

SPRINGER NATURE Link

ユーザーガイド

December 2024



SPRINGER NATURE

SPRINGER NATURE LINK – ホーム

2024年、SpringerLinkはSpringer Nature Linkに名称を変更しました

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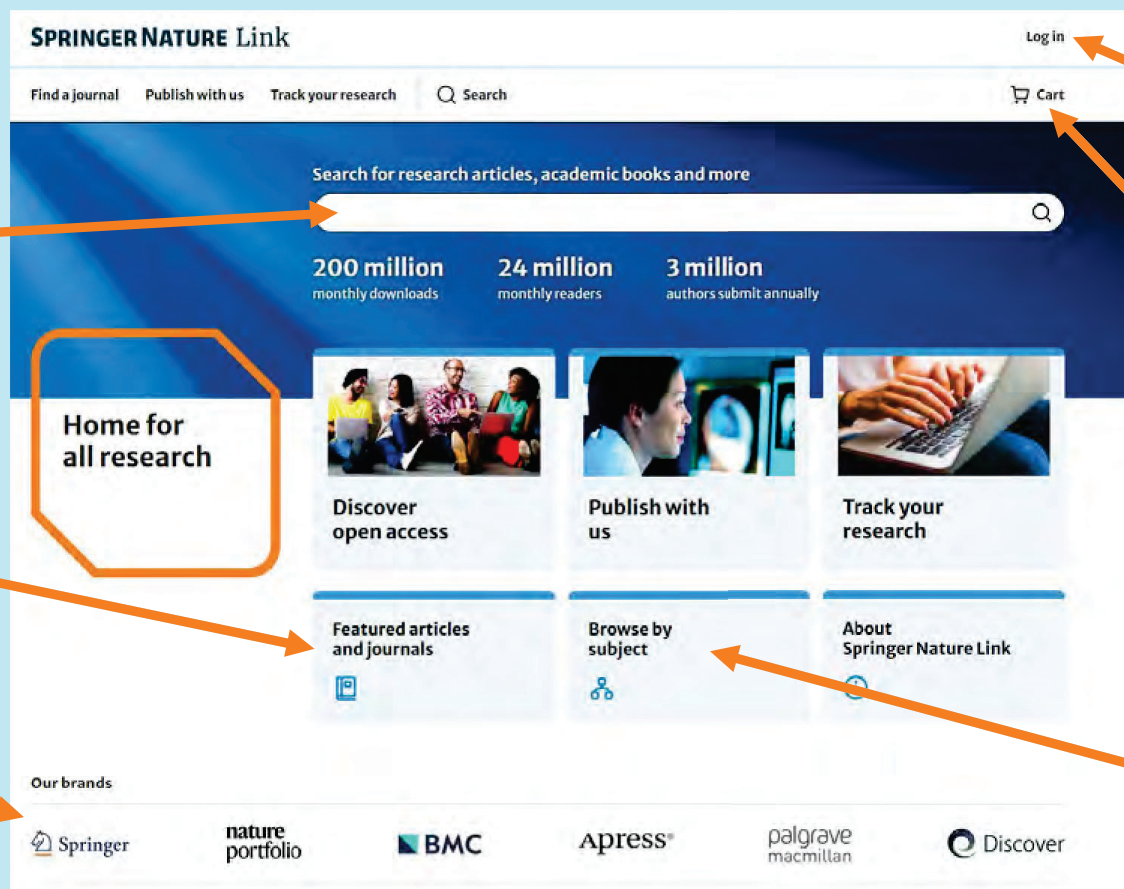
URL

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検索ボックス

注目のジャーナル

Springer Nature Linkで検索
できるインプリント



ログイン

ショッピングカート
(個人購入)

分野毎に
ブラウズ

ログイン

ログイン情報はnature.comと共通です

Springer Nature IDアカウントをお持ちの方は、新たに作成する必要はありません

3

Eメールアドレスで
ログイン

 Enter your email address to update your account to the new Springer Nature login on Springerlink.

Log in, or register a new account to continue

Email address

Continue →

OR

 Continue with Google →

 Continue with ORCID →

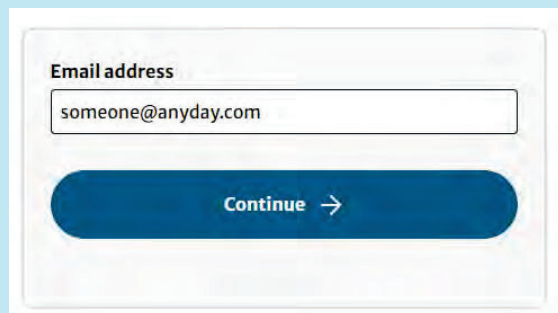
あるいはGoogleアカウント
もしくは ORCIDでログイン

EメールをIDにして新しいアカウントを作成する

初めてSpringer Nature Linkを利用する方へ

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1) Eメールアドレスを入力し、Continueをクリック

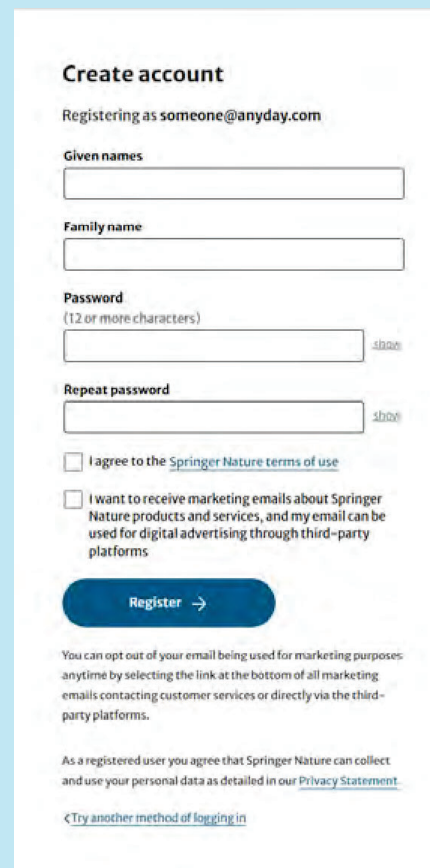


Email address

someone@anyday.com

Continue →

2) フォームに記入し、利用規約(Terms of use)を確認のうえ、Registerをクリック



Create account

Registering as someone@anyday.com

Given names

Family name

Password
(12 or more characters)

Repeat password

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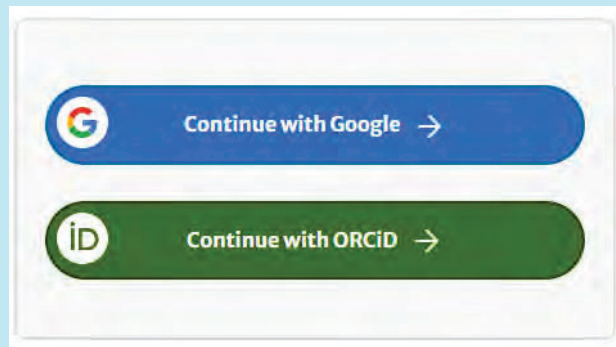
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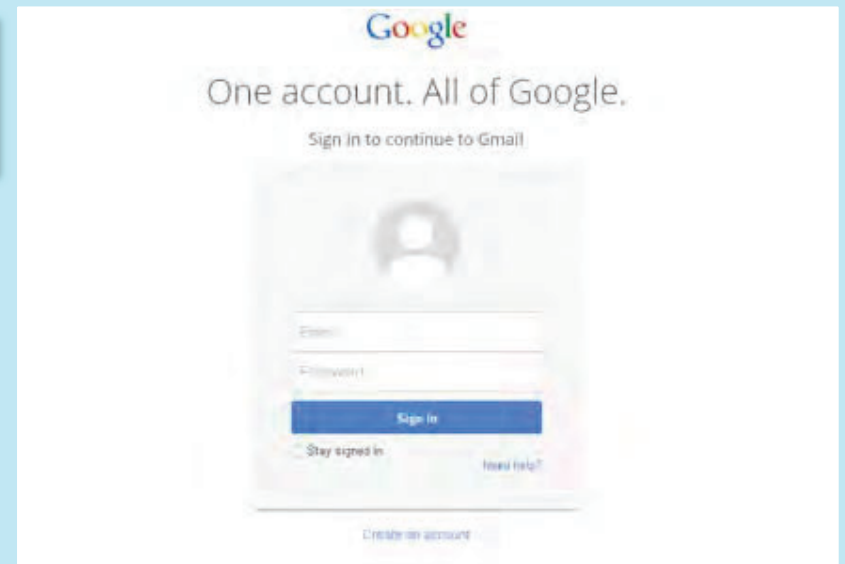
Googleアカウントでログインする

まずはGoogleアカウントを取得してください

1) Continue with Googleをクリック



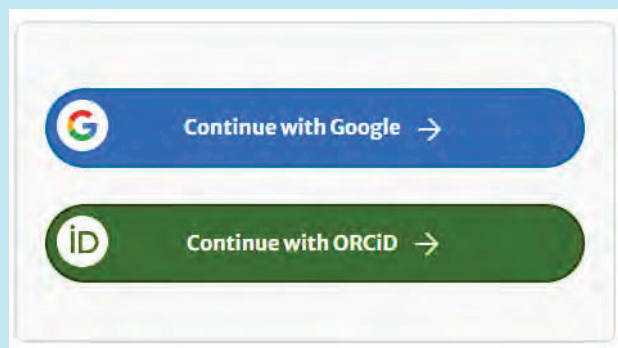
2)EメールアドレスとパスワードでGoogleにサインイン



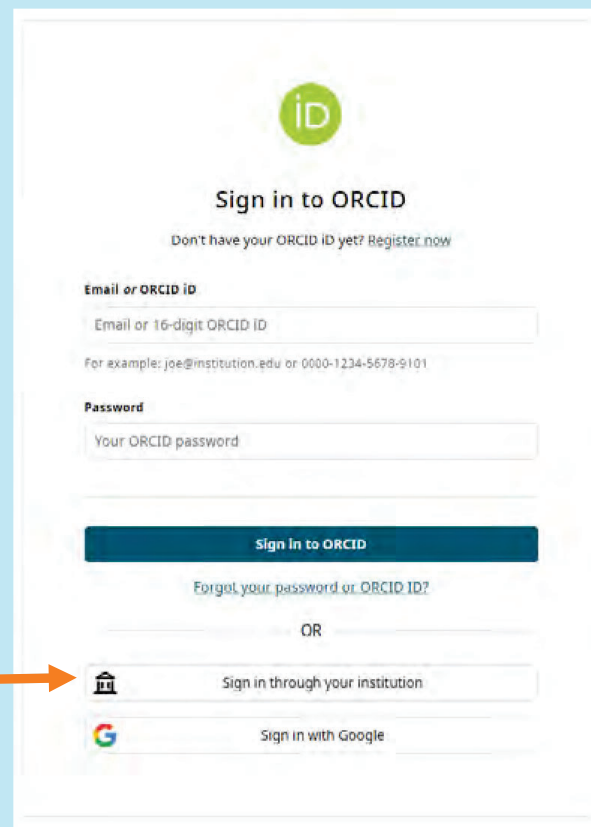
ORCID アカウントでログインする

まずはORCIDのアカウントを取得してください

1) Continue with ORCIDをクリック



2) EメールアドレスまたはORCID IDとパスワードでORCIDにサインイン

A screenshot of the ORCID sign-in page. At the top is the ORCID 'iD' logo. Below it is the heading 'Sign in to ORCID' and a link 'Don't have your ORCID ID yet? Register now'. There are two main input sections: 'Email or ORCID ID' with a text box and an example 'For example: joe@institution.edu or 0000-1234-5678-9101', and 'Password' with a text box labeled 'Your ORCID password'. Below these is a blue 'Sign In to ORCID' button and a link 'Forgot your password or ORCID ID?'. Underneath is an 'OR' separator, followed by two more options: 'Sign in through your institution' with an institution icon, and 'Sign in with Google' with the Google logo. An orange arrow points from the Japanese text box to the 'Sign in through your institution' option.

さらに所属機関経由で認証する方法もあります

コンテンツを検索する

必要な文献を素早く検索できます

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1) 検索ボックスにキーワードを入力し、Enter

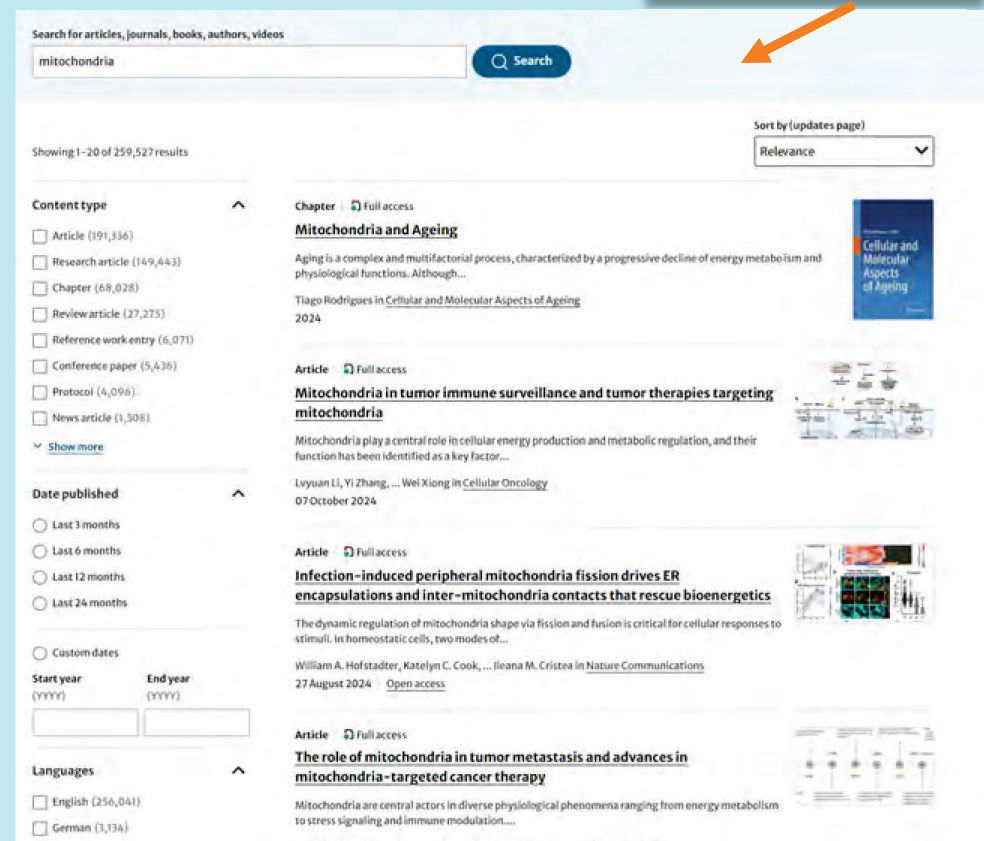


2) 左のメニューから検索結果を絞り込む。
フィルタの種類：

- Content type (コンテンツのタイプ)
- Date published (出版日)
- Language (言語)
- Subject (トピックやテーマ)
- Disciplines (分野)
- Subdisciplines (細分野)

その後、**Update Results**をクリック

検索結果ページ



コンテンツを検索する

必要な文献を素早く検索できます

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2) 検索結果を確認し、
適宜調整する

3) 順序の並び
替え

Full-access：フルテキストがダウンロードできる文献

The screenshot shows a search results page for the term 'mitochondria'. The search bar at the top contains 'mitochondria' and a 'Search' button. Below the search bar, there are filters for 'Research article', 'Last 3 months', 'English', and 'Life sciences'. The results are sorted by 'Relevance'. The first result is titled 'Stress triggers gut dysbiosis via CRH-CRHR1-mitochondria pathway' and is marked as 'Full access'. The second result is titled 'Mitochondria transfer-based therapies reduce the morbidity and mortality of Leigh syndrome' and is also marked as 'Full access'. The third result is titled 'Mitochondria facilitate neuronal differentiation by metabolising nuclear-encoded RNA' and is marked as 'Full access'. The page also includes a 'Content type' filter on the left, with 'Research article' selected. The 'Date published' filter shows 'Last 3 months' selected. The 'Subjects' filter shows 'Mechanism of action' selected. The 'Full access' label is highlighted with a red box in the third result.

論文ページ

利用者のフィードバックを反映したレイアウトを採用しています

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全文のPDFファイルをダウンロード

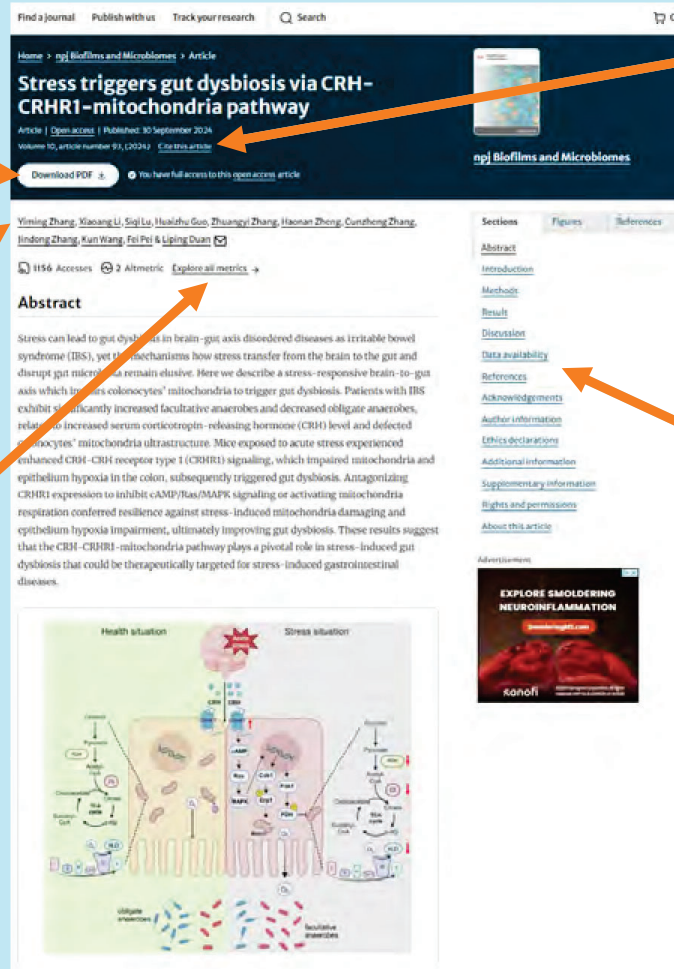
書誌情報にジャンプ、引用に必要な情報をダウンロード

著者の詳しい情報を確認

図表や参考文献の確認

全文へのアクセス数、引用された回数、ソーシャルメディアで言及された回数などの指標

各セクションへジャンプ



文献の引用方法

書誌情報が簡単に取得できます

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Stress triggers gut dysbiosis via CRH-CRHR1-mitochondria pathway

Article | Open access | Published: 30 September 2024
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Yiming Zhang, Xiaogang Li, Siqi Lu, Huihui Guo, Zhuangyi Zhang, Haonan Zheng, Cunsheng Zhang, Jindong Zhang, Kun Wang, Fei Pei & Liping Duan

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Abstract

Stress can lead to gut dysbiosis in brain-gut axis disordered diseases as irritable bowel syndrome (IBS), yet the mechanisms how stress transfer from the brain to the gut and disrupt gut microbiota remain elusive. Here we describe a stress-responsive brain-to-gut axis which impairs colonocytes' mitochondria to trigger gut dysbiosis. Patients with IBS exhibit significantly increased facultative anaerobes and decreased obligate anaerobes, related to increased serum corticotropin-releasing hormone (CRH) level and defected colonocytes' mitochondria ultrastructure. Mice exposed to acute stress experienced enhanced CRH-CRH receptor type 1 (CRHR1) signaling, which impaired mitochondria and epithelium hypoxia in the colon, subsequently triggered gut dysbiosis. Antagonizing CRHR1 expression to inhibit cAMP/Ras/MAPK signaling or activating mitochondria respiration conferred resilience against stress-induced mitochondria damaging and epithelium hypoxia impairment, ultimately improving gut dysbiosis. These results suggest that the CRH-CRHR1-mitochondria pathway plays a pivotal role in stress-induced gut dysbiosis that could be therapeutically targeted for stress-induced gastrointestinal diseases.

Sections Figures References

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Received	Accepted	Published
13 May 2024	16 September 2024	30 September 2024

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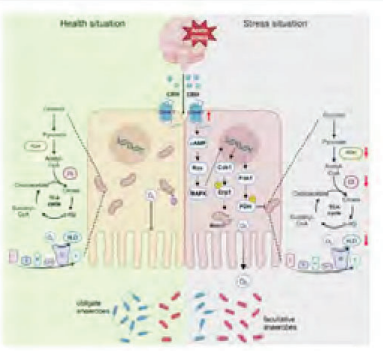
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Yiming Zhang, Xiaogang Li, Siqi Lu, Huihui Guo, Zhuangyi Zhang, Haonan Zheng, Cunsheng Zhang, Jindong Zhang, Kun Wang, Fei Pei & Liping Duan

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1) “References”を
クリック

2) 著者が論文を執筆するために
参照した文献リスト

ほとんどの参考文献は出典元に
リンクしています

Sections Figures **References**

1. Morais, L. H., Schreiber, H. L. T. & Mazmanian, S. K. The gut microbiota-brain axis in behaviour and brain disorders. *Nature reviews. Microbiology* **19**, 241–255, <https://doi.org/10.1038/s41579-020-00460-0> (2021).
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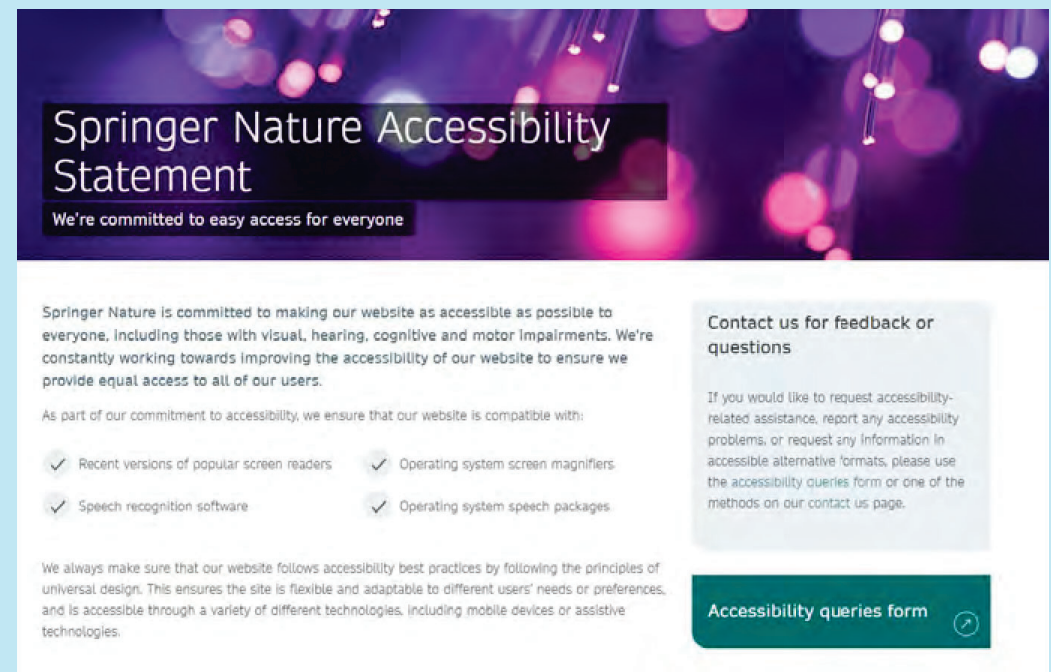
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