

PUBLIKASI FMIPA 2012

- Dhani Herdiwijaya, The Characteristics of Solar Wind Parameters During Minimum Periods of Solar Cycle 24 and Impact on Geoeffectiveness, AIP Conference Proceedings, vol. 1454 International Conference on Physics and Its Applications (ICPAP) 2011, p. 25-31, ISBN: 978-0-7354-1055-8, Printed in the USA, 2012
- Eka Puspita Arumaningtyas, Moedji Raharto, Dhani Herdiwijaya, Morning Twilight Measured at Bandung and Jombang, AIP Conference Proceedings, vol. 1454 International Conference on Physics and Its Applications (ICPAP) 2011, p. 29-31, ISBN: 978-0-7354-1055-8, Printed in the USA, 2012
- Febi Trihermanto, Dhani Herdiwijaya, The Surface Distribution of Solar Energetic Particles on the Earth and Southern Atlantic Anomaly, AIP Conference Proceedings, vol. 1454 International Conference on Physics and Its Applications (ICPAP) 2011, p. 32-34, ISBN: 978-0-7354-1055-8, Printed in the USA, 2012
- Moedji Raharto, Novi Sopwan, The Possible Range Are of Vision for Aphelion and Perihelion Group of Hilal Visibility, AIP Conference Proceedings, vol. 1454 International Conference on Physics and Its Applications (ICPAP) 2011, p. 35-38, ISBN: 978-0-7354-1055-8, Printed in the USA, 2012
- Suryadi Siregar, Valentino Agus Sutomo, Orbital Evolution of 4179 Toutatis, The 4th SEAAN Meeting (South East Asia Astronomy Network) di Auditorium CC Timur ITB, 10-11 Oktober 2012
- Muhammad Yusuf, Denny Mandey, I Putu Wira Hadiputrawan, Mahasena Putra and Mochamad Irfan, Speckle Observation of Visual Double Stars at Bosscha Observatory, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Taufiq Hidayat, Nadia Ridwan, Analyses of MODIS data for a future astronomical observatory in Indonesia, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Premana Premadi, Lombok Christina and Fanny Trirahmania, A detailed look at the late type galaxies in nearby clusters, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Hakim L. Malasan, Janette Suherli, Spectroscopic Study of Novae in Early 2012 at Bosscha Observatory, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Mochamad Irfan, Muhammad Azizul Hakim, Maulidiani Az Zahra, Lukmanul Hakim Durachman, Hamida Nisfillaili, Muhammad Dimas Taufani, Mahasena Putra, Report of Double Stars Measurement at Bosscha Observatory in 2012, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Novi Sopwan, Moedji Raharto, Lower Limit Hilal Visibility Criteria for the Naked Eye and Telescopic Observation, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)

- Dhani Herdiwijaya, Abdul Rachman, On the Effects of Solar Storms to the Decaying Orbital Space Debris, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Rasdewita Kesumaningrum, Dhani Herdiwijaya, Deep Coronal Hole Associated With Quiscent Filament, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Budi Dermawan, Hesti R. T. Wulandari, Putra Mahasena, Ridlo W. Wibowo, Sulistiyowati and Cometta S. Guritno, Orbit of the Short-lived Sun-grazing Comet C/1999 X3, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Muhamad Irfan Hakim, Mahasena Putra, Chatief Kunjaya and Doddy Sutarno, Rotational Velocity Evolution of Herbig Ae Stars: Be Stars Progenitor?, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Janette Suherli, Hakim Malasan, Mahasena Putra Lidia Mayangsari, Dhimaz Ramadhan and Gabriela Haans, The Bosscha Observatory's BIMA Program, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Sulistiyowati, Hesti Wulandari, Budi Dermawan, M. Ikbal Arifyanto and Ichsan Ibrahim, Effects of Dark Matter on Stellar Structure and Evolution, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Endang Soegiartini, Iratius Radiman1, Suryadi Siregar and Umar Fauzi, The Dynamical Behaviour of Asteroid 1566 Icarus, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Rhorom Priyatikanto, Mochamad Ikbal Arifyanto and Hesti Retno Tri Wulandari, Open Clusters Evolution in Binary System: How They Dissolved, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Anton T. Jaelani, Premana W. Premadi, The Hubble Constant Estimation Using 18 Gravitational Lensing Time Delays, Disampaikan pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Abdul Rachman, Dhani Herdiwijaya, Identifying Solar Wind Structures Related to Garuda 1 Satellite Anomaly by Analyzing Solar Wind and IMF Parameters, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Febrie Ahmad Azizi, Kiki Vierdayanti, Mahasena Putra and Chatief Kunjaya, Behavior of Long Term Interval of State A in GRS 1915+105, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Yolanda Ghea, Mahasena Putra, Budi Dermawan, Ridlo Wibowo, Sulistiyowati, Comet Guritno and Hesti Wulandari, Effect of Initial Inclination to the Stability of Triple Star Systems, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Riscye Oktavia, Hesti Wulandari, Rotation Curves of Early Type Spiral Galaxies with Modification of Gravity, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Prahesti Husnindriani, Hesti Wulandari, Distribution of Dark Matter in Late-type Spiral Galaxies, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)

- Lidia Mayangsari, Mahasena Putra and Rhorom Priyatikanto, On The Period Determination of ASAS Eclipsing Binaries, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Evan Akbar, Agus Setiawan, Maman Sulaeman, Mahasena Putra, Gabriela Haans and Dhimaz Ramadhan, Design Proposal of CCD Mount for Schmidt's Bima Sakti Telescope, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Christin Melati Tampubolon and Taufiq Hidayat, Searching for Planets from Data Mining in Kepler Released Data, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Retno Dyah Hapsari, Taufiq Hidayat and Farahhati Mumtahana, Recent Development of Radio JOVE Telescope at the Bosscha Observatory, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Farahhati Mumtahana, Taufiq Hidayat and Retno Dyah Hapsari, Characterization of the "Hidrogen" 6m Radio Telescope at the Bosscha Observatory, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Suryadi Siregar , Valentino Agus Sutomo, The Trajectory Around Lagrangian Point L_2 in the Earth-Moon System, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Moedji Raharto, Search for Bright Stars with Infrared Excess, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- Eka Puspita Arumaningtyas, Dhani Herdiwijaya and Moedji Raharto, Reading Quality of The Sky Quality Meter, Poster pada kegiatan The 4th International Conference on Mathematics and Natural Sciences (ICMNS-2012)
- T. Hidayat, P. Mahasena, B. Dermawan, T. W. Hadi, P. W. Premadi and D. Herdiwijaya, Clear sky fraction above Indonesia: an analysis for astronomical site selection, Monthly Notices of the Royal Astronomical Society vol. 427, p.1903-1917, (2012)
- Yoshida, Fumi; Ito, Takashi; Dermawan, Budi; Nakamura, Tsuko; Takahashi, Shigeru; Ibrahimov, Mansur A.; Malhotra, Renu; Huen Ip, Wing; Chen, Wen Ping; Sawabe, Yu; Haji, Masashige; Saito, Ryoko; Hirai, Masanori; Miyasaka, Seidai; Fukushima, Hideo; Sato, Hideo; Sato, Yusuke, Lightcurves of the Karin family asteroids, submitted to Icarus on 2012 May 13
- Braga Ribas, Felipe; Sicardy, B.; Ortiz, J. L.; Duffard, R.; Camargo, J. I. B.; Lecacheux, J.; Colas, F.; Vachier, F.; Tanga, P.; Sposetti, S.; Brosch, N.; Kaspi, S.; Manulis, I.; Baug, T.; Chandrasekhar, T.; Ganesh, S.; Jain, J.; Mohan, V.; Sharma, A.; Garcia-Lozano, R.; Klotz, A.; Frappa, E.; Jehin, E.; Assafin, M.; Vieira Martins, R.; Behrend, R.; Roques, F.; Widemann, T.; Morales, N.; Thirouin, A.; Mahasena, P.; Benkhaldoun, Z.; Daassou, A.; Rinner, C.; Ofek, E. O., Stellar Occultations by Large TNOs on 2012: The February 3rd by (208996) 2003 AZ84, and the February 17th by (50000) Quaoar, Bulletin of the American Astronomical Society, Vol. 44 No. 5 DPS 44th Meeting, Reno, Nevada
- Putra Mahasena, Pendidikan Astronomi di Indonesia Tahun 2001-2011, Prosidings Seminar Pendidikan Astronomi 26 Oktober 2011, p.19-23, ISBN:978-602-18108-0-4, Penerbit Obs. Bosscha ITB, 2012
- Prahesti Husnindriani, Anita R. Audina, Fuji Hidjriyati, Muji Lestari, Budi Dermawan, Hakim L. Malasan, Inisiasi Kegiatan Astronomi di Kelompok Ilmiah Remaja (KIR) SMMAN 1 Banjarmasin,

- Prosidings Seminar Pendidikan Astronomi 26 Oktober 2011, p.53-35, ISBN:978-602-18108-0-4, Penerbit Obs. Bosscha ITB, 2012
- Soekiyah Permani, Premana W. Premadi, Pendidikan Astronomi sebagai Sains, Prosidings Seminar Pendidikan Astronomi 26 Oktober 2011, p.59-60, ISBN:978-602-18108-0-4, Penerbit Obs. Bosscha ITB, 2012
- W. Liliawati, N. Rustaman, Dhani Herdiwijaya, dan D. Rusdiana, Peningkatan Kemampuan Konsep IPBA Terpadu Melalui Pembelajaran Berbasis Kecerdasan Majemuk pada Mahasiswa Calon Guru SMP, Prosiding Seminar Nasional Fisika III, Semarang 6 Okt. 2012 p. FP105-1sd 5, ISBN:978-602-97835-2-0
- Moedji Raharto, Siti Yuhamah, Astronomical Phenomena Above the Borobudur Temple, Prosiding Seminar Nasional Fisika III, Semarang 6 Okt. 2012 p. FT102-1sd 14, ISBN:978-602-97835-2-0
- Eka Puspita Arumaningtyas, Moedji Raharto dan Dhani Herdiwijaya, Profil Kecerlangan Langit Sebagai Penentu Waktu Subuh dan Visibilitas Hilal, Prosiding Seminar Nasional Fisika III, Semarang 6 Okt. 2012 p. FT104-1sd 5, ISBN:978-602-97835-2-0
- N. Sopwan, Moedji Raharto, Hilal Metonik: Usulan Kriteria Visibilitas Hilal, Prosiding Seminar Nasional Fisika III, Semarang 6 Okt. 2012 p. FT105-1sd 7, ISBN:978-602-97835-2-0
- Ridlo W. Wibowo, B. Dermawan, H.R.T. Wulandari, P. Mahasena, Sulistiyowati, Cometta S. Guritno, Orbital Coupling between Distributions of Semimajor Axis and Inclination of Near-Earth Asteroid Segregated at about 2 AU, Disampaikan pada kegiatan The 5th Asian Physics Symposium (APS) 2012
- B. Dermawan, H. R. T. Wulandari, P. Mahasena, Ridlo W. Wibowo, Cometta S. Guritno, Sulistiyowati, Searching for New Venus Co-orbital Asteroids, Disampaikan pada kegiatan The 4th South-East Asian Astronomy Network (SEAAN) Meeting 2012
- Moedji Raharto, Search for Solution for a Unique Islamic Calendar, Disampaikan pada Lokakarya International Penyatuan Kalender Hijriyah
- Suryadi Siregar and N. Daud, On the Probability Density Function and Tisserand Invariant of Orbital Elements of the NEAS, Disampaikan pada kegiatan IAU General Assembly XXVII, Beijing 20-31 August, 2012
- D. Herdiwijaya, M. Djamal, H. Gunawan, Design of Mobile and Robotic Observing System with Special Telescope Baffle for Searching Young Lunar Crescent, Jurnal Otomasi, Kontrol dan Instrumentasi, 4 (1), hal. 1-7, 2012
- P. Irawatii, P. Mahasena, D. Herdiwijaya, F. P. Zen, Population synthesis of cataclysmic variable star: I. Formalism and initial study on the post common-envelope stage, Submitted to Astrophysics and Space Science
- F. D. E. Latief, U. Fauzi, Kozeny-Carman and Empirical Formula for Permeability Calculation of Computer Rock Models, International Journal of Rock Mechanics and Mining Sciences 50 , pp. 117-123., 33, pp:539-548, 2011
- Mohammad, I.H., W. Srigutomo, D. Sutarno, P. Soemintadiredja, The Modeling of 2D Controlled Source Audio Magnetotelluric (CSAMT) Responses Using Finite Element Method., Journal of Electromagnetic Analysis and Applications, 4:7, 294-304.,19,3:1-7,2011
- Mohammad, I.H., W. Srigutomo, D. Sutarno, P. Soemintadiredja , Full Solution Modeling of 1D Controlled- Source Audio-Magnetotelluric (CSAMT) Responses,ITB Journal of Sciences (submitted), 50, 117-123, 2012.

- Singarimbun, A., Simulation of Production an Injection Process in Geothermal Reservoir using Finite Element Difference Method, WSEAS TRANSACTIONS ON HEAD AND MASS TRANSFER, ISSUE 3, VOLUME 7, JULY 2012.
- Khairurrijal, Eko Widiatmoko, Wahyu Srigutomo and Neny Kurniasih, Measurement of gravitational acceleration using a computer microphone port, 2012 Phys. Educ. 47 709 doi:10.1088/0031-9120/47/6/709
- Sukarman, E.P., Nurhasan,D. Sutarno, R. Prihantoro, Imaging resistivity structure of Sumatran Fault derived from 2D Magnetotelluric forward modeling using Finite Element Method,The 2nd Asian Physics Symposium (APS)
- Singarimbun, A., Estimation of Parameters Distributions in Geothermal Reservoir using Finite Difference method, Proceeding International Conference di Porti
- Gunawan Handayani, Workflow of Ground Penetrating Radar signal analysis, The 2nd Asian Physics Symposium (APS)
- F. D. E. Latief, U. Fauzi, Modeling and Characterization of The Computer Model of Laminated Granular Rocks, 2011, Proceedings of International Conference on Physics and Its Applications, Bandung, Indonesia (terbit 2012)
- Sutarno, D., Development of CSAMT Impedance Modeling and Its Estimation, The 2nd Asian Physics Symposium (APS)
- H. Alatas, Alexander A. Iskandar, M.O. Tjia, Structure Dependent Variations of Group Velocity, energy Loss and Confinement in a Regular Grated Waveguide, J. Nonlinear Opt. Phys. 21(1) (2012) 1250009
- R.N.S. Suryadharma, A.A. Iskandar and M.O.Tjia, Overlapping TE and TM Band Gaps in Square Lattice Photonic Crystal of Hollow Dielectric Rods, J. Nonlinear Opt. Phys. 21(1) (2012) 1250008
- B. Roberge, S. Jndl, A. A. Nugroho, T. T. M. Palstra Micro-Raman study of orbitonphonon coupling in YbVO₃, J. Raman Spectrosc. 43 (2012) 127.
- S. Nakatsuji, K. Kuga, K. Kimura, R. Satake, N. Katayama, E. Nishibori, H. Sawa, R. Ishii, M. Hagiwara, F. Bridges, T. U. Ito, W. Higemoto, Y. Karaki, M. Halim, A. A. Nugroho, J. A. Rodriguez-Rivera, M. A. Green, C. Broholm Spin-Orbital Short-Range Order on a Honeycomb-Based Lattice, Science 336(2012) 559.
- J. Reul, A. A. Nugroho, T. T. M. Palstra, M. Grueninger, Probing orbital fluctuations in RVO₃ (R = Y, Gd, or Ce) by ellipsometry, Phys. Rev. B86 (2012) 125128
- F. Novelli, D. Fausti, J. Reul, F. Cilento, P. H. M. Van Loosdrecht, A. A. Nugroho, T. T. M. Palstra, M. Grueninger, F. Parmigiani, Ultrafast optical spectroscopy of the lowest energy excitations in the Mott insulator compound YVO₃: Evidence for Hubbardtype excitons, Phys. Rev. B86 (2012) 165135
- Rahmat Hidayat, Widiyanta Gomulya, Pina Pitriana, Ryan Irmansyah, Rany Miranti, Herman, Sahrul Hidayat, Fitriawati, Akihiko Fujii, Masanori Ozaki, Siloxane based Organic-Inorganic Hybrid Polymers and their Applications for Nanostructured Optical/Photonic Components, ITB Journal Vol. 44B No. 3, 2012
- Hidayat, R., Hidayat, S., Fitriawati, F., Herman, Tjia, M.O., Fujii, A., Ozaki, M., Distributed feedback grating fabricated from hybrid polymer precursor gel by employing short-pulse laser interference for photopumped polymer laser applications, Polym. Adv. Technol. 23(9)(2012) 1264

- Wismanto, W.Y., Hidayat, R., Tjia, M.O., Fujiwara, Y., Murata, K., Ogawa, Y., Yoshida, H., Fujii, A., Ozaki, M., Emission enhancement characteristics of oxazine in pmma matrix influenced by surface plasmon polariton induced on sinusoidal silver grating, *J. Nonlinear Opt.Phys.* 21(1) (2012) 1250013
- Annisa Aprilia, Priastuti Wulandari, Rahmat Hidayat, Effect of Solvent Used in the Preparation of Aluminum-doped ZnO as Electron Acceptor Layer on the Characteristic of Its Hybrid Solar Cell, *Material Science Forum* Vol. 737(2013), pp 74-79
- Annisa Aprilia, Priastuti Wulandari, Veinardi Suendo, Herman, Rahmat Hidayat, Akihiko Fujii, Masanori Ozaki, Influences of Dopant Concentration in Sol-Gel Derived AZO Layer on the Performance of P3HT:PCBM based Inverted, Solar Cell Solar Energy Materials and Solar Cells (Accepted) 110 6 2011
- Tjia, Suyanto, H., Lie, Z.S., Niki, H., Kagawa, K., Fukumoto, K., Rinda, H., Abdulmadjid, S.N., Marpaung, A.M., Pardede, M., Suliyanti, M.M., Hidayah, A.N., Jobiliong, E., Lie, T.J., Tjia, M.O., Kurniawan, K.H., Quantitative analysis of deuterium in zircaloy using double-pulse laser-induced breakdown spectrometry (LIBS) and helium gas plasma without a sample chamber, *Anal. Chem.* 84(5) (2012) 2224
- Suliyanti, M.M., Hidayah, A.N., Pardede, M., Jobiliong, E., Abdulmadjid, S.N., Idris, N., Ramli, M., Lie, T.J., Hedwig, R., Tjia, M.O., Kurniawan, K.H., Lie, Z.S., Niki, H., Kagawa, K., Double pulse spectrochemical analysis using orthogonal geometry with very low ablation energy and He ambient gas Double pulse spectrochemical analysis using orthogonal geometry with very low ablation energy and He ambient gas Double pulse spectrochemical analysis using orthogonal geometry with very low ablation energy and He ambient gas, *Spectrochim. Acta A* 69 (2012) 56
- Masturi, Silvia, Mahardika Prasetya Aji, Euis Sustini, Khairurrijal and Mikrajuddin Abdullah, Peermeability, Strength and Filtration Performance for Uncoated and titania-Coated Clay WasterwaterFilters, *American Journal of Environmental Sciences* 8(2) : 79-94, 2012
- Masturi,Silvia,Aji MP, Aruant O, Aliah H, Euis Sustini, Khairurrijal dan Abdullah M (2012): Keramik berpori dari Clay dan Poly (Ethylene Glycol) yang dilapis Fotokatalis Titania untuk Aplikasi Filter Air, Prosiding Seminar Nasional Material 2012, ITB, Bandung , ISBN 978-602-19915-0-3
- Aliah, H, Sawitri A, Aji M P, Setiawan A, Euis Sustini, Budiman M, Abdullah M (2012): Pelapisan Partikel TiO₂ pada polimer Polipropilen dan Aplikasinya sebagai Reusable Photocatalyst, Procidingn Seminar Nasional Material 2012,ITB, Bandung , ISBN 978-602-19915-0-3
- Aliah, H, Nurashia AE, Karlina Y, Arutanti O, Masturi, Euis Sustini, Budiman M, Abdullah M (2012): Optimasi Durasi PelapisanKatalis TiO₂ pada polimer Polipropilen serta Aplikasinya dalam Fotodegradasi Larutan Metilen Biru, Procidingn Seminar Nasional Material 2012,ITB, Bandung , ISBN 978-602-19915-0-3
- Euis Sustini, Hasniah Aliah , Characteristic Transparent Conducting Oxides (TCO) In₂O₃:Ti (ITiO) growth by MOCVD method, ICPAP 2012
- Fatimah A. Noor, Fandi Oktasendra, Euis Sustini, Mikrajuddin Abdullah, and Khairurrijal, "A Theoretical Study on the Performance of SnO₂/SiO₂/n-Si Solar Cells", *Materials Sciences Forum* (2012). Accepted
- Fatimah A. Noor, Ferry Iskandar, Mikrajuddin Abdullah, and Khairurrijal, "Analysis of electron leakage current in MOS capacitors by using anisotropic and isotropic mass approaches", *Electronics Letters* (2012). Accepted

- Fatimah A. Noor, Ferry Iskandar, Mikrajuddin Abdullah, and Khairurrijal, "Numerical Simulation of Tunneling Current in an Anisotropic Metal-Oxide-Semiconductor Capacitor", TELKOMNIKA Indonesian Journal of Electrical Engineering, Vol. 10, No. 3 (July 2012), pp. 477-485.
- Khairurrijal, Fatimah A. Noor, Ferry Iskandar, and Mikrajuddin Abdullah, "The Importance of Transverse-Longitudinal Energy Coupling in Modeling of Tunneling Current in Nano MOS Capacitors – A Review" (Solo, 2-3 october 2012) (Invited)
- Fatimah A. Noor, Ferry iskandar, Mikrajuddin Abdullah, and Khairurrijal, "Simulation of Electron Transmittance and Tunnel Current in n+Poly-Si/HfSiOxN/Trap/SiO₂/Si(100) Capacitors Using Analytical and Numerical Approaches", Asian Physics Symposium 2012 (APS 2012) (Bandung, 12-13 July 2012), will be published in American Institute of Physics (AIP) Conference Proceedings. (in Press)
- Khairurrijal, Fatimah A. Noor, and Mikrajuddin Abdullah, "A Computational Study of Electron Direct Tunneling Current in TiNx/HfSiOxN/SiO₂/Si(100) High-K MOS Capacitors", The 2nd International Conference on Computation for Science and Technology (Nigde, Turkey, 9-11 July 2012). (Invited)
- Fatimah A. Noor, Muhammad F. Sahdan, Panji Achmari, Ferry Iskandar, Mikrajuddin Abdullah, and Khairurrijal, "Modeling of Electron Transmittance and Tunneling Current through an Interfacial Oxide-High-k-Gate-Stack by Including Transverse-Longitudinal Kinetic Energy Coupling and Anisotropic Masses: Effects of Metal Work Function", The 5th International Conference on Physics and Applied Physics (Bandung, 10-11 November 2011), published in American Institute of Physics (AIP) Conference Proceedings, Vol. 1454 (2012), pp. 199-202.
- Mora, Saehana, S., Sustini, E., Khairurrijal, Abdullah, M., Ising model for conductive percolation in electrically conductive adhesives by considering random arrangement of conducting particles, *American Journal of Applied Sciences* 9 (7) , pp. 1113-1123 (2012)
- Saehana, S., Arifin, P., Khairurrijal, Abdullah, M., A new architecture for solar cells involving a metal bridge deposited between active TiO₂ particles, *Journal of Applied Physics* 111 (12) , art. no. 123109 (2012)
- Aji, M.P., Masturi, Bijaksana, S., Khairurrijal, Abdullah, M., A general formula for ion concentration-dependent electrical conductivities in polymer electrolytes, *American Journal of Applied Sciences* 9 (6) , pp. 946-954 (2012)
- Aliah, H., Aji, M.P., Masturi, Sustini, E., Budiman, M., Abdullah, M., TiO₂ nanoparticles-coated polypropylene copolymer as photocatalyst on methylene blue photodegradation under solar exposure, *American Journal of Environmental Sciences* 8 (3) , pp. 280-290 (2012)
- Pramana, A.A., Rachmat, S., Abdassah, D., Abdullah, M., A study of asphaltene content of indonesian heavy oil, *Modern Applied Science* 6 (5) , pp. 64-72 (2012)
- Aji, M.P., Rahmawati, Masturi, Bijaksana, S., Khairurrijal, Abdullah, M., Electrical and Magnetic Properties of Polymer Electrolyte (PVA:LiOH) Containing In Situ Dispersed Fe₃O₄ Nanoparticles, *ISRN Materials Science*, Volume 2012, Article ID 795613 (2012)
- Arkundato, A., Su'ud, Z., Abdullah, M., Sutrisno, W., Molecular dynamic simulation on iron corrosion-reduction in high temperature molten lead-bismuth eutectic, *Turkish Journal of Physics*, doi:10.3906/fiz-1112-12 (accepted 2012)
- Masturi, Aji, M.P., Aliah, H., Sustini, E., Khairurrijal, Abdullah, M., Non-linear oscillation model for explaining the distribution of position deviation in self-organized nanoparticles, *NANO*, DOI: 10.1142/S1793292013500094 (accepted 2012).

- Subianto, H., Khairurrijal, Mahfudz, H., Dananjaya, N., Abdullah, M., Distributed Inner States TiO₂-Coated Plastic Fibers as Photocatalysts for Decomposing Organic Pollutants in Water, *Journal of Materials Cycles and Waste Management* (accepted 2012)
- Arkundato, A., Su'ud, Z., Abdullah, M., Widayani, Celino, M., Numerical study: Iron corrosion-resistance in lead-bismuth eutectic coolant by molecular dynamics method, *AIP Conference Proceedings* 1448 , pp. 155-163 (2012)
- Arkundato, A., Su'ud, Z., Abdullah, M., Sutrisno, W., Study of liquid lead corrosion of fast nuclear reactor and its mitigation by using molecular dynamic method, *International Journal of Applied Physics and Mathematics*, 3(1), pp. 1-7, DOI: 10.7763/IJAPM.2013.V3.163 (2013)
- Ramli, Djamal, M., Haryanto, F., Viridi, S., Khairurrijal, Giant magnetoresistance in (Ni₆₀Co₃₀Fe₁₀/Cu) trilayer growth by opposed target magnetron sputtering,*Advanced Materials Research*, 535-537, pp. 1319-1322 (2012)
- Khairurrijal, Widiatmoko, E., Srigutomo, W., Kurniasih, N., Measurement of gravitational acceleration using a computer microphone port, *Physics Education*, 47 (6), pp. 709-714 (2012)
- Ariani, M., Su'ud, Z., Waris, A., Khairurrijal, Monado, F., Sekimoto, H., The feasibility study of small long-life gas cooled fast reactor with mixed Natural Uranium/Thorium as fuel cycle input, *AIP Conference Proceedings*, 1448, pp. 59-64(2012)
- Arutanti, O., Nurmala,S.S., Khairurrijal, Abdullah, M., Design of Roll Hot Press for Fabrication of TiO₂-coated Fiber Surface and Application for Decomposing Rhodamine B Compound in Water, *Materials Science Forum*, 737, pp. 33-36 (2013)
- Saehana, S., Yuliza, E., Arifin, P., Khairurrijal, Abdullah, M., Dye-sensitized solar cells (DSSC) from black rice and its performance improvement by depositing interconnected copper (copper bridge) into the space between TiO₂ nanoparticles, *Materials Science Forum*, 737, pp. 43-53 (2013)
- Yuliza, E., Saehana, S., Rahman, D. Y., Rosi, M., Khairurrijal, Abdullah, M., Enhancement Performance of Dye Sensitized Solar Cells from Black Rice as Dye and Black Ink as Counter Electrode with Inserting Copper on The Space Between TiO₂ Particles by Using Electroplating Method, *Materials Science Forum*, 737, pp. 85-92 (2013)
- Ala'a, S., Khairurrijal, Abdullah, M., Thermal Conductivity Enhancement Of Brine Containing Charcoal Particles, *Materials Science Forum*, 737, pp. 209-214 (2013)
- Noor, F.A., Oktasendra, F., Sustini, E., Abdullah, M.,Khairurrijal, A Theoretical Study on the Performance of SnO₂/SiO₂/n-Si Solar Cells,*Materials Science Forum*, 737, pp. 1-8 (2013)
- Nugraha, M.I., Noorlaily, P., Abdullah, M., Khairurrijal, Iskandar, F., Synthesis of Ni_xFe_{3-x}O₄ Nanoparticles by Microwave-AssistedCoprecipitation and Their Application on Viscosity Reduction ofHeavy Oil,*Materials Science Forum*, 737, pp. 204-208 (2013)
- Nurhayati, T., Iskandar, F., Abdullah M., Khairurrijal, Syntheses of Hematite (α -Fe₂O₃) Nanoparticles UsingMicrowave-Assisted Calcination Method, *Materials Science Forum*, 737, pp. 197-203 (2013)
- Pamudji, J.S., Khairurrijal, Mauludin, R.,Sudiati, T., Evita, M., PVA-KetoprofenNanofibers Manufacturing Using ElectrospinningMethod for Dissolution Improvement of Ketoprofen, *Materials Science Forum*, 737, pp. 166-175 (2013)
- Munir, M.M., Nuryantini, A.Y., Khairurrijal, Abdullah, M., Iskandar, F., Okuyama, K., Preparation of PolyacrylonitrileNanofibers with Controlled MorphologyUsing a Constant-Current Electrospinning System for Filter Applications, *Materials Science Forum*, 737, pp. 159-165 (2013)

- Noorlaily, P., Nugraha, M.I., Khairurrijal, Abdullah, M., Iskandar, F., Ethylene Glycol Route Synthesis of Nickel Oxide Nanoparticles as a Catalyst in Aquathermolysis, *Materials Science Forum*, 737, pp. 93-97 (2013)
- Rosi, M., Iskandar, F., Abdullah, M., Khairurrijal, Syntheses and Characterizations of Supercapacitors Using Nano-sizedZnO/Nanoporous Carbon Electrodes and PVA-based Polymer-Hydrogel Electrolytes, *Materials Science Forum*, 737, pp. 191-196 (2013)
- A. Roshikin, T. Winata, and A. Elyana, Study of Graphene Growth by HWC-VHF-PECVD Method using Annealed Ag Films, 5th Asian Physics Symposium 2012.
- A. Elyana, A. Roshikin, and T. Winata, Initial Study of CNT Growth using Nanocatalyst Ag Precursor by HWC-VHF_PECVD, 5th Asian Physics Symposium 2012, Bandung.
- M. R. Mahmudi and T. Winata. Application of Algebraic Computation Method for Analytical Solution of Hydrogenic Atoms, 5th Asian Physics Symposium 2012.
- M. R. Mahmudi and T. Winata. Analytical Solution of Qtomic Hydrogen by Algebraic Computation, International Symposium on Computational Science 2012, Yogyakarta.
- Ria Sri Rahayu, Indra Noviandri, Buchari Buchari, Mikrajuddin Abdullah, Teruo Hinoue, (2012), The effect of laser pulse irradiation at glassy carbon electrode on the electrochemistry of dopamine an ascorbic acid, *Int. J. Electrochem. Sci.*, 7, pp. 8225-8265.
- M.M. Munir, A. Suhendi, T. Ogi, F. Iskandar and K. Okuyama; Ion-induced nucleation rate measurement in SO₂/H₂O/N₂ gas mixture by soft X-ray ionization at various pressures and temperatures, *Adv. Powder technology*, Accepted (2012).
- T. Ogi, F. Iskandar, A. B. D. Nandyanto, W-N Wang, K. Okuyama: Influence of Polymer Decomposition Temperature on the Formation of Rare-earth Free Boron Carbon Oxynitride Phosphors, *Journal of Chemical Engineering of Japan*, Accepted (2012).
- T. Ogi, A. B. D. Nandyanto, W-N. Wang, F. Iskandar, and K Okuyama: Direct synthesis of spherical YAG:Ce phosphor from precursor solution containing polymer and urea, *Chem. Eng. J.*, Accepted (2012)
- I. D. Faryuni, B. W. Nuryadin, F. Iskandar, M. Abdullah, and Khairurrijal, "Effect on N/B and C/B ratio on the photoluminescence properties of BCNO/SiO₂ nanocomposite phosphor" 5th Asian Physics Symposium 2012.
- B. W. Nuryadin, T. Pratiwi, I. D. Faryuni, F. Iskandar, M. Abdullah, Khairurrijal, T. Ogi, and K. Okuyama, "Preliminary Study on Preparation of BCNO Phosphor Particles Using Citric Acid as Carbon Source" 5th Asian Physics Symposium 2012.
- Prawistin Noorlaily, Mohamad Insan Nugraha, Ferry Iskandar, Mikrajuddin Abdullah, and Khairurrijal, Effect of Calcination Temperature and Precursor Concentration on Crystallinity of NiO Nanocrystalline Powder Synthesized via Ethylene Glycol Route, 5th Asian Physics Symposium 2012.
- R. Widita, R. Kurniadi, Y. Darma, Y. S. Perkasa, and N. Trianti "New AIRS: The medical imaging software for segmentation and registration of elastic organs in SPECT/CT" AIP Conf. Proc. 1454 (2012), pp. 87-90; doi:<http://dx.doi.org/10.1063/1.4730694> (4 pages) ,
- Adha Sukma Aji and Yudi Darma, "Simulation of quantum dot floating gate MOSFET memory performance using various high-k material as tunnel oxide" AIP Conf. Proc. 1454 (2012), pp. 195-198; doi:<http://dx.doi.org/10.1063/1.4730719> (4 pages)

- Fitria Rahayu and Yudi Darma, "Simulation of charge carriers generation rate of SiGe quantum dot based intermediate band solar cell" AIP Conf. Proc. 1454 (2012), pp. 203-206; doi:<http://dx.doi.org/10.1063/1.4730721> (4 pages)
- Mohamad Insan Nugraha and Yudi Darma "Coulomb blockade effect simulation to the electrical characteristic of silicon based single electron transistor" AIP Conf. Proc. 1454(2012), pp. 211-214; doi:<http://dx.doi.org/10.1063/1.4730723> (4 pages).
- M.F. Sahdan and Y. Darma, Preliminary study of Topological Insulator using graphene material, Proceeding of National Material Seminar2012, Bandung, pp. 93-96 (in Indonesian)
- A.S. Aji and Y. Darma, Simulation of Memory Device performance using semiconductor quantum dot and High-K material as tunnel oxide, Proceeding of National Material Seminar2012, Bandung, pp84-87 (in Indonesian)
- I.B Hendra P, F. Rahayu and Y Darma, Simulation of quantum dot based intermediate band solar cell, Proceeding of National Material Seminar2012, Bandung, pp. 88-91 (in Indonesian)
- Y. Darma and R. Widita, Simulation of Floating Gate MOSFET memory using Si Quantum Dot with Ge Core and High-K material as Tunnel Oxide, Proceeding of ICEIC2012 pp. 209-210, Jeongseon, February 2012, Korea.
- Y.Darma, Ozone Assisted Low Temperature Oxidation by continuous UV Lamp on Nanometer-thick Amorphous Silicon Surfaceas Characterized by XPS, *Journal of Mathematics and Sciences* Vol 16, No 3 December (2011), pp 153-157
- Yudi Darma, Raman and Photoemission Spectroscopy Studies on Thermal Stability of Quantum Dot consisting of Si Clad and Ge Core, Book chapter of Advances in Nanodevices and Nanofabrication, July 17, 2012 by Pan Stanford Publishing, ISBN 9789814364546, Cat# N10682
- Mohamad Ali Shafii, Zaki Su'ud; Abdul Waris; Neny Kurniasih:Nuclear Fuel Cell Calculation using Collision Probability Method withLinear Non Flat Flux Approach, World Journal of Nuclear Science and Technology (WJNST), Vo.2 no. 2, 2012, pp. 49-53
- Ade Gafar A. et al. : ULOF Accident Analysis for 300 MWt Pb-Bi Cooled MOX Fuelled SPINNOR Reactor, Applied Physics Research Journal, Vol. 4 No. 1, p. 78, 2012
- Su'ud, Z., Sekimoto, H., Design study of medium-sized Pb-Bi cooled fast reactors with natural uranium as fuel cycle input using modified CANDLE burn-up scheme, *International Journal of Nuclear Energy Science and Technology* 7 (1) , pp. 23-44, 2012
- Perkasa, Y.S., Waris, A., Kurniadi, R., Suud, Z., Implementation of new fission barrier model in TALYS code, *Applied Mechanics and Materials* 110-116 , pp. 2475-2480, 2012
- Zaki Su'ud and H. Sekimoto, The prospect of gas cooled fast reactors for long life reactors with natural uranium as fuel cycle input, *Annals of Nuclear Energy* 54 (2013) 58–66
- Zaki Su'ud, Design Study of Small Pb-Bi Cooled Non-Refueling Nuclear Power Reactors (SPINNORs) , Applied Mechanics and Materials Vols. 260-261 (2013) pp 296-301
- Menik Ariani, Z. Su'ud1 , Fiber Monado, A. Waris, Khairurrijal, I. Arif, Ferhat A , and H. Sekimoto, Optimization of Small Long Life Gas Cooled Fast Reactors With Natural Uranium as Fuel Cycle Input, Applied Mechanics and Materials Vols. 260-261 (2013) pp 307-311
- Waris, A., Shafii, M.A.,Pramuditya, S., Kurniadi, R.,Novitrian, Su'Ud, Z., Effect of void-fraction on characteristics of several thorium fuel cycles in BWR, Energy Conversion and Management, Vol. 63 , pp. 11-16 , 2012

- Artoto Arkundato, Zaki Suud, Mikrajuddin Abdullah, Widayani Sutrisno, Molecular dynamic simulation on iron corrosion-reduction in high temperature molten lead-bismuth eutectic, Turkish Journal of Physics, SNIP = 0.52 (2013). DOI: 10.3906/fiz-1112-12
- Artoto Arkundato, Zaki Suud, Mikrajuddin Abdullah, Widayani, Study of liquid lead corrosion of fast nuclear reactor and its mitigation by using molecular dynamics method, International Journal of Applied Physics and Mathematics, Vol.3 No.1, 2013, Singapore
- Artoto Arkundato, Zaki Suud, Mikrajuddin Abdullah, Widayani, Massimo Celino, Numerical Study: Iron Corrosion-Resistance in Lead-bismuth Eutectic Coolant by Molecular Dynamics Method: *High Performance Computing on CRESCO infrastructure: research activities and results 2010-2011*, ENEA, Italia.
http://www.afs.enea.it/project/cmast/Documenti/web/documentazione/LBEcoolant_ReportENEA_2012.pdf (monograf)
- Ramli, Djamal, M., Haryanto, F., Viridi, S., Khairurrijal, Giant magnetoresistance in (Ni 60Co 30Fe 10/Cu) trilayer growth by opposed target magnetron sputtering, Advanced Materials Research 535-537 , pp. 1319-1322, 2012
- D. Irwanto and T.Obara, "Burnup Characteristics and Fuel Cycle Economics of Mixed Uranium-Thorium Fuel in a Simplified Small Pebble Bed Reactor", Journal of Nuclear Science and Technology Vol.49, No.2, p. 222-229 (2012)
- Sidik Permana, Mitsutoshi Suzuki, Masaki Saito, Novitrian, Abdul Waris, Zaki Suud, Study on Material Attractiveness Aspect of Spent Fuel of LWR and FBR Cycles Based on Isotopic Plutonium Production, Energy Conversion and Management, Elsevier, Accepted, To be Published 2013. (International Journal)
- Sidik Permana, "Research and Development on Nuclear Science and Technology in Preparing Nuclear Industry in Indonesia", Journal of Sustainable Energy and Environment (JSEE), Vol 3, p 67-72 (2012).
- Zaki S et al. : Development of Cell Homogenization Code for Thermal Reactors: Low energy Nuclear Resonance Treatment, American Institute of Physics (AIP) Conf. Proc. Vol. 1448, 2012, pp.202-208
- M Nurul Subkhi, Zaki Su'ud, A. Waris:Design Study of Long Life PWR using Thorium Cycle, American Institute of Physics (AIP) Conf. Proc. Vol. 1448, 2012, pp.102-107
- Permana, S., Suzuki, M., Su'ud, Z., Heavy metal inventory and fuel sustainability of recycling TRU in FBR design, *AIP Conference Proceedings* 1448 , pp. 119-125, 2012
- Setiawan, Y., Fermi, N., Su'ud, Z., Preliminary study of fusion reactor: Solution of grad Shapranov equation, *AIP Conference Proceedings* 1448 , pp. 193-201, 2012
- Arkundato, A., Su'ud, Z., Abdullah, M., Widayani, Celino, M., Numerical study: Iron corrosion-resistance in lead-bismuth eutectic coolant by molecular dynamics method, *AIP Conference Proceedings* 1448 , pp. 155-163, 2012
- Permana, S., Suzuki, M., Su'ud, Z., Comparative analysis of LWR and FBR spent fuels for nuclear forensics evaluation, *AIP Conference Proceedings* 1448 , pp. 142-152, 2012
- Perkasa, Y.S., Waris, A., Kurniadi, R., Su'ud, Z., Calculation of fission yield using fission barrier from optimal shapes of liquid drop model, *AIP Conference Proceedings* 1448 , pp. 297-306, 2012
- Drajat, R.Z., Su'Ud, Z., Soewono, E., Gunawan, A.Y., Multi channel thermal hydraulic analysis of gas cooled fast reactor using genetic algorithm, *AIP Conference Proceedings* 1450 , pp. 246-253, 2012

- Trianti, N., Su'ud, Z., Riyana, E.S., Design study of Thorium-232 and Protactinium-231 based fuel for long life BWR, *AIP Conference Proceedings* 1448 , pp. 96-100, 2012
- Anshari, R., Su'ud, Z., Preliminary analysis of loss-of-coolant accident in Fukushima Nuclear Accident, *AIP Conference Proceedings* 1448 , pp. 315-327, 2012
- Irka, F.H., Aryani, M., Suud, Z., Sekimoto, H., Desain study of gas cooled fast reactor with natural uranium as fuel cycle input using radial shuffling strategy, *AIP Conference Proceedings* 1448 , pp. 74-81, 2012
- Novitrian, Su'ud, Z., Waris, A., Thermal hydraulic analysis of advanced Pb-Bi cooled NPP using natural circulation, *AIP Conference Proceedings* 1448 , pp. 275-280, 2012
- Waris, A., Nuha, Novitrian, Kurniadi, R., Su'ud, Z., Preliminary study on direct recycling of spent PWR Fuel in PWR System, *AIP Conference Proceedings* 1448 , pp. 135-141, 2012
- Kurniadi, R., Perkasa, Y.S., Waris, A., Neck curve polynomials in neck rupture model, *AIP Conference Proceedings* 1448 , pp. 291-296, 2012
- Waris, A., Ajji, I.K., Novitrian, Kurniadi, R., Su'ud, Z., Plutonium and minor actinides utilization in thorium molten salt reactor, *AIP Conference Proceedings* 1448 , pp. 115-118, 2012
- Perkasa, Y.S., Waris, A., Kurniadi, R., Su'ud, Z., Prediction of natPb and 209Bi neutron induced fission cross section using TALYS for energy up to 200 MeV, *AIP Conference Proceedings* 1448 , pp. 283-290
- Viridi, S., Kurniadi, R., Waris, A., Perkasa, Y.S., A classical approach in simple nuclear fusion reaction ^{1}H + ^{1}H \rightarrow ^{3}He using two-dimension granular molecular dynamics model, *AIP Conference Proceedings* 1448 , pp. 170-176, 2012
- Sundari, P., Fauzi, U., Irayani, Z., Viridi, S., Two dimension porous media reconstruction using granular model under influence of gravity, *AIP conf proc* 1454, 2012
- Arkundato, A., Su'ud, Z., Abdullah, M., Widayani, Computational study: Reduction of iron corrosion in lead coolant of fast nuclear reactor, *AIP conf proc* 1454, 2012
- Basar, K., Viridi, S., Simulation of ion conduction phenomenon in superionic material using granular molecular dynamics, *AIP conf proc* 1454, 2012
- Viridi, S., Widayani, Khotimah, S.N., 2-D Granular model of composite elasticity using molecular dynamics simulation, *AIP conf proc* 1454, 2012
- Surbakti, R., Waris, A., Basar, K., Permana, S., Kurniadi, R., Influence of void fraction on plutonium recycling in BWR, *AIP conf proc* 1454, 2012
- Widita, R., Kurniadi, R., Darma, Y., Perkasa, Y.S., Trianti, N., New AIRS: The medical imaging software for segmentation and registration of elastic organs in SPECT/CT, *AIP conf proc* 1454, 2012
- Waris, A., Sumbono, Prayudhatama, D., Novitrian, Su'ud, Z., Preliminary study on direct recycling of spent bwr fuel in BWR system, *AIP conf proc* 1454, 2012
- D. Irwanto and T. Obara, "Design Study of an Innovative Small Simplified Pebble Bed Reactor with Accumulative Fuel Loading Scheme", 1st International Seminar on Global Nuclear Human Resource Development for Safety, Security and Safeguard", February 29
- Sidik Permana, Mitsutoshi Suzuki and Zaki Suud, "Heavy Metal Inventory and Fuel Sustainability of Recycling TRU in FBR Design", Proceedings of ICANSE 2011, November 14-17, 2011, Denpasar-Bali Indonesia (2011), American Institute of Physics (AIP) Proceeding 2012. (International Conference, Proceeding Paper)
- Sidik Permana, Mitsutoshi Suzuki and Zaki Suud, "Comparative Analysis of LWR and FBR Spent Fuels for Nuclear Forensics Evaluation", Proceedings of ICANSE 2011, November 14-17, 2011, Denpasar-

Bali Indonesia (2011), American Institute of Physics (AIP) Proceeding 2012. (International Conference, Proceeding Paper)

Indarta Kuncoro Aji and Sidik Permana, Nuclear Energy Position in Industrial and Economics Global, Proceedings of ICANSE 2011, November 14-17, 2011, Denpasar-Bali Indonesia (2011), American Institute of Physics (AIP) Proceeding 2012. (International Conference, Proceeding Paper)

Sidik Permana, Mitsutoshi Suzuki, Masaki Saito, Abdul Waris and Zaki Suud, "Important roles and expectations of recycling TRU in FBR", Proceedings of 3rd international conference on nuclear and renewable energy resources, May 20-23, 2012, Istanbul Turkey (2012). (International Conference, Proceeding Paper)

Sidik Permana, Mitsutoshi Suzuki, Masaki Saito, Abdul Waris and Zaki Suud, "Comparative Evaluation on Material Attractiveness of Plutonium Production of LWR and FBR Cycle", Proceedings of 3rd international conference on nuclear and renewable energy resources, May 20-23, 2012, Istanbul Turkey(2012). (International Conference, Proceeding Paper)

Sidik Permana, "Indonesia Energy Strategies Post Fukushima: "The Effect on Nuclear Energy Program", Submitted to International Conference on Applied Energy (ICAE) 2012, July 5-8, 2012, Suzhou, China (2012). International Conference, (Proceeding Paper)

Sidik Permana, Mitsutoshi Suzuki, Masaki Saito, Abdul Waris and Zaki Suud, "Fuel Breeding Analysis on MA Loading Options of FBR", The International Conference of Asian Physics Symposium (APS) 2012, July 10-12 July, 2012, Bandung, Indonesia (2012). (International Conference, Abstract Submission and Presentation)

Sidik Permana, Novitrian, Abdul Waris, Zaki Suud and Mitsutoshi Suzuki, Proliferation Resistance Analysis Based on Plutonium Production of Different Loading Materials in FBR Blanket, the Fourth International Conference on Mathematics and Natural Sciences (ICMNS), November 8-9, 2012, Bandung, Indonesia (2012). (International Conference, Abstract Submission and Presentation)

Sidik Permana, Novitrian, Abdul Waris, Zaki Suud and Mitsutoshi Suzuki, Important Aspect of Pu-238 Isotope Composition for Proliferation Resistance and Fuel Sustainability Analyses, The 2nd International Conference on Theoretical and Applied Physics (ICTAP-2012) & Simposium Fisika Nasional 2012 (SFN XXV), October 19-20, 2012, Palangkaraya, West Kalimantan, Indonesia (2012). (International Conference, Abstract Submission and Presentation)

A.B. Suryamas, M.M. Munir, T. Ogi, Khairurrijal and K. Okuyama: Intense green and yellow emissions from electrospun BCNO phosphor nanofibers, *J. Mater. Chem.*, 21 (2011), 12629 A.

A. Hartanto, F.P. Zen, J.S. Kosasih, L.T. Handoko, Near-brane SU(6)-origin Higgs in Scherk-Schwarz breaking of five dimensional SU(6) GUT, *Int. J. Mod. Phys. A*, 27(7) 2012

A. Sulaiman, F.P. Zen, H. Alatas, L.T. Handoko, Dynamics of DNA breathing in the Peyrard-Bishop model with damping and external force, *Physica D: Nonlinear Phenomena* 241 issue 19 pp. 1640-1647, 2012

A. Sulaiman, F.P. Zen, H. Alatas, L.T. Handoko, The thermal denaturation of the Peyrard-Bishop model with an external potential, *Physica Scripta* 86 issue 1 art no. 15802 -15807, 2012

A. Suroso, F.P. Zen, "Varying gravitational constant in five dimensional universal extra dimension with nonminimal derivative coupling of scalar field", *Advanced Studies in Theoretical Physics*, Vol. 6, 2012, no. 27, 1337 – 1344.

- Agus Suroso and Freddy P. Zen, "Cosmological Model with Nonminimal Derivative Coupling of Scalar Fields in Five Dimensional Universal Extra Dimension" (diterima untuk dipublikasikan di *General Relativity and Gravitation*)
- Asep Suhendi, Muhammad Miftahul Munir, Adi Bagus Suryamas, Asep Bayu Dani Nandiyanto, Takashi Ogi, and Kikuo Okuyama, "Control of cone-jet geometry during electrospray by an electric current", *Advanced Powder Technology*, In Press (2013)
- B. E. Gunara, *Spherical Symmetric Dyonic Black Holes and Vacuum Geometries in 4d N=1 Supergravity on Kaehler-Ricci Soliton*, Reports on Mathematical Physics **69** (2012) 281
- B. E. Gunara, *A Survey on Constant Scalar Curvature Black Holes of 4d N=1 Supergravity in Four Dimensions*, Advanced Studies in Theoretical Physics **6** (2012) 975.
- B. E. Gunara, *4D N=1 Supersymmetric Yang-Mills on Kahler-Ricci Soliton*, Journal of Mathematics and Statistics **8** (2012) 441.
- B. E. Gunara, F.P. Zen, and Arianto, *Deformation of Dyonic Black Holes and Vacuum Geometries in Four Dimensional N=1 Supergravity*, Advanced Studies in Theoretical Physics **6** (2012) 379, hep-th/0908.2015
- M.M. Munir, A. Suhendi, T. Ogi, F. Iskandar and K. Okuyama: "Ion-induced nucleation rate measurement in SO₂/H₂O/N₂ gas mixture by soft X-ray ionization at various pressures and temperatures ", *Adv. Powder Technol.* **24** (2013) 143
- Muhammad Miftahul Munir, Ade Y. Nuryantini, Khairurrijal, Mikrajuddin Abdullah, Ferry Iskandar, and Kikuo Okuyama, "Preparation of Polyacrylonitrile Nanofibers with Controlled Morphology Using a Constant-Current Electrospinning System for Filter Applications", *Materials Science Forum*, **737** (2013) 159
- Ramli, M. Djamal, F. haryanto, S. Viridi, Khairurrijal, Giant magnetoresistance in(Ni60C030Fe10/Cu) trilayer growth by opposed target magnetron sputtering, *Advanced Materials Research*, Vol 535-537, 1319-1322, 2012
- T. Jin, A. Takita, M. Djamal, W. Hou, J. Hongzhi, Y. Fuji, A method for evaluating the electromechanical characteristics of piezoelectric actuators during motion, *Sensor, (Basel)* **12(9):11559-70**, 2012
- Triyanta, A.N. Bowaire, & W. Hidayat, *Hawking Temperature of the Reissner-Nordstrom-Vaidya Black Hole* , *ITB Journal of Science* (2012) (submitted)
- T. Ogi, Y. Kisakibaru, Y. Kaihatsu,W.N. Wang, M.M. Munir, and K. Okuyama: "Preparation and Characterization of Boron Oxide-based Red Emitting Phosphors using Eu, Al, Ca additives", *Mater. Chem. Phys.* **133** (2012) 392
- Y. Fujii, A. Takita, J. Kaewkhao, M. Djamal, T. Yamaguchi, Precision force measurement using the levitation mass method (LMM), *Applied Mechanics and Materials*, **103,1**, 2012
- Widyaningrum Indrasari, Mitra Djamal, Wahyu Srigutomo, Ramli, *A Magnetic Distance Sensor with High Sensitivity Based on Double Secondary Coil of Fluxgate*, *IOSR Journal of Applied Physics (IOSR-JAP)*, Vol. 2, Issue 5 (Nov.-Dec. 2012), PP 29-35.
- Triyanta, Kian Ming, *Vertices in a Scalar-Gravity System in The Teleparallel Gravity*, *Integral* **11(1)** (2012)
- Ismail Rizka Pambudi, Yudi Nugraha, Mitra Djamal, *Sistem Telemetri Pemantau Gempa Menggunakan Jaringan GSM*, *J.Oto.Ktrl.Inst.*, Vol 4 (1), 2012.
- Dhani Herdiwijaya, Mitra Djamal, Hendra Gunawan, *Design of Mobile and Robotic Observing System with Special Telescope Baffle for Searching Young Lunar Crescent*, *J.Oto.Ktrl.Inst.*, Vol 4 (1), 2012.

- Yulkifli, Hufri, Mitra Djamal, Rahmondia Nanda Setiadi, *Desain Sensor Getaran Frekuensi Rendah Berbasis Fluxgate*, J.Oto.Ktrl.Inst., Vol 4 (1), 2012.
- Irkhos dan **Suprijadi**, *Simulasi kontrol temperatur berbasis fuzzy logic untuk tabung sampel minyak bumi pada metoda direct subsurface sampling*, Jurnal Otomasi Kontrol dan Instrumentasi, vol 4 (2), p. 37 – 46
- Agus Suroso, Freddy P.Zen, Arianto, and Bobby E. Gunara, "Accelerating universe from nonminimal derivative coupling in 5D universal extra dimension", AIP Conf. Proc.1450, 338 (2012); doi: 10.1063/1.4724164
- Agus Suroso, Freddy P. Zen, and Bobby E. Gunara, "Nonminimal derivative coupling in five dimensional universal extra dimensions and recovering the cosmological constant", AIP Conf. Proc.1454, 47 (2012); doi: 10.1063/1.4730685.
- B. E. Gunara, *Static Spacetimes with Einstein Surfaces in 4d Einstein-Maxwell-Higgs Theory with General Couplings*, AIP Conference Proceeding of Asian Physics Symposium 2012, Bandung, Indonesia.
- B. E. Gunara, F. P. Zen, F. T. Akbar, A. Suroso, W. Hidayat, *Spherical Symmetric Extremal Black Holes in 4d N=1 Supergravity*, AIP Conference Proceeding of Asian Physics Symposium 2012, Bandung, Indonesia
- B. E. Gunara, *Static Spacetimes of Constant Scalar Curvature of Einstein-Maxwell-Higgs Theory in d ≥ 4 Dimensions*, AIP Conference Proceeding of International Conference on Research and Education in Mathematics 2011, Bandung, Indonesia
- F. T. Akbar, B. E. Gunara, F. P. Zen, Triyanta, *Local Existence of N=1 Supersymmetric Gauge Theory in Four Dimensions*, AIP Conference Proceeding of Asian Physics Symposium 2012, Bandung, Indonesia
- F.T. Akbar, B.E. Gunara. F.P.Zen, Triyanta, *Local Existence of N=1 Supersymmetric Gauge Theory in 4d*, International Conference in Mathematics and Natural Sciences, Bandung (2012)
- Hasanuddin, A. Azwar, B. E. Gunara, *Stationary Axisymmetric Four Dimensional Space-time Endowed With Einstein Metric*, AIP Conference Proceeding of Asian Physics Symposium 2012, Bandung, Indonesia
- Kian Ming, Triyanta, *Propagators and Vertices of Scalar-Gravity Interaction in The Teleparallel Theory of Gravitation*, International Conference in Mathematics and Natural Sciences, Bandung (2012)
- Muhammad Miftahul Munir, Arif Surachman, Indra Wahyudin Fathonah, Muhammad Aziz Billah, Khairurrijal, Hernawan Mahfudz, Ririn Rimawan and Slamet Lestari: "Development of Microcontroller Based Water Flow Measurement", 5th Asian Physics Symposium (APS2012), Bandung, Indonesia, 10-12 July 2012
- Muhammad Miftahul Munir, Mohammad Aziz Billah, Arif Surachman, Maman Budiman, and Khairurrijal: "Design of 3D Scanner for Surface Contour Mapping by Ultrasonic Sensor", 5th Asian Physics Symposium (APS2012), Bandung, Indonesia, 10-12 July 2012
- N.Yulius, F. T. Akbar, B. E. Gunara, *Simple Magnetic Monopole of Yang-Mills-Higgs Theory in Four Dimensions*, AIP Conference Proceeding of Asian Physics Symposium 2012, Bandung, Indonesia
- R. N. Wijaya, M. F. Rozi, B. E. Gunara, *Einstein and Maximally Symmetric Space Condition for 4D Metric with Torus Symmetry*, AIP Conference Proceeding of Asian Physics Symposium 2012, Bandung, Indonesia

- S. A. Wahyoedi, and B. E. Gunara, *Multi-Centered Metric on (n+1)-Dimensional Static Spacetimes*, AIP Conference Proceeding of International Conference on Research and Education in Mathematics 2011, Bandung, Indonesia
- S. Viridi,, Novitrian, F. Masterika, W. Hidayat, F. P. Zen, Segmented self-siphon: Experiments and simulations, AIP Conference Proceedings 1450 pp. 190-195(2012)
- Triyanta, Supardi, F.P.Zen, *Solutions of Dirac Fields in Teleparallel Gravity in Bianchi Type I Spacetime*, International Conference on Theoretical and Applied Physics, Palangkaraya (2012)
- Triyanta, *Scattering of Fundamental Fields by Gravitational Fields up to One Loop Order in Teleparallel gravity*, International Workshop on Integrated Research, Bandung (2012)
- Sentosa, M.R.A, Suprijadi, Viridi.S, *Constriction Of Blood Vessels Modeling Using Molecular Dynamics*, 4th Intr.Conf.Math & Sciences, Bandung
- Wella,S.A, Nakamura, M., Obata,.M., Suprijadi, Oda,T., Tight-binding molecular dynamics with Fermi operator expansion: application to vacancy defects of silicon, ,The 3rd Workshop on Computational and Statistical Physics (CSP3). Kyoto - JAPAN, 19 – 20 Oktober 2012
- F. Muttaqien and Suprijadi, *First Principles Calculations of Hydrogen Chemisorption in Zigzag Edge (10,0) Carbon Nanotubes With Stone-Wales Defect*, 5th Asian Physics Symposium 2012 (5th APS 2012), July 10 – 12, Bandung – Indonesia, abstract 096-COM, p.85
- A.Setiadi and Suprijadi, *Transition Mechanism of Stone-Wales Defect in Armchair Edge (5,5) Carbon Nanotube*, 5th APS 2012, July 10 – 12, 098-COM, Bandung Indonesia, p. 85
- Ferry Faizal and Suprijadi, *Smoothed Particle Hydrodynamics Method and Free Surface Heat Transfer for Phase Change Problem*, 5th APS 2012, July 10 – 12, 090-COM, Bandung Indonesia, p. 84
- Suprijadi, I. R Pambudi, M. Woran, *Developing stereo image based robot control system*, 5th APS 2012, July 10 – 12, 170 -INS, Bandung – Indonesia, p.105
- S. H. Pratama, Y. S. Gunawan, Suprijadi, F. Haryanto, *Characterization and analysis of brain tissue abnormalities using geometric features analysis in MRI image*, 5th APS 2012, July 10 – 12, 159-BIO, Bandung – Indonesia, p.52
- C. F. Naa and Suprijadi, *Parallel Algorithm Design of Moving Particle Semi-Implicit using Message Passing Interface*, International Symposium on Computational Science 2012, Jogjakarta -Indonesia
- Ely Aprilia,H. Katou, J. Gotou, S. Haraguchi, Suprijadi, T. Oda, *Structural, magnetic, electronic properties in small bismuth clusters Bi_n (2 ≤ n ≤ 7)*, International Symposium on Computational Science 2012, Jogjakarta –Indonesia
- Wahyu Hidayat, Novitrian, Sparisoma Viridi, Freddy P.Zen, Numerical Studies on Dynamical Fluid for Air Temperature Distribution, Asian Physics Symposium 2012
- Wahyu Hidayat, Sparisoma Viridi, Freddy P. Zen, mathematical modelling for stability analisys of smell print, ICMNS 2012
- Viera, B.V.E., Madayanti, F., Aryantha, I.N.P., Akhmaloka, Succession of eukaryotic communities during traditional composting of domestic waste based on PCR-DGGE analysis-Journal of Pure and Applied Microbiology 6 (2), pp. 525-536
- Nurbaiti, S., Martoprawiro, M.A., Akhmaloka, Hertadi, R. , The role of electrostatic interactions on Klentaq1 insight for domain separation-Bioinformatics and Biology Insights 2012, 6, pp. 225-234
- Widhiastuty, M.P., Wahyudi, S.T., Moeis, M.R., Madayanti, F., Akhmaloka, Cloning and sequence analysis of lipase gene from DMS3 isolate-Biosciences Biotechnology Research Asia 2012, 9 (1), pp. 187-192

- Nurachman, Z., Hartati, Anita, S., Anward, E.E., Novirani, G., Mangindaan, B., Gandasasmita, S., Suantika, G., Oil productivity of the tropical marine diatom *Thalassiosira* sp.-Bioresource Technology 2012, 108 , pp. 240-244
- Zeily Nurachman, Hartati, Syahfitri A., Etsuroyya E.A., Gestria N., Bill M., Suryo G., Yana M.S., Lily M.G.P., and Gede S., Oil productivity of the tropical marine diatom *Thalassiosira* sp-Bioresource Technology (accepted)
- Purkan, Ihsanawati, Yana M.S, Debbie S.R., Achmad S.N., Shigeru S., and Dassy Natalia-Mutations in the C-terminal Region of KatG in Isoniazid Resistant Clinical *M. tuberculosis* isolate reduce its catalase-proxidase activities-Biologia 2012, 67 (1), pp. 41-47
- Ngili, Y., Noer, A.S., Ahmad, A.S., Syukriani, Y.F., Natalia, D., Syah, Y.M., Variants analysis of human mitochondrial genome mutation: Study on Indonesian human tissues-International Journal of ChemTech Research 2012, 4 (2), pp. 720-728
- Nurachman, Z., Brataningtyas, D.S., Hartati, Pangabean, L.M.G., -Oil from the tropical marine benthic-diatom navicula sp.-Applied Biochemistry and Biotechnology 2012, 168 (5) , pp. 1065-1075
- Aldina S.S., Ihsanawati, and Ernawati A.G.R., Molecular Cloning of PhoR Sensor Domain from *Mycobacterium tuberculosis* for Structure-Based Discovery of Novel Anti-Tubercular-Journal of Life Sciences 2012, 6 (3), 268-275
- Irdhawati, I., Tatsumi, H., Noviandri, I., Buchari, B., Ibrahim, S., (2012), *Cyclic Voltammetry of Ion Transfer for Phenylpropanolamine Hydrochloride at Water/Nitrobenzene Interface*, J. Chin. Chem. Soc., 59 (1) , pp. 40-45.
- V Saraswaty, H Setiyanto, J Nurhajati (2012) *Antibacterial Activity from Croton argyratus Stem Bark Extract*, International Journal of PharmTech Research 4(1), 190-193.
- Handayani N., Loos K., Wahyuningrum D., Buchari, Zulfikar M.A., (2012), *Immobilization of Mucor miehei Lipase onto Macroporous Aminated Polyethersulfone Membrane for Enzymatic Reactions*, Membranes, 2, 198-213.
- Megawati Zunita, Deana Wahyuningrum, Buchari, Bunbun Bundjali, (2012), *Investigation of Corrosion Inhibition Activity of 3-butyl-2,4,5-triphenylimidazole and 3-butyl-2-(2-butoxyphenyl)-4,5-diphenylimidazol toward Carbon Steel in 1% NaCl Solution*, Int. J. Electrochem. Sci., 7(4), 3274-3288.
- Indra Noviandri and Rien Rakhmana, (2012), *Carbon Paste Electrode Modified with Carbon Nanotubes and Poly(3-Aminophenol) for Voltammetric Determination of Paracetamol*, Int. J. Electrochem. Sci., 7(5), 4479 - 4487.
- Muhammad Ali Zulfikar, Edeh Dieke Mariske and Samitha Dewi Djajanti, (2012), *Adsorption of lignosulfonate compounds using powdered eggshell*, Songklanakarin J. Sci. Technol. 34 (3), 309-316.
- R Muhida, M M Rahman, M S H Chowdhury, H Setiyanto, H Zainuddin, A B Zakaria, H Kasai (2012), *Theoretical Study of Atomic Level Understanding of the Reactive Ion Etching (RIE)*, Journal of Computational and Theroretical Nanoscience 9(8), 1067-1069.
- M M Rahman, R Muhida, M S H Chowdhury, H Setiyanto, H Zainuddin, A B Zakaria, H Kasai (2012), *Theoretical Investigation of a BenzeneVanadium Multiple-Decked Sandwich Chain on a Gold Surface*, Journal of Computational and Theoretical Nanoscience 9(8), 1063-1066.
- Aladin Sianipar, Amran M.B, Buchari Buchari, I Made Arcana (2012), *Effect Of Degree Binary Complex Of Imprint Ion On The Extraction Of Zircon Ion*, IOSR Journal of Applied Chemistry (IOSRJAC), 1(4), 15-19.

- Rusnadi Rusnadi, Buchari Buchari, M. Bachri Amran, Deana Wahyuningrum (2012), *Cerium Adsorption Using 1-Phenyl-3-Methyl-4-Benzoyl- 5-Pyrazolone(HPMBP) Loaded Calcium Alginate Beads*, International Journal of Engineering Research and Applications (IJERA), 2(5), 496-499.
- Murniati A., Buchari B., Gandasasmita S., Nurachman Z. (2012), *Synthesis and characterization of polypyrrole polyphenol oxidase (PPy/PPO) on platinum electrode*, Research J. Pharm. Biol. Chem. Sci., 3(4), 855.
- Ria Sri Rahayu, Indra Noviandri, Buchari Buchari, Mikrajuddin Abdullah, Teruo Hinoue, (2012), *The effect of laser pulse irradiation at glassy carbon electrode on the electrochemistry of dopamine an ascorbic acid*, Int. J. Electrochem. Sci., 7, 8225-8265.
- M A Zulfikar, A Rohman, H Setiyanto, M B Amran (2012), *The removal of nickel, copper and cadmium from aqueous solution using hepaticeae (Dumortiera hirsute Sw. nees)*, International Journal of Environmental Studies.
- M A Zulfikar, H Setiyanto, S D Djajanti (2012), *Effect of Temperature and Kinetic Modelling of Lignosulfonate Adsorption onto Powdered Eggshell in Batch Systems*, Songklanakarin, J. Sci. Technol.
- Muhammad Ali Zulfikar and Aminudin Sulaeman., (2012), *Transport of Rare Earth Elements (REEs) through Hollow Fiber Supported Liquid Membrane (HFSLM) using di-(2-ethylhexyl) phosphoric acid and trybutylphosphate as a carrier*. Int. J. ChemTech Res.
- Zulfikar, Muhammad; Wahyuningrum, Deana; and Lestari, Sinta (2012), *Adsorption of lignosulfonate compound from aqueous solution onto chitosan-silica beads*, Separation Science and Technology.
- R. Muhida, M.M. Rahman, M.S.H. Chowdhury, H. Setiyanto, H. Zainuddin, B.Z. Azmi, (2012), *Density Functional Study of Spin Polarization on a Carbon Material with a Hexagonal Structure Induced by Iron Atoms*, Journal of Computational and Theoretical Nanoscience.
- H. Setiyanto, I.B.L. Simbolon, Rifka, M.A. Zulfikar, M.B. Amran, B. Buchari (2012), *Comparative study on leachate in old and new municipal solid waste landfills at Bandung- Indonesia*, European Journal of Scientific Research, 79(2):159-165.
- Hardian, A., and Ismunandar, Synthesis and characterization of gd and er co-doped ceria as solid electrolyte for IT-SOFC via solid state method, Proceedings - International Conference on nstrumentation, Communication, Information Technology and Biomedical Engineering 2011, ICICI-BME 2011
- Kilo, A. L., Prijamboedi, B., Martoprawiro, M. A., &Ismunandar, Modeling ionic conduction in γ -Bi₂VO 5.5, Proceedings - International Conference on nstrumentation, Communication, Information Technology and Biomedical Engineering 2011, ICICI-BME 2011
- Ismunandar, Rusli, R., &Ramdan, H., Temperature dependent study of Bi₂V 1-xGa xO 5.5 (x = 0.1 and 0.15) oxides, Proceedings - International Conference on Instrumentation, Communication, Information Technology and Biomedical Engineering 2011, ICICI-BME 2011
- R., Prijamboedi, B., Marsih, I. N., Mukti, R. R., &Ismunandar, Conductivity and solid state ²⁹Si NMR studies of apatite-type lanthanum silicate prepared by hydrothermal method , Proceedings - International Conference on Instrumentation, Communication, Information Technology and Biomedical Engineering 2011, ICICI-BME 2011
- H.D. Setiabudi, A.A. Jalil, S. Triwahyono, N.H.N. Kamarudin, R.R. Mukti, IR study of iridium bonded to perturbed silanol groups of PtHZSM5 for npentane isomerization, Applied Catalysis A: General 29 February 2012

- Fitria Rahmawati, Bambang Prijamboedi, Syoni Soepriyanto, and Ismunandar, SOFC composite electrolyte based on LSGM-8282 and zirconia or doped zirconia (from zircon concentrate), International Journal of Minerals, Metallurgy, and Materials
- Atiek Rostika Noviyanti, Bambang Prijamboedi, I Nyoman Marsih & Ismunandar, Hydrothermal Preparation of Apatite-Type Phases La_{9.33}Si₆O₂₆ and La_{9M1}Si₆O_{26.5} (M = Ca, Sr, Ba), ITB Journal of Science
- N.H.N. Kamarudin, A.A. Jalil, S. Triwahyono, R.R. Mukti, M.A.A. Aziz, H.D. Setiabudi, M.N.M. Muhid, H. Hamdan, Interaction of Zn²⁺ with extraframework aluminum in HBEA zeolite and its role in enhancing n-pentane isomerization, Applied Catalysis A: General
- Veinardi Suendo, Sparisoma Viridi, Ab Initio Calculation Study Between RHF/CIS. TDDFT, and Semi-Empirical Methods, ITB Journal of Science
- Ismunandar and Yuli S Indartono, Editorial Introduction Climate Change and Poverty in Asia. Challenges and Prospects, RDD (Regional Development Dialogue)
- E. P. Ng, S.N.M Subari, O. Marie, R. R. Mukti, J. Cuan, Sulfonic Acid Functional MCM - 41 as Solid Acid Catalyst for Tert Butylation of Hydroquinone by Microwave Heating, Applied Catalysis A: General
- Aladin Sianipar, Amran M.B, Buchari Buchari, I Made Arcana, , Effect Of Degree Binary Complex Of Imprint Ion On The Extraction Of Zircon Ion, IOSR Journal of Applied Chemistry (IOSRJAC) Vol.1(4), 15-19 (2012), .
- Siang Tandi Gonggo1, Cynthia L. Radiman, Bunbun Bundjali, and I Made Arcana, Properties of Polymer Electrolyte Membranes Prepared by Blending Sulfonated Polystyrene with Lignosulfonate, ITB J. Sci., Vol. 44 A, No. 3, 2012, 285-295
- L.O.A.N. Ramadhan, C.L. Radiman, V. Suendo, D. Wahyuningrum, S. Valiyaveettill, Synthesis and characterization of polyelectrolyte complex N-succinyl chitosan-chitosan for proton exchange membrane , Procedia Chemistry", 4, 114-122.
- V. Suendo, M. Minagawa, A. Tanioka (2012), Chronopotentiometry study of a cation-exchange membrane in the presence of cationic surfactant in membrane surface vicinity, Ionics 18, 159-166.,
- Annisa Aprilia, Priastuti Wulandari, Veinardi Suendo, Herman, Rahmat Hidayat, Akihiko Fujii, Masanori Ozaki,, Influences of dopant concentration in sol-gel derived AZO layer on the performance of P3HT:PCBM based inverted solar cell (accepted)., Solar Energy Materials and Solar Cells, 2012
- Ali Syari'ati, Veinardi Suendo,, Effect of Electrochemical Reaction Environment on the Surface Morphology and Photoluminescence of Porous Silicon", Materials Science Forum, 2012 (Accepted).
- M. Astuti, A.N.M.Salman, H.Garminia and Irawati, The Properties of Some Coefficients of the Characteristics and the Laplacian Polynomial of a Hypergraph, International Journal of Contemporary Mathematical Sciences, Vol 7 no 21 (2012), 1029-1035.
- M.Astuti, H.Garminia, A.N.M.Salman and Irawati, Integral Complete r-Uniform Hypergraph and Sunflower Hypergraph, Far East Journal of Mathematical Sciences Vol 65 Issue 1 (2012) 87-96.
- M.A. Misri, Irawati, H.Garminia, Cyclic and multiplication p-Bezout modules, International Journal of Algebra, Vol 6 no 23 (2012) 1117-1120
- T.W. Purboyo, B. Rahardjo, Kuspriyanto and I. Muchtadi-Alamsyah, A New Metric for Predicting Network Security Level, Journal of Global Research in Computer Sciences, Vol 3 no 3 (2012) 68-72.

- M. Paryasto, B. Rahardjo, F. Yuliawan. I. Muchtadi-Alamsyah, Kuspriyanto, Composite Field Multiplier based on Look-Up Table for Elliptic Curve Cryptography Implementation, ITB Journal of Information and Communication Technology, Vol 6C No 1 (2012) 63-81.
- Darmajid, I.Muchtadi-Alamsyah, Irawati, The Degenerations for Modules and Dual Modules, JP Journal of Algebra Number Theory and Applications Vol 26 Issue 1 (2012), 65-73.
- A. P.Santika and I. Muchtadi-Alamsyah, The p-regular subspaces of symmetric Nakayama algebras and algebras of dihedral and semidihedral type, JP Journal of Algebra Number Theory and Applications vol 27 Number 2 (2012), 131-142.
- Darmajid, I.Muchtadi-Alamsyah and Irawati, Polydule varieties over finite dimensional algebras, Proceeding International Conference on Mathematics, Statistics and Applications, 2012, PM5.
- Irwansyah, A. Muchlis, D. Suprijanto and I. Muchtadi-Alamsyah, On almost weakly self-dual normal bases, Proceeding International Conference on Mathematics, Statistics and Applications, 2012, PM9.
- I. Muchtadi-Alamsyah, Pollard Rho Algorithm for Elliptic Curves over Composite Fields, Proceeding International Conference on Mathematics, Statistics and Applications, 2012, PM10.
- I. M. Maris, D. Kariman, Risnawita and I. Muchtadi-Alamsyah, A Note on the Dual of Some Special Biserial Algebras, in Advances in Algebraic Structures, World Scientific, 2012, 414-417.
- I. Muchtadi-Alamsyah, F. Yuliawan and A. Muchlis, Finite Field Basis Conversion and Normal Basis in Characteristic Three, in Advances in Algebraic Structures, World Scientific, 2012, 439-447.
- Darmajid and I. Muchtadi-Alamsyah, The Geometric Representation of Semisimple Module, Proceeding 2nd Basic Sciences International Conference 2012, M1-M4.
- A.P.Santika, Grup Defect pada Grup $PSL(2,3)$ dan $PSL(2,5)$, Jurnal Matematika dan Sains ITB, 19-21, 2012.
- Nopendri, F.Yuliawan, Algoritma Perluasan Euclid pada Lapangan Komposit $GF((pn)m)$, Prosiding Seminar Nasional Aljabar 2012, 130-135.
- Faisal, Irawati, I. Muchtadi-Alamsyah, Auslander-Reiten Quiver of Nakayama Algebra type Dynkin Graph An, ITB Journal of Science vol 45 A no.1, 1-18, 2013
- I. Muchtadi-Alamsyah and F. Yuliawan, Basis Conversion in Composite Fields, International Journal of Mathematics and Computations, Vol 19 Issue 2, 11-17, 2013
- M. A. Misri, Irawati and H. Garminia, Generalization of Bezout Modules, Far East Journal of Mathematical Sciences Vol 72 Issue 1, 131-133, 2013
- Fatmawati, Saragih, R., Soeharyadi, Y., Reduced-order model based on H_{∞} -balancing for infinite-dimensional systems, Appl. Math. Sci., Vol. 7, 2013, Issue 9-12, 2013, pp. 405-418
- Nunung Nurhayati, Udjiana S. Pasaribu, and Oki Neswan, Application of Generalized Space-Time Autoregressive
- Y.E.P. Pangalela & H. Gunawan, "Representasi fungsional-2 di \mathbb{I}^p ", JMP Edisi Khusus Simposium Nasional Analisis
- Denny I. Hakim & H. Gunawan, "Ketaksamaan Hermite-Hadamard terhadap integral Riemann-Stieltjes", JMP Edisi Khusus Simposium Nasional Analisis Matematika dan Aplikasinya V, April 2012
- S. Ekariani & H. Gunawan, "Teorema Titik Tetap pada ruang norm-n standar", JMP Edisi Khusus Simposium Nasional Analisis Matematika dan Aplikasinya V, April 2012
- Pangeran B.H.P. & H. Gunawan, "Ketaksamaan Chebyshev dan perumumannya", JMP Edisi Khusus Simposium Nasional Analisis Matematika dan Aplikasinya V, April 2012
- H. Gunawan, E. Nakai, Y. Sawano, H. Tanaka, "Generalized Stummel class and Morrey spaces", PIMB 92 (2012)

- H. Tanaka, H. Gunawan, "The local trace inequality for potential type integral operators", POTA (2012)
- I. Sihwaningrum, S. Maryani, H. Gunawan, "Weak-type inequalities for fractional integral operators on generalized non-homogeneous Morrey spaces", ATA 28 (2012), 65-72
- Eridani, H. Gunawan, M.I. Utomo, "A revisit on Nakai's results on fractional integrals and maximal functions", ATA 28 (2012), 263-267
- Sitompul, P., Gunawan, H., Soeharyadi, Y., Gunawan, A.Y., An energy investigation of reaction diffusion equations, AIP Conf. Proc., Vol 1450, 2012, pp 363-367
- Wono Setya Budhi, Another Elementary Proof of Jordan Decomposition for a matrix, AIP Conference Proceedings 1450 (2012),
- P. Sitompul, H. Gunawan, Y. Soeharyadi, A.Y. Gunawan, "An energy investigation of reaction diffusion equations", AIP Conference Proceedings 1450 (2012), 363-367
- Dadang A. Hamzah & H. Gunawan, "Aproksimasi polinomial minimaks berderajat satu dengan menggunakan metode jajargenjang terkecil", Prosiding Konferensi Nasional Matematika XV, Juli 2012
- S.R. Pudjaprasetya**, E. Khatizah, Longshore Submerged Wave Breaker for Reflecting Beach, *East Asian Journal on Applied Mathematics (EAJAM)* Vol. 2, No. 1, pp. 47-58, 2012.
- K. Yulianti, **A.Y. Gunawan**, An asymptotic study of the steady state model of oxygen diffusion in tissue regions, *ITB Journal of Science*, Vol 44A, no.2, pp 164-178, 2012.
- A. Nuryaman, **A.Y. Gunawan**, **K.A. Sidarto**, Y.W. Budhi, A Singular Perturbation Problem for Steady State Conversion of Methane Oxidation in Reverse Flow Reactor, *ITB Journal of Science*, Vol 44A, no.3 (In press), 2012.
- Windarto, **A.Y. Gunawan**, **E. Soewono**, P. Sukarno, Modelling of formation damage due to mud filtrate invasion in a radial flow system, *Journal of Petroleum Science and Engineering* 100, pp 99-105, 2012
- S. Darwis, **A.Y. Gunawan**, A.K. Permadi, N. Fitriyati, Reserve Estimation, *Advances and Applications in Statistics*, Volume 28, Issue 1, pp. 45 – 54, 2012.
- H. Tasman, A. K. Supriatna, **N. Nuraini**, **E. Soewono**, A dengue vaccination model for immigrants in a two-age-class population, *International Journal of Mathematics and Mathematical Sciences*, Volume 2012, Article ID 236352, 15 pages doi:10.1155/2012/236352, 2012.
- N. Nuraini**, H. Tasman, Simulation Model for Dengue Infection, *International Journal of Basic & Applied Sciences*, Volume 12 Issue 01, pp.26 – 30, 2012.
- Ariadji, T., Sukarno, P., **Sidarto**, **K.A.**, **Soewono**, E., Riza, L.S., Kenny David, K., Optimization of vertical well placement for oil field development based on basic reservoir rock properties using Genetic Algorithm, *ITB Journal of Engineering Science*, 44 B (2), pp. 106-127, 2012.
- L.H. Wiryanto**, H.B. Suprijanto, The Contraction Coefficient of a Free-Surface Flow Under Gravity Entering a Region Beneath a Semi-Infinite Plane, *East Asian Journal on Applied Mathematics* Vol. 2, No. 4, pp. 342-352, doi: 10.4208/eajam.240912.141112a, 2012.
- Deana Wahyuningrum, **Nuning Nuraini**, Novriana Sumarti, Model Matematika Pada Mekanisme Laju Korosi Logam Baja Karbon dengan Penambahan Inhibitor, *Jurnal Matematika & Sains*, Vol 17, No. 1, 2012.
- R. Saragih** and Fidya Indah Dewanti, Model reduction of bilinear system using balanced singular perturbation, *Communications in Computer and Information Science* 339 CCIS , pp. 198-204, 2012.

- D. Aldila, **E.Soewono, N. Nuraini**, On the analysis of effectiveness in mass application of mosquito repellent for dengue disease prevention, *American Institute of Physic Conference Proceedings*, Volume 1450, pp. 103 – 109, 2012.
- N. Nuraini**, IK Adriani, MS Baladram, S Viridi, 2012, Rise time of inverted triangular prism intruder in vibrating granular bed: Experiments and model, *American Institute of Physic Conference Proceedings*, Volume 1450, pp. 201 – 204, 2012.
- L.H. Wiryanto**, Cyntia Paramitha, Zickry Zulkifti, the discretisation of an integral equation for sluice gate flow, Proc. 5th Int. Symp. On Computational Science, Yogyakarta, 15-16 May 2012, p. 165-171.
- L.H. Wiryanto**, Zickry Zulkifti, Cyntia Paramitha, Stream near a separation of solid boundary, Proc. Basic Science International Conference, 2012.
- Fuady, A.M., **Soewono, E., Nuraini, N.**, Tasman, H., Supriatna, A.K.:A mass treatment model for endemic reduction of filaria disease with pre-testing, *AIP Conference Proceedings*, 1450, pp. 241-245, 2012.
- Drajat, R.Z., Su'Ud, Z., **Soewono, E., Gunawan, A.Y.**: Multi channel thermal hydraulic analysis of gas cooled fast reactor using genetic algorithm, *AIP Conference Proceedings*, 1450, pp. 246-253, 2012.
- Septiani, R.D., Pasaribu, H.M., **Soewono, E.**, Fayalita, R.A. : Optimization in fractional aircraft ownership, *AIP Conference Proceedings*, 1450, pp. 234-240, 2012.
- Kusdiantara, R., **Hadianti, R.**, Badri Kusuma, M.S., **Soewono, E.**: Tsunami evacuation mathematical model for the city of Padang, *AIP Conference Proceedings*, 1450, pp. 305-312, 2012.
- Ariadji, T., Aziz, P.A., **Soewono, E.**, Syifa, A.A., Riza, L.S., **Sidarto, K.A.**, Sukarno, P.: A robust method for determining the optimum horizontal well direction and length for a petroleum field development using genetic algorithm, *AIP Conference Proceedings*, 1450, pp. 319-325, 2012.
- J. Naiborhu**, Firman, and Marsiana L. Sitanggang, Iterative Learning Control based on Modified Steepest Descent Control For Output Tracking of Nonlinear Nonminimum Phase Systems, *Proceedings of the 10th World Congress on Intelligent Control and Automation*, Beijing, China, July 6-8, p., 1361-1366, 2012.
- N. Nuraini**, D.R Pasha, **E. Soewono**, A Simple Diffusion Model Of Plasma Leakage In Dengue Infection, *Proceedings of "The 6th SEAMS-UGM Conference 2012"*.
- Taufan Mahardhika, **R. Saragih**, B.R. Trilaksono, Reduksi system bilinear dengan menggunakan Algoritma Genetika, *Prosiding Konferensi Nasional Matematika XVI*, UNPAD, 2012.
- Solikhatun, **R. Saragih**, Endro Julianto, Pengendali kokoh umpan balik untuk system bilinear tereduksi melalui Pertidaksamaan Matriks Linear, *Prosiding Konferensi Nasional Matematika XVI*, UNPAD, 2012.
- SinungSuakanto, SuhonoHarsoSupangkat, Suhardi, **R. Saragih**, Performance Measurement of Cloud Computing Services, *International Journal on Cloud Computing: Services and Architecture (IJCCSA)*, Vol. 2, No. 2, pp. 9-20, April 2012.
- SinungSuakanto, SuhonoHarsoSupangkat, Suhardi, and **R. Saragih**, Impact of Blocking HTTP Request for Average Round Trip Time Delay, *International Journal of Computer Science and Management Research (IJCSCR)* , Vol. 1, Issue 2, pp. 242-249, September 2012.
- Suakanto, S., Supangkat, S.H., Suhardi, **Saragih, R.**, Nugroho, T.A., Nugraha, I.G.B.B., Environmental and disaster sensing using cloud computing infrastructure, *Proceedings - International Conference*

- on *Cloud Computing and Social Networking 2012: Cloud Computing and Social Networking for Smart and Productive Society, ICCCSN 2012*, art. no. 6215712.
- Suakanto, S., Supangkat, S.H., Suhardi, **Saragih, R.**, Nugraha, I.G.B.B., Building crawler engine on cloud computing infrastructure, *Proceedings - International Conference on Cloud Computing and Social Networking 2012: Cloud Computing and Social Networking for Smart and Productive Society, ICCCSN 2012*, art. no. 6215751.
- D. Aldila, T. Götz, **E. Soewono**: An optimal control problem arising from a Dengue disease transmission model, In Press at *Math BioSciences*
- M. Elviyenti, Djoko Suprijanto, An algorithm to construct new (near---) MDS or (near---) MDR self---dual codes over finite rings $Z_{(p^m)}$, AIP Conf. Proc. 1450 (2012), 205---210.
- Mulia Astuti, Hanni Garminia, A.N.M. Salman, Irawati, Integral complete r---uniform hypergraphs and sunflower hypergraphs, *Far East Journal of Mathematical Sciences* 1 (2012) 87---96.
- Edy Tri Baskoro, Darmaji, The partition dimension of corona product of two graphs, *Far East Journal of Mathematical Sciences*, 66:2 (2012), 181---196.
- Darmaji, Edy Tri Baskoro, Further results on partition dimension of corona products, AIP Conf. Proc. 1450 (2012), 77---81.
- Dedy Tatanto, Edy Tri Baskoro, On Ramsey (2K2, 2Pn)---Minimal Graphs, AIP Conf. Proc. 1450 (2012), 90---95.
- Hadi Muhshi, Edy Tri Baskoro, On Ramsey (3K2, P3)---minimal graphs, AIP Conf. Proc. 1450 (2012), 110---117.
- Mania Roswitha, Edy Tri Baskoro, H---magic coverings on some classes of graphs, AIP Conf. Proc. 1450 (2012), 135---138.
- Adiwijaya, A.N.M. Salman, Djoko Suprijanto, Edy Tri Baskoro, A characterization of the corona product of a cycle with some graphs based on its f---chromatic index, AIP Conf. Proc. 1450 (2012), 155---158.
- Meilin I. Tilukay, A.N.M. Salman, Mona Elviyenti, On super d---face antimagic total labelings of the corona product of a tree with r copies of a path, AIP Conf. Proc. 1450 (2012), 218---221.
- Syafrizal Sy, Edy Tri Baskoro, A lower bound of the size multipartite Ramsey number $m_j(P_n, K_{j,b})$, AIP Conf. Proc. 1450 (2012), 259---261.
- Ira Apni Purwasih, Edy Tri Baskoro, The Locating Chromatic Number of Certain Halin Graphs, AIP Conf. Proc. 1450 (2012), 342---345.
- Asmiati, Edy Tri Baskoro, Characterizing all graphs containing cycles with locating---chromatic number 3, AIP Conf. Proc. 1450 (2012), 351---357.
- D.K. Syofyan, A.N.M. Salman, Some sufficient conditions for corona graphs to be product cordial graphs, Proceeding of International Conference on Mathematics, Statistics and its Applications (2012), PM7.
- Asmiati, E.T. Baskoro, H. Assiyatun, D. Suprijanto, R. Simanjuntak, S. Uttunggadewa, The locating---chromatics number of firecracker graphs, *Far East Journal of Mathematical Sciences* 63:1 (2012), 11---23.
- Mulia Astuti, A.N.M. Salman, Hanni Garminia, Irawati, The properties of some coefficients of the characteristic and the Laplacian polynomial of a hypergraph, *Inter'l J. Contemporary Math. Sci.* 7 (21-- 24) (2012) 1029---1035
- A. Ahmad, E.T. Baskoro, M. Imran, Total vertex irregularity strength of disjoint union of helm graphs, *Discussiones Mathematicae – Graph Theory* 32:3 (2012), 427--- 434

M. Hussain, E.T. Baskoro, K. Ali, On super antimagic total labeling of Harary graph, *Ars Combinatoria* 104 (2012), 225---233.

E.T. Baskoro, I.A. Purwasih, The locating chromatic number for corona product of graphs, *Southeast Asian Journal of Sciences*, 1:1 (2012), 126---136.

S.W. Saputro, D. Suprijanto, E.T. Baskoro, A.N.M. Salman, The metric dimension of a graph composition products with star, *J. Indones. Math. Soc.*, Vol 18 No 2 (2012) pp. 85---92

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