center: [service.elsevier.com/app/home/supporthub/sciencedirect](https://service.elsevier.com/app/home/supporthub/sciencedirect)
- Send an email to [accessibility@elsevier.com](mailto:accessibility@elsevier.com) for any additional questions on accessibility and assistive technology compatibility features.

WCAG 2.1 Success Criterion	Level	Evaluation	Remarks
1.1.1 Non-text Content	A	Supports	Hamburger menu has an accessible name: "toggle mobile menu".
1.2.1 Audio-only and Video-only (Prerecorded)	A	Supports	Tutorials have HTML transcripts or equivalent how to sections in HTML.
1.2.2 Captions (Prerecorded)	A	Supports (N/A)	Video tutorials provide open captioning.
1.2.3 Audio Description or Full Text Alternative	A	Supports	Tutorials have HTML text versions.
1.2.4 Captions (Live)	AA	Supports (N/A)	No live video exists
1.2.5 Audio Description	AA	Does Not Support	Video tutorials have an HTML text version but not audio description
1.3.1 Info and Relationships	A	Supports	Headings, lists, and labels are used appropriately
1.3.2 Meaningful Sequence	A	Supports	Content has a meaningful reading order and is read fine by screen readers
1.3.3 Sensory Characteristics	A	Supports	Content does not rely on sensory characteristics such as color or shape
1.4.1 Use of Color	A	Supports	Text links within text paragraphs provide an arrow icon or underline
1.4.2 Audio Control	A	Supports (N/A)	There is no audio that auto-plays
1.4.3 Contrast (Minimum)	AA	Partially Supports	Text provides 4.5:1 contrast except blue links on gray background.
1.4.4 Resize text	AA	Supports	The user interface is usable when zoomed 200%
1.4.5 Images of Text	AA	Supports	No images of text are used in the Support Center.
2.1.1 Keyboard	A	Supports	All interactive elements work with keyboard input
2.1.2 No Keyboard Trap	A	Supports	No keyboard trap exists
2.2.1 Timing Adjustable	A	Supports (N/A)	No timeouts exist
2.2.2 Pause, Stop, Hide	A	Supports (N/A)	No videos auto play
2.3.1 Three Flashes or Below Threshold	A	Supports (N/A)	There is no flashing content
2.4.1 Bypass Blocks	A	Supports	Skip to main content present, also navigation by landmarks, headings, lists.
2.4.2 Page Titled	A	Supports	Page titles include page name and system name
2.4.3 Focus Order	A	Supports	Focus order is logical throughout
2.4.4 Link Purpose (In Context)	A	Supports	Purpose of links can be determined from link text or fro context
2.4.5 Multiple Ways	AA	Supports	Content is available through search or browse
2.4.6 Headings and Labels	AA	Supports	Headings and labels are clear and consistent
2.4.7 Focus Visible	AA	Supports	Links and buttons change color on focus and receive browser default focus
3.1.1 Language of Page	A	Supports	Page language is defined on the HTML element
3.1.2 Language of Parts	AA	Supports (N/A)	All content is in English
3.2.1 On Focus	A	Supports	No examples of unexpected actions on focus
3.2.2 On Input	A	Supports	No examples of changes of context based upon setting of UI components
3.2.3 Consistent Navigation	AA	Supports	Navigation, search, and related content is consistent across pages
3.2.4 Consistent Identification	AA	Supports	Components with the same functionality are identified consistently
3.3.1 Error Identification	A	Supports	Error messages are part of input labels. An error summary is provided.
3.3.2 Labels or Instructions	A	Supports	Most labels are programmatically correct, but gray tip text not part of label
3.3.3 Error Suggestion	AA	Supports	Error suggestions are present and programmatically part of inputs
3.3.4 Error Prevention (Legal, Financial, Data)	AA	Supports (N/A)	No web pages in support that cause legal commitments et al.
4.1.1 Parsing	A	Supports	No violations
4.1.2 Name, Role, Value	A	Supports	Elements have name, role, value.





# 508 602.3 Electronic Support Documentation

## 602.3.2 Alternate Formats

Alternate Formats shall be provided upon request

### 508 Chapter 6

#### OVERALL RATING: Supports

##### Examples of Supports ✓

- The support documentation consists of: FAQ, ScienceDirect Support/Help Center, HTML pages, e.g. How can I setup and manage my alerts?, and Tutorials/Training.
- Alt formats that can be generated include: PDF, HTML, and Excel.
- Flash tutorials have HTML equivalentents

##### Examples of Does Not Support ✗

No violations found by reviewers

##### Workarounds and User Tips 🛠️

The page with Tutorials and links to HTML versions is:

[https://service.elsevier.com/app/answers/detail/a\\_id/10263/supporthub/sciencedirect/](https://service.elsevier.com/app/answers/detail/a_id/10263/supporthub/sciencedirect/)

Send an email to [accessibility@elsevier.com](mailto:accessibility@elsevier.com) to request alternate formats for documentation or for any additional questions on accessibility and assistive technology compatibility features.



# 508 603.2 Info on A11y and Compatibility Features

When ICT support services provide documentation, materials shall conform to 602.3  
[508 Chapter 6](#)

## OVERALL RATING: Supports

### Examples of Supports ✓

- This document describes information on the accessibility and compatibility features.
- The ScienceDirect Accessibility Statement with a description of accessibility features can be found at:
- [https://service.elsevier.com/app/answers/detail/a\\_id/37160/supporthub/sciencedirect/kw/accessibility/](https://service.elsevier.com/app/answers/detail/a_id/37160/supporthub/sciencedirect/kw/accessibility/)
- Our company provides a free web accessibility fundamentals course for staff to learn about people with disabilities and digital accessibility topics.

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🛠️

Send an email to [accessibility@elsevier.com](mailto:accessibility@elsevier.com) for any additional questions on accessibility and assistive technology compatibility features.



# 508 603.3 Accommodation of Communication Needs

When ICT support services provide documentation, materials shall conform to 602.3

## 508 Chapter 6

**OVERALL RATING: Supports**

### Examples of Supports ✓

- Users can contact the help desk through:
  - Email (web form)
  - Email ([accessibility@Elsevier.com](mailto:accessibility@Elsevier.com))
  - Chat (web interface)
  - Phone

### Examples of Does Not Support ✗

No violations found by reviewers

### Workarounds and User Tips 🔧

The Support center main page can be found at:  
<https://service.elsevier.com/app/contact/supporthub/sciencedirect/>

Send an email to [accessibility@elsevier.com](mailto:accessibility@elsevier.com) for any additional questions on accessibility and assistive technology compatibility features.

## To Learn More About ScienceDirect Accessibility

- [ScienceDirect Accessibility Statement](#)
- [The ScienceDirect accessibility journey: A case study](#)
- [CSUN Conference Presentation on Article of the Future](#)
- [Elsevier Accessibility Checklist](#)
- [Elsevier Company Accessibility Policy](#)
- [Three Key Principles of an Accessible Website](#)

Contact [accessibility@elsevier.com](mailto:accessibility@elsevier.com) for any questions about ScienceDirect or Elsevier accessibility topics.