

DAFTAR PUSTAKA

- Andrea Mario Giovannozzi, Francesca Rolle, Michela Sega, Maria Cesarina Abete, Daniela Marchis, Andrea Mario Rossi. 2014. *Rapid and sensitive detection of melamine in milk with gold nanoparticles by Surface Enhanced Raman Scattering*. Food Chemistry 159, 250–256
- Andrew S. Westover, John W. Tian, Shivaprem Bernath, Landon Oakes, Rob Edwards, Farhan N. Shabab, Shahana Chatterjee, Amrutur V. Anilkumar, Cary L. Pint. 2014. *A Multifunctional Load-Bearing Solid-State Supercapacitor*. *Nano Letters*; 140519102659001.
- Artacho, Emilio. 2002. *The Siesta method for ab initio order-N materials simulation*. J. Phys. Cond. Matt. 14, 2745. Brendan O'Malley. 2001. *Molecular Dynamics Investigation of the Crystallization in the Hard Sphere System* PhD Thesis. RMIT University. Melbourne, Australia.
- Artacho, Emilio. 2010. *User's Guide SIESTA 3.0*. Universidad Aut'onoma de Madrid.
- B. J. Alder dan T. E. Wainright. 1957. *Journal of Chemistry Physics*. 27, 1207-1208.
- Chen-Zhong Li, Keith B. Male, Sabahudin Hrapovic and John H. T. Luong. 2005. *Fluorescence properties of gold nanorods and their application for DNA biosensing*. *Chem Communication*, 3924–3926.
- Dominik Marx and Jurg Hutter. 2000. *Ab initio molecular dynamics: Theory and Implementation*. John von Neumann Institute for Computing.
- E. R. Hernandez. 2000. *Molecular Dynamics: from basic techniques to applications*. Institut de Ciencia de Materials de Barcelona. Spanyol.
- G.J. Williams, M.A. Pfeifer, I.A. Vartanyants, and I.K. Robinson. 2003. *Imaging microstructure in crystals using coherent X-ray diffraction*. *Phys. Rev. Lett* 90. 175501
- Gang Han, Partha Ghosh, and Vincent Rotello. 2007. *Multifunctional Gold Nanoparticles for Drug Delivery*. Landes Bioscience and Springer Science. Chapter 4, 48-56.
- H. Cui, Z. F. Zhang, M. J. Shi, Y. Xu, and Y. L. Wu. 2005. *Light Emission of Gold Nanoparticles Induced by the Reaction of Bis(2,4,6-trichlorophenyl) Oxalate and Hydrogen Peroxide*. *Anal. Chem.* 77, 6402.
- H. C. Andersen. 1980. *Molecular Dynamics Simulations at Constant Pressure and/or Temperature*. *Journal of Chemistry Physics*. 72, 2384-2393.

- J.E.Martin,F.Parsapour, B.Wiedenmanand, D.F.Kelley. 1998. *Photoluminescence from Nonosize Gold Cluster*. J. Chem. Phys. 108, 9137.
- J. C. Slater. 1930. *Notes on Hartree's Method*. Phys. Rev. 35, 210.
- J. Harris. 1985. *Simplified method for calculating the energy of weakly interacting fragments*. Phys. Rev. 31, 1770.
- J.F. Hainfeld. Et al. 2013. *Gold Nanoparticle Imaging and Radiotherapy of Brain Tumors in Mice*. *Nanomed. (Lond.)* 8 (2013) 1601–1609
- James A. Wollmershauser, Boris N. Feigelson, Edward P. Gorzkowski, Chase T. Ellis, Ramasis Goswami, Syed B. Qadri, Joseph G. Tischler, Fritz J. Kub, Richard K. Everett. 2014. *An extended hardness limit in bulk nanoceramics*. *Acta Materialia*; 69: 9.
- Janquera, Jaquer. *Workshop: The SIESTA Method for Electronic Structure Calculation*. Universidad Aut'onoma de Madrid.
- Javier Hernández-Ferrer, José Solla-Gullón, Enrique Herrero, Juan M. Feliu and Antonio Aldaz. 2006. *Preferential surface orientation of gold nanoparticles*. *Journal Physical Chemistry*. B109.
- Jin Yong Oh, Jong-Tae Park, Hyun-June Jang, Won-Ju Cho, M. Saif Islam. 2014. *3D-Transistor Array Based on Horizontally Suspended Silicon Nano-bridges Grown via a Bottom-Up Technique*. *Advanced Materials*; 26 (12): 1929.
- Jin Zhong Zhang. 2009. *Optical Properties and Spectrosopy of Nanomaterials*. University of California. Santa Cruz; USA
- Jorge Botana Alcalde. 2011. *Ab initio study of low-dimensional metallic systems*. PhD Thesis. Universidade de Santiago de Compostela.
- Juh Tzeng Lue. 2007. *Physical Properties of Nanomaterials*. Encyclopedia of Nanoscience and Nanotechnology. Volume X. 1-46.
- K. Huang, H. Ma, J. Liu, S. Huo, A. Kumar, T. Wei, X. Zhang, S. Jin, Y. Gan, P.C. Wang, S. He, X.J. Liang. 2012. *Size-dependent localization and penetration of ultrasmall gold nanoparticles in cancer cells, multicellular spheroids, and tumors in vivo*, *ACS Nano* 6, 4483–4493
- Link, Stephan dan Elsayed, Musthafa. 2000. *Shape and size dependence of radiative, non-radiative and photothermal properties of Gold Nanoparticles*. Georgia Institute of Technology.
- M. Parrinello dan A. Rahman. 1980. *Crystal Structure and Pair Potential; a Molecular Dynamic Study*. Phys. Rev. Lett. 45, 1196-1199.

- M.R. Bindhu, M. Umadevi. 2014. *Silver and gold nanoparticles for sensor and antibacterial applications*. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 128, 37–45
- Mikael Andersson. 2013. *Modeling and characterization of magnetic nanoparticles intended for cancer treatment*. UPPSALA Universitet.
- Mohamed Anwar K Abdelhalim, Mohsen M. Mady, and Magdy M. Ghannam. 2012. *Physical Properties of Different Gold Nanoparticles: Ultraviolet-Visible and Fluorescence Measurements*. Journal Nanomed Nanotechol, 3: 3.
- National Nanotechnology Initiative (NNI) dalam <http://www.nano.gov/about-nni/what/funding>. tanggal akses 11/05/2014.
- Nozik, A.J .,and Memming, R.,1996. *Physical Chemistry of Semiconductor-Liquid*. J. phys. Chem., 100, 13061.
- P. Hohenberg, W.Kohn. 1994. *Inhomogenous Electron Gas*. J.Phys.Rev.136
- R. Car dan M. Parrinello. 1985. *Unified Approach for Molecular Dynamic Study and Density Functional Theory*. Phys. Rev. Lett. 55, 2471-2474.
- S. Nose. 1984. Journal of Computational Physics. 81, 522-519.
- Saini, Rajiv; Saini, Santosh, Sharma, Sugandha. 2012. *Nanotechnology: The Future Medicine*. Journal of Cutaneous and Aesthetic Surgery 3 (1): 32-33.
- Schaaff, TG. Et al. 1998. *Isolation and Selected Properties of a 10,4 kDa Gold: Glutamine Cluster Compound*. J. Phys. Chem. B. 102, 10643-10646.
- W. G. Hoover. 1985. *Canonical Dynamics; Equilibrium Phase-Space Distribution*. Phys. Rev. A. 31, 1695-1697.
- W.Kohn, L.J Sham. 1995. *Self-Consistent Equation Including Exchange and Correlation Effect*. J. Phys.Rev. 140
- Wikipedia dalam http://en.wikipedia.org/wiki/Colloidal_gold. tanggal akses 31/05/14.
- Xiaohua Huang, Mostafa A. El-Sayed. 2010. *Gold nanoparticles: Optical properties and implementation sin cancer diagnosis and photothermal therapy*. Journal of Advanced Research 1 , 13–28.
- Xinmai Yang, Sara E. Skrabalak, Zhi-Yuan Li, Younan Xia, and Lihong V. Wang. 2007. *Photoacoustic Tomography of a Rat Cerebral Cortex in vivo*

with Au Nanocages as an Optical Contrast Agent. Nano Letters. Vol 7. 3798-3802.

Yang Yang, Gedeng Ruan, Changsheng Xiang, Gunuk Wang, James M. Tour. 2014. *Flexible Three-Dimensional Nanoporous Metal-Based Energy Devices. Journal of the American Chemical Society; 140418142709000.*

Yu Hang Chui. 2007. *Molecular Dynamics Study of Structure and Stability in Au Nanoparticles.* PhD Thesis. RMIT University. Melbourne, Australia.

