

MINISTRY OF RESEARCH, TECHNOLOGY, AND HIGHER EDUCATION UNIVERSITAS NEGERI SEMARANG FACULTY OF MATHEMATICS AND NATURAL SCIENCES DEPARTMENT OF INTEGRATED SCIENCES IN COLLABORATION WITH PERKUMPULAN PENDIDIK IPA INDONESIA



JURNAL PENDIDIKAN IPA INDONESIA

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Secretariat: D5 Building, First Floor, UNNES Campus in Sekaran Gunungpati Semarang, Indonesia, Postal Code 50229. Phone (+6224) 70805795, Fax. (+6224) 8508005, E-mail: jpii@mail.unnes.ac.id, Website: http://journal.unnes.ac.id/nju/index.php/jpii

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We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us.

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The first author,

Mu'iizatin Fadianal