# DAFTAR PUSTAKA


Abdullah, M. (2016). *Fisika Dasar I (Edisi Revisi)*. Institut Teknologi Bandung.

Adeleke, A. A., & Joshua, E. O. (2015). Development and Validation of Scientific Literacy Achievement Test to Assess Senior Secondary School Students Literacy Acquisition in Physics. *Journal of Education and Practice*, *6*(7), 28–43.

Agustina, H., Roesminingsih, M. V., Jacky, M., & Surabaya, U. N. (2021). *Pengembangan Multimedia Interaktif Berbantu Articulate Storyline Untuk Meningkatkan Hasil Belajar Kognitif Siswa*. *9*(2), 567–571.

Al-Rahmi, W. M., Yahaya, N., Aldraiweesh, A. A., Alamri, M. M., Aljarboa, N. A., Alturki, U., & Aljeraiwi, A. A. (2019). Integrating Technology Acceptance Model with Innovation Diffusion Theory: An Empirical Investigation on Students' Intention to Use E-Learning Systems. *IEEE Access*, *7*, 26797–26809. https://doi.org/10.1109/ACCESS.2019.2899368

Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, *25*(6), 5261–5280. https://doi.org/10.1007/s10639-020-10219-y

Angraini, G. (2014). Analisis Kemampuan Literasi Sains Siswa SMA Kelas X di Kota Solok. *Prosiding Mathematics and Sciences Forum*, 161–170.

Anshari, M., Almunawar, M. N., Shahrill, M., Wicaksono, D. K., & Huda, M. (2017). Smartphones usage in the classrooms: Learning aid or interference? *Education and Information Technologies*, *22*(6), 3063–3079. https://doi.org/10.1007/s10639-017-9572-7

Ardianto, D., & Rubini, B. (2016). Comparison of students' scientific literacy in integrated science learning through model of guided discovery and problem based learning. *Jurnal Pendidikan IPA Indonesia*, *5*(1), 31–37. https://doi.org/10.15294/jpii.v5i1.5786

Aribowo, E. K. (2017). Quizlet: Penggunaan Aplikasi Smartphone untuk Siswa dalam

Mendukung Mobile Learning. *Seminar Nasional Pendidikan Bahasa Indonesia*, *September*, 31–38. https://doi.org/10.31227/osf.io/jkys5

Astra, I. M., Raihanati, R., & Mujayanah, N. (2020). Development of Electronic Module Using Creative Problem-Solving Model Equipped with HOTS Problems on The Kinetic Theory of Gases Material. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, *6*(2), 181–194. https://doi.org/10.21009/1.06205

Asvial, M., Mayangsari, J., & Yudistriansyah, A. (2021). Behavioral Intention of e-Learning: A Case Study of Distance Learning at a Junior High School in Indonesia due to the COVID-19 Pandemic. *International Journal of Technology*, *12*(1), 54–64. https://doi.org/10.14716/ijtech.v12i1.4281

Atkins, P., & Jones, L. (2012). *Chemical principles: The quest for insight 6th ed*.

Basyiroh, I. (2017). Program Pengembangan Kemampuan Literasi. *Tunas Siliwangi*, *3*(2), 120–134. http://www.e-journal.stkipsiliwangi.ac.id/index.php/tunas-siliwangi/article/viewFile/646/476

Batong, J. S. T., & Wilujeng, I. (2018). Developing Web-Students' Worksheet Based on Inquiry Training for Increase Science Literacy. *Journal of Physics: Conference Series*, *1097*(1). https://doi.org/10.1088/1742-6596/1097/1/012021

Cerbin, W. (2019). *Research-Based Guidelines for Using Flashcards to Improve Your Learning*. *November*.

Chang, R. (2010). *CHEMISTRY 10th ed*.

Chitra, A. P., & Raj, M. A. (2018). E-Learning. *Journal of Applied and Advanced Research*, *2018*(3), 11–13. https://dx.doi.org/10.21839/jaar.2018.v3S1.158

Cucus, A., & Aprilinda, Y. (2016). Pengembangan E-Learning Berbasis Multimedia untuk Efektivitas Pembelajaran Jarak Jauh. *Explore: Jurnal Sistem Informasi Dan Telematika*, *7*(1). https://doi.org/10.36448/jsit.v7i1.765

D'Angelo, T., Bunch, J. C., & Thoron, A. C. (2018). Instructional Design Using the Dick & Carey Systems Approach. *Edis*, *2018*(2), 1–5. https://doi.org/10.32473/edis-wc294-2018

Dahiya, S., Jaggi, S., Chaturvedi, K. K., Bhardwaj, A., Goyal, R. C., & Varghese, C.

(2012). An eLearning System for Agricultural Education. *Indian Res. J. Ext. Edu*, *12*(3), 132–135.

Darihastining, S., Utomo, E. S., & Chalimah. (2021). The Effectiveness of Communication and Online Language Disruption During the Era of Pandemic Covid-19 in Senior High School. *Journal of Physics: Conference Series*, *1722*(1). https://doi.org/10.1088/1742-6596/1722/1/012024

Dupigny-Giroux, L. A. L. (2010). Exploring the challenges of climate science literacy: Lessons from students, teachers and lifelong learners. *Geography Compass*, *4*(9), 1203–1217. https://doi.org/10.1111/j.1749-8198.2010.00368.x

Fatmawati, A., Zubaidah, S., Mahanal, S., & Sutopo. (2019). Critical Thinking, Creative Thinking, and Learning Achievement: How They are Related. *Journal of Physics: Conference Series*, *1417*(1). https://doi.org/10.1088/1742-6596/1417/1/012070

Febrianto, P. T., Mas'udah, S., & Megasari, L. A. (2020). Implementation of online learning during the covid-19 pandemic on Madura Island, Indonesia. *International Journal of Learning, Teaching and Educational Research*, *19*(8), 233–254. https://doi.org/10.26803/ijlter.19.8.13

Giancoli, D. C. (2015). Physics: Principles with Applications Global Edition. In *PEARSON*.

Hakim, L., & Agung, H. (2018). Kajian Desain E-Learning Berdasarkan Spesifikasi E-Learning. *Prosiding Semnastek*, *17*(0).

Halliday, D., & Resnick, R. (2014). Fundamentals of Physics 10th ed. In *Wiley*.

Hanafi. (2017). Konsep Penelitian R & D Dalam Bidang Pendidikan. *Saintifika Islamica: Jurnal Kajian Keislaman*, *4*(2), 129–150.

Handayani, G., Adisyahputra, & Indrayanti, R. (2018). Hubungan Keterampilan Proses Sains Terintegrasi dan Kemampuan Membaca Pemahaman Terhadap Literasi Sains Pada Mahasiswa Calon Guru. *Biosfer: Jurnal Pendidikan Biologi*, *11*(1), 21–31. https://doi.org/10.21009/biosferjpb.11-1.3

Harisanty, D., Srirahayu, D., Kusumaningtiyas, T., Anugrah, E., & Permata, I. (2020).

The Utilization of Flashcards in Children Information Literacy Development. *Library Philosophy and Practice*, *2020*(November), 1–12.

Hariyanto, W. (2012). *Pemanfaatan Media Pembelajaran Fisika Berbasis Macromedia Flash 8 Guna Meningkatkan Motivasi Belajar Siswa Pada Pokok Bahasan Sifat Mekanik Bahan Kelas X*. *1*(1), 1–4.

Hartanto, W. (2016). Penggunaan E-Learning sebagai Media Pembelajaran. *Jurnal Pendidikan Ekonomi*, *10*(1), 1–18.

Hasyim, F., Prastowo, T., & Jatmiko, B. (2020). The Use of Android-Based PhET Simulation as an Effort to Improve Students' Critical Thinking Skills during the Covid-19 Pandemic. *International Journal of Interactive Mobile Technologies*, *14*(19), 31–41. https://doi.org/10.3991/ijim.v14i19.15701

Hidayat, D. R., Rohaya, A., Nadine, F., & Ramadhan, H. (2020). Kemandirian Belajar Peserta Didik Dalam Pembelajaran Daring Pada Masa Pandemi Covid-19. *Perspektif Ilmu Pendidikan*, *34*(2), 147–154. https://doi.org/10.21009/pip.342.9

Ikhwati, Hestiana., Sudarmin, P. (2014). Pengembangan Media Flashcard IPA Terpadu Dalam Pembelajaran Model Kooperatif Tipe Students Teams Achievement Divisions (STAD) Tema Polusi Udara. *USEJ - Unnes Science Education Journal*, *3*(2), 481–486. https://doi.org/10.15294/usej.v3i2.3344

Kabil, O. (2015). Philosophy in Physics Education. *Procedia - Social and Behavioral Sciences*, *197*(February), 675–679. https://doi.org/10.1016/j.sbspro.2015.07.057

Khusnah, N., Sulasteri, S., Suharti, S., & Nur, F. (2020). Pengembangan media pembelajaran jimat menggunakan Articulate Storyline. *Jurnal Analisa*, *6*(2), 197–208. https://doi.org/10.15575/ja.v6i2.9603

Kimianti, F., & Prasetyo, Z. K. (2019). Pengembangan E-Modul IPA Berbasis Problem Based Learning untuk Meningkatkan Literasi Sains Siswa. *Jurnal Teknologi Pendidikan*, *07*(02), 91–103.

Kumar Basak, S., Wotto, M., & Bélanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. *E-Learning and Digital Media*, *15*(4), 191–216. https://doi.org/10.1177/2042753018785180

Listiana, L., Abdurrahman, A., Suyatna, A., & Nuangchalerm, P. (2019). The Effect of Newtonian Dynamics STEM-Integrated Learning Strategy to Increase Scientific Literacy of Senior High School Students. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, *8*(1), 43–52. https://doi.org/10.24042/jipfalbiruni.v8i1.2536

Mochamad Irsyan, S., Setiawan, A., & Rusnayati, H. (2013). Analisis Buku Ajar Fisika SMA Kelas X di Kota Bandung Berdasarkan Komponen Literasi Sains. *Prosidings Seminar Nasional Fisika 2013*, 94–102.

Mohammad Yazdi. (2012). E-learning sebagai Media Pembelajaran Interaktif Berbasis Teknologi Informasi. *Jurnal Ilmu Foristek, 2 (1)*(1), 143–152.

Moreno-Guerrero, A. J., Aznar-Díaz, I., Cáceres-Reche, P., & Alonso-García, S. (2020). E-learning in the teaching of mathematics: An educational experience in adult high school. *Mathematics*, *8*(5). https://doi.org/10.3390/MATH8050840

Muliyati, D., Adillah, S., & Bakri, F. (2021). Physics learning through video by PowToon. *AIP Conference Proceedings*, *2320*(March). https://doi.org/10.1063/5.0037466

Ningsi, S., Suhandi, A., Kaniawati, I., & Samsudin, A. (2019). KTG-SESC: Development of Scientific Explanation Skills Test Instrument. *Journal of Physics: Conference Series*, *1157*(3). https://doi.org/10.1088/1742-6596/1157/3/032050

Nissa, A. D. A., Toyib, M., Sutarni, S., Akip, E., Kadir, S., Ahmad, & Solikin, A. (2021). Development of Learning Media Using Android-Based Articulate Storyline Software for Teaching Algebra in Junior High School. *Journal of Physics: Conference Series*, *1720*(1). https://doi.org/10.1088/1742-6596/1720/1/012011

Nurjannati, N., Rahmad, M., & Irianti, M. (2016). Pengembangan E-Modul Berbasis Literasi Sains Pada Materi Radiasi Elektromagnetik. *Jurnal Pendidikan Fisika*, *2*(1), 1–11.

Odegaard, M., Haug, B., Mork, S., & Sorvik, G. O. (2015). Budding Science and Literacy. A Classroom Video Study of the Challenges and Support in an Integrated Inquiry and Literacy Teaching Model. *Procedia - Social and*

*Behavioral Sciences*, *167*(1877), 274–278. https://doi.org/10.1016/j.sbspro.2014.12.674

OECD. (2021). *Sky's the limit: Growth mindset, students, and schools in PISA*.

Oktavia, M., Prasasty, A. T., & Isroyati. (2019). Uji Normalitas Gain untuk Pemantapan dan Modul dengan One Group Pre and Post Test. *Simposium Nasional Ilmiah Dengan Tema: (Peningkatan Kualitas Publikasi Ilmiah Melalui Hasil Riset Dan Pengabdian Kepada Masyarakat)*, *November*, 596–601. https://doi.org/10.30998/simponi.v0i0.439

Pakpahan, R., & Fitriani, Y. (2020). Analisa Pemanfataan Teknologi Informasi dalam Pembelajaran Jarak Jauh di Tengah Pandemi Virus Corona COVID-19. *JISAMAR (Journal of Information System, Applied, Management, Accounting and Researh)*, *4*(2), 30–36.

Perdana, A., Siswoyo, S., & Sunaryo, S. (2017). Pengembangan Lembar Kerja Siswa Berbasis Discovery Learning Berbantuan PhET Interactive Simulations Pada Materi Hukum Newton. *WaPFi (Wahana Pendidikan Fisika)*, *2*(1). https://doi.org/10.17509/wapfi.v2i1.4908

Pratama, N. S., & Istiyono, E. (2015). Studi Pelaksanaan Pembelajaran Fisika Berbasis Higher Order Thinking (HOTS). *Prosiding Seminar Nasional Fisika Dan Pendidikan Fisika (SNFPF)*, *6*, 104–112.

Pratiwi, M. S., Zulherman, & Amirullah, G. (2021). The Use of the Powtoon Application in Learning Videos for Elementary School Students. *Journal of Physics: Conference Series*, *1783*(1). https://doi.org/10.1088/1742-6596/1783/1/012115

Putranta, H., & Supahar. (2019). Synthesis of the Cognitive Aspects' Science Literacy and Higher Order Thinking Skills (HOTS) in Chapter Momentum and Impulse. *Journal of Physics: Conference Series*, *1397*(1). https://doi.org/10.1088/1742-6596/1397/1/012014

Ramdani, A., Jufri, A. W., & Jamaluddin, J. (2020). Pengembangan Media Pembelajaran Berbasis Android pada Masa Pandemi Covid-19 untuk

Meningkatkan Literasi Sains Peserta Didik. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, *6*(3), 433. https://doi.org/10.33394/jk.v6i3.2924

Risniawati, M., Serevina, V., & Delina, M. (2020). The development of E-learning media to improve students' science literacy skill in Senior High School. *Journal of Physics: Conference Series*, *1481*(1). https://doi.org/10.1088/1742-6596/1481/1/012075

Roemintoyo, & Kamil, M. (2021). Flipbook as Innovation of Digital Learning Media: Preparing Education for Facing and Facilitating 21st Century Learning. *Journal of Education Technology*, *5*(1), 8–13.

Rohmah, F. N., & Bukhori, I. (2020). Pengembangan Media Pembelajaran Interaktif Mata Pelajaran Korespondensi Berbasis Android Menggunakan Articulate Storyline 3. *Economic & Education Journal*, *2*, 169–182.

Rukoyah, R., Agustin, M., & Sopandi, W. (2020). Analysis of Science Literacy Skills Students of Class V Elementary School and Factors That Background IT. *The 2nd International Conference on Elementary Education*, *2*(1). http://proceedings.upi.edu/index.php/icee/article/view/814

Rusilowati, A., Astuti, B., & Rahman, N. A. (2019). How to improve student's scientific literacy. *Journal of Physics: Conference Series*, *1170*(1). https://doi.org/10.1088/1742-6596/1170/1/012028

Rusilowati, A., Nugroho, S. E., & Susilowati, S. M. (2016). Development of Science Textbook Based on Scientific Literacy for Secondary School. *Jurnal Pendidikan Fisika Indonesia*, *12*(2), 98–105. https://doi.org/10.15294/jpfi.v12i2.4252

Sage, K., Piazzini, M., Downey, J. C., & Ewing, S. (2020). Flip It or Click It: Equivalent Learning of Vocabulary From Paper, Laptop, and Smartphone Flashcards. *Journal of Educational Technology Systems*, *49*(2), 145–169. https://doi.org/10.1177/0047239520943647

Serevina, V., I Made Astra, & Danoza, F. V. (2021). Development of E-Learning Video Using a Contextual Approach to Distance Learning Static Fluid Discussion. *Asian*

*Journal of Science Education*, *3*(1), 81–89.

Sharmin, N., & Chow, A. K. (2020). Augmented Reality Application to Develop a Learning Tool for Students: Transforming Cellphones into Flashcards. *Healthcare Informatics Research*, *26*(3), 238–242. https://doi.org/10.4258/hir.2020.26.3.238

Sholihah, N. A., & Arif, S. (2020). Efektivitas model pembelajaran Simayang berbantuan flash card terhadap kemampuan representasi siswa. *Jurnal Ilmiah Pendidikan IPA*, *7*(1), 54–62.

Sindu, I. G. P., Santyadiputra, G. S., & Permana, A. A. J. (2021). Designing learning object using articulate storyline 3 for supporting Indonesia online learning system (spada). *Journal of Physics: Conference Series*, *1810*(1). https://doi.org/10.1088/1742-6596/1810/1/012058

Sugiyono, P. D. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan Tindakan*.

Sumarti, S., Rahayu, Y. S., & Madlazim, M. (2017). Pengembangan Perangkat Pembelajaran Berbasis Inkuiri Terbimbing Untuk Melatih Literasi Sains Siswa. *JPPS (Jurnal Penelitian Pendidikan Sains)*, *5*(1), 822. https://doi.org/10.26740/jpps.v5n1.p822-829

Syabri, K., & Elfizon. (2020). Pengembangan Media Pembelajaran Menggunakan Software Articulate Storyline Pada Pembelajaran Dasar Listrik Elektronika. *Jurnal Pendidikan Teknik Elektro*, *01*(01), 95–99.

Tawafak, R. M., Alsideir, A., Alfarsi, G., Malik, S. I., & Jabbar, J. (2019). E-learning Vs. Traditional Learning for Learners Satisfaction. *International Journal of Advanced Science and Technology*, *29*(3), 388–397. https://www.researchgate.net/publication/338991025

Tiarawati, S. (2020). Pengembangan Media Ular Tangga Berbantuan Flashcard. *Joyful Learning Journal*, *9*(452), 1665–1667. https://doi.org/10.1007/978-1-4419-1428-6_795

Tipler, P. A. (2007). *Physics For Scientists and Engineers 6th ed*. W. H. Freeman.

UNICEF. (2020). *COVID-19 dan Anak-Anak di Indonesia* (Issue May).

www.unicef.org

Warni, H. (2013). The Relevance of E-Learning in Higher Education. *Journal Kajian Pendidikan*, *3*(2), 181–194. https://www.researchgate.net/publication/312146845

Widyaningsih, S. W., Yusuf, I., Prasetyo, Z. K., & Istiyono, E. (2020). Online Interactive Multimedia Oriented to HOTS through E-Learning on Physics Material about Electrical Circuit. *JPI (Jurnal Pendidikan Indonesia)*, *9*(1), 1. https://doi.org/10.23887/jpi-undiksha.v9i1.17667

Wisanti, Ambawati, R., Putri, E. K., Rahayu, D. A., & Khaleyla, F. (2021). Science online learning during the covid-19 pandemic: Difficulties and challenges. *Journal of Physics: Conference Series*, *1747*(1). https://doi.org/10.1088/1742-6596/1747/1/012007

Wissman, K. T., Rawson, K. A., & Pyc, M. A. (2012). How and when do students use flashcards? *Memory*, *20*(6), 568–579. https://doi.org/10.1080/09658211.2012.687052

Yuliati, L., Parno, P., Hapsari, A. A., Nurhidayah, F., & Halim, L. (2018). Building Scientific Literacy and Physics Problem Solving Skills through Inquiry-Based Learning for STEM Education. *Journal of Physics: Conference Series*, *1108*(1). https://doi.org/10.1088/1742-6596/1108/1/012026

Yuniarti, R., & Hartati, W. (2020). Persepsi Mahasiswa Tentang Penerapan E-learning pada Masa Darurat Covid-19. *APOTEMA: Jurnal Program Studi Pendidikan Matematika*, *6*(2), 158–167. http://194.59.165.171/index.php/APM/article/view/377/326

Zumdahl, S. S. (2013). Chemistry 9th ed. In *Molecular Geometry*. https://doi.org/10.1016/b978-0-7506-2295-0.50005-4