

Mustofa Amien. 2025. *Pengembangan Media Pembelajaran Augmented Reality Berbasis Android Pada Materi Struktur Atom*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Luluk Mauli Diana, S.Si., M.Pd.

ABSTRAK

Materi struktur atom tergolong sulit dipahami karena bersifat abstrak dan tidak dapat diamati langsung. Penelitian ini bertujuan mengembangkan media pembelajaran *Augmented Reality* berbasis Android pada materi struktur atom untuk membantu siswa memahami materi tersebut. Media yang dikembangkan menyajikan visualisasi model-model atom secara tiga dimensi menggunakan teknologi *Augmented Reality*, sedangkan konsep partikel penyusun atom seperti proton, neutron, dan elektron hanya disampaikan melalui penjelasan teks. Pengembangan dilakukan menggunakan model *ADDIE* yang terdiri dari lima tahap: analisis, desain, pengembangan, implementasi, dan evaluasi. Validasi dilakukan oleh ahli materi dan media, serta uji coba kepada siswa. Hasil validasi ahli materi sebesar 90% dan ahli media sebesar 88%, keduanya termasuk kategori sangat layak. Uji coba kepada siswa menghasilkan rata-rata respon sebesar 90%, menunjukkan media ini sangat layak digunakan sebagai alat bantu pembelajaran pada materi struktur atom.

Kata Kunci: Augmented Reality, Struktur Atom, Model Atom, Media Pembelajaran, Android

Mustofa Amien. 2025. *Development of Android-Based Augmented Reality Learning Media on Atomic Structure Material. Undergraduate Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Universitas Trunojoyo Madura. Supervisor: Luluk Mauli Diana, S.Si., M.Pd.*

ABSTRACT

The topic of atomic structure is considered difficult to understand due to its abstract nature and the fact that atoms cannot be observed directly. This research aims to develop Android-based learning media utilizing Augmented Reality technology to assist students in understanding atomic structure material. The developed media presents three-dimensional visualizations of atomic models through Augmented Reality technology, while the concepts of atomic particles such as protons, neutrons, and electrons are delivered through textual explanations. The development process followed the ADDIE model, which consists of five stages: analysis, design, development, implementation, and evaluation. Validation was carried out by both material and media experts, as well as through student trials. The material expert validation reached a percentage of 90%, while media expert validation reached 88%, both categorized as highly feasible. Student testing showed an average response rate of 90%, indicating that this media is highly suitable to be used as a learning aid for atomic structure material.

Keywords: *Augmented Reality, Atomic Structure, Atomic Models, Learning Media, Android*