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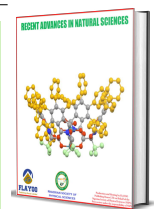

Preparation of papers for recent advances in natural sciences*

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ABSTRACT

These instructions give you guidelines for preparing papers for Recent Advances in Natural Sciences. Use this document as a template if you are using LaTeX. Otherwise, use this document as an instruction set. The electronic file of your paper will be formatted further at FLAYOO Publishing House LTD. Paper titles should be written in uppercase and lowercase letters, not all uppercase. Avoid writing long formulas with subscripts in the title; short formulas that identify the elements are fine (e.g., "Nd–Fe–B"). Full names of authors are preferred in the author field, but are not required. Put a space between authors' initials. The abstract must be a concise yet comprehensive reflection of what is in your article. In particular, the abstract must be self-contained, without abbreviations, footnotes, or references. It should be a microcosm of the full article. The abstract must be between 150–250 words. Be sure that you adhere to these limits; otherwise, you will need to edit your abstract accordingly. The abstract must be written as one paragraph, and should not contain displayed mathematical equations or tabular material. The abstract should include three or four different keywords or phrases, as this will help readers to find it. It is important to avoid over-repetition of such phrases as this can result in a page being rejected by search engines. Ensure that your abstract reads well and is grammatically correct.

1. INTRODUCTION

This document is a LaTeXtemplate for Recent Advances in Natural Sciences (RANS). If you are reading a paper or PDF version of this document, please download the LaTeX template of your preferred publication from the FLAYOO Publishing House LTD (FLAYOO PHL) website at https://flayoophl.com/templates so you can use it to prepare your manuscript. Please note that Latex is preferred for mathematical related submissions. For all other areas, you may prepare your manuscript using MS Word. FLAYOO PHL will do the final formatting of your paper.

2. ARTICLE TYPES

RANS publishes original research, comments, and errata/corregendum. Every paper, except an erratum/corregendum, must have an abstract. There is no limit to the length for articles submitted to RANS.

*Only the first word and nouns should begin with a capital letter.
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e-mail: author3@author.com (Given-name3 Surname3)
[1]This is author footnote for second author.

2.1. ORIGINAL RESEARCH

It describe the results of original research of exceptional importance. There is no restriction to number of pages.

2.2. LETTERS

This is intended for findings that are particularly noteworthy and may be communicated in a concise manner. The relevance of the advancement will be determined based on current interest and the significance of the progress in the discipline. Authors can follow up a Letter with a more detailed description in the form of an Original Research paper. Authors should justify the need for publishing in this format in their submission letter because letters receive preferential treatment.

2.3. COMMENTS

This critique or correct works already published in RANS by other authors. Each Comment should include an abstract and explicitly specify the paper it pertains to. A Comment must be written in a friendly tone, be relevant, and free of mistakes in order to be considered for publishing. While it is OK to critique the work, it is not acceptable to criticize the writers. Comments should not rehash arguments that have already been made public. These guidelines must also be followed when responding to a comment. The purpose of a Reply is not to simply repeat material from the original paper. On the website, there is a crosslink between a Comment and a Reply.

2.4. CORRECTIONS

Authors can ask for self-contained mistakes in articles published in the previous issue to be corrected. The Editors must approve the revisions, which will be evaluated for their impact on the correctness of scientific assertions, funding information, and metadata. The correction would only affect the online version of the article. Also, please keep in mind that corrections should only be made to matter that were known at the time the paper was published.

2.5. ERRATA

In the Errata section, you'll find notifications about mistakes or omissions in previously published publications. Other types of documents, in addition to typical Errata, may appear in this area, as indicated below. The original article and the document in the Errata section are interlinked . The correction document's category is specified in its title and in the link to the original article.

2.6. STANDARD ERRATUM

is a note by the original paper's authors that briefly summarizes the correction(s) and, if relevant, any implications for the paper's findings.

2.7. CORRIGENDUM

A corrigendum is an inaccuracy in a printed document that must be fixed after it has been published.

2.8. EDITORIAL NOTE

An Editorial Note is a remark made by the journal concerning the paper that the editors believe should be made known to the article's readers.

2.9. EXPRESSION OF CONCERN

It alerts the reader to a potential issue in a document. It is used when a concern with the publication has been brought to the Editors' notice and it may takes a longer period to resolve the problem.

2.10. RETRACTION

This is a statement that a study should not be considered scientific literature. This might be due to a variety of factors, including the presentation of erroneous results and the inclusion of previously published results in a substantially similar format. The details of article retracted shall not be deleted from the online journal web-portal to preserve the honesty of the record, but it is given notice of retraction. When writers find significant scientific flaws, retractions are occasionally issued by the authors; in other circumstances, the editors determine that retraction is necessary. In every situation, the retraction explains why such action was taken and who is to blame.

3. MANUSCRIPT FORMATTING GUIDELINES

Manuscript can be prepared in LaTeXor MS-word but LaTeXis preferred. Please use this template to prepare your manuscript. It can be downloaded online at https://flayoophl.com/templates.

3.1. MANUSCRIPT ORDER

Submitting manuscript sections in the following order will allow us to locate important information more easily and may speed the review process. Number all manuscript pages starting with the title page.

1. Title page
2. Abstract
    - Explain to the general reader the major contributions of the article
    - Include no more than 250 words
3. Main text
    - Introduction
    - Materials and methods (describe procedures in sufficient detail so that the work can be repeated)
    - Results
    - Discussion
4. Acknowledgment and funding sources.
    - Spell out all abbreviations
    - Do not include dedications
5. References

3.2. ABBREVIATIONS AND ACRONYMS

Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract. Abbreviations such as SI, ac, and dc do not have to be defined. Abbreviations that incorporate periods should not have spaces: write "C.N.R.S.", not "C. N. R. S." Do not use abbreviations in the title.

3.3. SOME RECOMMENDATIONS

Avoid dangling participles, such as, "Using Eq. (1), the potential was calculated." [It is not clear who or what used Eq. (1)]. Write instead, "The potential was calculated by using Eq. (1)," or "Using Eq. (1), we calculated the potential."

Use a zero before decimal points: "0.25," not ".25." Use "cm^3," not "cc." Indicate sample dimensions as "0.1 cm × 0.2 cm," not "0.1 × 0.2 cm^2." The abbreviation for "seconds" is "s," not "sec." Use "Wb/m^2" or "webers per square meter," not "webers/m^2." When expressing a range of values, write "7 to 9" or "7–9," not "7~9."

Avoid contractions; for example, write "do not" instead of "don't." The serial comma is preferred: "A, B, and C" instead of "A, B and C." If you wish, you may write in the first person singular or plural and use the active voice ("I observed that ..." or "We observed that ..." instead of "It was observed that ..."). Remember to check spelling. If your native language is not English, please get a native English-speaking colleague to carefully proofread your paper.

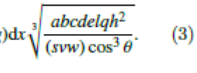
3.4. EQUATIONS

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. Punctuate equations when they are part of a sentence, as in

$$E = mc^2. \tag{1}$$

The following 2 equations are used to test your LaTeX compiler's math output. Eq. (2) is your LaTeXcompiler' output. Eq. (3) is an image of what Eq. (2) should look like. Please make sure that your Eq. (2) matches Eq. (3) in terms of symbols and characters' font style (Ex: italic/roman).

$$\frac{47i + 89jk \times 10rym \pm 2npz}{(6XYZ\pi Ku)Aoq \sum_{i=1}^{r} Q(t)} \int_0^{\infty} f(g)\mathrm{d}x \sqrt[3]{\frac{abcdelqh^2}{(svw)\cos^3\theta}}. \tag{2}$$



$$\frac{47i + 89jk \times 10rym \pm 2npz}{(6XYZ\pi Ku)Aoq \sum_{i=1}^{r} Q(t)} \int_0^{\infty} f(g)\mathrm{d}x \sqrt[3]{\frac{abcdelqh^2}{(svw)\cos^3\theta}}. \tag{3}$$

Be sure that the symbols in your equation have been defined before the equation appears or immediately following. Italicize symbols (T might refer to temperature, but T is the unit tesla). Refer to "Eq. (1)," or "equation (1)," not "(1),".

3.5. LATEX-SPECIFIC ADVICE

Please use "soft" (e.g., `\eqref{Eq}`) cross references instead of "hard" references (e.g., `(1)`). That will make it possible to combine sections, add equations, or change the order of figures or citations without having to go through the file line by line.

Please note that the `{subequations}` environment in LaTeX will increment the main equation counter even when there are no equation numbers displayed. If you forget that, you might write an article in which the equation numbers skip from (17) to (20), causing the copy editors to wonder if you've discovered a new method of counting.

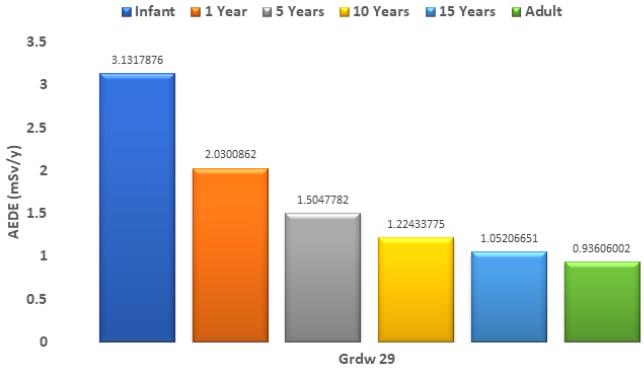


Figure 1. Average TAEDE for the inhabitants of various age group in sample Grdw29. It is good practice to explain the significance of the figure in the caption. **(Small Figure)**

BibTeX does not work by magic. It doesn't get the bibliographic data from thin air but from .bib files. If you use BibTeX to produce a bibliography you must send the .bib files.

LaTeX can't read your mind. If you assign the same label to a sub-subsection and a table, you might find that Table I has been cross referenced as Table IV-B3.

LaTeX does not have precognitive abilities. If you put a `\label` command before the command that updates the counter it's supposed to be using, the label will pick up the last counter to be cross referenced instead. In particular, a `\label` command should not go before the caption of a figure or a table.

Do not use `\nonumber` inside the `{array}` environment. It will not stop equation numbers inside `{array}` (there won't be any anyway) and it might stop a wanted equation number in the surrounding equation.

4. UNITS

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) English units may be used as secondary units (in parentheses). This applies to papers in data storage. For example, write "15 Gb/cm^2 (100 Gb/in^2)". The SI unit for magnetic field strength H is A/m. However, if you wish to use units of T, either refer to magnetic flux density B or magnetic field strength symbolized as $\mu_0 H$. Use the center dot to separate compound units, e.g., "A·m^2".

5. SOME COMMON MISTAKES

The word "data" is plural, not singular. The subscript for the permeability of vacuum μ_0 is zero, not a lowercase letter "o." Do not use the word "issue" as a euphemism for "problem." When compositions are not specified, separate chemical symbols by en-dashes; for example, "NiMn" indicates the intermetallic compound $Ni_{0.5}Mn_{0.5}$ whereas "Ni–Mn" indicates an alloy of some composition Ni_xMn_{1-x}. Prefixes such as "non," "sub," "micro," "multi," and "ultra" are not independent words; they should be joined to the words they modify, usually without a hyphen. There is no period after the "et" in the Latin abbreviation "*et al.*" (it is also italicized). The abbreviation "i.e.," means "that is," and the abbreviation "e.g.," means "for example" (these abbreviations are not italicized).

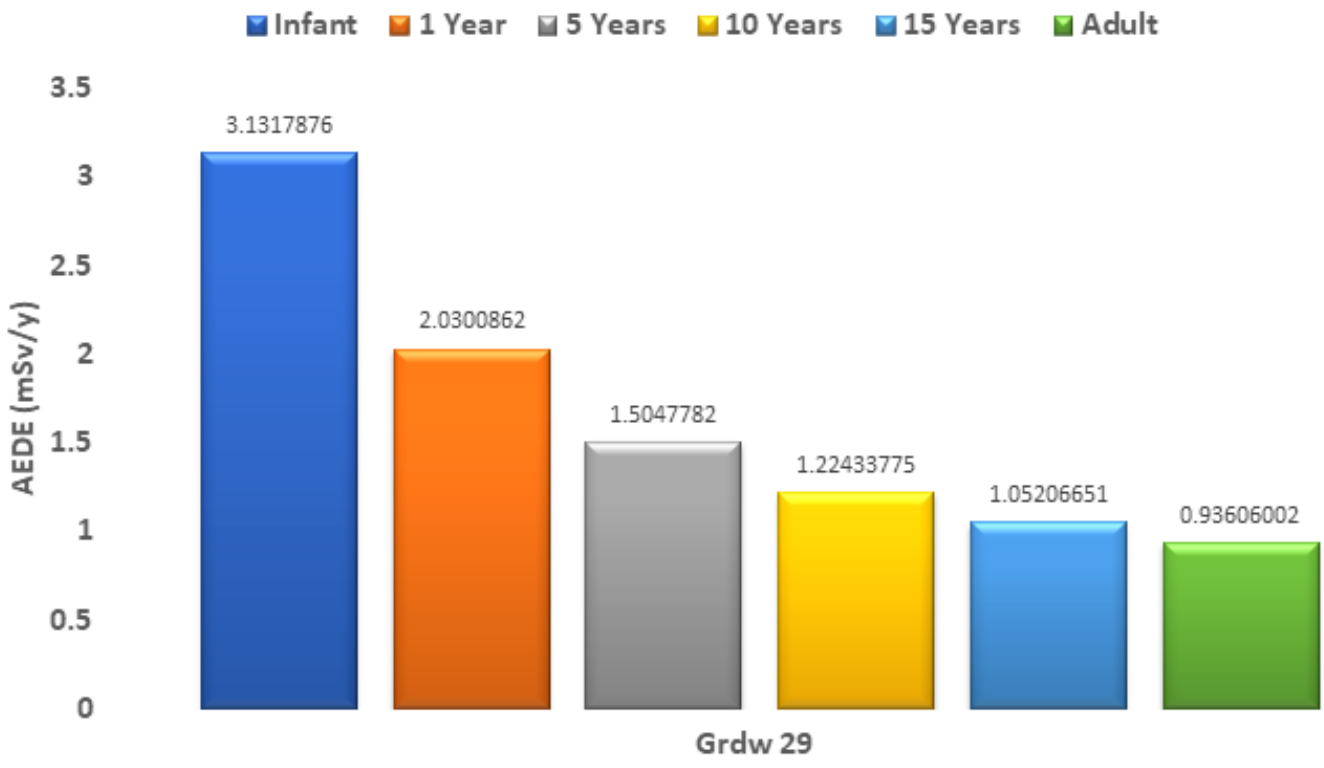


Figure 2. Average TAEDE for the inhabitants of various age group in sample Grdw29. It is good practice to explain the significance of the figure in the caption. **(Big Figure)**

6. GUIDELINES FOR GRAPHICS PREPARATION AND SUBMISSION

Under no circumstances should a figure be scanned/screen-shots from another source. All figures/images must be original

6.1. TYPES OF GRAPHICS

They are categorized based on their construction, and use of color/shades of gray:

6.1.1. Color/Grayscale figures

Figures that are meant to appear in color, or shades of black/gray. Such figures may include photographs, illustrations, multicolor graphs, and flowcharts. For multicolor graphs, please avoid any gray backgrounds or shading, as well as screen-shots, instead export the graph from the program used to collect the data.

6.1.2. Line Art figures

Figures that are composed of only black lines and shapes. These figures should have no shades or half-tones of gray, only black and white.

6.1.3. Tables

Data charts which are typically black and white, but sometimes include color. See Tables 1 and 2

6.2. FILE FORMATS FOR GRAPHICS

Format and save your graphics using a suitable graphics processing program that will allow you to create the images as Encapsulated PostScript (.EPS), Joint Photographic Experts Group (.JPEG), Portable Document Format (.PDF), or Portable Network Graphics (.PNG), sizes them, and adjusts the resolution settings. When submitting your final paper, your graphics should all be submitted individually in one of these formats along with the manuscript.

6.3. ACCEPTED FONTS WITHIN FIGURES

When preparing your graphics we suggest that you use of one of the following Open Type fonts: Times New Roman, Helvetica, Arial, and Symbol.

6.4. USING LABELS WITHIN FIGURES

6.4.1. Figure Axis labels

Figure axis labels are often a source of confusion. Use words rather than symbols. Do not label axes only with units. Do not label axes with a ratio of quantities and units. For example, write ‘‘Temperature (K)’’, not ‘‘Temperature/K’’. Figure labels should be legible, approximately 8 to 10 point type.

6.4.2. Subfigure Labels in Multipart Figures and Tables

Multipart figures should be combined and labeled before final submission. Labels should appear centered below each subfigure in 8 point Times New Roman font in the format of (a) (b) (c).

6.5. REFERENCING A FIGURE OR TABLE WITHIN YOUR PAPER

Figures should be numbered with Arabic Numerals. Do not abbreviate ‘‘Table’’ and do not abbreviate ‘‘Figure". In other words,

Table 1. A sample table that span through two columns. Do not use Vertical lines in tables.

Controlador	$Re(\lambda)_{max}$	u_{max}	t_{est}^{max}	$noise_{max}$	u_{nom}	t_{est}^{nom}	t_{est}^{max}	$noise_{max}$	u_{nom}	t_{est}^{nom}
B23	INA	INA	INA	INA	AD	AIND	INA	INA	AD	AIND
M23	AD	AD	AD	T	AD	AIND	INA	INA	AD	AIND
PPGA23	**AD**	**AD**	**AD**	**AD**	**AD**	**AD**	INA	INA	AD	AIND
W34	AD	AD	D	T	AD	IND	INA	INA	AD	AIND
M34	AD	AD	D	AD	AD	AD	INA	INA	AD	AIND
PPGA23*	**AD**	**AD**	**AD**	**AD**	**AD**	**AD**	INA	INA	AD	AIND
PPGA34	**AD**	**AD**	**AD**	**AD**	**AD**	**AD**	INA	INA	AD	AIND
J45	AD	IND	AD	IND	AD	AD	INA	INA	AD	AIND
M45	AD	AD	IND	T	AD	IND	INA	INA	AD	AIND
PPGA23**	**D**	**AD**	**D**	**T**	**AD**	**D**	INA	INA	AD	AIND
PPGA34**	**AD**	**AD**	**D**	**D**	**AD**	**D**	INA	INA	AD	AIND
PPGA45	**AD**	**AD**	**AD**	**AD**	**AD**	**D**	INA	INA	AD	AIND

Do not use Vertical lines in tables. Statements that serve as captions for the entire table do not need footnote letters.

Table 2. A sample table that fit in one column. Do not use Vertical lines in tables.

	g_i^1	g_i^2	g_i^3	g_i^4	g_i^5
$Re(\lambda)_{max}$	-0.01	-0.005	-0.001	-0.0005	-0.0001
u_{max}	0.85	0.90	1	1.5	2
t_{est}^{max}	14	16	18	21	25
$noise_{max}$	0.5	0.9	1.2	1.4	1.5
u_{nom}	0.5	0.7	1	1.5	2
t_{est}^{nom}	10	11	12	14	15

when referring to Figure or Table, do not write Fig. to mean Figure.

6.6. SUBMITTING YOUR GRAPHICS

Place figure captions below the figures; place table titles above the tables. Please do not include captions as part of the figures, or put them in ‘‘text boxes’’ linked to the figures. Also, do not place borders around the outside of your figures.

7. INITIAL SUBMISSIONS

Articles should be submitted electronically on the journal portal. There are various steps to the submission process; you must complete all steps for a complete submission. After the last step, you should see a confirmation that the submission is complete. You should also receive an e-mail confirmation. For inquiries regarding the submission of your article, please contact info@flayoophl.com / editorial.office@nsps.org.ng

RANS is format-neutral at initial submission, which means that manuscripts do not need to be formatted according to specific journal guidelines to be considered for review. We do, however, require the following information in order to evaluate your manuscript:

A manuscript file (in any format). A list of potential reviewers who are experts in the paper’s scientific area, a brief justification for suggested reviewers is welcome. Letter to the Editor explaining the significance of the research at a level understandable to an undergraduate-educated scientist outside their field of specialty.

8. REVISED SUBMISSIONS

Revised papers must be received within 1-3 months of the revision decision or they will be treated as new submissions. If you require additional time, please notify Editorial Office. In addition to the information provided at initial submission, revised submissions must also include **a point-by-point response to reviewers’ comments**.

Please note that multiple revisions are rarely permitted, and there is no guarantee that the paper will be accepted. Please contact us if you have any questions regarding manuscript formatting or the revision process.

8.1. FINAL STAGE

Upon acceptance, you will receive an email with specific instructions. Designate the author who submitted the manuscript as the ‘‘corresponding author.’’ This is the only author to whom proofs of the paper will be sent.

When your article is accepted, you can submit the final files, including figures, and tables per the journal’s guidelines through the submission system used to submit the article. You may use *Zip* for large files.

9. CONCLUSION

Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

References

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APPENDIX A.
FOOTNOTES

Number footnotes separately in superscript numbers.[2] Place the actual footnote at the bottom of the column in which it is cited; do not put footnotes in the reference list (endnotes). Use letters for table footnotes (see Table 1).

PUBLISHING POLICY

Our policy requires that authors should only submit original work that has neither appeared elsewhere for publication, nor is under review for another refereed publication. The submitting author must disclose all prior publication(s) and current submissions when submitting a manuscript. Do not publish "preliminary" data or results. To avoid any delays in publication, please be sure to follow these instructions. Final submissions should include source files of your accepted manuscript, high quality graphic files, and a source file (LaTeX / MS Word). If you have any questions regarding the final submission process, please contact the Editorial Office.

PUBLICATION PRINCIPLES

Authors should consider the following points:

1. Manuscript submitted for publication must advance the state of knowledge and must cite relevant prior work.
2. The length of a submitted paper should be commensurate with the importance, or appropriate to the complexity, of the work. For example, an obvious extension of previously published work might not be appropriate for publication or might be adequately treated in just a few pages.
3. Authors must convince both peer reviewers and the editors of the scientific and technical merit of a paper; the standards of proof are higher when extraordinary or unexpected results are reported.
4. Because replication is required for scientific progress, papers submitted for publication must provide sufficient information to allow readers to perform similar experiments or calculations and use the reported results. Although not everything need be disclosed, a paper must contain new, useable, and fully described information. For example, a specimen's chemical composition need not be reported if the main purpose of a paper is to introduce a new measurement technique. Authors should expect to be challenged by reviewers if the results are not supported by adequate data and critical details.
5. Papers that describe ongoing work or announce the latest technical achievement, which are suitable for presentation at a professional conference, may not be appropriate for publication.

REFERENCE EXAMPLES

Just like the title, only the first word and nouns should begin with a capital letter.

- *Basic format for book chapter:*
  A. B. Author, "Title of chapter in the book", in *Title of the Published Book*, Editor Name (Ed.), Publisher, City of Publisher, Country, year, pp. xxx–xxx. https://doi.
  See [1].

- *Basic format for book:*
  A. B. Author, *Title of chapter in the book*, Publisher, City of Publisher, Country, year, pp. xxx–xxx. https://doi.10.61298.XXX.123456
  See [2].

- *Basic format for journals:*
  A. B. Author, J. K. Author & X. Y. Author, "Title of paper", Title of Journal **Vol.** (Year) First Page/Article ID. https://doi.10.61298.XXX.123456.
  See [3–5].

- *Basic format for papers presented at conferences:*
  A. B. Author, J. K. Author & X. Y. Author,"Title", presented at conference title, location, date, year. site/path/file.
  See [6].

- *Basic format for patents:*
  Name of the invention, by inventor's name. (year, month day). Patent Number [Type of medium]. site/path/file
  See [7].

- *Basic format for conference proceedings:*
  A. B. Author, J. K. Author & X. Y. Author,"Title of paper", Name of Conference, City of Conference, Country, year, pp. xxx–xxx. https://site/path/file.
  See [8].

- *Basic format for theses (M.S.) and dissertations (Ph.D.):*

[2] It is recommended that footnotes be avoided. Instead, try to integrate the footnote information into the text.

1. A. B. Author, *Title of thesis*, M.S. thesis, Department, University, City of University, State, year. https://site/path/file.
2. A. B. Author, *Title of dissertation*, Ph.D. dissertation, Department, University, City of University, State, year. https://site/path/file.

See [9, 10].