

# Paper Submission Form - SAIP2025 Proceedings

Sections A, C, D, and E must be completed by all authors (including students) who submit papers. Section B is compulsory for students who submit manuscript(s).

## Section A: Paper Submission Information

Paper/Abstract ID	#286
Paper title	Structural and optical properties of rare earth (Sm <sup>3+</sup> )-doped hematite nanostructures
Corresponding Author Name & Surname:	Ntokozo G Cebekhulu
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## Section B: For Students & Supervisors

Supervisor Name & Surname:	Cebeliyazakha L Ndlangamandla
Supervisor Email Address:	NdlangamandlaC@unizulu.ac.za

For this paper, the supervisor must agree/disagree with the following statements.

	Yes	No
1. I am aware that the above-mentioned paper is being submitted for possible publication in the Proceedings of the SAIP Conference. I am satisfied that the presented work is that of the listed authors. I hereby give consent to the submission	Yes	
2. I have proof-read the manuscript	Yes	
3. I am satisfied that the manuscript is written in appropriate English and is sufficiently free of grammatical and spelling errors	Yes	
4. I am familiar with the required manuscript format ("House Style"), and I am satisfied that this manuscript meets the criteria. I am aware that manuscripts not conforming with House Style may be desk rejected	Yes	
5. I am satisfied that the scientific content of this manuscript is of sufficient standard for it to be considered for publication in the Proceedings of the South African Institute of Physics Conference Proceedings	Yes	

Student Name & Surname: Ntokozo G Cebekhulu ... Signature:



Date: .....24/07/2025.....

Supervisor Name & Surname: Ceboliyazakha L Ndlangamandla Signature: .....



Date: .....30/07/2025.....

## Section C: Suggested Reviewers

Obtaining the two referee reports necessary for DHET subsidy is an onerous task.

Please provide the names and contact details of three qualified South African and/or international referees. Referees should have a PhD and expertise in the relevant area of Physics. Do not recommend referees who have co-authored a work with any of the authors on the manuscript within the past five (5) years. Manuscripts without three recommended referees may be subject to desk rejection.

Suggested Reviewers in your Research Field (Both local & international)		
	Reviewer Names & Surname	Reviewer's Email Address(es)
Suggested reviewer #1	Prof Buyi Sondeze	<a href="mailto:Bmsondezi@uj.ac.za">Bmsondezi@uj.ac.za</a>
Suggested reviewer #2	Dr Zelalem	<a href="mailto:Zelalem.urgessa@mandela.ac.za">Zelalem.urgessa@mandela.ac.za</a>
Suggested reviewer #3	Dr Thulani Hlatshanywa	<a href="mailto:Thulani.hlatshwayo@up.ac.za">Thulani.hlatshwayo@up.ac.za</a>

# Section D: Declaration of Novelty and Use of AI

This work is based on the synthesis of the nanoparticle material which is hematite using the well hydrothermal synthesis methods and we are more interested investigate the impact of doping with different rera earth element on the hematite nanostructure materials. Different characterization was than further used to study the properties of the undoped and REEs doped materials. X-xay diffraction confirmed the formation of the hematite nanostructure in the 3RC spacing group, While the TEM was used estimate the particles size of the undoped and REEs doped material. The optical properties was investigated using the UV-Vis spectroscopy. This is an ongoing work, and based on the development of the new material with better properties for the application of sensing and water purification.

Please see the Author Guidelines for the AI use policy.

How was AI used in the generation of this manuscript?

The AI was not being used to generated the manuscript, proper reference was used to develop this paper.

# Section E: Plagiarism

	Yes
I am aware that plagiarism detection software may be used on my manuscript.	Yes