High-Level Accessibility Evaluation (WCAG 2.1)

IOPScience eBooks

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Prepared for:

BTAA-Library Accessibility Alliance

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SUMMARY

This report reflects the findings of a high-level assessment of the IOPScience eBooks platform for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 (WCAG 2.1).

There are very few WCAG 2.1 compliance issues with IOPScience eBooks, and they are very minor overall with the most pressing issue being around PDF content. Below are the most critical issues to address to improve system compliance.

Top Findings

1. **PDF Content:** The paramount issue with the accessibility of IOPScience eBooks is the PDF content. There are some key areas missing for compliance such as content tags. The table for this section contains the output of the analysis and can be used as reference for what needs to be fixed for compliance with the Section 508 PDF guideline.

2. **Tablist Link:** The only other issue that was found is very minor. The "Browse all books" link on the landing page is contained within the tablist and still has its tab-index. Moving the link outside of the tablist will solve the issue.

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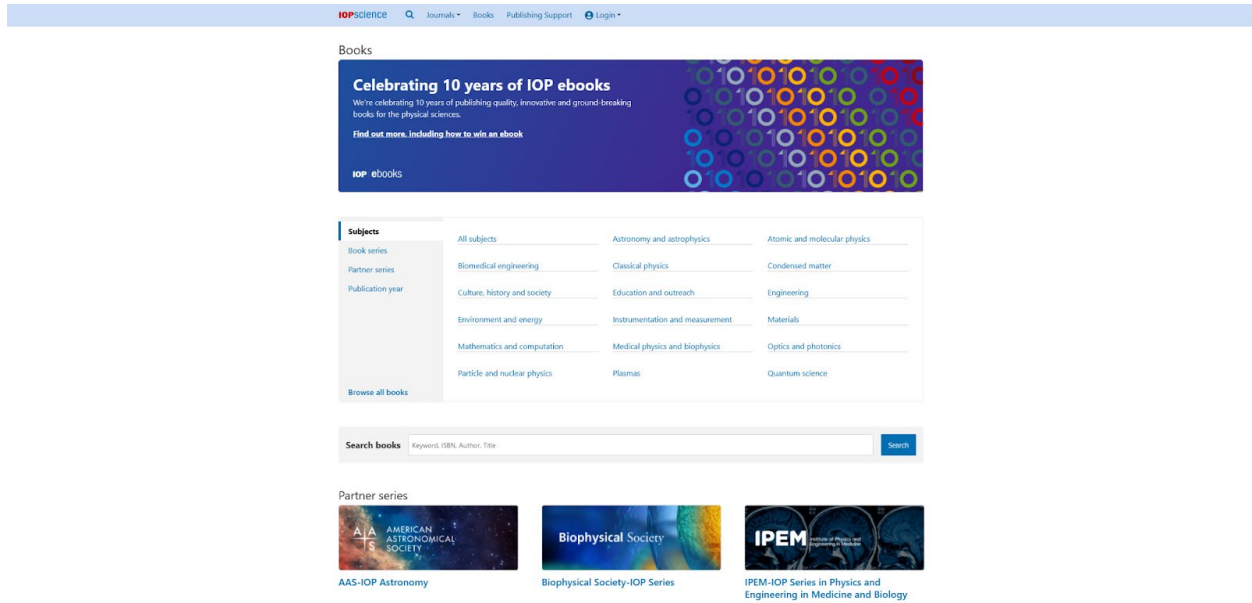KNOXVILLE

ACCESSIBILITY FINDINGS

This report was conducted against the IOPScience eBooks Platform and covers a selection of pages and features that were to be tested as a representative sample of the database's conformance to the WCAG 2.1 AA standards.

The resource was reviewed using a combination of manual and automatic review tools and assistive technologies, including the WAVE Accessibility Assessment tool, Axe Accessibility Assessment tool, WCAG Color Contrast Checker, and NVDA screen reader. PDF content was tested against Section 508 requirements using Adobe Acrobat's accessibility tools and manual analysis. All problems identified by automatic tools were verified manually. This evaluation was performed using Firefox on Windows 11.

Below are the errors revealed during the accessibility evaluation of the IOPScience eBooks platform. Each result shows a summary of accessibility issues and the reason it was flagged. Screenshots are included.

1. Initial Interface

Test Case: Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible. https://iopscience-iop-org.utk.idm.oclc.org/booklistinfo/home

SC 1.4.3: Certain ARIA roles must contain particular children.

Location(s):
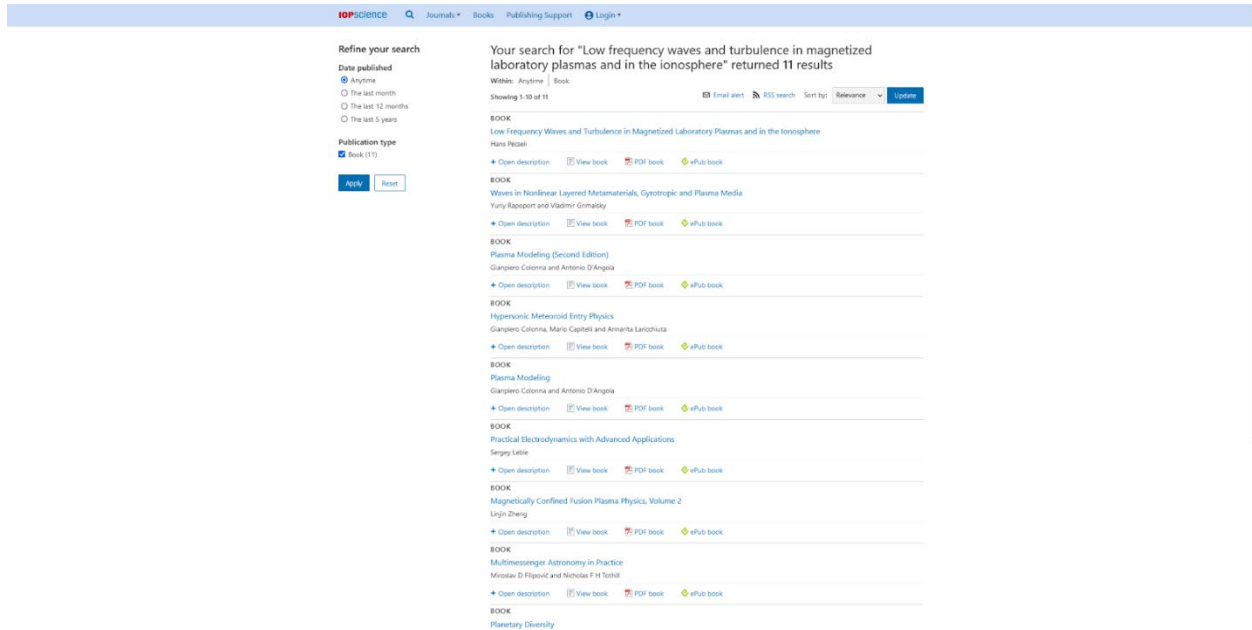- <div role="tablist" class="tabs__tablist">

Reason flagged:
- Element has children which are not allowed: a[tabindex]
- Element uses aria-busy="true" while showing a loader

2. Search Results

Test Case: From the initial landing page, select the magnifying glass and conduct a search for: "Low frequency waves and turbulence in magnetized laboratory plasmas and in the ionosphere". Test search results page, including filters/refine search and sort by options.
- o Filter "Publication Type" to Books
- o Test the "Open Description" button beneath the title of the first record listed.

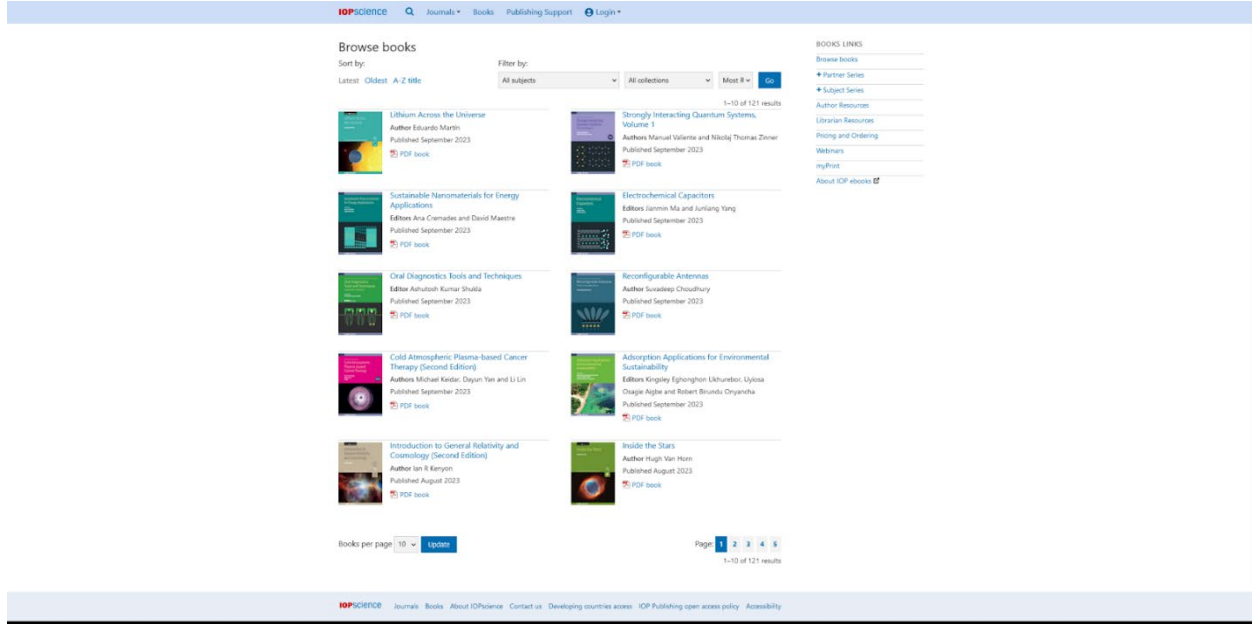❖ No Issues found by automatic or manual analysis.

Test Case: Select the first record listed to test the individual search result landing page. Test switching from the Table of Contents tab to the About Book tab. Test the "You may also like" box on the right, & test the actual eBook by selecting PDF at the top. URL: https://iopscience-iop-org.utk.idm.oclc.org/book/mono/978-0-7503-1251-6

PDF Area Assessed	Failed Issues
Document	Tagged PDF Primary Language Title
Page Content	Tagged Content Tagged Annotations Tab Order Character Encoding
Forms	*None*
Alternate Text	Figures Alt Text Nested Alt Text Associated with Content Hides Annotation Other Elements Alt Text
Tables	Rows TH and TD Headers Regularity Summary (skipped)
Lists	List Items Lbl and Lbody
Headings	Appropriate Nesting

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3. Advanced Search

Test Case: Test the Browse All Books page advanced search page. URL: https://iopscience.iop.org/bookList/10/1

❖ No issues found through automatic or manual testing.

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