Sparql Sample Queries

Please adapt these queries to your needs (e.g. adapting the dois of the articles to match the articles within your document collection rdfized with se4ojs).

Query for the sections directly contained by the article

```
prefix c4o: <http://purl.org/spar/c4o/>
prefix prism: <a href="http://prismstandard.org/namespaces/basic/2.0/">http://prismstandard.org/namespaces/basic/2.0/</a>
prefix co: <http://purl.org/co/>
prefix deo: <http://purl.org/spar/deo/>
prefix rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
prefix owl: <a href="http://www.w3.org/2002/07/owl#">prefix owl: <a href="http://www.w3.org/2002/07/owl#">http://www.w3.org/2002/07/owl#</a>
prefix xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>>
prefix rdfs: <a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#>
prefix po: <a href="http://www.essepuntato.it/2008/12/pattern#">http://www.essepuntato.it/2008/12/pattern#>
prefix doco: <http://purl.org/spar/doco/>
prefix fabio: http://purl.org/spar/fabio/
#select the first-level sections of the article and the text contained in these sections.
select ?sec ?p ?text
where {
  ?article rdf:type fabio:Article.
  ?article prism:doi "10.5964/ejcop.v3i1.23".
  ?article po:contains ?list.
  ?list co:element ?sec.
  ?sec rdf:type doco:Section.
  ?sec po:contains ?listSubSecAndParagraphs.
  ?listSubSecAndParagraphs co:element ?p.
  ?p rdf:type doco:Paragraph.
  ?p c4o:hasContent ?text.
```

Query for all sections (directly contained sections and transitively contained subsections) of the article

Query that ranks the citations of references of an article according to frequency

```
prefix rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
prefix owl: <http://www.w3.org/2002/07/owl#>
prefix xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>
prefix rdfs: <a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#>
prefix prism: <a href="http://prismstandard.org/namespaces/basic/2.0/">http://prismstandard.org/namespaces/basic/2.0/</a>
prefix cito: <a href="http://purl.org/spar/cito/">http://purl.org/spar/cito/>
prefix biro: <a href="http://purl.org/spar/biro/">http://purl.org/spar/biro/>
prefix c4o: <http://purl.org/spar/c4o/>
#The top 10 references cited in the article with in-text citation frequency > 1.
Select ?ref ?inTextCount
where {
  ?art prism:doi "10.5964/ejcop.v3i1.23".
  ?art cito:cites ?refText.
  ?ref biro:references ?refText.
  ?ref c4o:hasInTextCitationFrequency ?inTextCount
  FILTER(?inTextCount > 1)
} ORDER BY DESC (?inTextCount ) LIMIT 10
```

Query to retrieve the titles of the top 10 references cited in the article with in-text citation frequency > 1.

Retrieve the references' titles and links to pdf of an article's references that have a link to a PDF.

```
prefix rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
prefix owl: <http://www.w3.org/2002/07/owl#>
prefix xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>
prefix rdfs: <a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#>
prefix frbr: <http://purl.org/vocab/frbr/core#>
prefix biro: <a href="http://purl.org/spar/biro/">http://purl.org/spar/biro/>
prefix fabio: <a href="mailto:rg/spar/fabio/">http://purl.org/spar/fabio/>
prefix dcterms:<http://purl.org/dc/terms/>
prefix application:<a href="http://purl.org/NET/mediatypes/application/">http://purl.org/NET/mediatypes/application/</a>
prefix cito:<http://purl.org/spar/cito/>
SELECT *
WHERE {
  ?article rdf:type fabio:Article.
  ?article dcterms:title ?title.
  ?article cito:cites ?ref.
  ?ref frbr:embodiment ?pdf.
```

```
?ref dcterms:title ?refTitle.
?pdf dcterms:format application:pdf.
?pdf dcterms:relation ?pdfLink.
FILTER(contains (?title, "Anger"))
```

Query to retrieve the Top cited authors of an article.

prefix foaf: http://xmlns.com/foaf/0.1/>

```
prefix doco: <a href="http://purl.org/spar/doco/">http://purl.org/spar/doco/</a>
prefix cito: <a href="http://purl.org/spar/cito/">http://purl.org/spar/cito/>
prefix dcterms: <http://purl.org/dc/terms/>
prefix biro: <a href="http://purl.org/spar/biro/">http://purl.org/spar/biro/>
prefix c4o: <a href="http://purl.org/spar/c4o/">http://purl.org/spar/c4o/</a>
prefix prism: <a href="http://prismstandard.org/namespaces/basic/2.0/">http://prismstandard.org/namespaces/basic/2.0/</a>
prefix pro: <a href="http://purl.org/spar/pro/">http://purl.org/spar/pro/>
#The top cited authors of the article.
Select (sum(?inTextCount) AS ?count) ?authorName ?firstName
where {
  ?art prism:doi "10.5964/ejop.v8i3.308".
  ?art cito:cites ?reference.
  ?inTextCitation biro:references ?reference.
  ?inTextCitation c4o:hasInTextCitationFrequency ?inTextCount.
  ?reference dcterms:title ?refTitle.
  ?role pro:relatesToDocument ?reference.
  ?role pro:withRole pro:author.
  ?group pro:holdsRoleInTime ?role.
  ?group foaf:member ?member.
  ?member foaf:familyName ?authorName.
  ?member foaf:givenName ?firstName.
```

} GROUP BY ?authorName ?firstName ORDER BY Desc (?count)

Query to retrieve the sections ranked by number of citations occurring within their paragraphs.

prefix doco: <http://purl.org/spar/doco/>
prefix cito: <http://purl.org/spar/cito/>
prefix dcterms: <http://purl.org/dc/terms/>

prefix biro: http://purl.org/spar/biro/>

Query for "mental disorders" in the document collection

This query searches the ONTOAD ontology:

prefix skos: http://www.w3.org/2004/02/skos/core#

- It searches for the children of the concept with the preferred label "Mental disorders" in the ONTOAD ontology (an owl / skos ontology that needs to be copied to the SPARQL endpoint and can be obtained from bioportal).
- It matches ao:body's object in the rdf (which is the concept preferred label) to the corresponding preferred label of the matched child concepts.
- It displays the title of the article where the match was found, the matched text itself, the paragraph, the paragraph starting position and the concept resource (of the ontology).

```
prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
prefix owl: <a href="http://www.w3.org/2002/07/owl#">prefix owl: <a href="http://www.w3.org/2002/07/owl#">http://www.w3.org/2002/07/owl#</a>
prefix xsd: <a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>
prefix rdfs: <a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#>
prefix aot: <a href="http://purl.org/ao/types/">http://purl.org/ao/types/>
prefix aos: <a href="http://purl.org/ao/selectors/">http://purl.org/ao/selectors/</a>
prefix dcterms: <a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
prefix aoa: <a href="http://purl.org/ao/annotea/">http://purl.org/ao/annotea/>
prefix c4o: <http://purl.org/spar/c4o/>
prefix biotea: <a href="http://www.biotea.ws/ontology/ao_biotea.owl">http://www.biotea.ws/ontology/ao_biotea.owl</a>
prefix ao: <a href="http://purl.org/ao/core/">http://purl.org/ao/core/>
SELECT ?title ?textMatch ?text ?label ?concept ?startPosition
WHERE(
  ?annotation ao:body ?body.
  ?annotation ao:context ?context.
  ?context ao:exact ?textMatch.
  ?context dcterms:references ?para.
  ?context ao:offset ?startPosition.
  ?para c4o:hasContent ?text.
  ?annotation ao:annotatesResource ?doc.
  BIND(IRI(CONCAT(STR(?doc), "/textual-entity")) AS ?docTextualEntity)
 ?docTextualEntity dcterms:title ?title.?concept skos:prefLabel ?label.?concept rdfs:subClassOf
?parentConcept.?parentConcept skos:prefLabel ?parentLabel.
```

```
FILTER(STR(?parentLabel) = 'Mental disorders')
FILTER(STR(?label) = ?body)
}
```