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Article

# Full title of the paper (Capitalized)

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Simple Summary: A Simple summary goes here.

**Abstract:** A single paragraph of about 200 words maximum. For research articles, abstracts should give a pertinent overview of the work. We strongly encourage authors to use the following style of structured abstracts, but without headings: 1) Background: Place the question addressed in a broad context and highlight the purpose of the study; 2) Methods: Describe briefly the main methods or treatments applied; 3) Results: Summarize the article's main findings; and 4) Conclusion: Indicate the main conclusions or interpretations. The abstract should be an objective representation of the article, it must not contain results which are not presented and substantiated in the main text and should not exaggerate the main conclusions.

**Keywords:** keyword 1; keyword 2; keyword 3 (list three to ten pertinent keywords specific to the article, yet reasonably common within the subject discipline.).

1. Version

This Rmd-skeleton uses the mdpi Latex template published 2023-03-25. However, the official template gets more frequently updated than the **rticles** package. Therefore, please make sure prior to paper submission, that you're using the most recent .cls, .tex and .bst files (available here).

## 2. Article Header Information

The YAML header includes information needed mainly for formatting the front and back matter of the article. Required elements include:

Citation: Leutnant, D.; Doe, J. Full title of the paper (Capitalized). *Journal Not Specified* **2024**, 1, 0. https://doi.org/

Received: Revised: Accepted:

Published:

4.0/).

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```
title: Title of the paper
author:
    - name: first and last name
    affil: |
        One or more comma seperated numbers corresponding to affilitation
        and one or more comma seperated symbols corresponding
        optional notes.
        orcid: optional orcid number
affiliation:
        - num: 1,..., n for each affiliation
        address: required
        email: required
authorcitation: |
        Lastname, F.
correspondence: |
```

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**Table 1.** MDPI article types.

abstract	entry	retraction
addendum	expressionofconcern	review
article	extendedabstract	perspective
book	datadescriptor	protocol
bookreview	editorial	shortnote
briefreport	essay	studyprotocol
casereport	erratum	systematicreview
comment	hypothesis	supfile
commentary	interestingimage	technicalnote
communication	obituary	viewpoint
conferenceproceedings	opinion	guidelines
correction	projectreport	registeredreport
conferencereport	reply	tutorial

```
email@email.com; Tel.: +XX-000-00-0000.
journal: notspecified
type: article
status: submit
```

Journal options are in Table 2. The status variable should generally not be changed by authors. The type variable describes the type of of submission and defaults to article but can be replaced with any of the ones in Table 1

## 2.1. Journal Specific YAML variables

```
# for journal Diversity,
# add the Life Science Identifier using:
lsid: http://zoobank.org/urn:lsid:zoobank.org:act:nnnn
# for journal Applied Sciences
# add featured application
featuredapplication:
  Authors are encouraged to provide a concise
  description of the specific application or
  a potential application of the work. This
  section is not mandatory.
# for the journal Data
# add dataset doi and license
dataset: https://doi.org/10.1000/182
datasetlicense: CC-BY-4.0
# for the journal Toxins
# add key contributions
keycontributions:
 The breakthroughs or highlights of the manuscript.
  Authors can write one or two sentences to describe
  the most important part of the paper.
# for the journal Encyclopedia
encyclopediadef:
```

For entry manuscripts only: please provide a brief overview of the entry title instead of an abstract.

entrylink: The Link to this entry published on the encyclopedia platform.

# for the journal Advances in Respiratory Medicine
# add highlights
addhighlights: |

This is an obligatory section in "Advances in Respiratory Medicine", whose goal is to increase the discoverability and readability of the article via search engines and other scholars. Highlights should not be a copy of the abstract, but a simple text allowing the reader to quickly and simplified find out what the article is about and what can be cited from it. Each of these parts should be devoted up to 2 bullet points.

 Table 2. MDPI journal names.

acoustics	biomedinformatics	dentistry	galaxies	jcp	metabolites	philosophies	socsci
actuators	biomimetics	dermato	games	jcs	metals	photochem	software
addictions	biomolecules	dermatopathology	gases	jcto	meteorology	photonics	soilsystems
admsci	biophysica	designs	gastroent	jdb	methane	phycology	solar
adolescents	biosensors	devices	gastrointestdisord	jeta	metrology	physchem	solids
aerobiology	biotech	diabetology	gels	jfb	micro	physics	spectroscj
aerospace	birds	diagnostics	genealogy	jfmk	microarrays	physiologia	sports
agriculture	bloods	dietetics	genes	jimaging	microbiolres	plants	standards
agriengineering	blsf	digital	geographies	jintelligence	micromachines	plasma	stats
agrochemicals	brainsci	disabilities	geohazards	jlpea	microorganisms	platforms	std
agronomy	breath buildings businesses cancers carbon	diseases	geomatics	jmmp	microplastics	pollutants	stresses
ai		diversity	geosciences	jmp	minerals	polymers	surfaces
air		dna	geotechnics	jmse	mining	polysaccharides	surgeries
algorithms		drones	geriatrics	jne	modelling	poultry	suschem
allergies		dynamics	grasses	jnt	molbank	powders	sustainability
alloys	cardiogenetics	earth ebj ecologies econometrics economies	gucdd	jof	molecules	preprints	symmetry
analytica	catalysts		hazardousmatters	joitmc	mps	proceedings	synbio
analytics	cells		healthcare	jor	msf	processes	systems
anatomia	ceramics		hearts	journalmedia	mti	prosthesis	targets
animals	challenges		hemato	jox	muscles	proteomes	taxonomy
antibiotics	chemengineering	education	hematolrep	jpm	nanoenergyadv	psf	technologies
antibodies	chemistry	ejihpe	heritage	jrfm	nanomanufacturing	psych	telecom
antioxidants	chemosensors	electricity	higheredu	jsan	nanomaterials	psychiatryint	test
applbiosci	chemproc	electrochem	highthroughput	jtaer	ncrna	psychoactives	textiles
appliedchem	children	electronicmat	histories	jvd	ndt	publications	thalassrep
appliedmath	chips	electronics	horticulturae	jzbg	network	quantumrep	thermo
applmech	cimb	encyclopedia	hospitals	kidneydial	neuroglia	quaternary	tomography
applmicrobiol	civileng	endocrines	humanities	kinasesphosphatases	neurolint	qubs	tourismhosp
applnano	cleantechnol	energies	humans	knowledge	neurosci	radiation	toxics
applsci	climate	eng	hydrobiology	land	nitrogen	reactions	toxins
aquacj	clinpract	engproc	hydrogen	languages	notspecified	receptors	transplantology

architecture	clockssleep	entomology	hydrology	laws	nri	recycling	transportation
arm	cmd	entropy	hygiene	life	nursrep	regeneration	traumacare
arthropoda	coasts	environments	idr	liquids	nutraceuticals	religions	traumas
arts	coatings	environsciproc	ijerph	literature	nutrients	remotesensing	tropicalmed
asc	colloids	epidemiologia	ijfs	livers logics logistics lubricants lymphatics	obesities	reports	universe
asi	colorants	epigenomes	ijgi		oceans	reprodmed	urbansci
astronomy	commodities	est	ijms		ohbm	resources	uro
atmosphere	compounds	fermentation	ijns		onco	rheumato	vaccines
atoms	computation	fibers	ijpb		oncopathology	risks	vehicles
audiolres	computers	fintech	ijtm	machines	optics	robotics	venereology
automation	condensedmatter	fire	ijtpp	macromol	oral	ruminants	vetsci
axioms	conservation	fishes	ime	magnetism	organics	safety	vibration
bacteria	constrmater	fluids	immuno	magnetochemistry	organoids	sci	virtualworlds
batteries	cosmetics	foods	informatics	make	osteology	scipharm	viruses
bdcc	covid	forecasting	information	marinedrugs	oxygen	sclerosis	vision
behavsci	crops	forensicsci	infrastructures	materials	parasites	seeds	waste
beverages	cryptography	forests	inorganics	materproc	parasitologia	sensors	water
biochem	crystals	foundations	insects	mathematics	particles	separations	wem
bioengineering	csmf	fractalfract	instruments	mca	pathogens	sexes	wevj
biologics	ctn	fuels	inventions	measurements	pathophysiology	signals	wind
biology	curroncol	future	iot	medicina	pediatrrep	sinusitis	women
biomass	cyber	futureinternet	j	medicines	pharmaceuticals	skins	world
biomechanics	dairy	futurepharmacol	jal	medsci	pharmaceutics	smartcities	youth
biomed	data	futurephys	jcdd	membranes	pharmacoepidemiology	sna	zoonoticdis
biomedicines	ddc	futuretransp	jcm	merits	pharmacy	societies	

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3. Introduction

The introduction should briefly place the study in a broad context and highlight why it is important. It should define the purpose of the work and its significance. The current state of the research field should be reviewed carefully and key publications cited. Please highlight controversial and diverging hypotheses when necessary. Finally, briefly mention the main aim of the work and highlight the principal conclusions. As far as possible, please keep the introduction comprehensible to scientists outside your particular field of research. Citing a journal paper [1,2]. And now citing a book reference Gujer [3]. Some MDPI journals use Chicago and others use APA, this template should choose the correct citation format for you once you specify the journal in the YAML header.

To use endnotes, change endnotes: true in the YAML header, then use \endnote{This is an endnote.}.

#### 4. Materials and Methods

Materials and Methods should be described with sufficient details to allow others to replicate and build on published results. Please note that publication of your manuscript implicates that you must make all materials, data, computer code, and protocols associated with the publication available to readers. Please disclose at the submission stage any restrictions on the availability of materials or information. New methods and protocols should be described in detail while well-established methods can be briefly described and appropriately cited.

Research manuscripts reporting large datasets that are deposited in a publicly available database should specify where the data have been deposited and provide the relevant accession numbers. If the accession numbers have not yet been obtained at the time of submission, please state that they will be provided during review. They must be provided prior to publication.

Interventionary studies involving animals or humans, and other studies require ethical approval must list the authority that provided approval and the corresponding ethical approval code.

5. Results

This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation as well as the experimental conclusions that can be drawn.

5.1. Subsection Heading Here

Subsection text here.

5.1.1. Subsubsection Heading Here

Bulleted lists look like this:

- First bullet
- Second bullet
- Third bullet

Numbered lists can be added as follows:

- 1. First item
- 2. Second item
- 3. Third item

The text continues here.

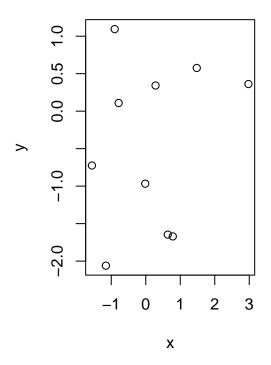


Figure 1. A figure added with a code chunk.

## 5.2. Figures, Tables and Schemes

All figures and tables should be cited in the main text as Figure 1, 3, etc. To get cross-reference to figure generated by R chunks include the beta tag in the fig.cap attribute of the R chunk: fig.cap = "Fancy Caption\\label{fig:plot}".

When making tables using kable, it is suggested to use the format="latex" and tabl.envir="table" arguments to ensure table numbering and compatibility with the mdpi document class.

**Table 3.** This is a table caption. Tables should be placed in the main text near to the first time they are cited.

	mpg	cyl	disp
Mazda RX4	21.0	6	160
Mazda RX4 Wag	21.0	6	160
Datsun 710	22.8	4	108
Hornet 4 Drive	21.4	6	258
Hornet Sportabout	18.7	8	360

For a very wide table, landscape layouts are allowed.

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**Table 4.** This is a very wide table

Title.1	Title.2	Title.3	Title.4
Entry 1	Data	Data	This cell has some longer content that runs over two lines
Entry 2	Data	Data	Data

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# 5.3. Formatting of Mathematical Components

This is an example of an equation:

a = 1.

If you want numbered equations use Latex and wrap in the equation environment:

$$a = 1, (1)$$

the text following an equation need not be a new paragraph. Please punctuate equations as regular text.

This is the example 2 of equation:

$$a = b + c + d + e + f + g + h + i + j + k + l + m + n + o + p + q + r + s + t + u + v + w + x + y + z$$
 (2)

Theorem-type environments (including propositions, lemmas, corollaries etc.) can be formatted as follows:

Example of a theorem:

#### **Theorem 1.** Example text of a theorem

The text continues here. Proofs must be formatted as follows: Example of a proof:

**Proof of Theorem1.** Text of the proof. Note that the phrase "of Theorem 1" is optional if it is clear which theorem is being referred to.

The text continues here.

6. Discussion

Authors should discuss the results and how they can be interpreted in perspective of previous studies and of the working hypotheses. The findings and their implications should be discussed in the broadest context possible. Future research directions may also be highlighted.

7. Conclusion

This section is not mandatory, but can be added to the manuscript if the discussion is unusually long or complex.

8. Patents

This section is not mandatory, but may be added if there are patents resulting from the work reported in this manuscript.

**Supplementary Materials:** The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/1010000/s1, Figure S1: title; Table S1: title; Video S1: title.

**Author Contributions:** For research articles with several authors, a short paragraph specifying their individual contributions must be provided. The following statements should be used "X.X. and Y.Y. conceive and designed the experiments; X.X. performed the experiments; X.X. and Y.Y. analyzed the data; W.W. contributed reagents/materials/analysis tools; Y.Y. wrote the paper.'' Authorship must be limited to those who have contributed substantially to the work reported.

**Funding:** Please add: This research received no external funding' or This research was funded by NAME OF FUNDER grant number XXX.'' and and "The APC was funded by XXX''. Check carefully that the details given are accurate and use the standard spelling of funding agency names at <a href="https://search.crossref.org/funding">https://search.crossref.org/funding</a>, any errors may affect your future funding.

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Written informed consent for publication must be obtained from participating patients who can be identified (including by the patients themselves). Please state "Written informed consent has been obtained from the patient(s) to publish this paper' if applicable.

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**Acknowledgments:** All sources of funding of the study should be disclosed. Please clearly indicate grants that you have received in support of your research work. Clearly state if you received funds for covering the costs to publish in open access.

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Abbreviations

The following abbreviations are used in this manuscript:

MDPI Multidisciplinary Digital Publishing Institute

DOAJ Directory of open access journals

TLA Three letter acronym LD linear dichroism

Appendix I

Appendix I.1

The appendix is an optional section that can contain details and data supplemental to the main text. For example, explanations of experimental details that would disrupt the flow of the main text, but nonetheless remain crucial to understanding and reproducing the research shown; figures of replicates for experiments of which representative data is shown in the main text can be added here if brief, or as Supplementary data. Mathematical proofs of results not central to the paper can be added as an appendix.

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Appendix J

All appendix sections must be cited in the main text. In the appendixes, Figures, Tables, etc. should be labeled starting with 'A', e.g., Figure A1, Figure A2, etc.

References

- 1. Bertrand-Krajewski, J.L.; Chebbo, G.; Saget, A. Distribution of pollutant mass vs volume in stormwater discharges and the first flush phenomenon. *Water Research* **1998**, 32, 2341–2356.
- 2. Leutnant, D.; Muschalla, D.; Uhl, M. Stormwater Pollutant Process Analysis with Long-Term Online Monitoring Data at Micro-Scale Sites. *Water* **2016**, *8*, 299. 00000, https://doi.org/10.3390/w8070299.
- 3. Gujer, W. Systems Analysis for Water Technology; Springer-Verlag: Berlin, Heidelberg, Germany, 2008.

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