

# High-level accessibility review – BTAA (Directory of Open Access Journals - final)

## Primary Point of Contact

Denis Boudreau  
Principal Accessibility SME & Training Lead

Deque Systems, Inc.

Web: [www.deque.com](http://www.deque.com)

Email: [denis.boudreau@deque.com](mailto:denis.boudreau@deque.com)

**May 13<sup>th</sup>, 2019**



## High-level accessibility review – DOAJ

### TABLE OF CONTENTS

High-level accessibility review – DOAJ.....	2
Directory of Open Access Journals (DOAJ).....	3
Summary (top 3 problems for DOAJ).....	3
Accessibility findings.....	3
Project wide issues.....	3
1. DOAJ Home page.....	4
2. DOAJ Search Results page.....	5
3. DOAJ Browse Subject page.....	7
4. DOAJ Search page.....	8

## Directory of Open Access Journals (DOAJ)

### Summary (top 3 problems for DOAJ)

---

This assessment covers portions of the Directory of Open Access Journals application. The assessment revealed some problems with screen reader compatibility, resulting in screen reader users sometimes missing critical information needed to understand how to operate the features.

1. **Lack of section headings** – While the pages are generally fairly usable for someone who is sighted, the lack of section headings will make navigation hard for someone who isn't and relies on a screen reader to navigate around the content. Providing a meaningful heading structure to the pages would go a long way towards making it easier to use.
2. **Screen reader compatibility** – Several parts of the application are incompatible with screen readers or fail to convey the current states of the features, such as whether sections are expanded, or their content updated. Many screen reader users will find this lack of information about the interface confusing.
3. **Insufficient color contrast** – There are many instances throughout the application where minimum color contrast requirements are not met. This will make it difficult for people with low vision and/or color blindness to use the application.

### Accessibility findings

---

#### Project wide issues

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are reported on a page per page basis, where applicable.

#### Automated findings using Axe

1. **SC 1.4.3** - Elements in pages must be provided with sufficient color contrast.

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Firefox and Chrome. Details here: <https://www.deque.com/products/axe/>.

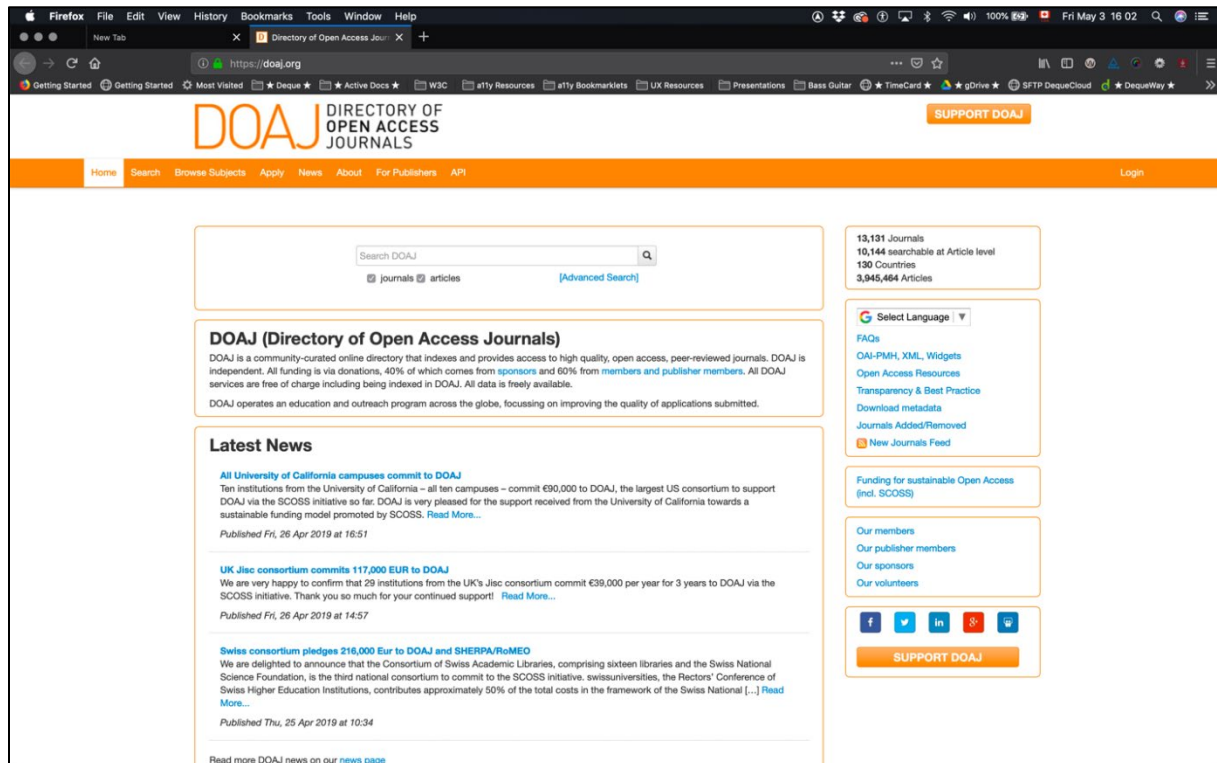
#### Additional manual findings using NVDA screen reader

None of the issues found were found on every page assessed. Please refer to each section for details.

## 1. DOAJ Home page

Source: <https://doaj.org/>

Test case: Test homepage, including menu across the top (home, search, browse subjects, etc.), search box, sections of texts, icons/images, reading order, etc.



### Automated findings using Axe

1. **SC 1.1.1** - The RSS image must be provided with meaningful alternate text.
2. **SC 1.3.1** – The Search form element must have a meaningful label assigned.
3. **SC 4.1.1** - ID values of active elements within the page must be unique.
4. **SC 4.1.2** - The Search button must have discernible text announced to assistive technologies.
5. **SC 4.1.2** - Social media links must have discernible text announced to assistive technologies.

### Additional manual findings using NVDA screen reader

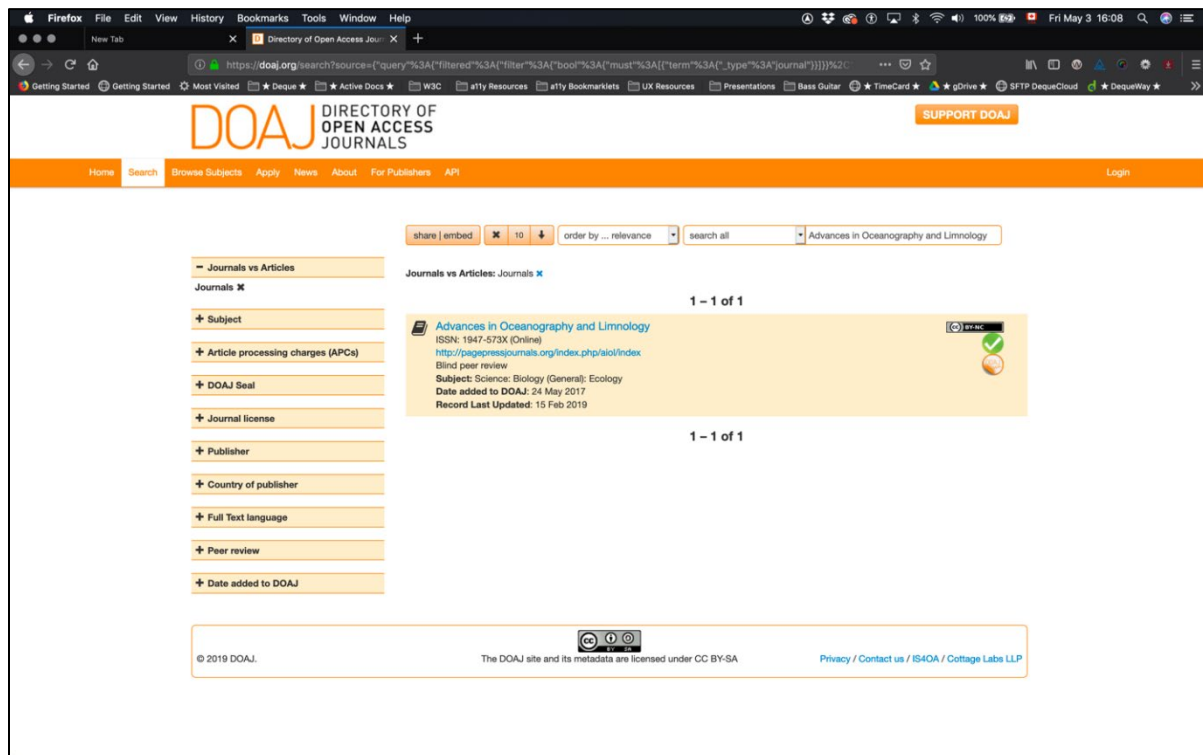
1. **SC 1.3.1** – The Search button is only announced as “button” by the screen reader.
2. **SC 1.3.1** – The page is missing a main heading set to level 1 (possibly on the logo).
3. **SC 1.3.1** – “Gold Sponsor” is made to look like a section heading but is not marked up as such.
4. **SC 2.4.3** – Focus is lost and sent to bottom of the page when the language modal is dismissed.
5. **SC 2.4.4** – Links like “Read more” are not meaningful, even within their immediate context.

## 2. DOAJ Search Results page

### Source:

[https://doaj.org/search?source=%7B%22query%22%3A%7B%22filtered%22%3A%7B%22filter%22%3A%7B%22bool%22%3A%7B%22must%22%3A%5B%7B%22term%22%3A%7B%22\\_type%22%3A%22journal%22%7D%7D%5D%7D%7D%2C%22query%22%3A%7B%22query\\_string%22%3A%7B%22query%22%3A%22Advances%20in%20Oceanography%20and%20Limnology%22%2C%22default\\_operator%22%3A%22AND%22%7D%7D%7D%7D%2C%22from%22%3A0%2C%22size%22%3A10%7D](https://doaj.org/search?source=%7B%22query%22%3A%7B%22filtered%22%3A%7B%22filter%22%3A%7B%22bool%22%3A%7B%22must%22%3A%5B%7B%22term%22%3A%7B%22_type%22%3A%22journal%22%7D%7D%5D%7D%7D%2C%22query%22%3A%7B%22query_string%22%3A%7B%22query%22%3A%22Advances%20in%20Oceanography%20and%20Limnology%22%2C%22default_operator%22%3A%22AND%22%7D%7D%7D%7D%2C%22from%22%3A0%2C%22size%22%3A10%7D)

**Test case:** From the initial page, search for: Advances in Oceanography and Limnology – (just search journals NOT article - unselect articles box). Select the journal title after hitting search and test the journal landing page.



### Automated findings using Axe

2. **SC 1.3.1** – Dropdowns, text fields and textareas need to be provided with meaningful labels.
3. **SC 2.4.1** - The page must provide a means to bypass repeated blocks (like a skip to content).
4. **SC 4.1.2** - Link next to Journals must have discernible text announced to assistive technologies.

### Additional manual findings using NVDA screen reader

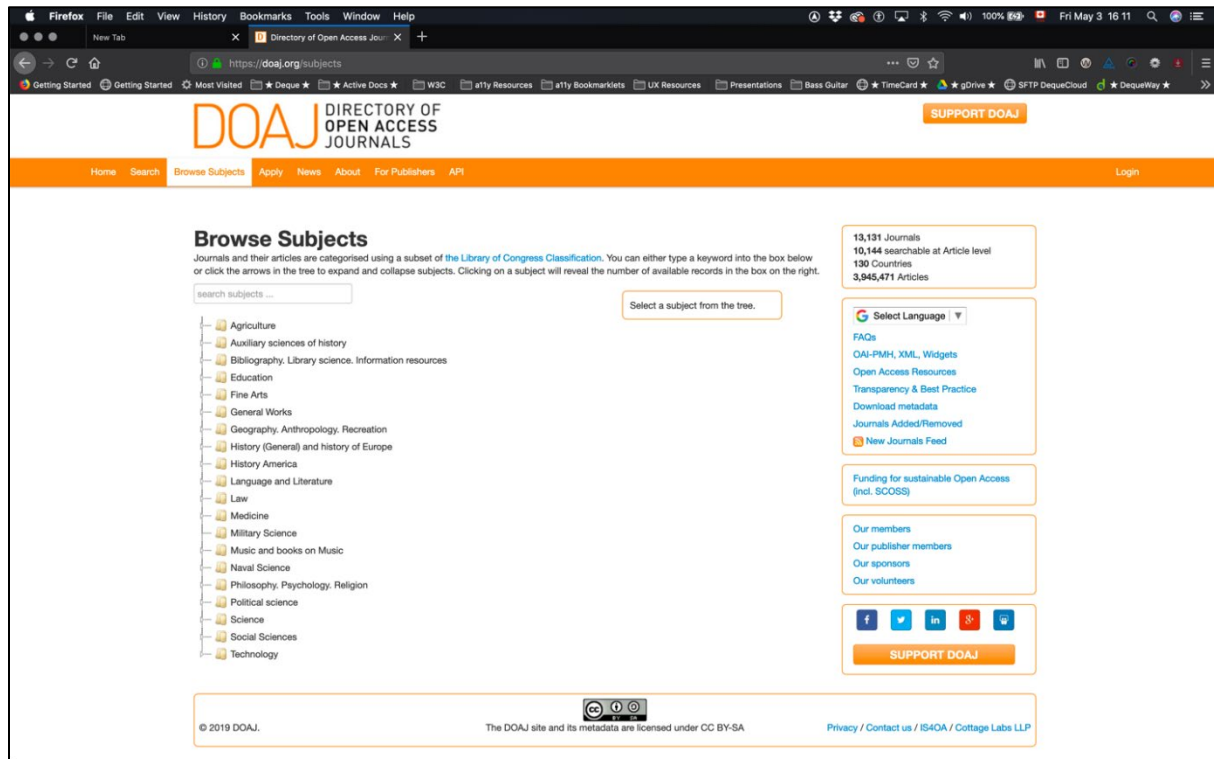
1. **SC 1.1.1** – The image of the “X” next to Journals doesn’t convey its purpose (remove filter).
2. **SC 1.3.1** – The page contains no section headings. The logo should at least be made into a H1.
3. **SC 1.3.1** – The “1 – 1 of 1” is made to look like a section heading but is not marked up as such.
4. **SC 2.1.1** – The “Next” (and previous) pagination links are not keyboard accessible.
5. **SC 2.4.4** – The “x” to close the expanded content for “Share/Embed” is not meaningful.
6. **SC 2.4.4** – The “Abstract” links are not meaningful even within their immediate context.
7. **SC 2.4.4** – The “Full text” links are not meaningful even within their immediate context.

8. **SC 3.2.1** – Content is refreshed without warning as the focus leaves the topic text field.
9. **SC 3.2.2** – Content is updated without warning as options in dropdowns are chosen.
10. **SC 4.1.2** – The filter items on the left are not announced as expandable to screen readers.
11. **SC 4.1.2** – Once activated, the state of the filter items on the left are not conveyed either.
12. **SC 4.1.2** – The modal to change the number of items shown (from 10 to x) is repeated 4 times.
13. **SC 4.1.2** – The state of the filter (descending, ascending, count, etc.) is not conveyed to NVDA.
14. **SC 4.1.2** – The outcome of the “What do these figures mean” link isn’t clear to NVDA users.
15. **SC 4.1.2** – The state (collapse or expanded) or the Share/Embed link is not conveyed.
16. **SC 4.1.2** – Expanded content is not announced to NVDA once the Share/Embed link is triggered.

### 3. DOAJ Browse Subject page

Source: <https://doaj.org/subjects>

Test case: Test Browse Subject page. Is the list of subjects accessible for keyboard users (can one expand Fine Arts, then select Architecture for example)?



#### Automated findings using Axe

1. **SC 1.1.1** - The RSS image must be provided with meaningful alternate text.
2. **SC 1.3.1** - List elements must only directly contain <li>, <script> or <template> elements.
3. **SC 1.3.1** - The Search form element must have a meaningful label assigned.
4. **SC 4.1.1** - ID values of active elements within the page must be unique.
5. **SC 4.1.2** - Social media links must have discernible text announced to assistive technologies.

#### Additional manual findings using NVDA screen reader

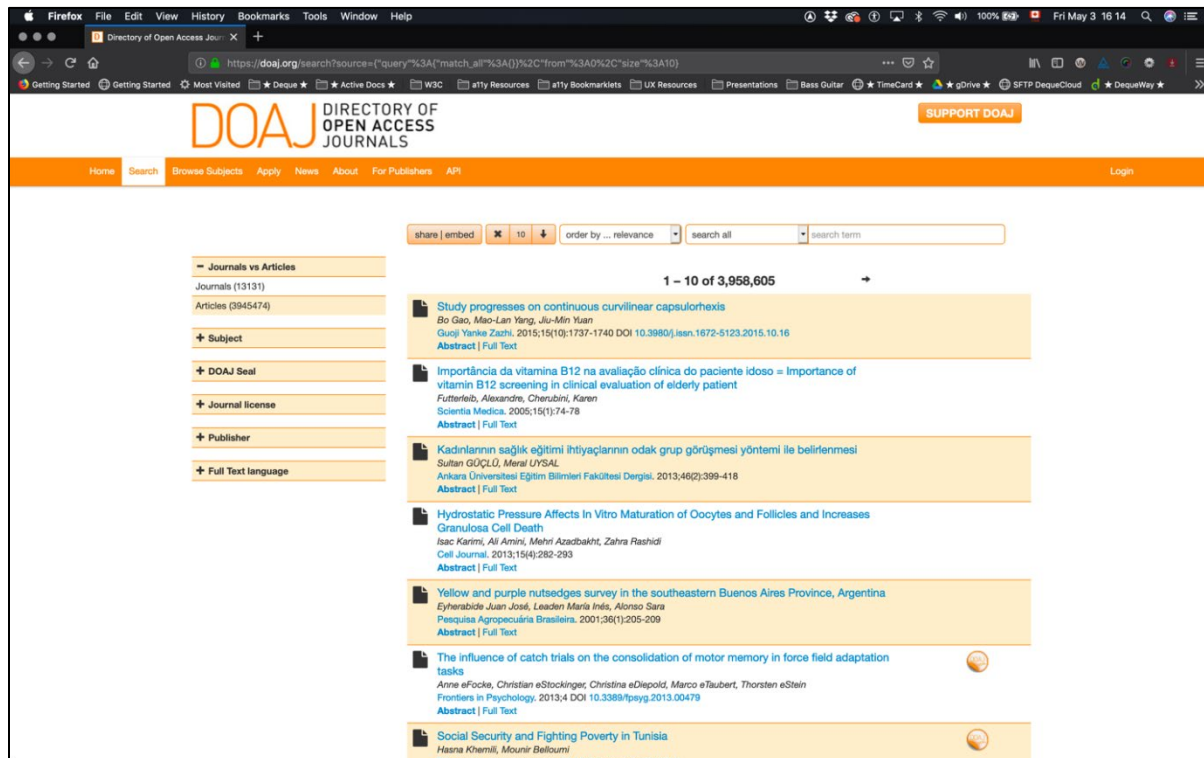
1. **SC 1.3.1** – The boxed Subject is made to look like a heading but is not mared up as such.
2. **SC 2.4.3** – Focus is lost and sent to bottom of the page when the language modal is dismissed.
3. **SC 3.2.2** – Treeview is updated without warning as keywords are typed in the Search box.
4. **SC 4.1.2** – The information updated from the treeview is not conveyed to NVDA.

## 4. DOAJ Search page

### Source:

[https://doaj.org/search?source=\[\"query%3A\(match\\_all%3A\)%2C\"from%3A0%2C\"size%3A10\]](https://doaj.org/search?source=[\)

**Test case:** Test search page. Test limits/search filters on the left by selecting: Medicine (from subject category) and Yes (from DOAJ Seal category).



### Automated findings using Axe

1. **SC 1.3.1** - Dropdowns and text fields need to be provided with meaningful labels.
2. **SC 2.4.1** - The page must provide a means to bypass repeated blocks (like a skip to content).

### Additional manual findings using NVDA screen reader

1. **SC 1.1.1** – The image of the “X” next to Journals doesn’t convey its purpose (remove filter).
2. **SC 1.3.1** – The list of items under each filter on the left are not semantically grouped in lists.
3. **SC 1.3.1** – The page contains no section headings. The logo should at least be made into a H1.
4. **SC 1.3.1** – The “1 – 10 of 3M+” is made to look like a heading but is not marked up as such.
5. **SC 3.2.1** – Content is refreshed without warning as the focus leaves the topic text field.
6. **SC 3.2.2** – Content is updated without warning as options in dropdowns are chosen.
7. **SC 4.1.2** – The filter items on the left are not announced as expandable to screen readers.
8. **SC 4.1.2** – Once activated, the state of the filter items on the left are not conveyed either.
9. **SC 4.1.2** – The modal to change the number of items shown (from 10 to x) is repeated 4 times.
10. **SC 4.1.2** – The state of the filter (descending, ascending, count, etc.) is not conveyed to NVDA.
11. **SC 4.1.2** – The state (collapse or expanded) or the Share/Embed link is not conveyed.
12. **SC 4.1.2** – Expanded content is not announced to NVDA once the Share/Embed link is triggered.