Practices for enhancing research visibility, citations and impact: review of literature

Introduction

Increased research visibility is desired for a variety of reasons by researchers and research departments. It might be as straightforward as wishing to increase the academic influence of their research articles by increasing views and citations. However, others might want to raise their profile in order to attract more prospects for collaboration or even to emphasise the influence of their study on society as a whole. Universities, businesses and governments all over the world have taken notice of the possibilities of more open research. Whatever the objective or goal, it is crucial to share the research work on the appropriate platform for dissemination.

Institutional and subject repositories are excellent locations to make research outputs publicly accessible. Researchers can share their research with the public through a variety of alternative dissemination mechanisms, including Research Gate, Academia.edu and others. One of the best effective techniques to boost a research paper's visibility and number of citations is through open-access (OA) publication, because it makes the study publicly accessible from the very beginning. Researchers can boost their visibility, preserve their work and make it available for use in the future by making all of their outputs publicly accessible. Ogunleye (2019) made a study on "Some determinants of visibility boost for research publications among early career educational researchers in southwest, Nigeria". In this study, he described that the early career of educational researchers in Southwest Nigeria looked into some determinants (shared reference databases, research profiles, publishing in OA, self-archiving, publication metadata, researcher profiles and social media platforms) for boosting visibility of the publication. A structured questionnaire on factors determining publication boost ($r = 0.81$) was utilised to collect data, and multiple regression analysis and the Pearson's correlation approach were employed to evaluate the data. A significant positive correlation between each of the following was discovered in the results: joint reference databases ($r = 0.17$), Publication metadata ($r = 0.23$), result profiles ($r = 0.44$), open-access publishing ($r = 0.27$), self-archiving ($r = 0.52$), social media networks ($r = 0.43$) and accessibility of published work are all positively correlated with each other. The six variables had a positive correlation with the publication visibility ($R = 0.60$), and they were responsible for 32.9% of the gains invisibility of early career researchers' publications. Norman (2012) conducted a research on "Maximizing Journal Article Citation Online: Readers, Robots, and Research Visibility". Then he explained that online academic publications with peer review provide numerous advantages for researchers. They can enhance an article's popularity and publicity, connect someone's research to the relevant web of existing literature rapidly and add other scholars' attention who will use it, increasing the likelihood of it being used. Also provided five basic areas to make the literature more popular which are choosing a search engine-friendly title, writing of abstracts and introductions, making the article easy to find, using of media and links, dissemination of articles after publication and emphasised on increasing a piece of content's prospects of future downloads, citations and visibility.

Research methodology for review

The search procedure included two phases. Synonymous keywords were found and collated in the first stage. The featured research papers written in English were considered for the

study. The only factor used to choose an item for the current evaluation process was its possible relevance. Options for basic and advanced searches were adopted to retrieve the documents. Every research paper with the keyword "research visibility" or similar terms like "research impact," "Citation," "tools to enhance research impact" or "papers addressed to enhance research visibility, citation and impact" in the title, keywords or abstract was deemed relevant for the study. Around 135 papers were retrieved using the Web of Science database, which was obtained in September 2022. Out of 40 papers, they were determined to be pertinent for this study, as those papers present usage tools and techniques to enhance the research impact, citation and visibility. Another 19 papers related to the topic were retrieved from the literature review tool *"Inciteful"* during April 2023. Hence, a total of 59 papers were reviewed.

The researcher had to gone through all the retrieved papers thoroughly to investigate real facts. The papers taken for review were a variety of publications, including journal articles, conference papers, book chapters and book reviews. However, journal papers covered more than 90% of the literature consulted for this review.

Tips for enhancing research visibility, impact and citations

a. Self-archiving

Self-archiving is the process of depositing an electronic document for free online, so that anybody can access it and that helps to improve accessibility, usage, impact and citation of research work. Through institutional or other repositories, manuscripts must be made accessible to the public, such as ArXiv (https://arxiv.org/), SSRN (https://www.ssrn.com/), ZENODO, n.d (https://zenodo.org/) and Figshare, n.d. (https://figshare.com/), etc. Supplementary files such as data, extra figures, presentations, tables and reports can be made available too.

According to Ertürk and Şengül (2012) keeping the findings of scientific research on scholars' individual webpages, business websites or institutional repository (IR) is a technique referred to as self-archiving. Making someone's academic work accessible on open-access websites is known as self-archiving. Hence, sharing your research public through open-access platforms boost citations and guarantee greater impact. Lupton (2013) mentioned that benefit of self-archiving content is that it can be found by a larger audience with a quick Google search. Self-archiving is frequently described as the "green way" to OA; this method allows for the free public distribution of full-text articles. As a result, researchers can provide readers with access to their scholarly articles by making them freely accessible (Bradley, 2017). Researchers can use this to submit their paper's pre- or post-print version to self-archiving systems. Pre-prints are scientific papers that have not yet undergone peer assessment, and the peer-reviewed, authorised version for publication is considered a post-print; both can be self-archived.

Cerejo (2013) presented ways to make your paper more accessible. According to the author, self-archiving boosts the research's impact, affordability and accessibility. She said that scientists are being urged by funding organisations to accept the idea of granting OA to published publications for self-archiving. She has given many examples, which are mentioned below.

(1) According to a guideline that Research Councils UK (RCUK) has stated, all scientific articles that have been funded by grant organisations associated with RCUK shall be made publicly available within six months of publication as of April 2013.

(2) All papers funded by public organisations like the US National Institutes of Health are required to be stored in PubMed for free access after being accepted for publication.

Ale Ebrahim *et al.* (2014) in their research "Visibility and Citation Impact" looks into the connection between an article's visibility and its citation count and recommended for self-archiving publications that would greatly improve the citations. Additionally, their study aims to ascertain the impact of paper exposure on the number of citations received by two distinct academics from various institutions and academic fields. After that, they found that the visibility and citation effect of the publications increased significantly as a result of self-archiving.

Okeji *et al.* (2018) discovered that some instances of self-archiving sites are Academia.edu, ResearchGate and IRs that academic librarians in Nigerian institutions are aware of and utilise, while academic librarians rarely utilise private websites/servers, Mendeley.com, Kudos and other supported tools.

A study by Shehata *et al.* (2015) stated that sharing research after it has been published is a good idea since it will make it more visible and easier for people to obtain their papers, which will enhance the likelihood that their work will be cited in more publications. According to Smith (2013), 84% of the authors believed that there is still more to be done to enhance their work's efficiency, visibility and impact. Unfortunately, a lot of researchers do not share or disseminate their work after it has been peer reviewed. In most cases, they are unaware of the advantages or do not know how to disseminate their research through informal networks.

Only 15–25% of the 2.5 million articles that are produced each year throughout the world are self-archived by the writers (Hajjem *et al.*, 2005a, b; Björk *et al.*, 2010; Gargouri *et al.*, 2010). Around 95% of researchers in two international, multidisciplinary surveys stated that they would self-archive if it is mandatory to do at their institutions or funders; 81% stated that they would deposit willingly if it was required and 14% stated that they would deposit unwillingly (Swan, 2006).

Cerejo (2013) mentioned following interesting facts about self-archiving.

Lack of awareness of its benefits: Many writers are not aware that self-archiving is an option or that it has benefits. Because of this, even whilst the authors' universities have repositories, writers rarely bother with self-archiving until their institutions require it. Self-archived materials' content is a source of concern. In several academic fields, including computer science, pre-prints are stored far more often than post-prints. The research might be evaluated by the larger scientific community before being peer-reviewed.

The majority of journals make their copyright policies on self-archiving clear in their instructions for authors; thus, there is rarely a need to be concerned about breaking them. If authors read and grasp these guidelines, the majority of which permit authors to self-archive, they don't face the danger of breaching any agreements.

The School of Electronics and Computer Science (ECS) of The University of Southampton was the first organisation in the world to explicitly mandate self-archiving in 2002. Since then, an increasing number of divisions, faculties and organisations from around the globe, including Stanford, Harvard and MIT, as well as research funding organisations like all seven Research Funding Councils of UK, European Research Council and the US National Institutes of Health have also adopted OA self-archiving mandates. As of summer 2010, the Registry of Open Access Repository Material Archiving Policies (ROARMAP) already had over 160 mandates enacted, registered and charted (Gargouri *et al.*, 2010).

Various platforms shown in Table 1 for self-archiving provide ways for researchers to exchange and save their work. Institutional and disciplinary repositories mentioned in Table 1 are the most common self-archiving platforms. Researchers may promote global information sharing by using these platforms to boost awareness, encourage cooperation and adhere to open-access regulations.

Repositories	Name of the repositories	Subject coverage	Format coverage
Disciplinary repository	ArXiv (https://arxiv.org/)	Mathematics, non-linear science, quantitative finance and statistics, physics, computer science and quantitative biology	Pre-prints, post-prints and working papers
	Cogprints (http://cogprints.org/)	Neuroscience, linguistics, computer science, psychology, philosophy and biology	Full-text e-print, post-prints and pre-prints
	RCLIS/E-LIS (http://eprints.rclis.org/)	Library and information science	Pre-print, post-print and working paper
	RePEc (http://repec.org/)	Economics	Working papers, journals, books and software components
	PubMed (https://pubmed.ncbi.nlm.nih.gov/)	Biomedical and life sciences literature	Journals, articles and online books
	Soc Arxiv (https://socopen.org/)	Social sciences, arts and humanities, education and law	Pre-prints, post-prints and working papers
	Humanities Commons (https://hcommons.org/)	Humanities repository for dissertations and theses, work in progress, syllabi, abstracts, data sets, presentations, peer-reviewed journal articles, translations, conference papers, book reviews, maps, charts and more	Articles, monographs, course materials, white papers, code and digital projects
	Social science research network (SSRN) (https://www.ssrn.com/)	Engineering sciences, applied sciences, social sciences, health sciences, humanities, life sciences and physical sciences	Papers
	Peer J Pre-prints (https://peerj.com/preprints/)	Biology, life science, environmental science, computer science and chemistry	Technical reports from agencies or research groups, working papers, white papers and pre-prints
	AgEcon Search- Research in Agricultural and Applied Economics (https://ageconsearch.umn.edu/?ln=en)	Generally speaking, agricultural and applied economics encompass agribusiness, food security, energy and natural resource economics and the growth of international trade	Working papers and reports, journal articles, conference papers and posters, theses or dissertations (see dissertation guidelines), books or book chapters, pre-prints or post-prints of journal articles

(*continued*)

Table 1.
Platforms for self-archiving

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Repositories	Name of the repositories	Subject coverage	Format coverage
Institutional repositories	ROAR (http://roar.eprints.org/)	A accessible global database titled the Registry of Open Access Repositories (ROAR) is available, that keeps track of the creation, growth and evolution of institutional repositories with open access, with the content they include	Open-access repositories
	DOAJ (https://doaj.org/)	Infrastructure Services for Open Access (IS4OA) operates the website identified as a list of open access journals that have received community approval is available from the Directory of Open-Access Journals (DOAJ).	Open-access journals
	DOAR (https://www.doar.com/)	A UK-based platform Directory of Open-Access Repositories gathers a list of open access repositories. It can be accessed using various criteria, like location and subject. The service does not ask for information from the whole repository and doesn't browse through repository metadata	Open-access repositories encompassing scholarly ones
	Digital commons (https://bepress.com/products/digital-commons/)	Digital Commons is a greatest hosted option for open sharing, control and display all of your institution's research and scholarly output	Open educational resources, conference proceedings, journals, campus newsletters, books, and magazines
	DSpace (https://www.dspace.com/en/pub/home.cfm)	DSpace is a piece of open-source software used to build open access archives for scholarly and/or published digital information	Book, articles, conference papers, etc.

Source(s): Platforms for self-archiving by authors

Social media platforms

Social media platforms are becoming an essential component of every marketing plan. They are also amongst the best resources to increase research visibility, drive web traffic and interact with audience. Although being visible on social media is one of the essential ways for getting more popularity and gaining citation and visibility, social media platforms like Research Gate, Academia.edu, cite-u-like, Facebook and YouTube can enhance the research impact. Mazurek *et al.* (2020) explained that the citations are currently regarded as one of the fundamental instruments for evaluating academic performance – an indicator of academic performance is research. Facebook, Twitter, LinkedIn and ResearchGate are utilised for many objectives, and the social media presence of the researcher on all systems that have been evaluated is related to the level of academic success and number of citations. Researchers may boost the number of citations they receive with the effectiveness of social media and communication. Giglia (2011) discussed successful instances of academic social networks that have altered to look for, access and distribution of the scientific work. It also explained the features of ResearchGate, Academia.edu and Mendeley to give openness to scientific work. Similarly, Tripathy *et al.* (2017) explained to make use of social media platforms like Twitter, Facebook and LinkedIn for the sharing of podcasts and many other research outputs like, posters, conference papers, reports, presentations, pre-print copies etc. Again sharing of research data in figshare, Scribd, Zenodo and Slideshare as well as the use of individual blogs and unique author identifiers (ORCID) are examples of current approaches to make research more impactful. Ortega (2015) investigated "Disciplinary differences in the use of academic social networking sites amongst researchers from the Spanish National Research Council". It was found that amongst four academic social networking sites, i.e. Google Scholar, Mendley, ResearchGate and Academia, the fourth one is heavily populated by social scientists and humanists. Racz and Marković (2018) founded that online communication tools like research sharing (Google Scholar, LinkedIn, Academia.edu and ResearchGate), social networking (Blogs, Google Plus, Facebook and Twitter), by distributing their work through media sharing (Slide Share) and data sharing (PubChem, Mendeley, PubMed and Dryad Digital Repository), writers are able to make their study more visible, accessible and profitable. Mikki *et al.* (2015) found that 37% of University of Bergen researchers have profiles on at least one academic social networking site, comparing data across five sites. The most frequent frequency was found at the Faculty of Social Sciences.

According to the Van Noorden (2014), ResearchGate is very popular. In that study, more than 88 engineers claimed to be aware of it, compared to 29% of scientists who claimed to be aware of Academia.edu but only 5% of who visited frequently. Around 8% of scientists in the poll often visited Mendeley, and 48% were aware of it. Muscanell and Utz (2017) found that ResearchGate is the more popular one. Researchers would be more productive if they had access to publications and tools for collaboration and asking questions.

The web-based Research Information Management (RIM) service known as IRINS is provided by the Information and Library Network (INFLIBNET) Centre. By gathering, curating and promoting scholarly communication activities, the portal gives faculty members, scientists, R&D groups and academic institutions the opportunity to establish a scholarly network. The IRINS is available to Indian academic and R&D groups for free as software-as-a-service. The IRINS would facilitate the integration of the current research management systems, including the human resources system, course management system, grant management system, IR, free and subscription-based citation databases, academic publishers, etc. For consuming the scientific publication from, it has integrated with academic identities including ORCID ID, Scopus ID, Microsoft Academic ID, Google Scholar ID, etc. from various sources.

According to Netravati *et al.* (2010), today, the majority of research publications are available via OA via numerous channels. The data might be efficiently made apparent

through the use of IRINS, which also aids in measuring the research output of institutions. The INFLIBNET centre takes a lot of action. One of these is the 2002 formation of the VIDWAN expert database and National Researcher Network, which served as the impetus for the creation of the IRINS in 2017 as part of the National Mission on Education through ICT.

Examples of popular social academic platforms

1. Academia.edu

Richard Price launched the academic-only social networking site Academia.edu in 2008. Users may post papers, get feedback, interact with others who have similar interests and utilise analytics to track the popularity and impact of those pieces on this platform. Users may connect with colleagues on Twitter, Facebook, Google and other social networking sites by using Academia.edu's "import contact" feature. Users receive an email notification when a researcher on their follow list publishes a paper.

2. ResearchGate

IjadMadisch, Horst Fickenscher and Soren Hofmayer started ResearchGate in 2008. Researchers can interact, network and exchange knowledge on this academic social network by uploading data, code, posters, conference papers and journal articles to a repository. Like Academia.edu, ResearchGate offers an analytics function that lets users see statistics about their papers, such as how often they have been viewed and cited by other ResearchGate users.

3. Penprofile

In order to significantly accelerate the growth and spread of knowledge, Penprofile, a social networking tool for academicians, encourages connections amongst academics/scholars, students and educational institutions on a global scale. It is accessible to everyone and offers a variety of beneficial tools for productivity and networking.

Penprofile cleverly combines human resource development, social interactions and effective information sharing. The ability to create individual and organisational profiles, a distinctive article/blogging platform, the ability to create groups, the ability to review research, the ability to access academic news like job openings, calls for papers, conferences and many more membership opportunities are just a few of the many helpful built-in features/sections.

4. LinkedIn

LinkedIn is a networking website where individuals and organisations can connect to generate professional connections, employment opportunities, skill development, knowledge sharing, etc. Academic academics have discovered LinkedIn to be a useful tool over time, despite it being accessible to all professions. LinkedIn founded in 2002 and does business through its website and mobile app.

5. Google Scholar

Google Scholar is a search engine designed for finding academic materials. It gives users access to material from academic publications, professional organisations, institutional archives, university libraries and periodicals for in-depth searches of academic literature. After creating a Scholar profile, users may import their citations and retain their articles in Scholar Library. The citations' function in Google Scholar makes it simple for authors to keep track of references to their writings. Additionally, it provides authors with a metrics tool that

enables them to quickly gauge the acceptance and significance of recent publications in scientific journals.

6. Mendeley

A web tool called Mendeley combines reference management and social networking features for academics. It is a tool for organising, managing, sharing and finding activities related to research. Users can set up a profile for their academic work, post their publications and promote their research. Users of documents in PDF format can read, underline and highlight them. PDF papers are automatically sorted and organised by Mendeley. Furthermore, it offers comprehensive search capabilities and straightforward navigation, enabling users to browse the research library using useful criteria like author, title, discipline and journal. An online importer, current programmes (XML files for BibTeX, RIS and EndNoteTM), desktop drag and drop and other sources are all supported by the versatile platform Mendeley when importing papers. Additionally, projects, conversations, team plans and groups can be used by researchers to collaborate and communicate. They are able to monitor the development of their projects and collaborate with their co-workers to review articles in real time. In addition, Mendeley offers 2 GB of free online storage to automatically backup and synchronise your collection across desktop, web and mobile.

7. Zotero

Zotero acts as a social networking site for researchers, academics and librarians. Zotero also gives users the ability to manage collections and sub-collections; create and join groups of researchers; compile all of their research into one interface that is searchable; add PDF files, photos, audio recordings and video files; find an index of the library's full-text content; generate footnotes, endnotes, in-text citations or references and synchronise their work across multiple devices. Finding others who are interested in the same things you are, specialists in related subjects and the public or private sources they utilise is helpful and aids in further study. The search function in Zotero is activated when content, tags or metadata are run from the toolbar and match the search terms. Collaboration between researchers and scientists is now feasible, thanks to academic social networking sites. One facility houses all of the researchers and their research. A platform to communicate and update information in a safe and regulated way is urgently needed by researchers.

8. Scribd

Primarily, Scribd is an online library. It is an American e-book and audiobook subscription service that provides a single location for e-books, audiobooks, podcasts, periodicals, news articles, sheet music, papers and more (https://www.scribd.com/). It is also a social networking site where academicians will find a variety of resources for their research.

Open access
Unrestricted use of electronic resources and OA to information is referred to as "open access". OA is permitted for any kind of digital content, image, text, data, software, audio, video and multimedia. In 2001, Lawrence discovered that publications in computer science that were freely available online received a lot more citations than those that weren't. OA literature is defined by Peter Suber (2004) as being digital, online, cost-free and free of the majority of copyright and licencing restrictions. Lynch (2006) makes a similar point, describing OA as a greater removal of obstacles to the use of scientific material by anyone interested in doing so. In order to get "the best value" and make the results of publicly financed research transparent and freely available, the OA movement seeks to re-establish control over it, as illustrated by McCulloch (2006). Although the majority of studies have found that OA papers receive more

citations than non-OA (NOA) articles in the majority of fields, the origin of this so-called OA citation advantage (OACA) has been the topic of discussion (Craig *et al.*, 2007). When OA and NOA publications from the same journal and year are compared, OA articles regularly receive higher citations, with the advantage depending by discipline and year from 36 to 172%. The annual percentage of OA articles is growing significantly faster than NOA within every citation range when comparing articles within six citation ranges (0, 1, 2–3, 4–7, 8–15 and 16+ citations) (r > 0.90, N = 12 and p 0.0005), and the effect is greater with the more highly cited articles (r = 0.98, N = 6 and p 0.005). Although causality cannot be inferred from these data, it is unlikely that the OA citation advantage is merely or mostly a self-selection bias (for making only one's better articles OA), given that we previously discovered a similar pattern in physics where the per cent of OA is much higher (and even approaches 100% in some subfields). In addition to the direct impact advantages, when the OA database nears 100%, a wealth of additional rich indicators of research usage and impact, such as both citation and download counts, growth curves and latencies, will become possible. Numerous online performance measures include semantic indices, hub/authority ranks, co-citation counts and others (Chawki Hajjem *et al*, 2005a, b). It was initially noted in 2001 that publicly accessible online scientific proceedings earned more than three times as many citations as print journals on average. OA publications could reach more readers than subscription-based publications. There is no evidence to support the claim that OA publications get higher citations in the first year following publication. The OA citation advantage that has been extensively studied in the literature may have been influenced by additional factors (Philip M Davis *et al*, 2008).

To boost the exposure, application and citation effect of their research, more scientists are making the findings of their work publicly available (Dorta-Gonzalez *et al.*, 2017; 2020). Since 2004 (Harnadand Brody), researchers have been examining the potential "citation advantage" of OA publication or the likelihood that papers that are openly accessible to readers receive more citations than those that are protected by a barrier. Researchers who have access to publications are more likely to read and reference them than those who do not. As a result, different forms of OA, as a novel approach for the distribution of research publications, have been used by scholars and scientists alike since the advent of the Internet (Bjork, 2004). By highlighting the fact that it is easy to "read, download, copy, distribute and print articles and other materials freely," Nicholas *et al.* (2005) goes on to further discuss the importance of this activity. Making research outputs freely available can be done in many ways.

(1) Gold OA: The first is known as gold OA and entails publishing books or articles on a publisher's platform utilising an OA strategy. The second is known as green OA and involves archiving copy of the work in an OA repository. Christian Gumpenberger *et al.* (2013) claim that gold OA (=OA publication) is frequently chosen by those who want instant, unrestricted access to research output. Little is known about the likelihood that OA may benefit an article not just in terms of the overall number of citations it receives but also in terms of the nature and audience of those citations. Interdisciplinary is a characteristic that OA might undoubtedly affect. Interdisciplinary research is currently a hot topic in cutting-edge science. There is some proof that multidisciplinary research gets more high-quality citations.

(Chen *et al.*, 2015). According to Zhang and Watson (2017), using data from the Web of Science, the majority of the papers published between 2008 and 2015 were not freely accessible, although 9% were available through gold OA pathways and 13% were available through green routes. The OA journals with manuscript processing fees had the highest citation rates for gold OA publications. Readers may view all gold OA papers for free as soon as they are published.

(2) Green OA: Content published through the gold OA route is available right away, whereas manuscripts deposited through the green OA route may only be available once a self-archiving embargo period is completed. Depending on the licence under which it was made public, the conditions for further sharing and reusing OA content will vary.

According to Young and Brandes (2020a, b) this dataset includes 2105 items in total, spanning the years 2007–2019. There are 162 papers published each year on average, with a median normalised times cited per year of 0.16 and average integration scores of 0.56, 0.42 and 0.42, respectively. This journal's impact factor for 2017 is 0.976 according to the Journal Citation Reports. The investigation discovered that the citation rates were substantially greater when simply taking into account the green OA. Green OA papers have a higher multidisciplinary impact score than NOA publications. Lawrence (2001) wrote one of the earliest publications to look at the impact of research papers being available for free online. The author found that "an average of 336% more citations to online computer science articles compared with offline articles published in the same venue" (Lawrence, 2001). Since then, a number of studies that determine an "OA Citation Advantage," also known as OACA, have been published. Although several research have looked at whether OA publishing (either gold or green) generates more citations, there are few that have specifically compared the citation counts of gold OA and green OA. Green OA publications received 53% more citations on average than the average of all the papers in the study, according to research done by Archambault *et al.* between 1996 and 2013 on the different categories of OA papers at the European and global levels (Archambault *et al.*, 2014). Articles in green OA repositories receive 50% more citations than those behind a paywall (Pablo Dorta-González *et al.*, 2022).

As more people download publications, there are more citations of those articles, which increase the exposure of academic work (Swan 2006). Green OA essentially works to minimise expenses and related hazards whilst enabling access to the research literature. For colleges that aim to offer unfettered access to all literature at the lowest possible risk, green OA is the most affordable and advantageous alternative (Suzanne Fredericks RN, 2015). In a recent study of 1.3 million ISI-indexed journal articles published in 10 scientific fields between 1992 and 2003, it was discovered that publications that were accessible in full text via a web-crawling robot earned, on average, 83% more citations than those that could not be retrieved freely (Bo-Christer Björk, 2006).

(3) Hybrid OA: Hybrid OA (HOA) is a paid publication with partial OA content. For an item to be published OA under this status, the publisher usually has to pay a publishing fee in addition to the ongoing subscription fees for all other content. Papers undergo the same peer-review process after submission. The author has the choice to employ the OA option after being accepted or not. The author must pay the HOA cost, which is normally around $3,000, if the author opts for HOA. The author keeps the copyright in return. the author has the right to publish the article's final version in IRs without an embargo period as well as to post it for free online so that anybody may download it for free (Frank Mueller-Langer and Richard Watt, 2014).

The OA and closed-access economics articles published in the same hybrid journals were compared by Mueller-Langer and Watt (2014). The information utilised in their analysis came from a HOA Pilot Agreement, which reduced self-selection/ quality bias by automatically publishing publications by authors from the participating universities as OA in the piloting hybrid journals. The citation rate was found to have grown by 22–26% as a result of HOA. The number of citations for

open publications published in hybrid journals was far higher than for OA journals, according to our research. As a result, papers using the hybrid gold modality receive twice as many citations as those using the gold modality. Additionally, using OA repositories significantly boosts the number of citations obtained, especially for those without funding (Pablo Dorta-Gonzalez & María Isabel Dorta-Gonzalez, 2022). Mueller-Langer and Watt (2014) conducted a study on the citation effect of HOA amongst articles published in 15 economics journals offering an HOA option. The authors included 14 journals from Springer and 1 from Oxford University press, with a total of 1329 articles published from December 2006 to December 2011. Based on manual identification 208 articles were found to be available HOA. HOA shares of articles published in the 15 journals ranged from 3.02 to 18.06%, with a total HOA share of 6.5% for all included articles. Major scholarly publishers have in recent years started providing the hybrid option for the vast majority of their journals. The number of journals offering the hybrid option has increased from around 2,000 in 2009 to almost 10,000 in 2016. The number of individual articles has in the same period grown from an estimated 8,000 in 2009 to 45,000 in 2016 (Bo-Christer Björk, 2017).

OA studies increase citation rate: In the field of information science and bibliometrics, Internet accessibility is one of the most crucial factors that will boost the research's citations, page views, downloads (use) and media attention. Thus, it is claimed that subscription-based access is less likely to result in article downloads than OA publications (Miguel *et al.*, 2011).

OA gives more visibility and citation to enhance the research. Racz and Marković (2018) suggested that OA articles received more number of citations compared to subscription-based articles. Therefore, the OA to the resources and online communication tools helps the researcher to get greater audience. Rao (2021) Emphasised that scientific publications are crucial for researchers to publish their own research effort as well as learn about the earlier study in a field. The reader can learn more about an author's work and get free access to research, which also helps the researcher and publisher to increase the visibility of their work.

Three hypotheses suggesting the presence of a link between OA and more citations were first outlined by Kurtz *et al.* (2005) and afterwards expanded upon by various writers (Craig *et al.*, 2007; Moed, 2007; Davis *et al.*, 2008) (Pablo Dorta-Gonzalez &Mara Isabel Dorta-Gonzalez, 2022).

(1) OA papers are simpler to find, read and cite (OA hypothesis);

(2) OA publications typically become cited sooner than pay-for-access articles since they are made available online before being published (early-view hypothesis) and

(3) More well-known writers are more likely to offer OA to their works, and authors are more inclined to offer OA to their best works (selection-bias hypothesis).

b. ORCID

Open Researcher and Contributor ID (ORCID) is a 16-digit persistent digital identity that separates any researcher from all other researchers. Similar to how books and scholarly journals are tracked with ISBNs and digital object identifiers, publishers, authors and institutions may use this digital identity to simply recognise all scholars and researchers worldwide. It will enhance the research impact, citation and visibility of a researcher. Brown *et al.* (2016) make a study on "Open Access in Context: Connecting Authors, Publications and Workflows Using ORCID Identifiers". In that paper, they talk about the 2012-created ORCID and the problem of name ambiguity. In order to get over the challenges of distinguishing the

outputs of certain academics, the ORCID identifier was created to give the academic community a unique register to save their records and data, both manually and by automatically connecting with other data sources. Similarly, Shah (2020) in his study "The ORCID, why we need yet another ID?" explained that ORCID increases work's recognition and discoverability and it is free. The ORCID works across disciplines, institutions and the entire world, in contrast to other identifiers which may be restricted to an organisation, discipline, geographic location or proprietary system. It facilitates connections between various datasets and serves as a hub for managing and sharing research findings amongst academics, publishers, funders and employers. Also, it is a researcher-driven system that enables researchers to use their ORCID identity in a variety of platforms and services. Gireesh Kumar and Muruli, 2017 in their study "RESEARCHER IDENTIFIERS AND PROFILES: COMMUNITY STANDARD NETWORKS TO ENHANCE GLOBAL COLLABORATION" mentioned the benefits of popular researcher identities and profiles and suggests the optimal one. The scholarly community had considered ORCID to be the most effective unique researcher identity, and it is widely used in many nations as a well-recognised tool. They also described the state of scholarly community in higher education regarding knowledge, use and the use of researcher profiles for various tools in relation to the Central University of Kerala's faculties. It emphasised the creation of research profiles to enhance research impact, citations and visibility. Shah (2022) explained that the personal profile of a researcher facilitates communication and raises awareness of scholarly work. Online profiles significantly improve communication and involvement with the academic community also Academic Social Networking help the researcher to boost the research impact. Tripathy *et al.* (2017) made a study on "Ten tips to improve the visibility and dissemination of research for policy makers and practitioners" to analyse tips to improve the visibility and dissemination of research. They said there are many ways to increase research visibility such as expand the co-authorship 15 base, select the title and keywords wisely, make the articles OA, effective use of online social media, create and share podcasts, sharing research outputs other than the manuscript, create a personal blog, get a unique author identifier ORCID to distinguish yourself and your work from other researchers, etc. They also analysed that the researchers have more opportunities to share their research articles with the emergence of IRs and scholarly social media platforms such as Academia.edu and Research Gate.

Jain, Sanjeev Kumar and Makwana, Dr Jignesh in their research "Author and Researcher Identifier Services: A case of Open Researcher and Contributor ID (ORCID)" mentioned that researchers will be recognised for their contributions, save time and hassle and reduce the potential of errors by sharing their data with other systems using their ORCID. They also discuss about ORCID Membership Base. They found there are more than 1,200 organisations that are direct and indirect members of ORCID, including universities and research institutions (77.28), content providers (7.33), professional societies (4.20), non-profit entities (4.03), infrastructure, government entities (3.79), service providers, private enterprises and other participants (0.33) in the research ecosystem, are members of the ORCID initiative. As of 2 August 2022, ORCID declared 14,727 479 active accounts and 1258 member organisations are registered in ORCID (https://en.wikipedia.org). The ORCID work flow is depicted in the following diagram.

Disciplinary repository and institutional repository
A discipline repository, also known as a subject repository, is an archive in online mode that houses academics' works and the data that go with them. Scholars from any institution can submit their work to disciplinary repositories. According to Rebecca Reznik-Zellen and Adamick (2012), "disciplinary repositories that incorporate community building tools into their standard services of information collection, hosting, and dissemination might serve as

social networks for existing or emerging disciplines. It can integrate social networking components to act as 'knowledge brokers' for emerging disciplines of practice." By archiving research outputs in a particular disciplinary repository, the researcher will get more impact and citations.

The use of research institutions' own repositories for "hosting, archiving, monitoring, measuring, managing, evaluating and showcasing" their researchers' work in order to maximise its adoption, usage and effect has frequently been discussed by academics (Gargouri *et al.*, 2010).

IRs are archives for compiling, preserving and disseminating digital versions of a company's intellectual output, particularly that of a research institution.

Organ (2006) provided information on download and usage statistics for the Australian University of Wollongong's IR. He talked about how faculty members might boost the impact and number of citations of their research by uploading it to IRs.

He showed how publishing studies in OA databases might increase citations by as much as 500%. IRs are used primarily to boost the scientific and intellectual output of institutions' global visibility, which in turn raises the institution's reputation and stature. When these contents are uploaded in IRs, the web performance of research output in terms of presence, impact, openness and visibility of intellectual contents would be accomplished (Adewole-odeshi, Egbe &Ezechukwu, OkeomaChinelo, 2020).

Many academic institutions have made extensive use of IRs to share and preserve knowledge. Open-source solutions are often chosen by IR proponents due to their natural compliance with the ideology of the freedom and independence of the Internet from commercial concerns. Institutions gain from improved research visibility, the influence of research output, interoperability and other factors brought about by IRs (Akpokodje, Vera Nkiruka, Akpokodje, Edore Thomas (2015).

IRs give an institution a way to highlight its intellectual production, centralise and improve efficiency in the management of valuable digital data and proactively address the rising problem in scholarly communication. (Gibbons S. 200, as cited Foster, N.F. & Gibbons S.) Some believe that IRs can boost an institution's reputation or brand by presenting the research accomplishments of its faculty (Crow, 2002).

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IRs enable the collection of content in a single area, the capture and OA to an Institution's intellectual production and the preservation of content that might otherwise be unavailable or out of print. It attracts the wider audience of the institution or discipline. IRs are defined by Crow (2002) as digital collections that record and protect the scholarship produced by one or more university communities.

A variety of software programmes are available for building/creating institutional digital repositories.

(1) DSpace was created by HP and the MIT library in collaboration. DSpace records, saves, indexes, safeguards and redistributes the forms of an institute's research materials. IRs and electronic records management are supported by DSpace.

(2) E-prints was developed by the University of Southampton as the first programme for a digital repository to manage an open archive. The repository's Open Archives Initiative (OAI)-compliant software was E-Prints. It typically enables pre-prints and collections of technical reports with a specific focus.

(3) FEDORA: Flexible Extensible Digital Object and Repository Architecture (FEDORA) was created through a partnership between Cornell University Information Science and the University of Virginia Library. FEDORA is free source, serving as the foundation for several different types of information management systems. It also encourages the creative invention of original tools.

(4) Greenstone: Digital library collections are created and shared using Greenstone. This programme was developed and made available by the UNESCO and University of Waikato's New Zealand Digital Library Project. It was made available as open-source, multilingual software under the GNU General Public License.

(5) CONTENTdm is distributes by OCLC which was created at the University of Washington. The software includes tools for collecting or making collections, for storing content and for displaying and retrieving items.

(6) Digi Tool is a solution for managing digital assets in academic and library settings.

(7) EN Compass is the one of the software for managing and accessing digital content. EN Compass includes a wide range of modules for different uses.

(8) Meta Source is a group of tools for managing digital collections that includes support for metadata schemes, digital object storage and external collection crawling.

According to Zainab (2010), IRs make papers accessible, improve their chances of being used by other scholars and facilitate the flow of ideas between researchers working in related fields. Tate (2010) discussed the method for raising a paper's visibility is to deposit it in the IR. Increasing the exposure and citation impact of the institution's scholarship is one of the frequently touted advantages of adopting an IR. Ale Ebrahim (2016a, b) explained that the IR can enhance the research visibility. Faculty members and graduate students at universities can store their research outputs on platform like IRs. By lowering barriers to knowledge sharing, submitting papers to OA repositories will boost the article's visibility and citations.Singh *et al.* (2020) found that for the global visibility, the SAARC countries used IR to enhance the research impact and make it more popular amongst the scholarly communities. According to the findings of the study, out of 128 IRs, 14.06% of them were registered between 2013 and 2019. DSpace (60.94%) and E-Prints (25%) are the two software programmes that are most commonly used to create repositories. In terms of IRs amongst the SAARC nations, India contributes the most (72.66%). Rodríguez and Gallardo (2018) explained how the Institutional Digital Repository (IDR) was built as a plan to increase the

academic output of the UFPS-CUCUTA visibility and influence on the national and international levels. By adopting these tactics, the UFPS increased its exposure and the influence of its academic and research production on national and international levels, which advances science ranking on the university's website. The main barriers to developing IRs in African academic institutions, according to Dlamini and Snyman (2017), include a lack of funding, a lack of managerial support, and a lower level of understanding of IRs. In order to raise the awareness of the research, the study advised African academic institutions to both expand the number of IRs and enhance their utilisation (Kim, 2011). In a research of 17 Carnegie doctoral-granting universities in the United States of America, it was discovered that long-term preservation and copyright issues were the academics' motivating reasons for contributing to IRs.

Access and exposure are the two main problems that Indian scientists confront, according to Arunachalam and Muthu (2008). They have problems obtaining previously published content since it is expensive to subscribe to journals and databases. In a similar vein, foreign academics were denied access to the work being done by Indian researchers. This is due to the fact that a significant portion of research published in India is distributed through national publications that are not indexed or abstracted in the top databases. As a result, there are fewer readers and publications by Indian scientists. Gh *et al.* (2016) discovered that because of open-source software like DSpace, GNU EPrints and others, IRs are rapidly growing in India. The DSpace programme was chosen by 27 (or 63%) of the 43 IRs because it allows permanent access to digital data. With 14 repositories using it (33%) and other programmes being used by 2%, Eprints is the second most used software.

C. Search Optimisation

Search optimisation is the process of selecting key phrases and putting them in the content of the abstract for search engine optimisation (SEO). Avoiding titles with questions, use of comprehensive title that make use of the prominent words, as well as selecting a journal as publishing venue that included in the most significant library databases pertinent to the research area (O' Neill and Curran, 2011).

High exposure of an article may be accomplished through SEO techniques and modern methods that can enhance visibility and raise the number of citations. For academics, writing research papers for publication requires a lot of time and effort. A paper's influence on citations is not, however, guaranteed by publishing in a prominent journal with a high impact factor. The chance that a research publication is accessible online and the number of citations are highly correlated. Shahzad *et al.* (2017).

The author has to create a personal website or blog where he or she may publish their research contributions, thoughts, ideas and major findings. They can also use this space to promote their research work or to explain how their work has influenced and been useful to others. He or she can publish download links and a list of all of his research articles on a personal website or blog (Tripathy, J. P. *et al*, 2017). This will raise both the visibility and the number of citations for his or her research works. Unique author identifiers are essential for all research. Each researcher should establish their own author identity in order to set themselves and their work apart from that of other researchers (ORCID) (Tripathy *et al,* 2017; Shahzad *et al,* 2017).

One of the most crucial variables for assessing a website's search engine rating, popularity and value is the amount of back links it has (Jones, Kristopher 2018). "When a research article links to any website, it is called a back link for the research article" (Chavan *et al.* 2013).

Hence, the act of creating a back link for a research article is another important method for SEO. Back links, in the opinion of SEO professionals, are crucial for content visibility and a crucial ranking factor for research papers. An article with plenty of hyperlinks has a tendency to rank first on Google as well as other major search engines (Chavan *et al,* 2013).

The generation of back links for research articles can be done in a variety of ways. This can be accomplished by creating back links through social media. The author can look for pertinent online forums, join discussions, and include a link to his or her research publications as references. Additionally, the author might link to his or her research articles by writing guest pieces for the best research sites. Author can raise visibility of research articles and his research profile by building quality back links in pertinent forums, blogs, and discussion groups (Shahzad *et al.,* 2017; Chavan *et al.* 2013).

The researchers having more knowledge of computers, search engine optimisation and having the practice of sharing research in social media usually get more impact for their research work (Lotfipanah and Azadeh (2017). Taryn and Avery (2017) conducted a research on "Increasing Article Find ability Online: The Four Cs of Search Engine Optimization". In that study, the researchers concentrated on four SEO best practises for legal scholarship, including cross-discipline marketing to other disciplines, converting to searchable PDFs and developing strong titles, abstracts and metadata. By implementing the four recommended practises, the authors have the ability to increase the possibility that their research product will be found online. Ale Ebrahim (2017) in his study "Improving Research Visibility Part 1: Academic Search Engine Optimization" suggested the following strategies for search engine optimisation to enhance visibility.

(1) Choose the right keywords and search terms to improve visibility;

(2) Make sure the article's title is optimised for search engines;

(3) Use synonyms, key phrases and keywords whilst creating the abstract;

(4) To avoid ambiguity, get an ORCID and use it when submitting works to publishers;

(5) Use headings for various sections, it will help in structuring the article;

(6) Cite earlier works;

(7) Tables and figures should have machine-readable text and

(8) Make sure the article title contains the primary keyword of the subject.

Also Shahzad *et al.* (2017) examined how SEO strategies can raise a research paper's visibility. The strategies are the research paper's title optimisation, consistency and density of keywords, the coherence between the author's name and the researcher's website, social contributions made by researchers to Wikipedia and the generation of back links for research articles.

Schilhan *et al.* (2021) examined the effects of SEO strategies that can raise a research paper's visibility. They discuss some important terms for title optimisation, keyword optimisation and abstract optimisation for scholarly publication. These terms are listed below:

Table 2 shows the search engine optimisation strategies. The optimisation of abstracts, titles and keywords is a crucial component of content generation. Your material may

Title optimisation	Keyword optimisation	Abstract optimisation
Utilise descriptive titles	Utilise a thesaurus	Concise statements
Considering search phrases don't utilise acronyms	Broad versus specific terms	The key terms up top
Keep it brief	Utilise the singular form	Utilise similar words
Do not use special characters	Viewpoint of a seeker	Informative writing
Careful not to overwhelm	Expressive phrasing	Repeat of keywords

Table 2.
Strategies for search engine optimization by courtesy of Schilhan *et al.* (2021)

successfully reach and engage its intended audience by using single forms, choosing strong keywords and creating succinct sentences. Increased visibility and user happiness will eventually result from using a combination of general and particular terminology appropriately, refraining from acronyms and writing in an instructive manner.

c. Research data sharing

Research data are the raw materials that are obtained, prepared and reviewed whilst a study is being conducted. They act as the substantiating proof for results of published study. Research data may be found in text, Word and spreadsheet documents, diaries, lab notebooks, forms, audio and video recordings, photographs, movies, test results, slides, artefacts, samples, database contents, workflows and procedures, amongst other things. Sharing of research data helps in getting more visibility and Other researchers can use your data when they are is easily accessible, or they might want to interact with you to expand on the data you have previously shared. Pinho and Diogo (2018) conducted a research on "Enhancing the visibility and impact of scholarly research: an exploratory study on knowledge production settings". In this study, they explored that the researcher must communicate their research data, findings and spread their products such as articles, patents, etc. on an individual basis to enhance their research impact. The literature on the field makes the case that raising research's visibility is necessary to increase its impact on society and academia alike. In an exploratory study conducted by the authors at two university research centres in Portugal, they discovered some findings in certain responses that many respondents use ResearchGate (28%), ORCID (22%), Google Scholar (21%) and Academia. edu (20%) to deliver their research profile and research data. They also mentioned that participants are sharing their documents, like articles, posters and presentations, in different websites to get more impact and visibility. They discovered that disseminating research and its results can enhance its effect and advancement in the scientific community, where researchers are perceived as belonging or view their scientific contributions. This will simultaneously boost the quantity of citations. Ali and Saeed (2019) conducted a survey amongst researchers and the Aligarh Muslim University's (AMU) teaching fraternity of life sciences and social sciences. In that study, they found many reasons mentioned in following Figure 1, due to which research scholars in the social sciences are more open to sharing their findings than those in the life sciences. They also identified the different types of research data they are sharing amongst others (experimental measurements, statistical data, laboratory notes, clinical measurements, observations, questionnaires, photographs, films and test responses).
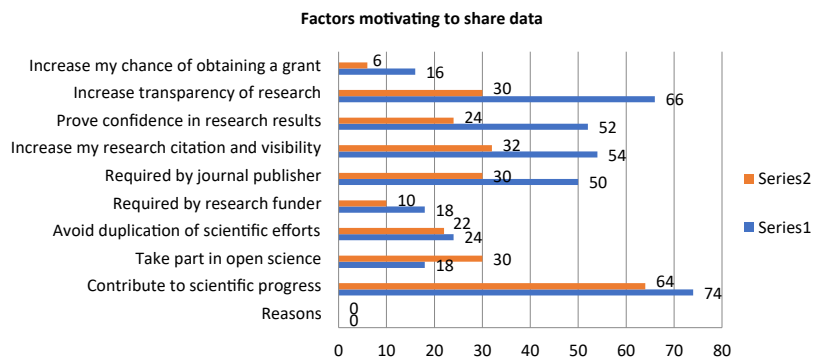

Figure 1.
Factors motivating to share research data by courtesy of Ali and Saeed (2019)

Louise Bezuidenhout and EreckChakauya (2018) carried a study on "Hidden concerns of
sharing research data by low/middle income country scientists". In this study, they were
concerned about the issues that encourage data sharing amongst researchers, so they used
information from a quantitative survey distributed to life scientists in 13 countries in Sub-
Saharan Africa. They also studied how the data sharing connected the researchers to the
research environment and gained visibility. Increased research impact and visibility were
identified as the main motivators for data sharing (55%) by the study. Also, they discovered
that many respondents utilised "altmetric" sharing services like Figshare (16%) and the
overwhelming majority of responders used peer-review publication (80%), emailed
collaborators (80%) and kept active research gate profiles (73%), IR (53%) and online
database (58%). Only some respondents mentioned a personal webpage (39%) for data
sharing. The responders also noted that networking and cooperation possibilities and the
progress of knowledge were the two main advantages of sharing their own data. The
researchers also found that 60% respondents mentioned that they felt at ease revealing pre-
publication information to others they knew, and 13% of respondents shared pre-publication
data with an unknown person.

Suhr et al. (2020) made a research on "Search, reuse and sharing of research data in
materials science and engineering—A qualitative interview study". The researchers who
took part in that study were questioned about potential incentives for sharing their research
data and found many reasons like encouragement by supervisors, increasing visibility,
getting citations, career benefits, facilitation of research, encouragement by funding agency,
getting feedback on the work, formation of collaborations, etc. Also Shahzad et al. (2017) in his
study "The Impact of Search Engine Optimization on The Visibility of Research Paper and
Citations" suggested that the author can upload all these data to public repositories to raise
the profile of their research and also post all the slides for better visibility as the research
community utilises SlideShare and Scribd regularly. It will increase visibility if research data
are published on Figshare, Datadryad and Zenodo etc. According to several studies, the
optimal method of distributing data in terms of preservation, openness and authorship
acknowledgement (which will help boost SEO) is to submit datasets to data repositories.
There were 9% (95% confidence interval: 5%–13%) more citations for data that were made
accessible in a public repository than for data that were not, according to 2013 research by
Piwowar and Vision on "Data reuse and the open data citation advantage". Additionally, they
claimed that articles employing publicly available datasets received more citations than
equivalent research that lacked data.

The ability to be seen these days when other researchers begin their own work is crucial
for a universal research scientist. Therefore, in order to promote scientific productions, more
data sharing in some channels is necessary.

Conclusion

In conclusion, the review of literature on practices for enhancing research visibility,
citations and impact highlights the significance of adopting various strategies to effectively
promote research output. It is evident that researchers need to adopt a multifaceted
approach that involves a combination of traditional and modern methods to achieve
maximum impact. The number of citations will significantly increase whenever a paper's
exposure rises. Consequently, a few easy methods can improve an article's prominence.
Simply by using particular practices, researchers might improve their reputation and
visibility. These practices include publishing in high-impact journals, utilising social media
and academic networking sites, creating effective and informative titles, abstracts and
keywords and making research accessible and understandable to a broader audience
through OA platforms.

The biggest advantages of visibility include getting noticed, enhancing communication and having more in-depth scientific knowledge, as well as improved teamwork, a passion for research and excellence in collaboration and research, as well as higher output, career advancement, an increase in exploratory studies, referencing levels and utilising scholarly journals.

Sabitri Majhi
Department of Library and Information Science, Sambalpur University, Burla, India
Lili Sahu
Department of Library and Information Science, Fakir Mohan University, Balasore, India, and
Kabita Behera
Department of Library and Information Science, Sambalpur University, Burla, India

References

Akpokodje, V.N. and Akpokodje, E.T. (2015), "Availability and utilization of institutional repositories as indicators to institutional web ranking", *European Journal of Computer Science and Information Technology (2054-0957)*, Vol. 3, available at: http://Www.Eajournals.Org/Journals/European-Journal-Of-Computer-Science-And-Information-Technology-Ejcsit/Vol-3issue-2-May-2015/29 40).

Ale Ebrahim, N. (2016a), *Online Repository: Improving the Research Visibility and Impact*, doi: 10.6084/m9.figshare.2060826.

Ale Ebrahim, N. (2016b), *Research Tools: Enhancing Visibility and Impact of the Research*, doi: 10.6084/m9.figshare.2794237.

Ale Ebrahim, N. (2017), *Improving Research Visibility Part 1: Academic Search Engine Optimization*, doi: 10.6084/m9.figshare.4884275.v1.

Ale Ebrahim, N., Salehi, H., Embi, M., Tanha, F., Gholizadeh, H. and Motahar, S.M. (2014), "Visibility and citation impact", *International Education Studies*, Vol. 7, pp. 120-125, doi: 10.5539/ies.v7n4p120.

Ali, N. and Saeed, S. (2019), "Research data management and data sharing among research scholars of life sciences and social sciences", *DESIDOC Journal of Library and Information Technology*, Vol. 39 No. 6, pp. 290-299, doi: 10.14429/djlit.39.06.14997.

Archambault, E., *et al.* (2014), *Proportion of Open Access Papers Published in Peer-Reviewed Journals at the European and World Levels – 1996-2013*, available at: http://science-metrix.com/en/publications/reports/proportion-of-open-access-papers-published-in-peer-reviewed-journals-at-the (accessed 20 June 2016).

Arunachalam, S. and Muthu, M. (2008), *Open Access to Scholarly Literature in India—A Status Report (With Emphasis on Scientific Literature)*.

Bezuidenhout, L. and Chakauya, E. (2018), "Hidden concerns of sharing research data by low/middle-income country scientists", *Global Bioethics*, Vol. 29 No. 1, pp. 39-54, doi: 10.1080/11287462.2018.1441780.

Björk, B.-C. (2006), "Open access—maximizing research impact in the internet age", *Journal of Computing in Civil Engineering*, Vol. 20, pp. 225-226, doi, doi: 10.1061/(ASCE)0887-3801(2006)20:4(225).

Björk, B.-C. (2017), "Growth of hybrid open access, 2009-2016", *PeerJ*, Vol. 5, e3878, doi: 10.7717/peerj.3878.

Björk, B.C., Welling, P., Laakso, M., Majlender, P., Hedlund, T., *et al.* (2010), "Open access to the scientific journal literature: situation 2009", *PLoS ONE*, Vol. 5 No. 6, e11273, doi: 10.1371/journal.pone.0011273, available at: http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0011273.

Brown, J., Demeranville, T. and Meadows, A. (2016), "Open access in Context: connecting authors, publications and workflows using ORCID identifiers", *Publications*, Vol. 4 No. 4, p. 30, doi: 10. 3390/publications4040030.

Cerejo, C. (2013), "How to make your paper more accessible through self-archiving", available at: www.editage.com/insights/how-to-make-your-paper-more-accessible-through-self-archiving.

Chen, S., Arsenault, C. and Larivière, V. (2015), "Are top-cited papers more interdisciplinary?", *Journal of Informetrics*, Vol. 9 No. 4, pp. 1034-1046, doi: 10.1016/j.joi.2015.09.003.

Craig, I.D., Plume, A.M., McVeigh, M.E., Pringle, J. and Amin, M. (2007), "Do open access articles have greater citation impact?: a critical review of the literature", *Journal of Informetrics*, Vol. 1 No. 3, pp. 239-248, doi: 10.1016/j.joi.2007.04.001.

Crow, R. (2002), "The case for institutional repositories: a sparc position paper", *Scholarly Publishing*, Vol. 223, pp. 1-37.

Davis, P.M., Lewenstein, B.V., Simon, D.H., Booth, J.G. and Connolly, M.J.L. (2008), "Open access publishing, article downloads, and citations: randomised controlled trial", *BMJ*, Vol. 337, p. a568, doi: 10.1136/bmj.a568.

Dlamini, N.N. and Snyman, M. (2017), "Institutional repositories in Africa: obstacles and challenges", *Library Review*, Vol. 66 Nos 6/7, pp. 535-548.

Ertürk, K.L. and Şengül, G. (2012), "Self archiving in atılım university", in Kurbanoğlu, S., Al, U., Erdoğan, P.L., Tonta, Y. and Uçak, N. (Eds), *E-science and Information Management*, Springer, pp. 79-86, doi: 10.1007/978-3-642-33299-9_11.

Fredericks, S. (2015), "Questioning the efficacy of 'gold' open access to published articles", *Nurse Researcher*, Vol. 22, pp. 8-10, doi: 10.7748/nr.22.6.8.e1370.

Figshare—Credit for all your research (n.d.), available at: https://figshare.com/ (accessed 24 April 2023).

Foster, N.F. and Gibbons, S. (2005), "Understanding faculty to improve content recruitment for institutional repositories", *D-lib Magazine*, Vol. 11 No. 01, doi: 10.1045/january2005-foster.

Gargouri, Y., *et al.* (2010), "Self-selected or mandated, open access increases citation impact for higher quality research", *PLoS ONE*, Vol. 5 No. 10, e13636, doi: 10.1371/journal.pone.0013636.

Gh, S., Jeelani, M., Mir, H., Wani, B., Wani, A. and Jeelani, S. (2016), "Institutional repositories in India: an evaluative study", *INTERNATIONAL JOURNAL OF LIBRARY AND INFORMATION SCIENCE*, Vol. 5, pp. 166-184.

Giglia, E. (2011), "Academic social networks: it's time to change the way we do research", *European Journal of Physical and Rehabilitation Medicine*, Vol. 47, pp. 345-350.

Gireesh Kumar, T.K. and Muruli (2017), "Researcher identifiers and profiles: community standard networks to enhance global collaboration", *Journal of Indian Library Association*, Vol. 53 Nos 2&3, pp. 61-71.

González, P., Mueller-Langer, F. and Watt, R. (2022), *The Influence of Funding on the Open Access Citation Advantage*, 2014, I.

Gumpenberger, C., Ovalle-Perandones, M.-A. and Gorraiz, J. (2013), "On the impact of gold open access journals", *Scientometrics*, Vol. 96, doi: 10.1007/s11192-012-0902-7.

Hajjem, C., Harnad, S. and Gingras, Y. (2005a), "Ten-year cross-disciplinary comparison of the growth of open access and how it increases research citation impact", *IEEE Data Engineering Bulletin*, Vol. 28 No. 4, pp. 39-47, available at: http://eprints.ecs.soton.ac.uk/11688/.

Hajjem, C., Gingras, Y., Brody, T., Carr, L. and Harnad, S. (2005b), *Open Access to Research Increases Citation Impact*.

Jones, K. (2018), *How to Push Great Content that Isn't Ranking Well. Searchenginejournal.Com*, (accessed 27 05 2020).

Kim, J. (2011), "Motivations of faculty self-archiving in institutional repositories", *The Journal of Academic Librarianship*, Vol. 37 No. 3, pp. 246-254, doi: 10.1016/j.acalib.2011.02.017.

Kurtz, M.J., Eichhorn, G., Accomazzi, A., Grant, C., Demleitner, M., Henneken, E. and Murray, S.S. (2005), "The effect of use and access on citations", *Information Processing & Management*, Vol. 41 No. 6, pp. 1395-1402, doi: 10.1016/j.ipm.2005.03.010.

Lotfipanah, M. and Azadeh, F. (2017), *Enhance Impact of Researchers, Journals and Increase Success for More Citations*, Vol. 11.

Lupton (2013), *Opening up Your Research: A Guide to Self-Archiving | Impact of Social Sciences*, n.d., available at: https://blogs.lse.ac.uk/impactofsocialsciences/2013/09/20/opening-up-your-research-self-archiving-for-sociologists/ (accessed 20 October 2022).

Mazurek, G., Górska, A., Korzynski, P. and Silva, S. (2020), "Social networking sites and researcher's success", *Journal of Computer Information Systems*, Vol. 62 No. 2, doi: 10.1080/08874417.2020.1783724.

McCulloch, E. (2006), "Taking stock of open access: progress and issues", *Library Review*, Vol. 55 No. 6, pp. 337-343, doi: 10.1108/00242530610674749.

Miguel, S., Chinchilla-Rodriguez, Z. and de Moya-Anegón, F. (2011), "Open access and Scopus: a new approach to scientific visibility from the standpoint of access", *Journal of the American Society for Information Science and Technology*, Vol. 62 No. 6, pp. 1130-1145, doi: 10.1002/asi.21532.

Mikki, S., Zygmuntowska, M., Gjesdal, Ø.L. and Al Ruwehy, H.A. (2015), "Digital presence of Norwegian scholars on academic network sites—where and who are they?", *PLOS ONE*, Vol. 10 No. 11, e0142709, doi: 10.1371/journal.pone.0142709.

Moed, H.F. (2007), "The effect of 'open access' on citation impact: an analysis of ArXiv's condensed matter section", *Journal of the American Society for Information Science and Technology*, Vol. 58 No. 13, pp. 2047-2054, doi: 10.1002/asi.20663.

Mrs, A.-O. and Ezechukwu, O. (2020), *An Analytical Study Of Open Access Institutional Repositories In Nigerian Universities*, available at: https://digitalcommons.unl.edu/libphilprac.

Mueller-Langer, F. and Watt, R. (2014), "The hybrid open access citation advantage: how many more cites is a $3,000 Fee buying you?", *SSRN Electronic Journal*, doi: 10.2139/ssrn.2391692.

Muscanell, N. and Utz, S. (2017), "Social networking for scientists: an analysis on how and why academics use ResearchGate", *Online Information Review*, Vol. 41, doi: 10.1108/OIR-07-2016-0185.

Netravati, Y., Hajjem, C., Larivière, V., Gingras, Y., Carr, L., Brody, T. and Harnad, S. (2010), "Self-selected or mandated, open access increases citation impact for higher quality research", *PloS One*, Vol. 5 No. 10, e13636, doi: 10.1371/journal.pone.0013636.

Nicholas, D., Huntington, P. and Rowlands, I. (2005), "Open access journal publishing: the views of some of the world's senior authors", *Journal of Documentation*, Vol. 61 No. 4, pp. 497-519, doi: 10.1108/00220410510607499.

Norman, E.R. (2012), "Maximizing journal article citation online: readers, robots, and research visibility", *Politics & Policy*, Vol. 40 No. 1, pp. 1-12, doi: 10.1111/j.1747-1346.2011.00342.x.

Ogunleye, B. (2019), "SOME determinants of visibility boost for research publications among early career educational researchers IN SOUTHWEST, Nigeria bamikole O. Ogunleye", *African Journal of Pedagogy*, Vol. 8 No. 1, pp. 93-111.

O'Neill, S. and Curran, K. (2011), "The core aspects of search engine optimisation necessary to move up the ranking", *IJACI*, Vol. 3, pp. 62-70, doi: 10.4018/jaci.2011100105.

Okeji, C., Eze, E. and Maureen, C. (2018), "Awareness and use of self-archiving options among academic librarians in Nigerian universities", *Global Knowledge, Memory and Communication*, Vol. 68 No. 4, doi: 10.1108/GKMC-12-2017-0109.

Organ, M. (2006), "Download statistics - what do they tell us? The example of research online, the open access institutional repository at the university of Wollongong, Australia", *Academic Services Division - Papers*, p. 121.

Ortega, J. (2015), "Disciplinary differences in the use of academic social networking sites", *Online Information Review*, Vol. 39, pp. 520-536, doi: 10.1108/OIR-03-2015-0093.

PeerJ - Search (n.d.), available at: https://peerj.com/preprints/ (accessed 24 April 2023).

Pinho, I. and Diogo, S. (2018), "Enhancing the Visibility and Impact of Scholarly Research: an exploratory study on knowledge production settings", *Meta: Avaliacao*, Vol. 10, p. 502, doi: 10. 22347/2175-2753v10i30.1606.

Racz, A. and Marković, S. (2018), "'Worth(less) papers' – are journal impact factor and number of citations suitable indicators to evaluate quality of scientists?", *Nova Prisutnost*, Vol. XVI No. 2, pp. 369-388, doi: 10.31192/np.16.2.10.

Rao, Y.S. (2021), "Scientific publication process and its impact on growth of science", *Annals of Library and Information Studies (ALIS)*, Vol. 68 No. 1, 1, doi: 10.56042/alis.v68i1.31709.

Reznik-Zellen, R. and Adamick, J. (2012), "Supporting virtual communities through disciplinary repository development", *Library Hi Tech*, Vol. 30 No. 2, pp. 275-290, doi: 10.1108/ 20177378831211239951.

Rodríguez, J.P. and Gallardo, O.A. (2018), "Visibility strategy of the academic production and research output of the UFPS:Institutional digital repository", *Journal of Physics: Conference Series*, Vol. 1126, 012031, doi: 10.1088/1742-6596/1126/1/012031.

Schilhan, L., Kaier, C. and Lackner, K. (2021), "Increasing visibility and discoverability of scholarly publications with academic search engine optimization", *Insights the UKSG Journal*, Vol. 34 No. 8, doi: 10.1629/uksg.534.

Shah, J.N. (2020), "The ORCID, why we need yet another ID?", *Journal of Patan Academy of Health Sciences*, Vol. 7 No. 1, pp. 1-3, doi: 10.3126/jpahs.v7i1.28840.

Shah, J.N.解伊. (2022), "Researcher's personal profile on Academic Social Network sites: connection, visibility, and impact of academic work", *Journal of Institute of Medicine Nepal*, Vol. 43 No. 3, pp. 9-14.

Shahzad, A., MohdNawi, N., Hamid, N., Khan, S., Aamir, M., Ulah, A. and Abdullah, S. (2017), "The impact of search engine optimization on the visibility of research paper and citations", *JOIV : International Journal on Informatics Visualization*, Vol. 1, p. 195, doi: 10.30630/joiv.1.4-2.77.

Shehata, A., Ellis, D. and Foster, A. (2015), "Scholarly communication trends in the digital age informal scholarly publishing and dissemination, a grounded theory approach", *The Electronic Library*, Vol. 33 No. 6, pp. 1150-1162.

Singh, M., Kuri, R.K.G. and Singh, K. (2020), "Global visibility of open access institutional repositories of SAARC countries: an explorative study", *Library Philosophy and Practice*, pp. 1-20.

Smith, D. (2013), *What Is Kudos? an Interview with David Sommer, Co-founder*, The Scholarly Kitchen, available at: https://scholarlykitchen.sspnet.org/2013/12/17/what-is-kudos-an-interview-with-david-sommer-co-founder/.

Suber, P. (2004), *A Very Brief Introduction to Open Access*, available at: https://dash.harvard.edu/ handle/1/4727454.

Suhr, B., Dungl, J. and Stocker, A. (2020), "Search, reuse and sharing of research data in materials science and engineering—a qualitative interview study", *PLOS ONE*, Vol. 15 No. 9, e0239216, doi: 10.1371/journal.pone.0239216.

Swan, A. (2006), "The culture of Open Access: researchers' views and responses", in Jacobs, N. (Ed.), *Open Access: Key Strategic, Technical and Economic Aspects*.

Tate (2010), *An Evaluation of SOAS Research Online, the Institutional Repository of the School of Oriental and African Studies*, n.d., available at: https://5dok.net/document/qmj617o7-evaluation-research-online-institutional-repository-oriental-african-studies.html (accessed 8 September 2022).

Tripathy, J.P., Bhatnagar, A., Shewade, H.D., Kumar, A.M.V., Zachariah, R. and Harries, A.D. (2017), "Ten tips to improve the visibility and dissemination of research for policy makers and practitioners", *Public Health Action*, Vol. 7 No. 1, pp. 10-14, doi: 10.5588/pha.16.0090.

Van Noorden, R. (2014), "Online collaboration: scientists and the social network", *Nature*, Vol. 512 No. 7513, pp. 126-129.

Young, J.S. and Brandes, P.M. (2020a), "Green and gold open access citation and interdisciplinary advantage: a bibliometric study of two science journals", *The Journal of Academic Librarianship*, Vol. 46 No. 2, 102105, doi: 10.1016/j.acalib.2019.102105.

Young, J.S. and Brandes, P.M. (2020b), "Green and gold open access citation and interdisciplinary advantage: a bibliometric study of two science journals", *The Journal of Academic Librarianship*, Vol. 46 No. 2, 102105, doi: 10.1016/j.acalib.2019.102105.

Zenodo—Research. Shared (n.d.), available at: https://zenodo.org/(accessed 24 April 2023).

Zainab (2010), "Open access repositories and journals for visibility: implications for MALAYSIAN libraries", *Malaysian Journal of Library & Information Science*, Vol. 15 No. 3, Article 3.

Zhang, L. and Watson, E.M. (2017), "Measuring the impact of gold and green open access", *The Journal of Academic Librarianship*, Vol. 43 No. 4, pp. 337-345, doi: 10.1016/j.acalib.2017.06.004.

Further reading

Aguinis, H., Yu, L. and Tosun, C. (2021), "How to enhance scholarly impact: recommendations for university administrators, researchers and educators", *International Journal of Contemporary Hospitality Management*, Vol. 33 No. 8, pp. 2485-2499, doi: 10.1108/IJCHM-10-2020-1189.

Aksnes, D.W., Langfeldt, L. and Wouters, P. (2019), "Citations, citation indicators, and research quality: an overview of basic concepts and theories", *SAGE Open*, Vol. 9 No. 1, 2158244019829575, doi: 10.1177/2158244019829575.

Ale Ebrahim, N. (2015), *Strategies to Enhance Research Visibility, Impact & Citations*, doi: 10.6084/m9.figshare.1404937.

Anatomy of green open access—Björk—2014—Journal of the Association for Information Science and Technology—Wiley Online Library (n.d.), available at: https://asistdl.onlinelibrary.wiley.com/doi/10.1002/asi.22963 (accessed 25 April 2023).

Archambault, S. (2001), "Free online availability substantially increases a paper's impact", *Nature*, Vol. 411, p. 521, doi: 10.1038/35079151.

ArXiv.org e-Print archive (n.d.), available at: https://arxiv.org/ (accessed 24 April 2023).

Björk, B.-C., Laakso, M., Welling, P. and Paetau, P. (2014), "Anatomy of green open access", *Journal of the Association for Information Science and Technology*, Vol. 65 No. 2, pp. 237-250, doi: 10.1002/asi.22963.

Digital Commons (n.d.), *Bepress*, available at: https://bepress.com/products/digital-commons/ (accessed 24 April 2023).

Directory of Open Access Journals (2023), available at: https://doaj.org/.

Discover the Best eBooks (n.d.), *Discover the Best eBooks, Audiobooks, Magazines, Sheet Music, and More*, Scribd, available at: https://www.scribd.com/ (accessed 24 April 2023)

EndNote | The best reference management tool (n.d.), "EndNote", available at: https://endnote.com/ (accessed 24 April 2023).

EPrints Services (n.d.), available at: https://www.eprints.org/uk/ (accessed 24 April 2023).

Foster, N.F. and Gumpenberger s, S. (2005), "Understanding faculty to improve content recruitment for institutional repositories", *D-lib Magazine*, Vol. 11 No. 01, doi: 10.1045/january2005-foster.

Fox, Pine and Sauterey (2010), *Citations Increase with Manuscript Length, Author Number, and References Cited in Ecology Journals—Fox—2016—Ecology and Evolution—Wiley Online Library*, n.d., available at: https://onlinelibrary.wiley.com/doi/10.1002/ece3.2505 (accessed 10 October 2022).

Gadd, E. and Troll Covey, D. (2019), "What does 'green' open access mean? Tracking twelve years of changes to journal publisher self-archiving policies", *Journal of Librarianship and Information Science*, Vol. 51 No. 1, pp. 106-122, doi: 10.1177/0961000616657406.

González-Betancor, S.M. and González, P. (2017), "An indicator of the impact of journals based on the percentage of their highly cited publications", *Online Information Review*, Vol. 41, doi: 10.1108/OIR-01-2016-0008.

Google Scholar (n.d.), available at: https://scholar.google.com/ (accessed 24 April 2023).

Harnad, S. and Brody, T. (2004), "Comparing the impact of open access (OA) vs. Non-OA articles in the same journals", *D-lib Magazine*, Vol. 10, doi: 10.1045/june2004-harnad.

Home (n.d.), available at: https://www.dspace.com/en/pub/home.cfm (accessed 24 April 2023).

Home: SSRN (n.d.), available at: https://www.ssrn.com/index.cfm/en/ (accessed 24 April 2023).

How to make your paper more accessible through self-archiving (2013), "Editage insights", available at: https://www.editage.com/insights/how-to-make-your-paper-more-accessible-through-self-archiving, available at: http://medicalfuturist.com/researchgate-launches-selfarchiving-repository/ (accessed 20 October 2023)

Humanities Commons – Open access, open source, open to all (n.d.), available at: https://hcommons.org/(accessed 24 April 2023).

Improving Access to Research Results (2006), *CNI: Coalition for Networked Information*, available at: https://www.cni.org/publications/cliffs-pubs/improving-access-to-research-results.

Increasing Article Findability Online: The Four Cs of Search Engine Optimization by Taryn Marks, Avery Le: SSRN (n.d.), available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3204550 (accessed 20 October 2022).

INFLIBNET Centre Gandhinagar (n.d.), available at: https://www.inflibnet.ac.in/(accessed 24 April 2023).

Jacso, P. (2006), "Open access to scholarly full-text documents", *Online Information Review*, Vol. 30, pp. 587-594, doi: 10.1108/14684520610706442.

Jain, S. and Makwana, J. (2022), *Author and Researcher Identifier Services: A Case of Open Researcher and Contributor ID (ORCID)*.

Kennan, M. and Wilson, C. (2006), "Institutional repositories: review and an information systems perspective", *Library Management*, Vol. 27, doi: 10.1108/01435120610668179.

Kumar, G. (2019), "Distinguish yourself from someone: role of researcher profiles in the academic environment", *the proceedings of TEQIP III Sponsored International Conference on Digital Technologies and Transformation in Academic Libraries(DigiTTAL-2019) organized by Central Library*, at NIT Surathkal, Mangalore, Karnataka, during December 26-28, 2019, Vol. 1, National Institute of Technology,Karnataka (NITK), pp. 292-301, ISBN: 978-81-941940-0-2.

LinkedIn India: Log In or Sign Up (n.d.), available at: https://in.linkedin.com/(accessed 24 April 2023).

Madson (2019), *Scientific Impact and the Quest for Visibility*, n.d., available at: https://febs.onlinelibrary.wiley.com/doi/epdf/10.1111/febs.15043 (accessed 19 August 2022).

Mannheimer, S., Pienta, A., Kirilova, D., Elman, C. and Wutich, A. (2019), "Qualitative data sharing: data repositories and academic libraries as key partners in addressing challenges", *American Behavioral Scientist*, Vol. 63 No. 5, pp. 643-664, doi: 10.1177/0002764218784991.

Maximizing Journal Article Citation Online: Readers, Robots, and Research Visibility—NORMAN - 2012—Politics & Policy—Wiley Online Library (n.d.), available at: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1747-1346.2011.00342.x (accessed 20 October 2022).

Mendeley—Reference Management Software (n.d.), available at: https://www.mendeley.com/ (accessed 24 April 2023).

Newsletter | Penprofile (2022), available at: https://www.penprofile.com/newsletter/.

Open Access to Scholarly Literature in India—A Status Report (with Emphasis on Scientific Literature) | Eldis (n.d.), available at: https://www.eldis.org/document/A61161 (accessed 25 April 2023).

Pampel, H., Vierkant, P., Scholze, F., Bertelmann, R., Kindling, M., Klump, J., Goebelbecker, H.-J., Gundlach, J., Schirmbacher, P. and Dierolf, U. (2013), "Making research data repositories visible: the re3data.org Registry", *PLOS ONE*, Vol. 8 No. 11, e78080, doi: 10.1371/journal.pone.0078080.

[PDF] Implementation of Concept Based Image Search Algorithm by Rupali S. Chavan, S. M. Patil · 1503117163 · OA.mg (n.d.), available at: https://oa.mg/work/1503117163 (accessed 2 November 2023).

Piwowar and Vision (2013), *Data Reuse and the Open Data Citation Advantage [PeerJ]*, n.d., available at: https://peerj.com/articles/175/ (accessed 10 October 2022).

Piwowar, Day and Fridsma (2007), *Sharing Detailed Research Data Is Associated with Increased Citation Rate | PLOS ONE*, n.d., available at: https://journals.plos.org/plosone/article?id=10. 1371/journal.pone.0000308 (accessed 10 October 2022).

Popkin, G. (2019), "Data sharing and how it can benefit your scientific career", *Nature*, Vol. 569 No. 7756, pp. 445-447, doi: 10.1038/d41586-019-01506-x.

PubMed (n.d.), "PubMed", available at: https://pubmed.ncbi.nlm.nih.gov/ (accessed 24 April 2023).

Rankin, J. (2020), *Increasing the Impact of Your Research: A Practical Guide to Sharing Your Findings and Widening Your Reach*, doi: 10.4324/9780429345166.

RePEc: Research Papers in Economics (n.d.), available at: http://repec.org/(accessed 24 April 2023).

Researcher's personal profile on Academic Social Network sites: Connection, visibility, and impact of academic work (n.d.), available at: https://www.researchgate.net/publication/363480274_ Researcher's_personal_profile_on_Academic_Social_Network_sites_Connection_visibility_ and_impact_of_academic_work (accessed 20 October 2022).

Search, reuse and sharing of research data in materials science and engineering—A qualitative interview study | PLOS ONE (n.d.), available at: https://journals.plos.org/plosone/article?id=10. 1371/journal.pone.0239216 (accessed 24 April 2023).

Self-selected (n.d.), "Self-selected or mandated, open access increases citation impact for higher quality research", *PLoS ONE*, Vol. 5 No. 10, e13636, doi:10.1371/journal.pone.0013636.

Singh, N.K., Sharma, J. and Kaur, N. (2013), "Institutional repositories initiatives in India: a study [chapter]", in *Design, Development, and Management of Resources for Digital Library Services*, IGI Global, doi: 10.4018/978-1-4666-2500-6.ch018.

Singh, N.K., Sharma, J. and Kaur, N. (2015), "Institutional repositories initiatives in India: a study [chapter]", in *Open Source Technology: Concepts, Methodologies, Tools, and Applications*, IGI Global, doi: 10.4018/978-1-4666-7230-7.ch014.

SocArXiv Papers (n.d.), available at: https://osf.io/preprints/socarxiv (accessed 24 April 2023).

SocOpen: Home of SocArXiv (n.d.), "SocOpen: home of SocArXiv", available at: https://socopen.org/ (accessed 24 April 2023).

The effect of "open access" on citation impact: An analysis of ArXiv's condensed matter section—Moed—2007—Journal of the American Society for Information Science and Technology—Wiley Online Library (n.d.), available at: https://onlinelibrary.wiley.com/doi/10.1002/asi.20663 (accessed 25 April 2023).

Welcome: Greenstone Digital Library Software (n.d.), available at: https://www.greenstone.org/ (accessed 24 April 2023).

Welcome to Cogprints—Cogprints (n.d.), available at: https://web-archive.southampton.ac.uk/ cogprints.org/ (accessed 24 April 2023).

Welcome to E-LIS repository—E-LIS repository (n.d.), available at: http://eprints.rclis.org/ (accessed 24 April 2023).

Welcome to OpenDOAR - Sherpa Services (n.d.), available at: https://v2.sherpa.ac.uk/opendoar/ (accessed 25 April 2023).

Welcome to the Registry of Open Access Repositories—Registry of Open Access Repositories (n.d.),
available at: http://roar.eprints.org/ (accessed 24 April 2023).

Xia, J. (2008), "A comparison of subject and institutional repositories in self-archiving practices", *The
Journal of Academic Librarianship*, Vol. 34 No. 6, pp. 489-495, doi: 10.1016/j.acalib.2008.09.016.

Xia, J. and Sun, L. (2007), "Assessment of self-archiving in institutional repositories: depositorship and
full-text availability", *Serials Review*, Vol. 33 No. 1, pp. 14-21, doi: 10.1016/j.serrev.2006.12.003.

Yallappa Annigeri, N. (2022), "Indian research information network system (IRINS): analysis of
colleges faculty profiles in Karnataka", Vol. 11 No. 1, pp. 29-36.

Zhang, S. and Cabage, N. (2017), "Search engine optimization: comparison of link building and social
sharing", *Journal of Computer Information Systems*, Vol. 57 No. 2, pp. 148-159.

Zotero | Your personal research assistant (n.d.), available at: https://www.zotero.org/ (accessed 24
April 2023).