

Curriculum Vitae

General Information

Full Name Dr. Suprijadi (Assoc. Prof.)
Place and date of birth Bandung, July 11th 1967
Research Group Theoretical High Energy Physics and Instrumentation
Office Faculty Mathematics and Natural Sciences
Institut Teknologi Bandung
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Educations record

| No | University | Degree (year) | Field Study |
|----|--|----------------|---|
| 1 | Nagoya University, Nagoya, JAPAN | Dr. (2001) | Material, Department of Quantum Engineering |
| 2 | Nagoya University, Nagoya, JAPAN | M.Eng. (1998) | Material, Department of Quantum Engineering |
| 3 | Institut Teknologi Bandung, Bandung, INDONESIA | Sarjana (1991) | Instrumentation, Dept. of Physics |

Selected Publication in Last 5 years

• In progress

1. Christian Fredy Naa, Didier Fasquelle, Manuel Mascot, Suprijadi, Sparisoma Viridi and Mitra Djamal, *Influence of Grain Size to Resistivity Relaxation of La 0.7 Sr 0.3 MnO 3 Nanoparticles*, Advanced Material Research, accepted
2. Sparisoma Viridi, Suprijadi, Veinardi Suendo, *Simulasi Deposisi berdasarkan Penumbuhan Butiran menggunakan Dinamika Molekular*, submitted RDNI
3. Suprijadi, A. Ikhwan, R. R. Septiawan dan I. D. Aditya; *Studi Komputasi Aliran Sebagai Fungsi Perbedaan Suhu Fluida*, To be published in Kontribusi Fisika
4. Triati D. K. Wungu, Sasfan A. Wella, Marhamni Syaputra, and Suprijadi; *he Adsorption of H2S on Silicene for Gas Sensor Application: A DFT Study*; submitted.
5. Marhamni Syaputra, Sasfan Arman Wella, Acep Purqon, Suprijadi; *External And Internal Influences In Silicene Monolayer*; Advance Material Research, minor revision
6. Marhamni Syaputra, Sasfan Arman Wella, Acep Purqon, Suprijadi; *Study of Hydrogenated Silicene: The Initialization Model of Hydrogenation on Planar, Low Buckled, Critical Point and High Buckled Structure of Silicene*; presented in 5th ICMNS, under review for AIP
7. Marhamni Syaputra, Sasfan Arman Wella, Triati Dewi Kencana Wungu, Acep Purqon, Suprijadi; *Study on Transport Properties of Silicene Monolayer under External Field using NEGF Method*; presented in 5th ICMNS, under review for AIP
8. Sasfan Arman Wella, Marhamni Syaputra, Triati Dewi Kencana Wungu, Acep Purqon, Suprijadi; *Hydrogen Concentration and Electric Field Dependent on Structural and Electronic Properties of Germanene*; presented in 5th ICMNS, under review for AIP
9. Sasfan Arman Wella, Marhamni Syaputra, Faiz Jazuli Nor, Suprijadi, *First Principle on Electronic and Magnetic Properties of 50 percent Hydrogenated Germanene*,under review, Recent Development on Computational Sciences.

• International Journal (IJ) and National Journal (JN)

1. (2014-IJ) Edi Sanjaya, Mitra Djamal, Suprijadi, Gunawan Handayani, Ambran Hartono, Ramli, *Development of Ground Displacement Sensor based on Flat Coil Element for Detection of Landslide*, IOSR Journal of Applied Physics (IOSR-JAP) e-ISSN: 2278-4861. Volume 6, Issue 1 Ver. III (Feb. 2014), PP 01-06

2. (2014-IJ) Suprijadi, F. Faizal, R. R. Septiawan, *Computational study on melting process using smoothed particle hydrodynamics* , J.of Modern Physics, vol.5, no.3, p. 112-116 <http://dx.doi.org/10.4236/jmp.2014.53019>
3. (2014-IJ) Christian Fredy Naa, Suprijadi, Sparisoma Viridi and Mitra Djamal, *Novel giant magnetoresistance model using multiple barrier potential*, ARPN Journal of Engineering and Applied Sciences (JEAS), vol.9, no.2, p.135-139
4. (2014-JN) S. A. Wella, M. Syaputra, F. J. Nor, Suprijad; *First Principle Calculation untuk Menyelidiki Sifat Elektronik dan Sifat Magnetik Hydrogenated Germanene*, Research and Development on Nanotechnology in Indonesia (RDNI), vol.1, no.3, p.99-102, ISSN : 2356-3303
5. (2014-JN) Faiz Jazuli Nor, Sasfan . A. Wella, Suprijadi; *Pengembangan Sensor Gas Ethyl Methilbutyrate (C7H14O2) Berbasis Graphene*, Research and Development on Nanotechnology in Indonesia (RDNI), vol.1, no.2, p.53 - 57, ISSN : 2356-3303
6. (2013-IJ) Suprijadi, T. Muliawan, S. Viridi, *Automatic Road Lighting System (ARLS) Based on Images from Digital Camera*, J.of Science and Technology, vol.3 (12), p.1105 - 1109
7. (2013-IJ) Suprijadi and A.Setiadi,2013, *Structural Shifting and Electronic properties of Stone-Wales Defect in Armchair Edge (5,5) Carbon Nano Tube*, Advanced Materials Research Journal,vol.772. p.380
8. (2012-JN) 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
9. (2011-IJ) M. Djamal, Ramli, S.Satira, Suprijadi, *Development of a Low Cost Vibration Sensor based on Flat Coil Element*, International Journal of mathematical models and methods in applied sciences, vol.5 (3), p.550 - 557
10. (2011-IJ) Mitra Djamal, Ramli, Yulkifli, Suprijadi, and Khairurrijal, *Biosensor Based on Giant Magnetoresistance Material*, International Journal of E-Health and Medical Communications, vol.1 , p.1-17

- **International Proceeding (IP) and National Proceeding (PN)**

1. (2014-IP) Reza Rendian Septiawan,Habibi Abdillah, Novitrian, Suprijadi, *Preliminary Study on Liquid Natural Convection by Temperature Differences*,International Conference on Advances in Education Technology (ICAET 2014), p. 140 -143, ISSN : 2352-5398; ISBN : 978-94-62520-44-8
2. (2014-IP) Suprijadi, S.H. Pratama, F. Haryanto, Volume estimation of brain abnormalities in MRI data , AIP Proceeding vol.1587, Symposium on Biomathematics, p.101-104; <http://dx.doi.org/10.1063/1.4866543>
3. (2014-IP) Suprijadi, M.R.A Sentosa, P. Subekti, S. Viridi, Application of Computational Physics:Blood Vessel Constrictions and Medical Infuses, AIP Proceeding vol.1587, Symposium on Biomathematics (invite paper),p.3; <http://dx.doi.org/10.1063/1.4866523>
4. (2013 - IP) Suprijadi, F. Faizal, C.F. Naa and A.Trisnawan, 3D Simulation of Dam Break effect on a Solid Wall, Recent Development on Computational Science, Vol.4, p.155
5. (2013-IP)Ely Aprilia, Acep Purqon, Suprijadi, The Geometrical Effects of Substitution Impurities (Ga, N, As) on Electric and Magnetic Properties of (10,0) Carbon Nano Tube using Density Functional Theory, Recent Development on Computational Science, vol.4, p. 23-28
6. (2013-IP) Nurul Ikhsan, Nakamura, M., Obata.,M., Suprijadi, Oda,T. Magnetic, structural, and electronic properties of Co doped Fe/MgO interface, Recent Development on Computational Science, Vol.4, p.95-104
7. (2013-IP) Sasfan Arman Wella, Makoto Nakamura, Masao Obata, Suprijadi, Tatsuki Oda, Tight-Binding Molecular Dynamics with Fermi Operator Expasion : Application to Vacancy Defects in Silicon, Recent Development on Computational Science, Vol.4, p. 145 -154
8. (2013-PN) Juan Prahamma Hartijamt, Renadi Permana Kusumawiangga, Suprijadi, *Simulasi Penentuan Material Heatsink Sebagai Pendingin Graphic Processing Unit (GPU) dengan Menggunakan Comsol*, Seminar Kontribusi Fisika, 2013, hal.193-200
9. (2013-PN) Enggar Alfianto, Faiz Jazuli Nor, Suprijadi; *Pengaruh Kadar Gula dalam Larutan terhadap Daya Serap Super Absorbent Polymer*, Seminar Kontribusi Fisika, 2013, hal.144-149
10. (2013-PN) Nurul Ikhsan, Ely Aprilia, Suprijadi, *Simulasi Carbon Nanotube (10,0) dengan atom Pengganti Gallium, Arsenik dan Nitrogen dengan Menggunakan Perangkat Lunak PHASE*, Seminar Kontribusi Fisika, 2013, hal.248-254
11. (2012-IP) 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

12. (2012-IP) 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
13. (2012-IP) 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
14. (2012-IP) 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
15. (2012-IP) 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
16. (2012-IP) C. F. Naa and Suprijadi, Parallel Algorithm Design of Moving Particle SemiImplicit using Message Passing Interface, International Symposium on Computational Science 2012, Jogjakarta -Indonesia
17. (2012-IP) Sentosa, Suprijadi, Viridi. S, Constriction of Blood Vessel Modelling Using Molecular Dynamics, 4th ICMNS, Bandung
18. (2012-PN) R. Ekawita, E. Widiatmoko, Suprijadi, H. Nawir, dan Khairurrijal, Pengukuran Deformasi Material Karet Menggunakan Metoda Image Processing, Seminar Nasional Material 2012, Bandung, p. 101 - 103
19. (2011-IP) Suprijadi, Ely Aprilia, Meiqorry Yusfi, Compression Stress Effect on Dislocations Movement and Crack propagation in Cubic Crystal, Recent development on computational science, vol 2, p.1-7
20. (2011-IP) Putu Harry Gunawan and Suprijadi, An Application of Graham Scan Algorithm for Surface Detection in Droplet Surface with SPH Method, The 5th International Conference on Research and Education in Mathematics (ICREM 5), Bandung, 22 - 24 October, p.79
21. (2011-IP) E. Aprilia, H. Katou , J. Gotou, S. Haraguchi, Suprijadi, T. Oda, Self-Consistent Treatment for Fully Relativistic Effects in the Small Bismuth Clusters, Molecular Simulation Conference, 4 - 7 december 2011, Tokyo Japan, p.117p
22. (2011-PN) Riska Ekawita, Eko Widiatmoko, Suprijadi, Hasbullah Nawir, Endra Susila1, Khairurrijal, Color image processing for measuring length deformation in compression test, 2011 International Conference on Instrumentation, Communication, Information Technology and Biomedical Engineering, 8-9 November 2011, Bandung Indonesia, p.239 - 241

- **Data Recapitulation**

1. *SCOPUS* 15 Documents; Citation Index : 95; HIndex : 4
2. *Google Scholar* 13 documents; Citation Index : 79; Hindex : 3
3. *ISI*

Research and Community Activity

1. Current Research (RIK) : Pengaruh Regangan Lapisan Silicene terhadap Sifat Elektroniknya
2. Current Research (Kerjasama Luarnegri DIKTI dengan Kyushu University-JAPAN) : Study on Mechanical and Electronic Properties of Carbon Nanotubes
3. 2014 (Riset KK), Studi Komputasi Kuantum Karakteristik Elektronik Silicene untuk aplikasi nanosensor gas
4. 2014 [PPM-ITB] Pengembangan Sistem Kontrol Irigasi Sawah dengan Tenaga Surya di Desa Cibuntu Sukabumi
5. 2013 (Riset KK), Model dan Simulasi Aliran Fluida Non Isothermal Berbasis Metode Smoothed Particle Hydrodynamics (SPH) 3D
6. 2013 [PPM-ITB] Pengembangan Sistem Controlled Air Treatment pada Proses Fermentasi Tape Singkong Skala Industri Kecil
7. 2012 (Riset Inovasi KK), Robot Pengintai Berbasis Citra Stereovision
8. 2010 (Hibah Kompetensi), Sistem pemetaan dan deteksi 3 dimensi dengan menggunakan metoda stereo vision
9. 2008 - 2009 (Hibah Fundamental), Sistem kontrol aliran fluida berbasis fuzzy logic pada hidroponik NFT
10. 2011 - now (Self Funding), Material Design base on computational methods especially on Carbon Nano Tube application
11. 2011 - 2012 (self funding), Computation and experimental study on combination of crack propagation and dislocation wake on cubic crystal system

Working Experience

Teaching

1. Department of Physics ITB : Fundamental of Physics, Fundamental Electronic, Instrumentation System, Sensor System, Microprocessor and Interface System, Computational Physics System, Programming and Physics Simulation
2. department of Computational Sciences : Algorithm and Design Programming, Visualization in Sciences
3. Nagoya University-Japan : Teaching assistant in laboratory of Fundamental Physics and laboratory of Crystal Structure and Characterization,

Quality Education

1. 2012 - now Gugus Kendali Mutu FMIPA
2. 2010 - now Assessor of ASEAN University Network Quality Assurance (AUN-QA)
3. 2010 - 2012 Member of Internal Quality Assurance of DGHE
4. 2006 - 2009 Member of Task Force for Quality Assurance and Accreditation
5. 2005 Member of Quality Assurance Committee ITB

Institutional Development

1. 2012 - now Head of Nanotechnology Center Development Task Force
2. 2010 - now Head of Center of Instrumentation and Technology Automation ITB
3. 2009 - 2012 Person in Charge of ITB-IMHERE b2.c program
4. 2005 - 2010 Head of Electronic and Instrumentation Laboratory, Department of Physics
5. 2007 PIC activity 4 for Quality Assurance System Development in ImHERE Project of SPM ITB
6. 2005 - 2007 Executive Secretary for B-Program Research Based Learning Project DGHE, Department of Physics
7. 2003 - 2004 KaSubDit Tahap Persiapan Bersama

Other Works

1. 2009 - 2013 Jawa Barat Research Council
2. 2007 - 2008 Technical Assistant for Information System in University of Muhamadyah Cirebon, A3 Program DGHE

Books

1. Research Based Learning A novel approach in Indonesian Universitys education system, (editor), 2007, Department of Physics - ITB
2. Suprijadi, 2008, FI-2111 Dasar-Dasar Pemrograman, Penerbit ITB, (Catatan Kuliah)
3. M. Ali Yaz (terjemahan), 2007, Fisika 2 untuk SMA Kelas XI, Penerbit Quadra Yudhistira
4. M.Ali Yaz (terjemahan), 2007, Fisika 1 Untuk SMA Kelas X, Penerbit Quadra Yudhistira