

Research Publications 2022–2025

The following table presents a list of scholarly publications published between 2022 and 2025. These articles reflect sustained research contributions and have been published in reputable academic journals.

| No | Tahun | Nama DTPS | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|-------------------------------|--|
| 1 | 2025 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Enhancing Critical Thinking Skills For Sustainable Education: A Case Study Of Indonesian Junior High School Students In Kuala Lumpur, Malaysia To Support Sdg-4 Quality Education</u> |
| 2 | 2025 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Chem-USG Learning Media to Increase Students' Learning Interest in High School Chemical Equilibrium Material: A Case Study</u> |
| 3 | 2025 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Kepraktisan E-Komik Interaktif Sebagai Media Pembelajaran pada Materi Ikatan Kimia Kelas XI SMA</u> |
| 4 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Hidden Chem Card to Improve Students' Motivation and Learning Outcomes</u> |
| 5 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Identification of Students' Misconceptions and Understanding on Thermochemistry Material with Four-Tier Multiple-Choice Tests</u> |
| 6 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Inquiry-Flipped Classroom E-worksheet to Train Critical Thinking Skills on Chemical Equilibrium Learning</u> |
| 7 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Effectiveness Of Bemo: An Android-Based Educational Game As A Learning Media On Molecular Shape Material</u> |
| 8 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Validity of PBEST Learning Model: An Innovative Learning to Improve Creative Thinking Skill and Entrepreneurial Science Thinking</u> |

| No | Tahun | Nama DTPS | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|-------------------------------|---|
| 9 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Chemture Gamification to Improve Learners' Cognitive Ability on Acid-Base Material</u> |
| 10 | 2024 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Identification of Students' Misconceptions and Understanding on Thermochemistry Material with Four-Tier Multiple-Choice Tests</u> |
| 11 | 2023 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>GAMIFICATION: GAME AS A MEDIUM FOR LEARNING CHEMISTRY TO MOTIVATE AND INCREASE RETENTION OF STUDENTS' LEARNING OUTCOMES</u> |
| 12 | 2023 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>House of Chemistry as a hydrocarbon learning media for high school students</u> |
| 13 | 2022 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>THE PRACTICALITY AND EFFECTIVENESS OF CASE STUDY-BASED MODULE ON CHEMICAL THERMODYNAMICS COURSE (IDEAL AND REAL GASES) AS LEARNING TOOL DURING THE COVID-19 PANDEMIC</u> |
| 14 | 2022 | Prof. Dr. Achmad Lutfi, M.Pd. | <u>Laboratorium Virtual sebagai Media Pembelajaran Kimia untuk Menyongsong Implementasi Kurikulum Merdeka</u> |
| 15 | 2025 | Dr. Sukarmin, M.Pd. | <u>Augmented Reality-Based Virtual Laboratory Application as Chemistry Learning Media for Acid-Base Titration Material</u> |
| 16 | 2025 | Dr. Sukarmin, M.Pd. | <u>A G-Bond Development: Gamification Media to Improve Literacy, Visualization, and Numeracy in Chemical Bond Learning in High School</u> |
| 17 | 2025 | Dr. Sukarmin, M.Pd. | <u>Peningkatan Kompetensi Guru Kimia Melalui Pelatihan Pembuatan Media Pembelajaran Kimia Berbasis ICT</u> |

| No | Tahun | Nama DTPS | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---------------------|---|
| 18 | 2024 | Dr. Sukarmin, M.Pd. | <u>Development of an Interactive Digital Learning Media "E-MIREDOKS" on Redox Reaction Material</u> |
| 19 | 2024 | Dr. Sukarmin, M.Pd. | <u>Development of Chemistry Lecture Sets for Reducing Logical Fallacy in Arguing</u> |
| 20 | 2023 | Dr. Sukarmin, M.Pd. | <u>Are Argumentation Skills Can Describe Understanding Concepts?</u> |
| 21 | 2023 | Dr. Sukarmin, M.Pd. | <u>Development of Interactive Learning Multimedia on Atomic Model Topic to Minimize Students Misconceptions at SMAN 1 Driyorejo</u> |
| 22 | 2023 | Dr. Sukarmin, M.Pd. | <u>Meningkatkan Hasil Belajar Peserta Didik dengan Model Discovery Learning pada Materi Ikatan Kimia</u> |
| 23 | 2023 | Dr. Sukarmin, M.Pd. | <u>Pengembangan E-flipbook Interaktif dengan Strategi Conceptual Change sebagai Media Reduksi Miskonsepsi Peserta Didik pada Materi Laju Reaksi</u> |
| 24 | 2023 | Dr. Sukarmin, M.Pd. | <u>Pengembangan E-Modul Berbasis Inkuiri Terbimbing untuk Melatihkan Keterampilan Berpikir Kritis Peserta Didik pada Materi Laju Reaksi</u> |
| 25 | 2023 | Dr. Sukarmin, M.Pd. | <u>Preliminary Study of College Students' Creative Thinking Skills on Electromagnetic Material</u> |
| 26 | 2023 | Dr. Sukarmin, M.Pd. | <u>Training Scientific Literacy Skills Through Inquiry Learning with Chemcollective's Virtual Laboratory on Chemical Equilibrium</u> |
| 27 | 2022 | Dr. Sukarmin, M.Pd. | <u>DEVELOPMENT OF INTERACTIVE MULTIMEDIA IN LEARNING CHEMISTRY ATOMIC STRUCTURE MATERIALS FOR HIGH SCHOOL</u> |

| No | Tahun | Nama DTPS | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---|---|
| 28 | 2022 | Dr. Sukarmin, M.Pd. | Development of Augmented Reality-Based Interactive "Element Card" Media on Electron Configuration Submaterial According to Niels Bohr |
| 29 | 2022 | Dr. Sukarmin, M.Pd. | The development of interactive multimedia to prevent misconceptions in salt hydrolysis materials |
| 30 | 2022 | Dr. Sukarmin, M.Pd. | Pengembangan Software Anti Mischemistry Dengan Menggunakan Strategi Conceptual Change Text Untuk Mereduksi Miskonsepsi Siswa Pada Materi Asam Basa |
| 31 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | A G-Bond Development: Gamification Media to Improve Literacy, Visualization, and Numeracy in Chemical Bond Learning in High School (IJORER: International Journal of Recent Educational Research, 6, 2025, 3, 775-788). |
| 32 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Augmented reality as an interactive multimedia in developing student's visual intelligence on molecular geometry material |
| 33 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | DEVELOPMENT OF INTERACTIVE VIDEO-ASSISTED WORKSHEETS: ENHANCING STUDENTS'VISUAL INTELLIGENCE |
| 34 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Innovative POGIL-Based E-Module with MolView Integration: Advancing Visual-Spatial Intelligence in Molecular Geometry Learning |
| 35 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Integration of 3D animation flipbook to enhance spatial visualization in molecular geometry learning |

| No | Tahun | Nama DTSP | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---|---|
| 36 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Interactive E-LKPD Based on CTL (Contextual Teaching Learning) Assisted Wizer. me to Train Students' Learning Independence in Hydrocarbons</u> |
| 37 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Interactive E-Module Based on WordPress Content Management System to Improve Student Learning Outcomes on Chemical Bond Material</u> |
| 38 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Interactive E-Worksheets for Critical Thinking in Chemistry: A Three-Level Representation Approach to Voltaic Cells</u> |
| 39 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>PENERAPAN MULTIMEDIA INTERAKTIF BERBASIS ANDROID UNTUK MENINGKATKAN HASIL BELAJAR SISWA MATERI EKOLOGI DAN KEANEKARAGAMAN HAYATI INDONESIA</u> |
| 40 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Peningkatan Kompetensi Guru Kimia Melalui Pelatihan Pembuatan Media Pembelajaran Kimia Berbasis ICT</u> |
| 41 | 2025 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Transforming Molecular Geometry Learning through EddPuzzle Interactive Videos to Improve High School Students' Visual Intelligence</u> |
| 42 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>DEVELOPMENT OF A PERIODIC ELEMENTARY SYSTEM MODULE FOR BOARDING SCHOOL STUDENTS IN IMPROVING VISUAL INTELLIGENCE</u> |
| 43 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Development of An Interactive E-Module Based on Blended Learning to Enhance Student Independence and Learning Outcomes</u> |

| No | Tahun | Nama DTSP | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---|---|
| 44 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>DEVELOPMENT OF POGIL-BASED E-WORKSHEET ON COVALENT BOND MATERIALS TO IMPROVE STUDENTS' LEARNING INDEPENDENCE</u> |
| 45 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Development of Project-Based Learning Oriented Student Worksheets to Improve Students' Creative Thinking Skills on Class X High School Nanotechnology Material</u> |
| 46 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Diversifikasi Teknologi Pengolahan Dan Pemasaran Tanaman Mangrove Menjadi Produk Unggulan Desa Pesisir Di Pasuruan</u> |
| 47 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>PELATIHAN PENYUSUNAN SOAL BERBASIS ARGUMENTASI BAGI GURU KIMIA DI KABUPATEN GRESIK</u> |
| 48 | 2024 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Project-Based Interactive Colloidal E-Module in Chemistry Learning to Improve Student's Science Process Skills and Understanding Concepts</u> |
| 49 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>3D Molecular Interactive Multimedia for Building Chemistry Students' Spatial Ability</u> |
| 50 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Analysis of the Validity Level of Interactive E-Modules to Improve Visual-Spatial Intelligence on Molecular Shape</u> |
| 51 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | <u>Development of Web-Based Interactive e-Module to Improve the Ability of Symbolic Representation of Chemical Bonding Material</u> |

| No | Tahun | Nama DTSP | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---|--|
| 52 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Effectiveness of Android-Based Mobile Learning (M-Learning) on Molecular Shape Sub-Materials to Improve Students' Visual-Spatial Intelligence |
| 53 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Improving Students' Learning Outcomes and Activities through the Implementation of the Discovery Learning Model on Mol Concept Material |
| 54 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | PELATIHAN PEMBUATAN E-LKPD BERBASIS PBL-STEM (PROBLEM BASED LEARNING-SCIENCE, TECHNOLOGY, ENGINEERING AND MATH) BAGI GURU KIMIA DI KABUPATEN GRESIK |
| 55 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | PELATIHAN PEMBUATAN PERANGKAT PEMBELAJARAN KURIKULUM MERDEKA BERBASIS PROJECT BASED LEARNING (PjBL) BAGI GURU SMA PONDOK PESANTREN BAYT AL-HIKMAH |
| 56 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Pengembangan E-Modul Kimia Interaktif untuk Meningkatkan Hasil Belajar Peserta Didik Melalui Representasi Kimia pada Materi Reaksi Reduksi dan Oksidasi |
| 57 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Pengembangan Multimedia Interaktif untuk Meningkatkan Kecerdasan Visuospasial Siswa SMA Melalui Strategi Three-Tier Test |
| 58 | 2023 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Voltaic Cell Practical Guide Application Based on Mobile-Augmented Reality to Improve Student's Understanding Concepts (Vol. 10 No. 3: Jurnal Paedagogy (July 2023)) |

| No | Tahun | Nama DTSP | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---|---|
| 59 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Laboratorium Virtual sebagai Media Pembelajaran Kimia untuk Menyongsong Implementasi Kurikulum Merdeka |
| 60 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | DESCRIPTION OF THE ROLE OF GUIDING BOOK IN LEARNING BASED ON ASSESSMENT AS LEARNING |
| 61 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | The Effectivity of Interactive E-Module to Increase the Students' Visual-Spatial Intelligence on Ionic |
| 62 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Interactive e-modules training and workshop as teaching materials the era of Society 5.0 |
| 63 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Validitas e-modul interaktif sebagai media pembelajaran untuk melatih kecerdasan visual spasial pada materi ikatan kovalen |
| 64 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Inquiry-based electronic student worksheets assisted with live worksheets to enhance visual-spatial |
| 65 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Interactive multimedia by stimulating visual-spatial intelligence trial |
| 66 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Development of Interactive E-Modules as a Learning Media to Train Visual-Spatial Intelligence on Intermolecular Force Materials |

| No | Tahun | Nama DTPS | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|---|--|
| 67 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | The Development of Android-Based Mobile Learning (M-Learning) on Voltaic Cell Sub Materials to Increase Learning Effectiveness in Pandemic Covid-19 Era |
| 68 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Laboratorium Virtual sebagai Media Pembelajaran Kimia untuk Menyongsong Implementasi Kurikulum Merdeka |
| 69 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Enhancement Student Achievement on Basic Chemistry Course Through Assessment as Learning Implementation |
| 70 | 2022 | Dr. Kusumawati Dwiningsih, S.Pd., M.Pd. | Analisis hasil belajar peserta didik melalui media visualisasi geometri molekul berbasis Mobile Virtual Reality (MVR) Improving Student's Ability to Understand Chemical Representations through the Implementation of a Web-Based E-Module on The Periodic System of Elements Materials |
| 71 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | A G-Bond Development: Gamification Media to Improve Literacy, Visualization, and Numeracy in Chemical Bond Learning in High School (IJORER: International Journal of Recent Educational Research, 6, 2025, 3, 775-788). |
| 72 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | Analisis Peringkat Nasional Program Kampus Mengajar di Universitas Negeri Surabaya |
| 73 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | Best Practice Implementasi Mobilitas Akademik Magang di Universitas Negeri Surabaya |
| 74 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | DEVELOPMENT OF E-LAPD LEARNING MEDIA TO IMPROVE STUDENTS' METACOGNITIVE SKILLS ON THE MATERIAL ON REACTION RATE FACTORS |

| No | Tahun | Nama DTSP | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|------------------------------------|--|
| 75 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>Development of E-Worksheet Project-Based Learning on Green Chemistry Materials to Improve Students Creative Thinking Skills</u> |
| 76 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>Efektivitas Penggunaan E-LAPD dengan Model Pembelajaran Project Based Learning untuk Meningkatkan Keterampilan Berpikir Kreatif Peserta Didik pada Materi Faktor-Faktor yang Mempengaruhi Laju Reaksi</u> |
| 77 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>Peningkatan Kompetensi Guru Kimia Melalui Pelatihan Pembuatan Media Pembelajaran Kimia Berbasis ICT</u> |
| 78 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>Profiling Students Scientific Literacy Skills in the Reaction Rate Topic through STEM Based E-LAPD</u> |
| 79 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>Student Exchange Program to Improve Interreligious Studies Among the Young Generation</u> |
| 80 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>The Creativity Skills of Students in PjBL and CPjBL Model: An Experimental Study</u> |
| 81 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>The Effectiveness of Student Electronic Worksheet-Based on Project-Based Learning to Improve Student Critical Thinking Skills in Green Chemistry Materials</u> |
| 82 | 2025 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>The Effectiveness of Using Animated Videos as A Learning Medium to Reduce Student Misconceptions About Reaction Rate Material</u> |
| 83 | 2024 | Dr. Rusly Hidayah, S.Si., M.Pd. | <u>PELATIHAN PENYUSUNAN SOAL BERBASIS ARGUMENTASI BAGI GURU KIMIA DI KABUPATEN GRESIK</u> |

| No | Tahun | Nama DTPS | Judul Artikel (Jurnal, Volume, Tahun, Nomor, Halaman) |
|----|-------|------------------------------------|---|
| 84 | 2024 | Dr. Rusly Hidayah, S.Si., M.Pd. | The effectiveness of website on improving students' creative thinking skills in chemical bonding |
| 85 | 2023 | Dr. Rusly Hidayah, S.Si., M.Pd. | House of Chemistry as a hydrocarbon learning media for high school students |
| 86 | 2022 | Dr. Rusly Hidayah, S.Si., M.Pd. | Synthesis of Nanoherbal from Ethanol Extract of Indonesian Fern Selaginella plana and Antibacterial Activity Assay |
| 87 | 2022 | Dr. Rusly Hidayah, S.Si., M.Pd. | Interactive Chemical Bond Electronic Module Based on Nature of Science (NoS) to Improve Scientific Literacy Knowledge |
| 88 | 2022 | Dr. Rusly Hidayah, S.Si., M.Pd. | PENERAPAN MODEL PEMBELAJARAN INKUIRI TERBIMBING UNTUK MELATIHKAN LITERASI SAINS PESERTA DIDIK PADA MATERI KESETIMBANGAN KIMIA |