

Daftar Pustaka

- Barak, M and Hussein, R. (2009). "Computerized Molecular Modeling as Means for Enhancing Students' Understanding of Protein Structure and Function". *Proceedings of The Chais Conference on International Technologies Research 2009: Learning in The Technological Era*. Raanana: The Open University of Israel. 14-19.
- Chang, R. (2010). *Chemistry (Tenth ed.)*. New York: McGraw-Hill.
- Cohen, R. J., Swerdlik, M., and Sturman, E. (2013). *Psychological Testing and Assessment: An Introduction to Tests and Measurement (Eighth ed.)*. New York: McGraw-Hill.
- Costa, A.L. (1985). Goal for Critical Thinking Curriculum. In Costa A.L. (Ed). *Developing Minds : A Resource Book for Teaching Thinking*. Alexandria : Association for Supervisor and Curriculum Development (ASCD).
- Dori, Y. J., and Barak, M. (2001). "Virtual and Physical Molecular Modeling: Fostering Model Perception and Spatial Understanding". *Educational Technology and Society*. **4**, (1), 61-73.
- Ebel, R. L. (1979). *Essentials Of Educational Measurement*. New Jersey: Prentice Hall.
- Effendy. (2010). *Teori VSEPR, Kepolaran, dan Gaya Antarmolekul (Edisi 3)*. Malang: Bayumedia Publishing.
- Ennis, R. H. (1993). "Critical Thinking Assesment". *Teaching for Higher Order Thinking: Theory into Practice*. **32**, (3), 179-186.
- Ennis, R. H. (1994). "The Nature of Critical Thinking: An Outline of Critical Thinking Dispositions and Its Abilities". Revision of a Presentation at The Sixth International Conference on Thinking at MIT, Cambridge, MA.

- Falvo, D. A. (2008). "Animations and Simulations for Teaching and Learning Molecular Chemistry". *International Journal of Technology in Teaching and Learning*, **4**, (1), 68–77.
- Fischer, A. (2001). *Critical Thinking: An Introduction*. Cambridge: University of Cambridge.
- Galvao, J. R., Martins, P. G., and Gomes, M. R. (2000). "Modeling Reality with Simulation Games for a Cooperative Learning". *Proceedings of the 2000 Winter Simulation Conference*, 1692-1698.
- Gillespie, R. J. (2009). "The Chemical Bond, Electron Pair Domains, and The VSEPR Model". *Chem 13 News*. 14-17.
- Gillespie, R. J., and Popelier, P. L. A. (2001). *Chemical Bonding and Molecular Geometry: From Lewis to Electron Densities*. New York: Oxford University Press, Inc.
- Greasley, P. (2008). *Quantitative Data Analysis Using SPSS: An Introduction for Health and Social Science*. New York: McGraw-Hill Open University Press.
- Gredler, M. E. (2004). "Games and Simulations and Their Relationships to Learning", In Jonassen, D. H. (2004). *Handbook of Research on Educational Communications and Technology*. Mahwah, NJ: IEA Publications. 571-583.
- Hake, R. R. (2002). Assessment of Student Learning in Introductory Science Courses. *2002 PKAL Roundtable on the Future: Assessment in the Service of Student Learning*. Duke University. [Online]. Tersedia: <http://www.pkal.org/events/roundtable2002/papers.html>. [15 Januari 2014]
- Herron, J. D., Cantu, L. L., Ward, R., and Srinivasan, V. (1977). "Problems Associated with Concept Analysis". *Paper for Associate Professor of Science Education*. 185-199.

- Honey, M. A., and Hilton, M. (2010). *Learning Science Through Computer Games and Simulations*. Washington, DC: The National Academies Press.
- Jones L., Jordan, K. D., and Stillings, N. A. (2001). *Molecular visualization in science education*. [Online]. Tersedia: http://pro3.chem.pitt.edu/workshop/workshop_report_180701.pdf [6 Januari 2014]
- Jones, L. L., Jordan, K. D., and Stillings, N. A. (2005). "Molecular Visualization in Chemistry Education: The Role of Multidisciplinary Collaboration". *Chemistry Education Research and Practice*. **6**, (3), 136-149.
- Kali, Y. (2006). "Collaborative Knowledge-building Using The Design Principles Database". *International Journal of Computer Support for Collaborative Learning*. **1**, (2), 187-201.
- Kartimi dan Liliasari. (2012). "Pengembangan Alat Ukur Berpikir Kritis pada Konsep Termokimia untuk Siswa SMA Peringkat Atas dan Menengah". *Jurnal Pendidikan IPA Indonesia*. **1**, (1), 21-26.
- Kusaeri dan Suprananto. (2012). *Pengukuran dan Penilaian Pendidikan*. Yogyakarta: Graha Ilmu.
- Liliasari. (2009). *Berpikir Kritis dalam Pembelajaran Sains Kimia Menuju Profesionalitas Guru*. [Online]. Tersedia: http://file.upi.edu/Direktori/SPS/PRODI.PENDIDIKAN_IPA/194909271978032-LILIASARI/BERPIKIR_KRITIS_Dlm_Pembel_09.pdf [6 Januari 2014]
- Liliasari. (2011). "Pengembangan Keterampilan Generik Sains untuk Meningkatkan Keterampilan Berpikir Kritis Peserta Didik". *Makalah Semnas UNNES 2011*. Bandung: Universitas Pendidikan Indonesia.
- Liliasari. (2011). "Peningkatan Kualitas Guru Sains Melalui Pengembangan Keterampilan Berpikir Tingkat Tinggi". *Makalah Seminar Nasional Pascasarjana*. Bandung: Universitas Pendidikan Indonesia.

- Linn, M. C., Chang, H., Chiu, J., Zhang, H., McElhaney, K. (2010). "Can desirable difficulties overcome deception clarity in scientific visualizations?". In A. S. Benjamin (Ed.), *Successful remembering and successful forgetting: A festschrift in honor of Robert A. Bjork*. New York: Routledge.
- McMurry, J., and Fay, R. C. (2003). *Chemistry (Fourth ed.)*. New Jersey: Prentice Hall.
- Nahum, T. L., Mamlok-Naaman, R., and Hofstein, A. (2007). "Developing a New Teaching Approach for the Chemical Bonding Concept Aligned With Current Scientific and Pedagogical Knowledge". *Science Education*. 579-603.
- Paul, R., and Elder, L. (2007). *A Guide for Educators to: Critical Thinking Competency Standards: Standards, Principles, Performance Indicators, and Outcomes With a Critical Thinking Master Rubric*. Dillon Beach: The Foundation for Critical Thinking Press.
- Perkins, K., Lancaster, K., Loeblein, P., Parson, R., and Podolefsky, N. (2010). *PhET Interactive Simulations: New Tools for Teaching and Learning Chemistry*. Boulder: University of Colorado. [Online]. Tersedia: <http://www.ccce.divched.org/Fall1010CCCENewsletterP7/phet-interactive-simulations-new-tools-for-teachine-and-learning-chemistry.pdf> [29 November 2013]
- Quellmalz, E. S., Timms, M. J., and Schneider, S. A. (2009). "Assessment of Student Learning in Science Simulations and Games". *Workshop on Gaming and Simulations*. Washington, DC: the National Research Council
- Redhana, I. W., dan Liliyasi. (2008). "Program Pembelajaran Keterampilan Berpikir Kritis pada Topik Laju Reaksi untuk Siswa SMA". *Forum Kependidikan*. **27**, (2), 103-112.
- Sahin, S. (2006). "Computer Simulations in Science Education: Implications for Distance Education". *Turkish Online Journal of Distance Education*. **7**, (4), 132-146.

- Sekretaris Negara Republik Indonesia. (2003). *Undang-undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Jakarta: Undang-undang Republik Indonesia.
- Sidharta, A., dan Winduono, Y. (2009). *Media Pembelajaran Ilmu Pengetahuan Alam*. Jakarta: Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan Ilmu Pengetahuan Alam (PPPPTK IPA)
- Sudjana. (2005). *Metoda Statistika (Edisi 6)*. Bandung: Tarsito
- Susetyo, B. (2011). *Menyusun Tes Hasil Belajar: Dengan Teori Ujian Klasik dan Teori Responsi Butir*. Bandung: CV Cakra.
- Thode, T. (1999). "Simulation Software: An Almost Real Experience". *Technology and Children*. **3**, 17-19.
- Tuvi-Arad, I., and Gorsky, P. (2007). "New Visualization Tools for Learning Molecular Symmetry: A Preliminary Evaluation". *Chemistry Education Research and Practice*. **8**, (1), 61-72.
- Whitten, K. (2004). *General Chemistry (Seventh ed.)*. Thomson: Brooks Cole.
- Wiersma, W., and Jurs, S. G. (2009). *Research Methods in Education: An Introduction*. Boston: Pearson.
- Wu, H-K., and Shah, P. (2004). "Exploring Visuospatial Thinking in Chemistry Learning". *Science Education*. **88**, 465-492.
- Zhou, Q., Ma, L., Huang, Na., Liang, Q., Yue, H., and Peng, T. (2012). "Integrating WebQuest into Chemistry Classroom Teaching to Promote Students' Critical Thinking". *Creative Education*. **3**, (3), 369-374.
- Zimmaro, D. M. (2004). *Writing Good Multiple-Choice Exams*. Paper presented at The University of Texas Workshop on Measurement and Evaluation Center, Texas.