



# Source details

## Journal of Physics: Conference Series

Scopus coverage years: from 2005 to Present

ISSN: 1742-6588 E-ISSN: 1742-6596

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Conference Proceeding

CiteScore 2020

**0.7**



SJR 2020

**0.210**



SNIP 2020

**0.464**



[View all documents >](#)

[Set document alert](#)

[Save to source list](#) [Source Homepage](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

### i Improved CiteScore methodology



CiteScore 2020 counts the citations received in 2017-2020 to articles, reviews, conference papers, book chapters and data papers published in 2017-2020, and divides this by the number of publications published in 2017-2020. [Learn more >](#)

### CiteScore 2020 ⌵

$$0.7 = \frac{52,411 \text{ Citations } 2017 - 2020}{72,842 \text{ Documents } 2017 - 2020}$$

Calculated on 05 May, 2021

### CiteScoreTracker 2021 ⓘ

$$0.8 = \frac{72,838 \text{ Citations to date}}{96,860 \text{ Documents to date}}$$

Last updated on 06 March, 2022 • Updated monthly

### CiteScore rank 2020 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#191/233	18th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ↗](#)

[< Back to results](#) | [< Previous](#) 4 of 18 [Next >](#)[Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Save to list](#) [More... >](#)

*Journal of Physics: Conference Series* • *Open Access* • Volume 1397, Issue 1 • 19 December 2019 • Article number 012085 • 6th International Conference on Research, Implementation, and Education of Mathematics and Science, ICRIEMS 2019 • Yogyakarta • 12 July 2019 through 13 July 2019 • Code 156695

**Document type**Conference Paper • *Bronze Open Access***Source type**

Conference Proceedings

**ISSN**

17426588

**DOI**

10.1088/1742-6596/1397/1/012085

[View more](#) ▾

# The mathematics education department students' ability in mathematical literacy for the change and relationship problems on the PISA adaptation test

[Anggoro A.Y.](#), [Julie H.](#) ✉, [Sanjaya F.](#), [Andy Rudhito M.](#), [Wiadnyana D.P.](#)[Save all to author list](#)<sup>a</sup> Sanata Dharma University, Jl. Affandi Tromol Pos 29, Sleman, Yogyakarta 55002 Indonesia, Indonesia

10

Views count [?](#) ↗[View all metrics >](#)[View PDF](#) [Full text options](#) ▾ [Export](#)**Abstract**

Indexed keywords

SciVal Topics

Metrics

Funding details

**Abstract**

One of goals of this research was to describe the mathematics education department students' ability in mathematics literacy for change and relationship problem on Programme for International Students Assessment (PISA) test. The procedures of this research were (1) adapt the PISA test, (2) validate the PISA adaptation test, (3) ask seven students from mathematics education department to solve PISA adaptation test, and (4) describe bachelor students' solution profile. There were (1) three change and relationship problems, (2) four space and shape problems, (3) two uncertainty problems, and (4) four quantity problems. The type of this research is a design research. Subjects of this research were seven bachelor students of mathematics education department. The research results were as follows: (1) level four achieved by one student (14.29%) in problem number 2b.4; (2) level three achieved by (a) six students at problem number 2a, (b) five students at problem number 2b.2; and (c) three students at

Cited by 0 documents

Inform me when this document is cited in Scopus:

[Set citation alert >](#)**Related documents**

The teachers' ability in mathematical literacy for space and shape problems on Program for International Student Assessment (PISA) adaptation test

Julie, H. , Sanjaya, F. , Anggoro, A.Y.

*(2020) Journal of Physics: Conference Series*

The teacher's mathematical literacy for the change and relationship problems on the PISA adaptation test

Anggoro, A.Y. , Julie, H. , Sanjaya, F.

*(2018) Journal of Physics: Conference Series*

The Mathematical Literacy Teachers' Ability for Quantity Area on PISA Adaptation Test

Julie, H. , Sanjaya, F. , Anggoro, A.Y.

*(2018) Journal of Physics: Conference Series*

View all related documents based on references

Find more related documents in Scopus based on:

Authors &gt; Keywords &gt;

---

Indexed keywords 


---

SciVal Topics  

---

Metrics 

---





Funding details 

---

## References (12)

[View in search results format >](#)

All

CSV export   Print  E-mail  Save to PDF

Create bibliography

- 
- 1 Stacey, K.  
The PISA view of mathematical literacy in Indonesia  
([Open Access](#))  
  
(2011) *Journal on Mathematics Education*, 2 (2), pp. 95-126. Cited 102 times.  
<https://ejournal.unsri.ac.id/index.php/jme/article/view/746/200>  
doi: 10.22342/jme.2.2.746.95-126  
  
[View at Publisher](#)
- 
- 2 Wijaya, A.  
Students' information literacy: A perspective from  
mathematical literacy ([Open Access](#))  
  
(2016) *Journal on Mathematics Education*, 7 (2), pp. 73-82. Cited 22 times.  
<https://ejournal.unsri.ac.id/index.php/jme/article/view/3532/1875>  
doi: 10.22342/jome.v7i2.3532  
  
[View at Publisher](#)
- 
- 3 Ojose, B.  
Mathematics literacy: Are we able. to put the mathematics, we learn into  
Everyday use?  
(2011) *Journal of Mathematics Education*, 4, p. 89. Cited 78 times.
- 
- 4 Christiansen, I.B.  
Mathematical literacy as a school subject: Failing the progressive vision?  
(2006) *Pythagoras*, 64, p. 6. Cited 20 times.
- 
- 5 Julie, H., Marpaung, Y.  
PMRI dan PISA: Suatu usaha peningkatan mutu pendidikan matematika di  
Indonesia  
(2012) *Widya Dharma*, 23. Cited 4 times.
- 
- 6 Julie, H.  
The elementary school teachers' ability in adding and subtracting fraction,  
and interpreting and computing  
(2017) *International Journal of Science and Applied Science: Conference  
Series*, 1, p. 55. Cited 7 times.
-

- 
- 7 (2013) *PISA 2012 Results: What Students Know and Can Do. Student Performance in Mathematics, Reading, and Science*. Cited 1642 times.  
OECD Paris: OECD
- 
- 8 (2012) *Assessment Framework. Key Competencies in Reading, Mathematics, and Science*. Cited 456 times.  
OECD Paris: OECD
- 
- 9 Julie, H., Sanjaya, F., Anggoro, A.Y.  
The students' ability in mathematical literacy for the quantity, and the change and relationship problems on the PISA adaptation test ([Open Access](#))  
  
(2017) *Journal of Physics: Conference Series*, 890 (1), art. no. 012089. Cited 7 times.  
<http://www.iop.org/EJ/journal/conf>  
doi: 10.1088/1742-6596/890/1/012089  
  
[View at Publisher](#)
- 
- 10 Campbell, P.F., Nishio, M., Smith, T.M., Clark, L.M., Conant, D.L., Rust, A.H., DePiper, J.N., (...), Choi, Y.  
The relationship between teachers' mathematical content and pedagogical knowledge, teachers' perceptions, and student achievement  
  
(2014) *Journal for Research in Mathematics Education*, 45 (4), pp. 419-459. Cited 70 times.  
<http://www.nctm.org/publications/archive.aspx?rnl=jrme>  
doi: 10.5951/jresematheduc.45.4.0419  
  
[View at Publisher](#)
- 
- 11 Akker, J.V.D., Gravemeijer McKenney K, S., Nieveen, N.  
(2006) *Educational Design Research*. Cited 468 times.  
New York: Taylor and Francis Group
- 
- 12 Miles, M.B., Huberman, A.M.  
(1994) *Qualitative Data Analysis*. Cited 46912 times.
- 

© Copyright 2020 Elsevier B.V., All rights reserved.

## About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

## Language

[日本語に切り替える](#)

[切换到简体中文](#)

[切换到繁體中文](#)

[Русский язык](#)

## Customer Service

[Help](#)

[Tutorials](#)

[Contact us](#)

---

## ELSEVIER

[Terms and conditions](#) ↗ [Privacy policy](#) ↗

Copyright © Elsevier B.V. ↗. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

We use cookies to help provide and enhance our service and tailor content. By continuing, you agree to the use of cookies.



[i](#) [x](#)

**Contact us now.**

Supply Flocculant, Anti Scalant

PT Adimitra Prima Lestari

## Journal of Physics: Conference Series

**COUNTRY**

United Kingdom



Universities and research institutions in United Kingdom

**SUBJECT AREA AND CATEGORY**

Physics and Astronomy  
Physics and Astronomy  
(miscellaneous)

**PUBLISHER**

IOP Publishing Ltd.

**H-INDEX**

**85**

**PUBLICATION TYPE**

Conferences and Proceedings

**ISSN**

17426588, 17426596

**COVERAGE**

2005-2020

**INFORMATION**

[Homepage](#)

[How to publish in this journal](#)

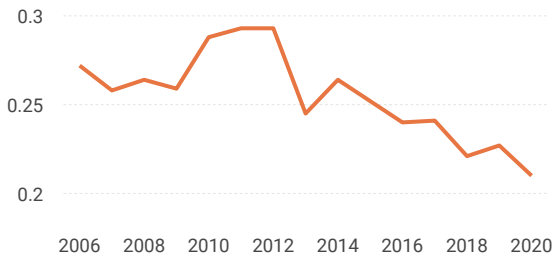
[jpcs@iopublishing.org](mailto:jpcs@iopublishing.org)

**SCOPE**

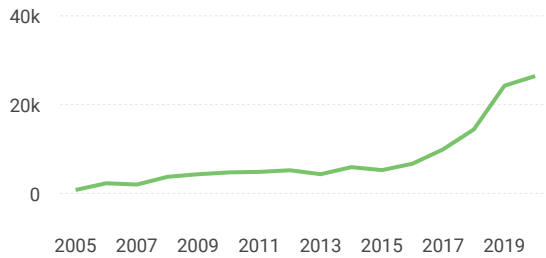
The open access Journal of Physics: Conference Series (JPCS) provides a fast, versatile and cost-effective proceedings publication service.

 Join the conversation about this journal

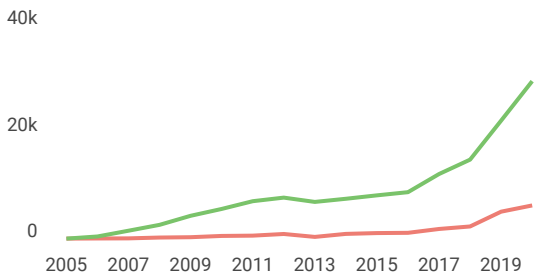
SJR



Total Documents



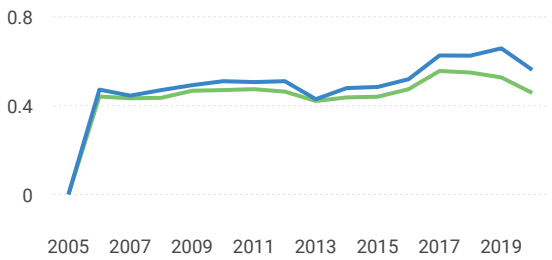
Total Cites Self-Cites



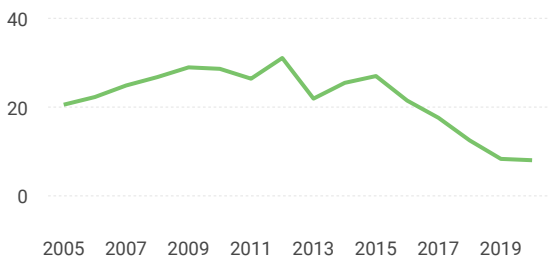
Citations per document



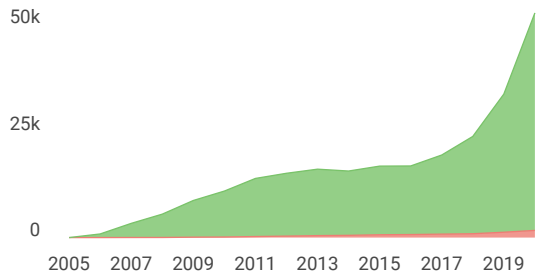
External Cites per Doc Cites per Doc



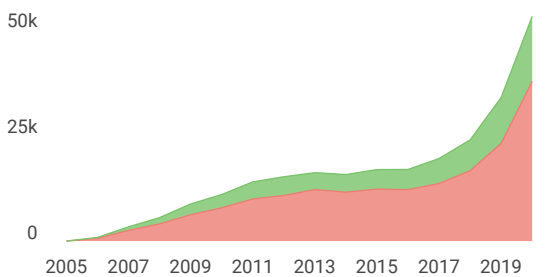
% International Collaboration



Citable documents Non-citable documents



Cited documents Uncited documents



**Journal of Physics: Conference Series**

**Q4** Physics and Astronomy (miscellaneous) best quartile

**SJR 2020** 0.21

powered by scimagojr.com

Show this widget in your own website

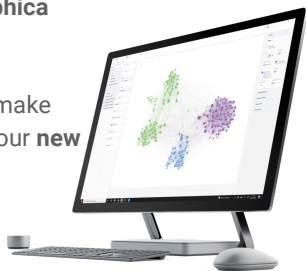
Just copy the code below and paste within your html code:

```
<a href="https://www.scimagojr.com" style="color: red; text-decoration: none;"></a>
```



Explore, visually communicate and make sense of data with our **new free tool**.

Get it



Metrics based on Scopus® data as of April 2021

Z **Zainab** 4 weeks ago

hello, is the IOP Journal of Physics: Conference Series of this journal listed in scopus?

reply



**Melanie Ortiz** 4 weeks ago

SCImago Team

Dear Zainab, thank you very much for your comment. We suggest you consult the Scopus database directly. Keep in mind that the SJR is a static image (the update is made one time per year) of a database (Scopus) which is changing every day.

Best Regards, SCImago Team

D **Dr Girisha A** 1 month ago

Dear sir,

Please inform me, whether Journal of Physics: Conference Series 1767 (2021) 012011 is rated in Q3 Or Q4.

reply



**Melanie Ortiz** 4 weeks ago

SCImago Team

Dear Dr Girisha,

Thank you for contacting us. Please see comments below.

Best Regards, SCImago Team

N **narasiman** 2 months ago

Dear sir,



*NOTICE:* Ukraine: [Click here to read IOP Publishing's statement.](#)



The open access *Journal of Physics: Conference Series (JPCS)* provides a fast, versatile and cost-effective proceedings publication service.

Latest published conferences

Vol 2237



Go

Conference archive

2019



Go

View forthcoming volumes accepted for publication.

If you would like more detailed information regarding *Journal of Physics: Conference Series* please visit [conferenceseries.iop.org](http://conferenceseries.iop.org), and if you are interested in publishing a proceedings with IOP Conference Series please visit our page for conference organizers.

**Conference organizers** can use our online form and we will get in touch with a quote and further details.

---

Most read

Latest articles

## JOURNAL LINKS

---

[Journal home](#)

---

[Journal Scope](#)

---

[Information for organizers](#)

---

[Information for authors](#)

---

[Contact us](#)

---

Reprint services from Curran Associates

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).



## JOURNAL HISTORY

---

2004-present Journal of Physics: Conference Series

doi:10.1088/issn.1742-6596

Online ISSN: 1742-6596

Print ISSN: 1742-6588



PAPER • OPEN ACCESS

## Preface

To cite this article: 2019 *J. Phys.: Conf. Ser.* **1397** 011001

View the [article online](#) for updates and enhancements.

You may also like

- [Preface](#)
- [Preface](#)
- [Preface to the 2nd ICI&ME 2020](#)



The Electrochemical Society  
Advancing solid state & electrochemical science & technology

242nd ECS Meeting

Oct 9 – 13, 2022 • Atlanta, GA, US

Abstract submission deadline: **April 8, 2022**

Connect. Engage. Champion. Empower. Accelerate.

**MOVE SCIENCE FORWARD**



Submit your abstract



**The 6<sup>th</sup> International Conference on Research, Implementation,  
and Education of Mathematics and Science (ICRIEMS 6)**

Universitas Negeri Yogyakarta, Indonesia

12-13 July 2019

**Editors:**

Dr. Restu Widiatmono

Universitas Negeri Yogyakarta, Indonesia

restu@uny.ac.id

Dr. Antuni Wiyarsi

Universitas Negeri Yogyakarta, Indonesia

antuni\_w@uny.ac.id

Dr. Eng. Kuwat Triyana, M. Si.

Universitas Gadjah Mada, Indonesia

triyana@ugm.ac.id



**Peer Review Statement**

All papers published in this volume of *IOP Conference Series: Journal of Physics Conference Series* have been peer reviewed through processes administered by the proceedings Editors. Reviews were conducted by expert referees to the professional and scientific standards expected of a proceedings journal published by IOP Publishing.

## **Preface: Proceedings of 6<sup>th</sup> International Conference on Research, Implementation, and Education of Mathematics and Science (ICRIEMS 6)**

**R Widiatmono<sup>1</sup>, A Wiyarsi<sup>2</sup>, and K Triyana<sup>3</sup>**

<sup>1</sup>Physics Education Department, Universitas Negeri Yogyakarta, Indonesia

<sup>2</sup>Chemistry Education Department, Universitas Negeri Yogyakarta, Indonesia

<sup>3</sup>Physics Department, Universitas Gadjah Mada, Indonesia

We are pleased to present you the 6<sup>th</sup> International Conference on Research, Implementation, and Education of Mathematics and Science (ICRIEMS 6) Conference Proceeding. The 6<sup>th</sup> ICRIEMS was held on 12-13th July 2019 and organized by the Faculty of Mathematics and Science, Universitas Negeri Yogyakarta, Indonesia. We are raising a theme “**Integrating Science, Technology, Engineering, & Mathematics (STEM) and Education for Disaster Risk Reduction and Mitigation**”. We hope that the theme will promote STEM and its education to enhance society knowledge and awareness on disasters. The knowledge could help people and government agencies to reduce and prevent the emergence of a larger disaster impact.

The conference also was an event where prominent practitioners, researchers, students and educators shared their research findings and exchange ideas. Five keynote speakers were given their talk: Prof. Dr. Gultekin Cakmakci, from Hacettepe University, Turkey; Prof. Dr. Wing Mui Winnie So from The Education University of Hong Kong; Martianus Frederic Ezerman, Ph.D, from Nanyang Technological University, Singapore; Prof. Dwikorita Karnawati, Ph.D from Meteorological, Climatological, and Geophysical Agency of Indonesia; and Dr. Insih Wilujeng from Universitas Negeri Yogyakarta. In addition, two invited speakers also contributed: Dr. Hanik Humaida from the Center for Volcanology and Geological Hazard Mitigation of Indonesia; and Dr. Azlan Kamari from Universiti Pendidikan Sultan Idris, Malaysia.

The conference has accepted 210 papers from six countries, i.e. Turkey, Indonesia, Hongkong, Singapore, Malaysia, and Thailand. After an intensive review process, finally 95 papers have been selected for publication. We believe the proceedings will provide the scientists of the world with an excellent reference and be an impetus to stimulate further studies in all related areas. We address big appreciation and many thanks to all authors and participants who have been actively involved in the conference. We also wish to thanks to our scientific committee for their invaluable comments and suggestions.

24 October 2019

### *Editors*

Restu WIDIATMONO

Antuni WIYARSI

Kuwat TRIYANA

**List of Committees***STEERING COMMITTEE*

Prof. Dr. Wim T van HORSSSEN (Applied Mathematics, TU Delft, Netherland)  
Prof. Dr. Muammer CALIK (Chemistry Education, Trabzon University, Turkey)  
Prof. Fang Ying YANG Ed.D (Science Education, National Taiwan Normal University, Taiwan)  
Allen PRICE, Ph.D (Physics Education, Emmanuel College Boston, USA)  
Guillermo DÁVILA-RASCÓN, Univesidad de Sonora, Mexico  
Osval Antonio Montesinos LOPEZ, Ph.D. (Statistic, Universidad de Colima, Mexico)  
Dr. Azmi MOHAMMED (Chemistry, Universiti Pendidikan Sultan Idris, Malaysia)  
Dr. Eng. Kuwat TRIYANA (Phycis, Uninersitas Gadjah Mada, Indonesia)  
Dr. HARTONO (Mathematics, Universitas Negeri Yogyakarta, Indonesia)  
Dr. Slamet SUYANTA (Biology, Universitas Negeri Yogyakarta, Indonesia)

*ORGANIZING COMMITTEE*

Dr. Restu WIDIATMONO  
Dr. Antuni WIYARSI  
Dr. Kun Sri BUDIASIH  
Dr. KARYATI  
Dr. PUJANTO  
Dr. Retno ARIANINGRUM  
Ilham RIZKIANTO, M.Sc  
Kuswari HERNAWATI, M.Kom

# Table of contents

Volume 1397

2019

◀ Previous issue      Next issue ▶

**The 6th International Conference on Research, Implementation, and Education of Mathematics and Science 12–13 July 2019, Yogyakarta, Indonesia**

Accepted papers received: 31 October 2019

Published online: 19 December 2019

Open all abstracts

---

## Preface

---

OPEN ACCESS 011001

Preface

+ Open abstract  View article  PDF

---

OPEN ACCESS 011002

Peer review statement

+ Open abstract  View article  PDF

---

## Papers

---

OPEN ACCESS 012001

The effects of annealing temperature and angular velocity variation on microstructure and optical properties of barium titanate ( $\text{BaTiO}_3$ ) using chemical solution deposition method

R. P. Rini, F. Nurosyid and Y. Iriani

+ Open abstract  View article  PDF

---

OPEN ACCESS 012002

Effect of pre-annealing and annealing temperature on microstructural and optical properties of multiferroic  $\text{BiFeO}_3$  thin films prepared by chemical solution deposition (CSD)

E B Agustina, Y Iriani and R Suryana

+ Open abstract  View article  PDF

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more,

see our [Privacy and Cookies policy](#).

 012003



# Comparing the Performance of Seasonal ARIMAX Model and Nonparametric Regression Model in Predicting Claim Reserve of Education Insurance

S M Ulyah, M F F Mardianto and Sediono

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012075

Probabilistic multi-objective optimization approach to solve production planning and raw material supplier selection problem under probabilistic demand value

Sutrisno, P. A. Wicaksono and Solikhin

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012076

Evenly brightening using kurtosis Gaussian pattern to simplify image binarization

T. M. S. Mulyana and Herlina

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012077

Evaluation of geographically weighted multivariate negative Binomial method using multivariate spatial infant mortality data

Y S Dewi, Purhadi, Sutikno and S W Purnami

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012078

Valuation risk adjusted deposit insurance on heston model

N Hariati, M Yunus and E R M Putri

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012079

What Difficulties that Students Working in Mathematical Reasoning Questions?

A H Zaini and H Retnawati

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012080

Why are mathematics teachers advised to use blended learning in the learning process?

Bulan Nuri

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012081

The Profile of Junior High School Students' Mathematical Creative Thinking Skills in Solving Problem through Contextual Teaching

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).



Cholis Sa'dijah, Ucik Fitri Handayani, Sisworo, Sudirman, Susiswo, Ety Tejo Dwi Cahyowati and Mukhtamilatus Sa'diyah

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012082

The Effect of Problem Based Learning on Mathematical Critical Thinking Skills of Junior High School Students

Fitriana Yolanda

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012083

How to Create Isomorphic Example-Problem Pairs for Facilitating Analogical Thinking

F M Pastoriko and E Retnowati

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012084

The Types and Factors of Error of Elementary School Students in Solving Mathematical Word Problems: An Analysis Using the Fong's Method

Hikmah Ramdhani Putri and Djamilah Bondan Widjajanti

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012085

The mathematics education department students' ability in mathematical literacy for the change and relationship problems on the PISA adaptation test

Antonius Yudhi Anggoro, Hongki Julie, Febi Sanjaya, M Andy Rudhito and Dewa Putu Wiadnyana

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012086

Analysis of The Difficulty of VIII<sup>th</sup> Grade Junior High School Students in Circle Material Reviewed from The Mathematics Connection Ability

Indra Kusuma Wijayanti and Agus Maman Abadi

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012087

The Lost Process of Mathematical Literacy on Excellent Students at MAN 2 Kudus

Lulu Choirun Nisa and Ainal Inayah

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012088

Exploration of teachers' "knowledge of students" in study-based teaching on polyhedron material

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy

Ma Fuhi, M Hiyas, R F Pasandaran and Salwah





# Certificate

Ref: 11/UN34.13/TU.01/2019

This is to certify that

**Hongki Julie**

has participated in

**The 6<sup>th</sup> International Conference on Research, Implementation and Education of Mathematics and Science 2019**

Organized by Faculty of Mathematics and Natural Sciences, Yogyakarta State University

on July, 12<sup>th</sup> - 13<sup>th</sup>, 2019

As a

**Presenter**

With the paper entitled:

The Mathematics Education Department Students' Ability in Mathematical Literacy for the Change and Relationship Problems on the PISA Adaptation Test



Dean,

Dr. Hartono

NIP.19620329 198702 1 002

Yogyakarta, July 13, 2019  
The Head of Committee

Dr. Restu Widiatmono, M.Si.

NIP 19720522 199802 1 001