

## [Publication List]

### JAN ~ DEC 2019

566. Jinbao Jiang, Manh-Ha Doan, Lingfeng Sun, Hyun Kim, Hua Yu, Min-kyu Joo, Sanghyun Park, Heejun Yang, Dinh Loc Duong, and Young Hee Lee, 'Ultra-Short Vertical-Channel Van der Waals Semiconductor Transistors', Online published, Advanced Science (23 December 2019)

565. Dinh Loc Duong, Seok Joon Yun, Youngkuk Kim, Seong-Gon Kim, Young Hee Lee, 'Long-range ferromagnetic ordering in vanadium-doped WSe<sub>2</sub> semiconductor', Applied Physics Letter, 115, 242406 (December 12, 2019)

564. Homin Choi, Byoung Hee Moon, Jung Ho Kim, Seok Joon Yun, Gang Hee Han, Sung-gyu Lee, Hamza Gul, Young Hee Lee, 'Edge Contact for Carrier Injection and Transport in MoS<sub>2</sub> Field-Effect Transistors', ACS Nano, 13, 11, 13169-13175 (November 12, 2019)

563. Fan Sidi, Seok Joon Yun, Woo Jong Yu, and Young Hee Lee, 'Tailoring Quantum Tunneling in Vanadium-Doped WSe<sub>2</sub>/SnSe<sub>2</sub> Heterostructure', Advanced Science, 10, 1902751 (November 27, 2019)

562. Ji-Hee Kim, Matthew R. Bergren, Jin Cheol Park, Subash Adhikari, Michael Lorke, Thomas Fraunheim, Duk-Hyun Choe, Beom Kim, Hyunyong Choi, Tom Gregorkiewicz, and Young Hee Lee, 'Carrier Multiplication in van der Waals Layered Transition Metal Dichalcogenides', Nature Communications, 10, 5488 (Dec 2, 2019)

- [YONHAPNEWS](#) (December 2, 2019)

- [EDAILY](#) (December 2, 2019)

- [DONGASCIENCE](#) (December 2, 2019)

- [NATURE COMMUNICATIONS EDITORS' HIGHLIGHTS](#) (December 2, 2019)

561. Hamza Zad Gul, Wonkil Sakong, Hyunjin Ji, Jorge Torres, Hojoon Yi, Mohan Kumar Ghimire, Jung Hyun Yoon, Min Hee Yun, Ha Ryong Hwang, Young Hee Lee, and Seong Chu Lim, 'Semimetallic Graphene for Infrared Sensing', ACS Applied Materials and Interfaces, 11(21), 19565-19571 (May 2, 2019)

560. Ramkrishna Sahoo, Tae Hoon Lee, Duy Tho Pham, Thi Hoai Thuong Luu and Young Hee Lee, 'Fast-Charging High-Energy Battery-Supercapacitor Hybrid: Anodic Reduced Graphene Oxide-Vanadium(IV) Oxide Sheet-on-Sheet Heterostructure', ACS Nano, 13, 10776-10786 (Oct 16, 2019)

559. Jinbong Seok, Jun-Ho Lee, Dongyeon Bae, Byungdo Ji, Young-Woo Son, Young Hee Lee, Heejun Yang, and Suyeon Cho, 'Hybrid catalyst with monoclinic MoTe<sub>2</sub> and platinum for efficient hydrogen evolution', APL Materials, 7, 071118 (July 31, 2019)

558. Dinh Hoa Luong, Thanh Luan Phan, Angesh Ghimire, Dinh Loc Duong, and Young Hee Lee, 'Revealing antiferromagnetic transition of van der Waals MnPS<sub>3</sub> via vertical tunneling electrical resistance measurement', APL Materials, 7, 081102 (August 1, 2019)

557. Jong Gil Park, Jeong-Gyun Kim, Kang Pyo So, Jun Yeon Hwang, Eun Sung Kim, Ju Li, Dongseok Suh, Young Hee Lee, 'Anisotropic mechanical properties and strengthening mechanism in superaligned carbon nanotubes-reinforced aluminum', Carbon, 153, 513-524 (July 10, 2019)

556. Jung Ho Kim, Jubok Lee, Hyun Kim, Seok Joon Yun, Yeongyang Kim, Hyun Seok Lee, Young Hee Lee, 'Optical logic operation via plasmon-exciton interconversion in 2D semiconductors', *Scientific Reports*, 9(9164) 1-7 (June 24, 2019)
555. Sidi Fan, Quoc An Vu, Sanghyub Lee, Thanh Luan Phan, Gyeongtak Han, Young-Min Kim, Woo Jong Yu, Young Hee Lee, 'Tunable Negative Differential Resistance in van der Waals Heterostructures at Room Temperature by Tailoring the Interface', *ACS Nano*, 13, 8193-8201 (July 1, 2019)
554. Bong Gyu Shin, Dae Hwan Boo, Bumsub Song, Sunam Jeon, Minwoo Kim, Sangwoo Park, Eun Soo An, Jun Sung Kim, Young Jae Song, Young Hee Lee, 'Single-Crystalline Monolayer Graphene Wafer on Dielectric Substrate of SiON without Metal Catalysts', *ACS Nano*, 13(6), 6662-6669 (June 7, 2019)
553. Kwangnam Yu, Nguyen Van Luan, Tae Soo Kim, Jiwon Jeon, Jiho Kim, Pilkyung Moon, Young Hee Lee and E. J. Choi, 'Gate tunable optical absorption and band structure of twisted bilayer graphene', *Physical Review B*, 99(25), 241405-1~241405-6 (Jun 21, 2019)
552. Byoung Hee Moon, Jung Jun Bae, Gang Hee Han, Hyun Kim, Homin Choi and Young Hee Lee, 'Anomalous Conductance near Percolative Metal-Insulator Transition in Monolayer MoS<sub>2</sub> at Low Voltage Regime', *ACS Nano*, 13(6), 6631-6637 (May 23, 2019)
551. Seunghun Lee, Ho-Yeol Park, Su Jae Kim, Hyangsook Lee, Ik-Jae Lee, Chae Ryong Cho, Eunha Lee, Se-Young Jeong and Young Hee Lee, 'Inverse Stranski-Krastanov Growth in Single-Crystalline Sputtered Cu Thin Films for Wafer-Scale Device Applications', *ACS Applied Nano Materials*, 2(5), 3300-3306 (April 30, 2019)
550. Niranjanmurthi Lingappan, Bing Li, Tae Hoon Lee, Young Hee Lee, 'Designing bifunctional catalysts for oxygen reduction/evolution reactions for high efficiency and long lifetime', *Electrochimica Acta*, 313, 41-47 (August, 2019)
549. Manh-Ha Doan, Youngjo Jin, Tuan Khanh Chau, Min-Kyu Joo, and Young Hee Lee, 'Room-Temperature Mesoscopic Fluctuation and Coulomb Drag in Multilayer WSe<sub>2</sub>', *Advanced Materials*, 31, 1900154 (March, 2019)
548. Hao Li, Xinming Li, Ji-Hoon Park, Li Tao, Ki Kang Kim, Young Hee Lee, Jian-Bin Xua, 'Restoring the photovoltaic effect in graphene-based van der Waals heterojunctions towards self-powered high-detectivity photodetectors', *Nano Energy*, 57, 214-221 (March, 2019)
547. Subash Adhikari, Chandan Biswas, Manh-Ha Doan, Sungtae Kim, Chandramouli Kulshreshtha, Young Hee Lee, 'Minimizing Trap Charge Density towards Ideal in Graphene-Silicon Schottky Solar Cell', *ACS Applied Materials & Interfaces*, 11(1), 880-888 (January 9, 2019)
546. Mali Zhao, Dohyun Kim, Van Luan Nguyen, Jinbao Jiang, Linfeng Sun, Young Hee Lee, Heejun Yang, 'Coherent thermoelectric power from graphene quantum dots', *Nano Letters*, 19(1), 61-68 (January 9, 2019)
545. Minh Dao Tran, Hyun Kim, Junsuk Kim, Manh Ha Doan, Tuan Khanh Chau, Quoc An Vu, Ji-Hee Kim, and Young Hee Lee, 'Two-Terminal Multibit Optical Memory via van der Waals Heterostructure', *Advanced Materials*, 31(7), 1807075-1~1807075-8 (February 15, 2019)

**JAN ~ DEC 2018**

544. Yong-Sang Kim, Jong Gil Park, Byeong-Seon An, Young Hee Lee, Cheol-Woong Yang and Jung-Gu Kim, 'Investigation of zirconium effect on the corrosion resistance of aluminium alloy using electrochemical methods and numerical simulation in an acidified synthetic sea salt solution', Materials, 11, 1982 (October 15, 2018)

543. Hyeona Mun, Kyu Hyoung Lee, Seung Jo Yoo, Hyun-Sik Kim, Jiwon Jeong, Sang Ho Oh, G. Jeffrey Snyder, Young Hee Lee, Young-Min Kim, Sung Wng Kim, 'Highly fluidic liquid at homointerface generates grain-boundary dislocation arrays for high-performance bulk thermoelectrics', Acta Materialia, 159, 266-275 (August 18, 2018)

542. Ui Yeon Won, Thuc Hue Ly, Young Rad Kim, Won Tae Kang, Yong Seon SHin, Ki Young Lee, Jin Seong Heo, Kun Nyun Kim, Young Hee Lee, Woo Jong Yu, 'Very high open-circuit voltage in dual-gate graphene/silicon heterojunction solar cells', Nano Energy, 53, 398-404(November, 2018)

541. Stephen Boando, Frederick Agyapong-Fordjour, Soo Ho Choi, Joo Song Lee, Ji-Hoon Park, Hayoung Ko, Gyeongtak Han, Seok Joon Yun, Sehwan Park, Young-Min Kim, Woochul Yang, Young Hee Lee, Soo Min Kim, Ki Kang Kim, 'Wafer-scale van der Waals heterostructures with ultraclean interfaces via the aid of viscoelastic polymer', ACS Applied Materials & Interfaces, 11(1), 1579-1586 (December 10, 2018)

540. Un Jeong Kim, Jun Suk Kim, Noejung Park, Sanghyub Lee, Ukjae Lee, Yeonsang Park, Jinbong Seok, Sungwoo Hwang, Hyungbin Son, Young Hee Lee, 'Anomalous K-Point Phonons in Noble Metal/Graphene Heterostructure Activated by Localized Surface Plasmon Resonance', ACS Nano, 12(12), 12733-12740 (December 6, 2018)

539. Joo Song Lee, Soo Ho Choi, Seok Joon Yun, Yong In Kim, Stephen Boando, Ji-Hoon Park, Bong Gyu Shin, Hayoung Ko, Seung Hee Lee, Young-Min, Kim, Young Hee Lee, Ki Kang Kim, Soo Min Kim, 'Wafer-scale single-crystal hexagonal boron nitride film via self-collimated grain formation', Science, 362(6416), 817-821 (November 16, 2018)

- [Yonhapnews](#) (November 16, 2018)

- [edaily](#) (November 16, 2018)

- [CHEMISTRYWORLD](#) (November 20, 2018)

538. Dinh hoa Luong, Hyun Seok Lee, Ganesh Ghimire, Jubok Lee, Hyun Kim, Seok Joon Yun, Gwang Hwi An, Young Hee Lee, 'Enhanced Light-Matter Interactions in Self-Assembled Plasmonic Nanoparticles on 2D Semiconductors', Small 14(47), 1802949-1~1802949-8 (November 22, 2018)

537. Chanwoo Lee, Byeong Geun Jeon, Seok Joon Yun, Young Hee Lee, Seung Mi Lee, Mun Seok Jeong, 'Unveiling Defect-Related Raman Mode of Monolayer WS<sub>2</sub> via Tip-Enhanced Resonant Raman Scattering', ACS Nano, 12(10), 9982-9990 (August 24, 2018)

536. Ramkrishna Sahoo, Duy Tho Pham, Tae Hoon Lee, Thi Hoai Thuong Luu, Jinbong Seok, Young Hee Lee, 'Redox-Driven Route for Widening Voltage Window in Asymmetric Supercapacitor', ACS Nano, 12(8), 8494-8505 (July 26, 2018)

535. Hee Jun Shin, Jaesu Kim, Sungho Kim, Homin Choi, Sahngkyu Lee, Young Hee Lee, Joo-Hiuk Son, and Seong Chu Lim, 'Unsaturated Drift Velocity of Monolayer Graphene', Nano Letters, 18(3), 1575-1581 (March 2018)

534. Hyunjin Ji, Hojoon Yi, Jibong Seok, Hyun Kim, Young Hee Lee and Seong Chu Lim, 'Gas adsorbates are Coulomb scatterers, rather than neutral ones, in a monolyyer MoS<sub>2</sub> field effect transistor' *Nanoscale*, 10(23), 10856-10862 (May 17, 2018)

533. Ki Kang Kim, Hyun Seok Lee and Young Hee Lee, 'Synthesis of hexagonal boron nitride heterostructures for 2D van der Waals electronics', *Chemical Society Reviews*, 2018, 47, 6342-6369(July, 2018)

532. Teun-Teun Kim, Hyeon-Don Kim, Rongkuo Zhao, Sang Soon Oh, Taewoo Ha, Dong Seob Chung, Young Hee Lee, Bumki Min and Shuang Zhang, 'Electrically Tunable Slow Light Using Graphene Metamaterials', *ACS Photonics*, 5, 1800-1807 (May 16, 2018)

531. Jung Ho Kim, Seok Joon Yun, Hyun Seok Lee, Jiong Zhao, Houcine Bouzid, Young Hee Lee, 'Plasma-Induced Phase Transformation of SnS<sub>2</sub> to SnS', *Scientific Reports*, 8, 10824, 1-7 (July 06, 2018)

530. Youngwoo Kim, Eric Moyen, Hemian Yi, Jose Avila, Chaoyu Chen, Maria C Asensio, Young Hee Lee , Didier Pribat, 'Synthesis of high quality graphene on capped (111) Cu thin films obtained by high temperature secondary grain growth on c-plane sapphire substrates', *2D Materials*, 5(3), 035008-1~035008-10 (April 16, 2018)

529. Gang Hee Han, Dinh Loc Duong, Donghoon Keum, Seok Joon Yun, Young Hee Lee, 'Van der Waals Metallic Transition Metal Dichalcogenides', *Chemical Reviews*, 118(13), 6297-6336 (June 29, 2018)

528. Un Jeong Kim, Hyansook Lee, Woojin Lee, Hye Yun Jeong, Hyun Kim, Gang Hee Han, Hyo Sug Lee, Yeonsang Park, Young-Geun Roh, Young Hee Lee, Eunha Lee, Sung Woo Hwang, 'Misorientation-Angle-Dependent Phase Transformation in van der Waals Multilayers via Electron-Beam Irradiation', *Advanced Materials*, 30(20), 170684-1~170684-7 (March 24, 2018)

527. Won Tae Kang, Il Min Lee, Seok Joon Yun, Young Il Song, Kunyun Kim, Do-Hwan Kim, Yong Seon Shin, Kiyoung Lee, Jinseong Heo, Young-Min Kim, Young Hee Lee, Woo Jong Yu, 'Direct Growth of Doping Controlled Monolayer WSe<sub>2</sub> by Selenium-Phosphorus Substitution', *Nanoscale*, 24, 11397-11402 (May 31, 2018)

526. Kuanchen Xiong, Hyun Kim, Roderick J Marstell, Alexander Goritz, Christian Wipf, Lei Li, Ji-Hoon Park, Xi Luo, Matthias Wietstruk, Asher Madjar, Nicholas C Strandwitz, Mehmet Kaynak, Young Hee Lee, James C M Hwang, 'CMOS-compatible batch processing of monolayer MoS<sub>2</sub> MOSFETs', *Journal of Physics D:Applied Physics*, 51(15), 1-6 (March 21, 2018)

525. Byoung Hee Moon, Jung Jun Bae, Min-Kyu Joo, Homin Choi, Gang Hee Han, Hanjo Lim, Young Hee Lee, 'Soft Coulomb gap and asymmetric scaling towards metal-insulator quantum criticality in multilayer MoS<sub>2</sub>', *Nature Communications*, 9, 2052 (May 24 , 2018)

- [Geumgangilbo](#) (May 24, 2018)

- [JoongAng Ilbo](#) (May 25, 2018)

524. Se Hwang Kang, Ho Sung Yu, Jaeyoon Baik, Heejun Yang, Young Hee Lee, Suyeon Cho, Sung Wng Kim, 'Superconductivity in Te-deficient polymorphic MoTe<sub>2-x</sub> and its derivatives: Rich structural and electronic phase transitions', *2D Materials*, 5(3), 031014-1~031014-7 (June 13, 2018)

523. Quoc An Vu, Sidi Fan, Sang Hyup Lee, Min-Kyu Joo, Woo Jong Yu, Young Hee Lee, 'Near-zero hysteresis and near-ideal subthreshold swing in h-BN encapsulated single-layer MoS<sub>2</sub> field-effect transistors', *2D Materials*, 5(3), 031001 (March 28, 2018)

522. Minh Dao Tran, Ji-Hee Kim, Hyun Kim, Manh-Ha Doan, Dinh Loc Duong, Young Hee Lee, 'Role of Hole Trap Sites in MoS<sub>2</sub> for Inconsistency in Optical and Electrical Phenomena', ACS Applied Materials & Interfaces, 10(12), 10580–10586 (March 5, 2018)

521. Kang Pyo So, Akihiro Kushima, Jong Gil Park, Xiaohui Liu, Dong Hoon Keum, Hye Yun Jeong, Fei Yao, Soo Hyun Joo, Hyoung Seop Kim, Hwanuk Kim, Ju Li and Young Hee Lee, 'Intragranular Dispersion of Carbon Nanotubes Comprehensively Improves Aluminum Alloys', Advanced Science, 5(7) 1800115-1~1800115-8 (July, 2018)

520. Srabani Kar, Van Luan Nguyen, Dipti R. Mohapatra, Young Hee Lee and A. K. Sood, 'Ultrafast Spectral Photoresponse of Bilayer Graphene: Optical Pimp-Terahertz Probe Spectroscopy', ACS Nano 2018, 12, 1785–1792(January 8, 2018)

519. Tae Hoon Lee, Duy Tho Pham, Ramkrishna Sahoo, Jingong Seok, Thi Hoai Thuong Luu, Young Hee Lee, 'High energy density and enhanced stability of asymmetric supercapacitors with mesoporous MnO<sub>2</sub>@CNT and nanodot MoO<sub>3</sub>@CNT free-standing films', Energy Storage Materials, 12, 223-231(May 2018)

## JAN ~ DEC 2017

518. Xu Cui, En-Min Shih, Luis A Jauregui, Sang Hoon Chae, Young Duck Kim, Baichang Li, Dongjea Seo, Kateryna Pistunova, Jun Yin, Ji-Hoon Park, Heon-Jin Choi, Young Hee Lee, Kenji Watanabe, Takashi Taniguchi, Philip Kim, Cory R. Dean, James C. Hone, 'Low-Temperature Ohmic Contact to Monolayer MoS<sub>2</sub> by van der Waals Bonded Co/h-BN Electrodes', Nano Letters, 17(8), 4781-4786 (August 2017)

517. Hee Jun Shin, Jaesu Kim, Seongho Kim, Hyeongmun Kim, Van Luan Nguyen, Young Hee Lee, Song Chu Lim, and Joo-Hiuk Son, 'Transient Carrier Cooling Enhanced by Grain Boundaries in Graphene Monolayer', ACS Applied Materials & Interfaces, 9(46), 41026-41033 (November 22, 2017)

516. Seok Joon Yun, Gang Hee Han, Hyun Kim, Dinh Loc Duong, Bong Gyu Shin, Jiong Zhao, Quoc An Vu, Jubok Lee, Seung Mi Lee, Young Hee Lee, 'Telluriding monolayer MoS<sub>2</sub> WS<sub>2</sub> via alkali metal scooter', Nature Communications, 8, 2163 (December 18, 2017)

- metro (Dec. 19, 2017)

515. Seung Hyun Song, Min-Kyu Joo, Michael Neumann, Hyun Kim, Young Hee Lee, 'Probing defect dynamics in monolayer MoS<sub>2</sub> via noise nanospectroscopy', Nature Communications, 8, 2121 (December 14, 2017)

- Yonhapnews (Dec. 21, 2017)

- Geumgangilbo (Dec. 21, 2017)

514. Dinh Loc Duong, Seok Joon Yun and Young Hee Lee, 'van der Waals Layered Materials: Opportunities and Challenges', ACS Nano, 11(12), 11803-11830 (December 8 2017)

513. Yong Seon Shin, Kiyoung Kee, Young Rae Kim, Hyangsook Lee, Il Min Lee, Won Tae Kang, Kunyun Kim, Jinseong Heo, Seongjun Park, Young Hee Lee and Woo Jong Yu, 'Mobility engineering in the vertical field effect transistor based on van der Waals heterostructures', Adv. Mater. 2018, 30, 1704435 (November 2017)

512. Jeong-Gyun Kim, Haeyoung Kang, Yourack Lee, Jeongmin Park, Joonggyu Kim, Thuy Kieu Truong, Eun Sung Kim, Doo Hyun Yoon, Young Hee Lee and Dongseok Suh, 'Carbon-Nanotube-

Templated, Sputter-Deposited, Flexible, Superconduction NbN Nanowire Yarns', Advanced Functional Materials, 27(30), 1701108-1~1701108-6, (August 11, 2017)

511. Yourack Lee, Min-Kyu Joo, Viet Thong Le, Raquel Ovalle-Robles, Xavier Lepro, Marcio D. Lima, Daniel G. Suh, Han Young Yu, Young Hee Lee and Dongseok Suh, 'Ultrastretchable Analog/Digital Signal Trasmission Line with Carbon Nanotubes Sheets', ACS Applied Materials & Interfaces, 9(31), 26286-26292 (August 9, 2017)

510. Quoc An Vu, Hyun Kim, Van Luan Nguyen, Ui Yeon Won, Subash Adhikari, Kunnyun Kim, Young Hee Lee, Woo Jong Yu, ' A High on/off ratio Floating-Gate Memristor Array on flexible substrate via CVD-Grown Large-Area 2D Layer Stacking', Advanced Materials, 29(44), 1703363 (November 27 2017)

509. D. W. Boukhvalov, P.F.Bazylewski, A.I.Kukharenko, I.S.Zhidkov, Yu.S.Ponosov, E.Z.Kurmaev, S.O.Cholakh, Y.H.Lee, G.S.Chang, 'Atomic and electronic structure of a copper/graphene interface as prepared and 1.5 years after', Applied Surface Science, 426, 1167-1172, (December 31, 2017)

508. Hyun Kim, Gang Hee Han, Seok Joon Yun, Jiong Zhao, Dong Hoon Keum, Hye Yun Jeong, Thuc Hue Ly, Youngjo Jin, Ji-Hoon Park, Byoung Hee Moon, Sung-Wng Kim and Young Hee Lee, 'Role of alkali metal promoter in enhancing lateral growth of monolayer transition metal dichalcogenides', Nanotechnology, 28(36), 36LT01 (August 8, 2017)

507. Heejun Yang, Sung Wng Kim, Manish Chhowalla and Young Hee Lee, 'Structural and quantum-state phase transition in van der Waals layered materials', Nature Physics, 13, 931-937 (October, 2017)

506. Yan Cui, Young Hee Lee, Jung Woon Yang, 'Impact of Carboxyl Groups in Graphene Oxide on Chemoselective Alcohol Oxidation with Ultra-Low Carbocatalyst Loading', Scentific Reports, 7(3146) (June 9, 2017)

505. Suyeon Cho, Se Hwang Kang, Ho Sung Yu, Hyo Won Kim, Wonhee Ko, Sung Woo Hwang, Woohyun Han, Duk-Hyun Choe, Young Hwa Jung, K Chang, Young Hee Lee, Heejun Yang, Sung Wng Kim, 'Te vacancy-driven superconductivity in orthorhombic molybdenum ditelluride', 2D Materials, 4(2), 021030 (June 5, 2017)

504. Min Kyu Joo, Jonggyu Kim, Gwanmu Lee, Young Hee Lee, Dong Seok Suh, 'Feasibility of Ultra-Sensitive Two-Dimensional Layered Hall Elements', 2D Materials, 4(2), 021029-1~ (June 5, 2017)

503. Dinh Hoa Luong, Hyun Seok Lee, Guru Prakash Neupane, Shravan Roy, Ganesh Chimire, Jin Hee Lee, Quoc An Vu, Young Hee Lee, 'Tunneling photocurrent assisted by interlayer excitons in staggered van der Waals heterobilayers', Advanced Materials, 29(33), 1701512, (September 6, 2017)

502. Sera Kim, Seunghyun Song, Jongho Park, Ho Sung Yu, Suyeon Cho, Dohyun Kim, Jae yoon Baik, Duk-hyun Choe, Kee Joo Chang, Young Hee Lee, Sung Wng Kim, Heejun Yang, 'Long-Range Lattice Engineering of MoTe<sub>2</sub> by 2D Electride', Nano Letters, 17(6), 3363-3368(May 10, 2017)

501.Dongil Chu, Young Hee Lee, Eun Kyu Kim, 'Selective control of electron and hole tunneling in 2D assembly', Science Advances, 3(4), e1602726-1~ e1602726-7 (Apr. 19, 2017)

500. Byoung Hee Moon, Gang Hee Han, Hyun Kim, Homin Choi, Jung Jun Bae, Jaesu Kim, Youngjo Jin, Hye Yun Jeong, Min-Kyu Joo, Young Hee Lee and Seong Chu Lim, 'Junction-Structure-Dependent Schottky Barrier Inhomogeneity and Device Ideality of Monolayer MoS<sub>2</sub> Field-Effect Transistors', ACS Applied Materials & Interfaces, 9(12), 11240-11246 (Mar. 7, 2017)

499. Manh-Ha Doan, Youngho Jin, Subash Adhikari, Sanghyub Lee, Jiong Zhao, Seong Chu Lim, Young Hee Lee, 'Charge Transport in MoS<sub>2</sub>/WSe<sub>2</sub> van der Waals Heterostructure with Tunable Inversion Layer', ACS Nano, 11(4), 3832-3840 (Mar. 14, 2017)

498. Wonbong Choi, Nitin Choudhary, Gang Hee Han, Juhong Park, Deji Akinwande and Young Hee Lee 'Recent development of two-dimensional transition metal dichalcogenides and their applications', Materials Today, 20(3), 116-130 , (Apr. 2017)

497. Hyun Jeong, Hye Min Oh, Anisha Gokarna, Hyun Kim, Seok Joon Yun, Gang Hee Han, Mun Seok Jeong, Young Hee Lee, Gilles Lerondel 'Integrated Freestanding Two-dimensional Transition Metal Dichalcogenides', Advanced Materials, 29(18), 1700308-1~1700308-9 (May. 10, 2017)

- [Cover page](#) (May. 10, 2017)

496. Jinbong Seok, Jun-Ho Lee, Suyeon CHO, Byungdo Ji, Hyo Won Kim, Min Kwon, DoHyun Kim, Young-Min Kim, Sang Ho Oh, Sung Wng Kim, Young Hee Lee, Young-Woo Son, Heejun Yang 'Active hydrogen evolution through lattice distortion in metallic MoTe<sub>2</sub>', 2D Materials, 4(2), 025061-1 ~ 025061-8 (Mar. 24, 2017)

495. Hye Yun Jeong, Youngjo Jin, Seok Joon Yun, Jiong Zhao, Jaeyoon Baik, Dong Hoon Keum, Hyun Seok Lee, and Young Hee Lee, 'Heterogeneous defect domains in single-crystalline hexagonal WS<sub>2</sub>', Advanced Materials, 29(15), 1605043-1~1605043-6 (Apr.18, 2017)

494. Jung Jun Bae, Hye Yun Jeong, Gang Hee Han, Jaesu Kim, Hyun Kim, Min Su Kim, Byoung Hee Moon, Seong Chu Lim and Young Hee Lee, 'Thickness-dependent in-plane thermal conductivity of suspended MoS<sub>2</sub> grown by chemical vapor deposition', Nanoscale 7(9), 2541-2547 (February 21, 2017)

493. Min-Kyu Joo, Byoung Hee Moon, Hyunjin Ji, Gang Hee Han, Hyun Kim, Gwan Mu Lee, Seong Chu Lim, Dongseok Suh, and Young Hee Lee, 'Understanding Coulomb Scattering Mechanism in Monolayer MoS<sub>2</sub> Channel in the Presence of h-BN Buffer Layer', ACS Applied Materials & Interfaces, 9(5), 5006-5013 (January 17 2017)

492. Thuc Hue Ly, Jiong Zhao, Magdalena Ola Cichocka, Lain-Jong Li, Young Hee Lee, 'Dynamical observations on the crack tip zone and stress corrosion of two-dimensional MoS<sub>2</sub>', Nature Communications, 8, 14116 (January 18, 2017)

- [Doangascience](#) (Jan. 18, 2017)

- [ETNEWS](#) (Jan. 19, 2017)

- [ScienceNewslne](#) (Jan. 18, 2017)

491. Jongho Park, Kimoon Lee, Seung Yong Lee, Chandani Nandadasa, Sungho Kim, Kyu Hyoong Lee, Young Hee Lee, Hideo Hosono, Seong-Gon Kim, and Sung Wng Kim, 'Strong localization of anionic electrons at interlayer for electrical and magnetic anisotropy in two-dimensional Y<sub>2</sub>C electride ', Journal of the American Chemical Society 132(2), 615-618(Jan. 18, 2017)

490. Eun Sung Kim, Jae-Yeol Hwang, Kyu Hyeong Lee, Hiromichi Ohta, Young Hee Lee, and Sung Wng Kim, 'Graphene Substrate for Van der Waals Epitaxy of Layer Structured

Bismuth Antimony Telluride Thermoelectric Film', Advanced Materials, 29(8), 1604899-1~1604899-7 (February 24, 2017)

489. Bing Li, Honggi Nam, Jiong Zhao, Jian Chang, Niranjanmurthi Lingappan, Fei Yao, Tae Hoon Lee and Young Hee Lee, ' Nanoreactor of Nickel-Containing Carbon-Shells as Oxygen Reduction Catalyst ', Advanced Materials, 29(7), 1605083-1~1605083-5 (February 17, 2017)

488. Kyoung-Duck Park, Markus B. Raschke, Joanna M. Atkin, Young Hee Lee and Mun Seok Jeong, ' Probing Bilayer Grain Boundaries in Large-Area Graphene with Tip-Enhanced Raman Spectroscopy ' Advanced Materials, 29(7), 1603601-1~1603601-6 (February 17, 2017)

- Inside back cover page

487. Jin Hee Lee, Hamza Gul, Hyun Kim, Byoung Hee Moon, Subash Adhikari, Jung Ho Kim, Homin Choi, Young Hee Lee, Seong Chu Lim 'Photocurrent Switching of Monolayer a MoS<sub>2</sub> using Metal-Insulator Transition', Nano Letters, 17(2), 673-678 (February 2017)

## JAN ~ Dec 2016

486. Quoc An Vu, Jin Hee Lee, Van Luan Nguyen, Yong Seon Shin, Seong Chu Lim, Kiyoung Lee, Jinseong Heo, Seongjun Park, Kunyun Kim, Young Hee Lee, Woo Jong Yu 'Tuning carrier tunneling in van der Waals heterostructures for ultrahigh detectivity', Nano Letters, 17(1), 453-459 (December 16, 2016)

485. Chandan Biswas, Younghwan Kim, and Young Hee Lee, 'Boosting photoresponse in silicon metal-semiconductor-metal photodetector using semiconducting quantum dots', Scientific Reports, (6), 37857 (November 25, 2016)

484. Thuc Hue Ly, Jiong Zhao, Dong Hoon Keum, Qingming Deng, Zhiyang Yu, Young Hee Lee, 'Hyperdislocations in van der Waals-layered materials', Nano Letters 16(12), 7807-7813 (December 14, 2016)

483. Yong Seon Shin, Won Tae Kang, Young Rae Kim, Ui Yeon Won, Ki Young Lee, Jin Seong Heo, Seong Jun Park, Young Hee Lee, and Woo Jong Yu, ' Mobility Enhancement of Transparent IZO/GrRM Heterostructure via Graphene-Random-Mesh Carrier Pathways', Advanced Electronic Materials 2(6), 1500382 (April 21, 2016)

482. Hye Min Oh, Hyun Jeong, Gang Hee Han, Hyun Kim, Jung Ho Kim, Si Young Lee, Seung Yol Jeong, Sooyeon Jeong, Doo Jae Park, Ki Kang Kim, Young Hee Lee, Mun Seok Jeong, ' Modulating Electronic Properties of Monolayer MoS<sub>2</sub> via Electron Withdrawing Functional Groups of Graphene Oxide', ACS Nano 10(11), 10446-10453 (November 22, 2016)

481. Hakim Arezki, Mohamed Bouthchich, David Alamarguy, Ali Madouri, Jose Alvarez, Pere Roca i Cabarricas, Jean-Paul Kleider, Fei Yao and Young Hee Lee, 'Electronic properties of embedded graphene: doped amorphous silicon/CVD graphene heterostucturectures, Journal of Physics-Condensed Mater, 28(40), 404001 (Oct 2016)

480. Hyun Seok Lee, Dinh Hoa Luong. Min Su Kim, Youngjo Jin, Hyun Kim, Seokjoon Yun, and Young Hee Lee, ' Reconfigurable exciton-plasmon interconverstion for nanophotonic circuits ', Nature Communications 7, 13663, (November 28, 2016)  
- ["Digitaltimes \(Nov.29,2016\) "](#)  
- ["ETNEWS \(Nov.29,2016\) "](#)

479. Subash Adhikari, David J. Perello, Chandan Biswas, Arunabha Ghosh, Nguyen Van Luan, Jihoon Park, Fei Yao, Slava V. Rotkin and Young Hee Lee, ' Determining Fermi level by absorption quenching of monolayer graphene by charge transfer doping ', Nanoscale 44(8), 18710-18717 (November 28, 2016)

478. Quang Huy Ta, David Perello, Dinh Loc Duong, Gang Hee Han, Sandeep Gorantla, Van Luan Nguyen, Alicja Bachmatiuk, Slava V. Rotkin, Young Hee Lee, Mark Rummeli, ' Stranski-Krastanov and Volmer-Weber CVD Growth Regimes to Control Stacking Order in Bilayer Graphene ', Nano Letters 16(10), 6403-6410 (12 October, 2016)

477. Min-kyu Joo, Byoung Hee Moon, Hyunjin Ji, Gang Hee Han, Hyun Kim, Gwan Mu Lee, Seong Chu Lim, Dongseok Suh, Young Hee Lee, ' Electron Excess Doping and Effective Schottky Barrier Reduction on the MoS<sub>2</sub>/h-BN Heterostructure ', Nano Letters 16(10), 6383-6389 (12 October, 2016)

476. Zhao Jiong, Honggi Nam, Thuc Hue Ly, Seok Joon Yun, Sera Kim, Suyeon Cho, Heejun Yang, Young Hee Lee, ' Chain Vacancies in 2D Crystals ', Small, Online Publish (October 17, 2016)

475. Woo Jong Yu, Quoc An Vu, Hyemin Oh, Hong Gi Nam, Hailong Zhou, Soonyoung Cha, Joo-Youn Kim, Alexandra Carvalho, Munseok Jeong, Hyunyong Choi, Antonio H. Castro-Neto, Young Hee Lee, Xiangfeng Duan, 'Unusually efficient photocurrent extraction in monolayer van der Waals heterostructure by tunneling through discretized barriers', Nature Communications 7, 13278 (November 9, 2016)  
- ["Photonics Online \(Nov.10,2016\) "](#)  
- ["ETNEWS Online \(Nov.10,2016\) "](#)  
- ["중도신문 Online \(Nov.10,2016\) "](#)

474. Young Hee Lee, Woo Seok Chcoi. 'Nanostructure physics and metarials science at center for integrated nanostructure physics', Current Applied Physics, 16(9), A1-A4 (September 2016)

473. Duy Tho Pham, Bing Li, Young Hee Lee, 'Nitrogen-doped activated graphene/SWCNT hybrid for oxygen reduction reaction', Current Applied Physics, 16(9), 1242-1249(September 2016)

472. Jung Jun Bae, Homin Choi, Young Hee Lee, Seong Chu Lim 'Pressure-dependent heat transfer at multilayer graphene and gas interface', Current Applied Physics, 16(9), 1236-1241 (September 2016)

471. Qinke Wu, Winadda Wongwiriyapan, Ji-Hoon Park, Sangwoo Park, Seong Jun Jung, Taehwan Jeong, Sungjoo Lee, Young Hee Lee, Young Jae Song, 'In situ chemical vapor

deposition of graphene and hexagonal boron nitride heterostructures', Current Applied Physics, 16(9), 1175-1191 (September 2016)

470. Minh Dao Tran, Ji-Hee Kim, Young Hee Lee, 'Tailoring photoluminescence of monolayer transition metal dichalcogenides', Current Applied Physics, 16(9), 1159-1174 (September 2016)

469. Jong Gil Park, Young Hee Lee, 'High thermoelectric performance of Bi-Te alloy: Defect engineering strategy', Current Applied Physics, 16(9), 1202-1215 (September 2016)

468. Ji-Hoon Park, Soo Ho Choi, Jiong Zhao, Seunghyun Song, Wochul Yang, Soo Min Kim, Ki Kang Kim, Young Hee Lee, 'Thickness-controlled multilayer hexagonal boron nitride film prepared by plasma-enhanced chemical vapor deposition', Current Applied Physics, 16(9), 1229-1235 (September 2016)

467. Min-Kyu Joo, Joonggyu Kim, Ji-Hoon Park, Van Luan Nguyen, Ki Kang Kim, Young Hee Lee, Dongseok Suh, 'Large-Scale Graphene on Hexagonal-BN Hall Elements: Prediction of Sensor Performance Without Magnetic Field', ACS Nano 10(9), 8803-8811 (27 September, 2016)

466. Gang Hee Han, Dong Hoon Keum, Zhao Jiong, Bong Gyu Shin, Seung Hyun Song, Jung Jun Bae, Ju Bok Lee, Jong Ho Kim, Hyun Kim, Byoung Hee Moon, Young Hee Lee, 'Absorption dichroism of monolayer 1T'-MoTe<sub>2</sub> in visible range ', 2D Materials, 3(3) 1-6 (September 8 2016)

465. Hye Yun Jeong, Un Jeong Kim, Hyun Kim, Gang Hee Han, Hyangsook Lee, Min Su Kim, Youngjo Jin, Thuc Hue Ly, Si Young Lee, Young-Geun Roh, Won-Jae Joo, Sung Woo Hwang, Yeonsang Park, Young Hee Lee, 'Optical Gain in MoS<sub>2</sub> via Coupling with Nanostructured Substrate: Fabry-Perot Interference and Plasmonic Excitation ', ACS Nano 10(9), 8192-8198 (27 September, 2016)

464. Quoc An Vu, Yong Seon Shin, Young Rae Kim, Van Luan Nguyen, Won Tae Kang, Hyun Kim, Dinh Hoa Luong, Il Min Lee, Kiyoung Lee, Dong-Su Ko, Jinseong Heo, Seongjun Park, Young Hee Lee, Woo Jong Yu, 'Two-Terminal Floating-Gate Memory with van der Waals Heterostructures for Ultrahigh On/Off Ratio', Nature Comm. 7, 12725 (September 2 2016)  
[- "Dong-A \(Sep.2,2016\) "](#)  
[- "Money Today \(Sep.2,2016\) "](#)  
[- "Daily News and Analysis \(Sep.6,2016\) "](#)  
[- "The Financial Express \(Sep.6,2016\) "](#)

463. Bong Gyu Shin, Gang Hee Han, Seok Joon Yun, Hye Min Oh, Jung Jun Bae, Young Ja e Song, Chong-Yun Park, and Young Hee Lee, 'Indirect Bandgap Puddles in Monolayer MoS<sub>2</sub> by Substrate-Induced Local Strain', Advanced Materials, 28(42), 9378-9384 (November 9, 2016)

462. Woo Jong Yu, Sang Hoon Chae, Quoc An Vu and Young Hee Lee, 'Sorting centimetre-long single-walled carbon nanotubes', *Scientific Reports*, 6, 30836(August 2016)
461. Tae Hyung Kim, Jaehyun Bae, Tae Hoon Lee, Jeongwoon Hwang, Jong Hyun Jung, Do Kyoung Kim, Jin Seo Lee, Dong Ok Kim, Young Hee Lee and Jisoon Ihm, 'Room-Temperature Hydrogen Storage via Two-Dimensional Potential Well in Mesoporous Graphene Oxide', *Nano Energy* 27, 402-411 (September 2016)
460. Kang Pyo So, Xiaohui Liu, Hideki Mori, Akihiro Kushima, Jong Gil Park, Hyoung Seop Kim, Shigenobu Ogata, Young Hee Lee, Ju Li, 'Ton-scale matal-carbon nanotube composite: The mechanism of strengthening while retaining tensile ductility' *Extreme Mechanics Letters* 8, 245-250(September, 2016)
459. Jun Suk Kim, Jaesu Kim, Jiong Zhao, Sungho Kim, Jin Hee Lee, Youngjo Jin, Homin Choi, Byoung Hee Moon, Jung Jun Bae, Young Hee Lee, and Seong Chu Lim, 'Electrical Transport Properties of Polymorphic MoS<sub>2</sub>', *ACS Nano* 10(8), 7500-7506 (July 11, 2016)
458. Van Luan Nguyen, David J. Perello, Seunghun Lee, Chang Tai Nai, Bong Gyu Shin, JoongGyu Kim, Ho Yeol Park, Hu Young Jeong, Jiong Zhao, Quoc An Vu, Sang Hyub Lee, Kian Ping Loh, Se-Young Jeong, Young Hee Lee, 'Wafer-scale single-crystalline AB-stacked bilayer graphene', *Advanced Materials* 28(37), 8177-8183 (October 5, 2016)
457. Thuc Hue Ly, Jiong Zhao, Hyun Kim, Gang Hee Han, Honggi Nam, Young Hee Lee, 'Vertically conductive MoS<sub>2</sub> spiral pyramid', *Advanced Materials* 28(35), 7723-7728 (21 September, 2016)
456. Le Duc Toan, Eric Moyen, Mihai Robert Zamfir, Young Woo Kim, Jemee Joe, Young Hee Lee and Didier Pribat, 'Connecting wire-based solar cells without any transparent conducting electrode', *CrystEngComm* 18(2), 207-212 (January 14, 2016)
455. Si Young Lee, Un Jeong Kim, Jae Gwan Chung, Honggi Nam, Hye Yun Jeong, Gang Hee Han, Hyun Kim, Hye Min Oh, Hyangsook Lee, Hyochul Kim, Young-Geun Roh, Jineun Kim, Sung Woo Hwang, Yeonsang Park, Young Hee Lee, ' Large Work Function Modulation of Monolayer MoS<sub>2</sub> by Ambient Gases' *ACS Nano* 10(6), 6100-6107 (June 28, 2016)
454. Seok Joon Yun, Soo Min Kim, Ki Kang Kim, Young Hee Lee "A systematic study of the synthesis of monolayer tungsten diselenide films on gold foil" *Current Applied Physics* 16(9) 1216-1222(September, 2016)
453. Hye Min Oh, Gang Hee Han, Hyun Kim, Jung Jun Bae, Mun Seok Jeong and Young Hee Lee, 'Photochemical Reaction in Monolayer MoS<sub>2</sub> via Correlated Photoluminescence, Raman Spectroscopy, and Atomic Force Microscopy ', *ACS Nano*, 10(5), 5230-5236 (May 24, 2016)
452. Hyun Seok Lee, Min Su Kim, Hyun Kim, and Young Hee Lee, " Identifying Multiexcitons in MoS<sub>2</sub> Monolayers at Room Temperature', *PRB : Rapid communications*, 93, 140409-1~140409-6 (April 19, 2016)

451. Sung Kyun Kim, Ravi Bhatia, Tae-Ho Kim, Daehee Seol, Jung Ho Kim, Hyun Kim, Wanchul Seung, Yunseok Kim, Young Hee Lee, Sang-Woo Kim, "Directional dependent piezoelectric effect in CVD grown monolayer MoS<sub>2</sub> for flexible piezoelectric nanogenerators", *Nano Energy*, 22, 483-489 (April 2016)

. Kang Pyo So, Di Chen, Akihiro Kushima, Mingda Li, Santae Kim, Yang Yang, Ziqiang Wang, Jong Gil Park, Young Hee Lee, Rafael I. Gonzalez, Miguel Kiwi, Eduardo M. Bringa, Lin Shao, Ju Li, 'Dispersion of carbon nanotubes in aluminum improves radiation resistance', *Nano Energy*, 22, 319-327 (April 2016)

-" Report on MIT webpage (March 2, 2016) "-

449. Jeongmin Park, Haeyong Kang, Kyeong Tae Kang, Yoojoo Yun, Young Hee Lee, Woo Seok Choi, and Dongseok Suh, "Voltage Scaling of Graphene Device on SrTiO<sub>3</sub> Epitaxial Thin Film", *NANO Letters*, 16(3), 1754-1759 (March 9, 2016)

448. Min Su Kim, Seok Joon Yun, Yongjun Lee, Changwon Seo, Gang Hee Han, Ki Kang Kim, Young Hee Lee and Jeongyong Kim, "Biexciton Emission from Edges and Grain Boundaries of Triangular WS<sub>2</sub> Monolayers", *ACS Nano*, 10(2) 2399-2405, (January 13 2016)

447. Ki Kang Kim, Soo Min Kim, and Young Hee Lee, 'Chemically Conjugated Carbon Nanotubes and Graphene for Carrier Modulation', *Accounts of Chemical Research*, 49(3), 390-399 (February 15, 2016)

446. Thuc Hue Ly, David J. Perello, Jiong Zhao, Qingmin Deng, Hyun Kim, Gang Hee Han, Sang Hoon Chae, Hye Yun Jeong and Young Hee Lee, 'Misorientation-angle-dependent electrical transport across molybdenum disulfide grain boundaries', *Nature communications* 7, 10426 (January 27, 2016)

445. Hye Yun Jeong, Si Young Lee, Thuc Hue Ly, Gang Hee Han, Hyun Kim, Honggi Nam, Zhao Jiong, Bong Gyu Shin, Seok Joon Yun, Jaesu Kim, Un Jeong Kim, Sungwoo Hwang, Young Hee Lee, 'Visualizing Point Defects in Transition Metal Dichalcogenides Using Optical Microscopy' *ACS Nano*, 10(1) 770-777, (January 26, 2016)

444. Sang Hoon Chae, Youngjo Jin, Tae Soo Kim, Dong Seob Chung, Hyuuyeong Na, Honggi Nam, Hyun Kim, David J. Perello, Hye Yun Jeong, Thuc Hue Ly and Young Hee Lee, 'Oxidation Effect in Octahedral Hafnium Disulfide Thin Film', *ACS Nano*, 10(1), 1309-1316 (January 26, 2016)

443. Weiwei Tie, Wurjya Sarathi Bhattacharyya, Yange Zhang, Zhi Zheng, Tae Hoon Lee, Sang Won Lee, Tae Hyung Kim, Young Hee Lee, Seung Hee Lee, 'Field-induced stretching and dynamic reorientation of functionalized multiwalled carbon nanotube aggregates in nematic liquid crystals', *Carbon* 96, 548-556, (January, 2016)

442. Seunghyun Song, Donghoon Keum, Suyeon Cho, David John Perello, Yunseok Kim, and Young Hee Lee, 'Room-Temperature Semiconductor-metal Transition of MoTe Thin Film Engineered by Strain', *Nanoletters*, 16(1) 188-193, (January, 2016)

**JAN ~ DEC 2015**

441. Haeyong Kang, Yoojoo Yun, Jeongmin Park, Joonggyu Kim, Thuy Kieu Troung, Jeong-Gyun Kim, Nahee Park, Hoyeol Yun, Sang Wook Lee, Young Hee Lee and Dongseok Suh, 'Quantum Hall conductance of graphene combined with charge-trap memory operation', *Nanotechnology*, 26, 345202~1-345202~6 (August 2015)

440. Hyun Seok Lee, Min Su Kim, Youngjo Jin, Gang Hee Han, Young Hee Lee and Jeongyong Kim , ' Efficient Exciton-Plasmon Conversion in Ag Nanowire/Monolayer MoS<sub>2</sub> Hybrids: Direct Imaging and Quantitative Estimation of Plasmon Coupling and Propagation' , *Advanced Optical Materials*, 2(7), 943-947 (July 2015)

439. Jung Jun Bae, Jung Hyun Yoon, Sooyeon Jeong, Byoung Hee Moon, Joong Tark Han, Hee Jin Jeong, Geon-Woong Lee, Ha Ryong Hwang, Young Hee Lee, Seung Yol Jeong and Seong Chu Lim ' Sensitive photo-thermal response of graphene oxide for mid-infrared detection ' , *Nanoscale* 2015(7), 15695-15700 (August 18, 2015)

438. Soo Min Kim, Allen Hsu, Min Ho Park, Sang Hoon Chae, Seok Joon Yun, Joo Song Lee, Dae-Hyun Cho, Wenjing Fang, Changgu Lee, Toma's Palacios, Mildred Dresselhaus, Ki Kang Kim, Young Hee Lee and Jing Kong ' Synthesis of Large-Area Multi-layer Hexagonal Boron Nitride for High Material Performance ' , *Nature Communications* 6(9662) (October 28, 2015)

437. Paul F. Bazylewski, Van Luan Nguyen, Robert P.C. Bauer, Adrian H. Hunt, Eamon J. G. McDermott, Brett D. Leedahl, Andrey I. Kukharenko, Seif O. Cholakh, Ernst Z. Kurmaev, Peter Blaha, Alexander Moewes, Young Hee Lee, Gap Soo Chang ' Selective Area Band Engineering of Graphene using Cobalt-Mediated Oxidation ' , *Nature, Scientific Report* 5(15380) (October 11, 2015)

436. Jong Gil Park, Dong Hoon Keum, Young Hee Lee ' Strengthening mechanisms in carbon nanotube-reinforced aluminum composites ' , *Carbon* 95, 690-698 (September 1, 2015)

435. Hyun Jeong, Seungho Bang, Hye Min Oh, Hyeyon Jun Jeong Sung-Jin An, Gang Hee Han, Hyun Kim, Ki Kang Kim, Jin Cheol Park, Young Hee Lee, Gilles Lerondel, Mun Seok Jeong ' Semiconductor-Insulator-Semiconductor Diode Consisting of Monolayer MoS<sub>2</sub>, h-BN, and GaN Heterostructure ' , *ACS Nano*, 9(10), 10032-10038 (October 4, 2015)

434. Hyun Seok Lee, Min Su Kim, Youngjo Jin, Gang Hee Han, Young Hee Lee, Jeongyong Kim ' Selective amplification of primary exciton in MoS<sub>2</sub> monolayer', *Physical Review Letters*, 115, 226801- (November 25, 2015)

433. Yongjun Lee, Seki Park, Hyun Kim, Gang Hee Han, Young Hee Lee, Jeongyong Kim ' Characterization of the structural defects in CVD-grown monolayered MoS<sub>2</sub> using near-field photoluminescence imaging', *Nanoscale*, 7, 11909-11914 (June 11, 2015)

432. Seong Chu Lim, Jung Hyun Yoon, Dinh Loc Duong, Young Woo Cho, Tae Hyung Kim, Soo Min Kim, Ha Ryong Hwang, Young Hee Lee ' Different mechanism of capacitance change for gas detection using semiconducting and metallic single-walled carbon nanotubes', *Current Applied Physics*, 15, 377-382 (January 19, 2015)

431. P.Bazylewski, D.W.Boukhvalov, A.I.Kukharenko, E.Z.Kurmaev, A.Hunt, A.Moewes, Y.H.Lee, S.O.Cholakhd, G.S.Chang ' The characterization of Co-nanoparticles supported on graphene', RSC Advances, 5, 75600-75606 (September 2, 2015)

430. Kyungjune Cho, Misook Min, Tae-Young Kim, Hyunhak Jeong, Jinsu Pak, Jae-Keun Kim, Jingon Jang, Seok Joon Yun, Young Hee Lee, Woong-Ki Hong, Takhee Lee ' Electrical and Optical Characterization of MoS<sub>2</sub> with Sulfur Vacancy Passivation by Treatment with Alkanethiol Molecules', ACS Nano, 9(8), 8044-8053 (August 13, 2015)

429. Lee Si Young, Duong, Dinh Loc, Vu, Quoc An, Jin, Yonngjo, Lee, Young Hee ' Chemically Modulated Bandgap in Bilayer Graphene Memory Transistors with High On/off Ratio', ACS Nano 9(9), 9034~9042 (August 26, 2015)

428. Youngjo Jin, Dong Hoon Keum, Sung-Jin An, Joonggyu Kim, Hyun Seok Lee, Young Hee Lee ' A Van der Waals homojunction: Ideal p-n diode behavior in MoS<sub>2</sub>', Advanced Materials, 27(37), 5534-5540 (August 21, 2015)

427. David J. Perello, Sang Hoon Chae, Seunghyun Song1 & Young Hee Lee ' High-performance n-type black phosphorus transistors with type control via thickness and contact-metal engineering ', Nature Communications 6(7809), 1~8 (July 30, 2015) [\\_](#)

426. Suyeon Cho, Sera Kim, Jung Ho Kim, Jiong Zhao, Jinbong Seok, Dong Hoon Keum, Jaeyoon Baik, Duk-Hyun Choe, K. J. Chang, Kazu Suenaga, Sung Wng Kim, Young Hee Lee, Heejun Yang ' Phase patterning for ohmic homojunction contact in MoTe<sub>2</sub>', Science 349(6248), 625-628 (August 7, 2015)

425. Min Kan, Hong Gi Nam, Young Hee Lee and Qiang Sun ' Phase stability and Raman vibration of the molybdenum ditelluride(MoTe<sub>2</sub>) monolayer ', Physical Chemistry Chemical Physics 22(17), 14866~14871 (June 14, 2015)

424. Dinh Loc Duong, Si Young Lee, Seong Kyu Kim and Young Hee Lee ' Graphene/ferroelectrics/graphene hybrid structure: Asymmetric doping of graphene layers ', Applied Physics Letters 106(24), 243104-1~5 (June 15, 2015)

423. Jin Cheol Park, Seok Joon Yun, Hyun Kim, Ji-Hoon Park, Sang Hoon Chae, Sung-Jin An, Jeong-Gyun Kim, Soo Min Kim, Ki Kang Kim and Young Hee Lee ' Phase-Engineered Synthesis of Centimeter-Scale 1T`-and 2H-Molybdenum Ditelluride Thin Films ', ACS Nano 9(6), 6548-6554 (June 24, 2015)

422. Fei Yao, Duy Tho Pham, Young Hee Lee ' Carbon-Based Materials for Lithium-Ion Batteries, Electrochemical Capacitors, and Their Hybrid Devices ', ChemSusChem 8(14), 2284-2311 (July 20, 2015)

421. Young Jin Lim, Byung Hoon Lee, You Ri Kwon, Young Eun Choi, G. Murali, Joong Hee Lee, Van Luan Nguyen, Young Hee Lee, and Seung Hee Lee ' Monitoring defects on monolayer graphene using nematic liquid crystals ', Optics express 23(11), 14162~14167 (June 1, 2015)

420. Qinke Wu, Seong Jun Jung, Sung Kyu Jang, Joohyun Lee, Insu Jeon, Hwansoo Suh, Yong Ho Kim, Young Hee Lee, Sungjoo Lee and Young Jae Song ' Controllable Poly-crystalline bilayered and multilayered graphene film growth by reciprocal chemical vapor deposition ', Nanoscale 23(7), 10357-10361 (June 21, 2015)

419. Qinke Wu, Sung Kyu Jang, Sangwoo Park, Seong Jun Jung, Hwansoo Suh, Young Hee Lee, Sungjoo Lee and Young Jae Song ' *In situ* synthesis of a large area boron nitride/graphene monolayer/boron nitride film by chemical vapor deposition ', Nanoscale 17(7), 7574-7579 (May 7, 2015)

418. Dong Hoon Keum, Suyeon Cho, Jung Ho Kim, Duk-Hyun Choe, Ha-Jun Sung, Min Kan, Haeyoung Kang, Jae-Yeol Hwang, Sung Wng Kim, Heejun Yang, K. J. Chang & Young Hee Lee ' Bandgap opening in few-layered monoclinic MoTe<sub>2</sub>', Nature Physics 11(6), 482-486 (June, 2015)

417. Seok Joon Yun, Sang Hoon Chae, Hyun Kim, Jin Cheol Park, Ji-Hoon Park, Gang Hee Han, Joo Song Lee, Soo Min Kim, Hye Min Oh, Jinbong Seok, Mun Seok Jeong, Ki Kang Kim, and Young Hee Lee ' Synthesis of Centimeter-Scale Monolayer Tungsten Disulfide Film on Gold Foils ', ACS Nano 9(5), 5510-5519 (May 26, 2015)

416. Young Rae Kim, Yong Eun Jo, Yong Seon Shin, Won Tae Kang, Yeo Hyun Sung, Ui Yeon Won, Young Hee Lee and Woo Jong Yu ' Electrostatically transparent graphene quantum-dot trap layers for efficient nonvolatile memory ', Applied Physics Letters 106(10), 103105-1~5 (Mar. 9, 2015)

415. Sang Il Kim, Kyu Hyoung Lee, Hyeon A Mun, Hyun Sik Kim, Sung Woo Hwang, Jong Wook Roh, Dae Jin Yang, Weon Ho Shin, Xiang Shu Li, Young Hee Lee, G. Jeffrey Snyder, Sung Wng Kim' Dense dislocation arrays embedded in grain boundaries for high-performance bulk thermoelectrics ', Science 348(6230), 109-114 (Apr. 3, 2015)

-" KBS News 9 Boardcating, Apr.04,2015 "

414. Van Luan Nguyen and Young Hee Lee ' Towards wafer-scale monocrystalline graphene growth and observations ', Small 11(29), 3512-3528 (Aug. 5, 2015)

413. Jian Chang, Subash Adhikari, Tae Hoon Lee, Bing Li, Fei Yao, Duy Tho Pham, Viet Thong Le, Young Hee Lee ' Leaf Vein-Inspired Nanochannelled Graphene Film for Highly Efficient Micro-Supercapacitors ', Advanced Energy Materials 5(9), 1500003-1~8 (May 6, 2015)

412. Hyun Kim, Seok Joon Yun, Jin Cheol Park, Min Ho Park, Ki Kang Kim and Young Hee Lee ' Seed growth of tungsten diselenide nanotubes from tungsten oxides', Small, 11(18), 2192-2199 (May 13, 2015)

411. Van Luan Nguyen, Bong Gyu Shin, Dinh Loc Duong, Sung Tae Kim, David Perello, Young Jin Lim, Qing Hong Yuan, Feng Ding, Hu Young Jeong, Hyeon Suk Shin, Seung Mi Lee, Sang Hoon Chae, Quoc An Vu, Seung Hee Lee, Young Hee Lee ' Seamless stitching of graphene domains on polished copper(111) foil', Advanced Materials 27(8), 1376-1382 (Feb. 25, 2015)

410. Duy Tho Pham, Tae Hoon Lee, Dinh Hoa Luong, Fei Yao, Arunabha Ghosh, Viet Thong Le, Tae Hyung Kim, Bing Li, Jian Chang, and Young Hee Lee ' Carbon Nanotube-Bridged Graphene 3D Building Blocks for Ultrafast Compact Supercapacitors ', ACS Nano 9(2), 2018-2027 (Feb. 24, 2015)

409. Gang Hee Han, Nicholas J. Kybert, Carl H. Naylor, Bum Su Lee, Jinglei Ping, Joo Hee Park, Jisoo Kang, Si Young Lee, Young Hee Lee, Ritesh Agarwal and A. T. Charlie Johnson ' Seeded growth of highly crystalline molybdenum disulphide monolayers at controlled locations ', Nature Communications 6(6128), 1-6 (Jan. 28, 2015)

408. Tae Hoon Seo, Ah Hyun Park, Sungchan Park, Yong Hwan Kim, Gun Hee Lee, Myung Jong Kim, Mun Seok Jeong, Young Hee Lee, Yoon-Bong Hahn and Eun-Kyung Suh ' Direct growth of GaN layer on carbon nanotube-graphene hybrid structure and its application for light emitting diodes ', Scientific Reports 5(7747), 1-6 (Jan. 19, 2015)

407. Hyun Jeong, Seung Yol Jeong, Doo Jae Park, Hyeon Jun Jeong, Sooyeon Jeong, Joong Tark Han, Hee Jin Jeong, Sunhye Yang, Ho Young Kim, Kang-Jun Baeg, Sae June Park, Yeong Hwan Ahn, Eun-Kyung Suh, Geon-Woong Lee, Young Hee Lee and Mun Seok Jeong ' Suppressing spontaneous polarization of p-GaN by graphene oxide passivation: Augmented light output of GaN UV-LED ', Scientific Reports 5(7778), 1-6 (Jan. 14, 2015)

406. Seung Jin Chae, Yong Hwan Kim, Tae Hoon Seo, Dinh Loc Duong, Seung Mi Lee, Min Ho Park, Eun Sung Kim, Jung Jun Bae, Si Young Lee, Hyun Jeong, Eun-Kyung Suh, Cheol Woong Yang, Mun Seok Jeong and Young Hee Lee ' Direct growth of etch pit-free GaN crystals on few-layer graphene', RSC Advances 5(2), 1343-1349 (2015)

405. Bing Li, Fei Yao, Jung Jun Bae, Jian Chang, Mihai Robert Zamfir, Duc Toan Le, Duy Tho Pham, Hongyan Yue, Young Hee Lee ' Hollow carbon nanospheres/silicon/alumina core-shell film as an anode for lithium-ion batteries', Scientific Reports 5(7659), 1-9 (Jan. 7, 2015)

404. Min Kan, Bo Wang, Young Hee Lee, and Qiang Sun ' A density functional theory study of the tunable structure, magnetism and metal-insulator phase transition in VS<sub>2</sub> monolayers induced by in-plane biaxial strain', Nano Research 8(4), 1348-1356 (April, 2015)

#### JAN ~ DEC 2014

403. Thuc Hue Ly, Ming-Hui Chiu, Ming-Yang Li, Jiong Zhao, David J. Perello, Magdalena Ola Cichocka, Hye Min Oh, Sang Hoon Chae, Hye Yun Jeong, Fei Yao, Lain-Jong Li and Young Hee Lee ' Observing Grain Boundaries in CVD-grown Monolayer Transition Metal Dichalcogenides', ACS Nano 8(11), 11401-11408 (Nov. 25, 2014 )

402. Dongmok Lee, Gi Duk Kwon, Jung Ho Kim, Eric Moyen, Young Hee Lee, Seunghyun Baik and Didier Pribat 'Significant enhancement of the electrical transport properties of graphene films by controlling the surface roughness of Cu foils before and during chemical vapor deposition', Nanoscale 6(21), 12943-12951 (Nov. 7, 2014 )

401. Benoît Rogez, Heejun Yang, Eric Le Moal, Sandrine Lévéque-Fort, Elizabeth Boer-Duchemin, Fei Yao, Young-Hee Lee, Yang Zhang, K. David Wegner, Niko Hildebrandt, Andrew Mayne, and Gérald Dujardin ' Fluorescence Lifetime and Blinking of Individual Semiconductor Nanocrystals on Graphene', *Journal of Physical Chemistry C* 118(32), 18445-18452 (14 August, 2014)

400. Kyoung-Duck Park, Jung Su Park, Jin Ho Park, Tae Kyu Ahn, Young Hee Lee, Mun Seok Jeong 'Laser Fabrication of Gold Nanoparticle Clustered Tips for Use in Apertureless Near-Field Scanning Optical Microscopy', *Journal of Nanoscience and Nanotechnology* 14(8), 5961-5964 (August, 2014)

399. Fei Yao, Bing Li, Kangpyo So, Jian Chang, Thuc Hue Ly, An Quoc Vu, Hyeona Mun, Costel Sorin Cojocaru, Hongyan Yue, Sishen Xie, and Young Hee Lee 'A strategy to overcome the limits of carbon-based materials as lithium ion battery anodes', *Carbon* 79, 563-571 (November 2014)

398. Ji-Hoon Park, Jin Cheol Park, Seokjun Yun, Hyun Kim, Dinh Hoa Luong, Soo Min Kim, Soo Ho Choi, Woochul Yang, Jing Kong, Ki Kang Kim, and Young Hee Lee 'Large-Area Monolayer Hexagonal Boron Nitride on Pt Foil', *ACS NANO* 8(8), 8520-8528(August 26, 2014 )

397. Weiwei Tie, Surjya Sarathi Bhattacharyya, Hye Ryung Park, Joong Hee Lee, Sang Won Lee, Tae Hoon Lee, Young Hee Lee, and Seung Hee Lee 'Comparative studies on field-induced stretching behavior of single-walled and multiwalled carbon nanotube clusters', *Physical Review E* 90(1), 012508-1~6 (24 July 2014 )

396. Aron W. Cummings, Dinh Loc Duong, Van Luan Nguyen, Dinh Van Tuan, Jani Kotakoski, Jose Eduardo Barrios Vargas, Young Hee Lee, and Stephan Roche 'Charge Transport in Polycrystalline Graphene: Challenges and Opportunities', *Advanced Materials* 26(30), 5079-5094 (August 13, 2014)

395. Ki Kang Kim, Soo Min Kim, Young Hee Lee 'A New Horizon for Hexagonal Boron Nitride Film', *Journal of the Korean Physical Society* 64(10), 1605~1616 (May 2014)

394. Tae Geun Kim, Un Jeong Kim, Si Young Lee, Young Hee Lee, Yun Seop Yu, Sung Woo Hwang, and Sangsig Kim 'Barrier Height at the Graphene and Carbon Nanotube Junction', *IEEE TRANSACTIONS ON ELECTRON DEVICES* 61(6), 2203~2207 (June 2014)

393. Sang Hoon Chae, Young Hee Lee 'Carbon nanotubes and graphene towards soft electronics', *Nano Convergence* 1(1), 1~26 (25 April 2014)

392. Sang Won Lee, Dongseok Suh, Si Young Lee, and Young Hee Lee 'Passivation effect on gate-bias stress instability of carbon nanotube thin film transistors', *Appl. Phys. Lett.* 104(16), 163506-1~4 (21 April 2014)

391. Srikrishna Pandey, Chandan Biswas, Titisa Ghosh, Jung Jun Bae, Padmnabh Rai, Gil-Ho Kim, K. J. Thomas, Young Hee Lee, Pavel Nikolaev and Sivaram Arepalli 'Transition from direct to Fowler-Nordheim tunneling in chemically reduced graphene oxide film', *Nanoscale* 6, 3410-3417 (Mar. 21, 2014)

390. Hong Yan Yue, Shuo Huang, Jian Chang, Chaejeong Heo, Fei Yao, Subash Adhikari, Fethullah Gunes, Li Chun Liu, Tae Hoon Lee, Eung Seok Oh, Bing Li, jianjiao Zhang, Quang Huy Ta, Luan Van Nguyen, Young Hee Lee 'ZnO Nanowire Arrays on 3D Hierachical

Graphene Foam: Biomarker Detection of Parkinson's Disease', Acs Nano 8(2), 1639-1646  
(Feb. 25, 2014) \_  
-"[Nanowerk Spotlight](#)"  
-"[Gaudian newspaper in UK](#)"

## JAN ~ DEC 2013

389. Eung Seok Oh, Chaejeong Heo, Ji Seon Kim, Minah Suh, Young Hee Lee, and Jong-Min Kim 'Hyperspectral fluorescence imaging for cellular iron mapping in the in vitro model of Parkinson's disease', Journal of Biomedical Optics 19(5), 051207-1~6 (Dec. 2, 2013)
388. Hosung Kang, Beibei Wang, Seunghyun Hong, Jung Jun Bae, Duckjong Kim, Chang-soo Han, Young Hee Lee, Seunghyun Baik 'Dielectrophoretic separation of metallic arc-discharge single-walled carbon nanotubes in a microfluidic channel', Synthetic Metals, 184, 23-28 (Nov. 15, 2013)
387. Younghwan Choi, Sangwan Sim, Seong Chu Lim, Young Hee Lee & Hyunyong Choi 'Ultrafast biexciton spectroscopy in semiconductor quantum dots: evidence for early emergence of multiple-exciton generation', Scientific Reports, 3(3206), 1-6 (Nov. 13, 2013)
386. Jaeseok Kim, Seong Chu Lim, Seung Jin Chae, Inhee Maeng, Younghwan Choi, Soonyoung Cha, Young Hee Lee and Hyunyong Choi 'Ultrafast zero balance of the oscillator-strength sum rule in graphene', Scientific Reports, 3(2663), 1-5 (Sep. 16, 2013)
385. A. Hunt, D.A. Dikin, E.Z. Kurmaev, Y.H. Lee, N.V. Luan, G.S. Chang, A. Moewes 'Modulation of the band gap of graphene oxide: The role of AA-stacking', Carbon 66, 539-546 (Sep. 23, 2013)
384. Arunabha Ghosh Viet Thong Le, Jung Jun Bae and Young Hee Lee 'TLM-PSD model for optimization of energy and power density of vertically aligned carbon nanotube supercapacitor', Scientific Reports, 3(2939), 1-10 (Oct. 22, 2013)
383. Jian Chang, Meihua Jin, Fei Yao, Tae Hyung Kim, Viet Thong Le, Hongyan Yue, Fethullah Gunes, Bing Li, Arunabha Ghosh, Sishen Xie and Young Hee Lee 'Asymmetric Supercapacitors Based on Graphene/MnO<sub>2</sub> Nanospheres and Graphene/MoO<sub>3</sub> Nanosheets with High Energy Density', Advance Functional Materials 23(40), 5074~5083 (Aug. 30, 2013)
382. Sohee Lee, Chaejeong Heo, Minah Suh and Young Hee Lee 'Nanoscale Live Cell Optical Imaging of the Dynamics of Intracellular Microvesicles in Neural Cells', Journal of Nanoscience and Nanotechnology 13(11), 7229~7234 (Nov, 2013)
381. Weiwei Tie, Surja Sarathi Bhattacharyya, Young Jin Lim, Sang Won Lee, Tae Hoon Lee, Young Hee Lee, and Seung Hee Lee 'Dynamic electro-optic response of graphene/graphitic flakes in nematic liquid crystals', OPTICS EXPRESS 21(17), 19867~19879 (Aug. 26, 2013)
380. Mihai Robert Zamfir, Hung Tran Nguyen, Eric Moyen, Young Hee Lee and Didier Pribat 'Silicon nanowires for Li-based battery anodes: a review', Journal of Materials Chemistry A 1(34), 9566-9586 (Sep. 14, 2013)

379. Chandan Biswas, Hyun Jeong, Mun Seok Jeong, Woo Jong Yu, Didier Pribat, and Young Hee Lee 'Quantum Dot-Carbon Nanotube Hybrid Phototransistor with an Enhanced Optical Stark Effect', Advanced Functional Materials 23(29), 3653-3660 (August 7, 2013)  
-Selected for Cover page-

378. Young Jin Lim, Surjya Sarathi Bhattacharyya, Weiwei Tie, Hye Ryung Park, Young Hee Lee and Seung Hee Lee 'Effects of carbon nanotubes on electro-optic characteristics in vertically aligned liquid crystal display', Liquid Crystals 40(9), 1202-1208 (June 20, 2013)

377. Viet Thong Le, Heetae Kim, Arunabha Ghosh, Jaesu Kim, Jian Chang, Quoc An Vu, Duy Tho Pham, Ju-Hyuck Lee, Sang-Woo Kim, and Young Hee Lee 'Coaxial Fiber Supercapacitor Using All-carbon Material Electrodes', ACS Nano 7(7), 5940-5947 (June 23, 2013)

376. Thuc Hue Ly, Dinh Loc Duong, Quang Huy Ta, Fei Yao, Quoc An Vu, Hye Yun Jeong, Sang Hoon Chae, and Young Hee Lee 'Nondestructive Characterization of Graphene Defects', Advance Functional Materials 23(41), 5183-5189 (Nov. 6, 2013)

375. Chaejeong Heo, Si Young Lee, Areum Jo, Susie Jung, Minah Suh and Young Hee Lee 'Flexible, Transparent, and Non-cytotoxic Graphene Electric Field Stimulator for Effective Cerebral Blood Volume Enhancement', ACS Nano 7(6), 4869-4878(Jun. 25, 2013)

374. Hye Yun Jeong, Kang Pyo So, Jung Jun Bae, Sang Hoon Chae, Thuc Hue Ly, Tae Hyung Kim, Dong Hoon Keum, Chang Kee Kim, Jun Sik Hwang, Yoon Jeong Choi, Young Hee Lee 'Tailoring oxidation of Al particles morphologically controlled by carbon nanotubes', Energy 55, 1143-1151( (June 15, 2013)

373. Sang Hoon Chae, Woo Jong Yu, Jung Jun Bae, Dinh Loc Duong, David Perello, Hye Yun Jeong, Quang Huy Ta, Thuc Hue Ly, Quoc An Vu, Minhee Yun, Xiangfeng Duan, and Young Hee Lee 'Transferred wrinkled Al<sub>2</sub>O<sub>3</sub> for highly stretchable and transparent graphene/carbon nanotube transistors', Nature Materials 12(5), 403-409 (May, 2013)

-" Published on Nature Materials Online "

-" KBS News 9 Boardcating/Mar.04,2013 "

372. Tae Hoon Seo, Jae-Phil Shim, Seung Jin Chae, GangU Shin, Bo Kyoung Kim, Dong-Seon Lee, Young Hee Lee, and Eun-Kyung Suh 'Improved photovoltaic effects in InGaN-based multiple quantum well solar cell with graphene on indium tin oxide nanodot nodes for transparent and current spreading electrode', Appl. Phys. Lett. 102(3), 03116-1~4 (21 Jan, 2013)

371. Seunghyun Hong, Wonyoung Kim, Seong-Jae Jeon, Seong Chu Lim, Hoo-Jeong Lee, Seungmin Hyun, Young Hee Lee, and Seunghyun Baik 'Enhanced Electrical Potential of Thermoelectric Power Waves by Sb<sub>2</sub>Te<sub>3</sub>-Coated Multiwalled Carbon Nanotube Arrays', Journal of Physical Chemistry C 117(2), 913-917 (3 Jan, 2013)

## JAN ~ DEC 2012

370. Hung Tran Nguyen, Mihai Robert Zamfir, Loc Dinh Duong, Young Hee Lee, Paolo Bondavalli and Didier Pribat 'Alumina-coated silicon-based nanowire arrays for high quality Li-ion battery anodes', Journal of Materials Chemistry 22(47), 24618-24626 (21. Dec, 2012)

369. Tae Hoon Seo, Seung Jin Chae, Bo Kyoung Kim, GangU Shin, Young Hee Lee, and Eun-Kyung Suh 'Enhanced Light Output Power of Near-Ultraviolet Light-Emitting Diodes with Au-Doped Graphene for Transparent and Current-Spreading Electrode', *Applied Physics Express* 5(11), 115101-1~3 (Nov, 2012)

368. Jung Jun Bae, Seong Chu Lim, Gang Hee Han, Young Woo Jo, Dinh Loc Doung, Eun Sung Kim, Seung Jin Chae, Ta Quang Huy, Nguyen Van Luan, and Young Hee Lee 'Heat Dissipation of Transparent Graphene Defoggers', *Advanced Functional Materials*, 22(22), 4819-4826 (Nov. 21, 2012)

367. Seunghyun Hong, Eun Sung Kim, Wonyoung Kim, Seong-Jae Jeon, Seong Chu Lim, Ki Hong Kim, Hoo-Jeong Lee, Seungmin Hyun, Duckjong Kim, Jae-Young Choi, Young Hee Lee and Seunghyun Baik, 'A hybridized graphene carrier highway for enhanced thermoelectric power generation', *Physical Chemistry Chemical Physics*, 14(39), 13527-13531 (Oct. 21, 2012)

366. Dinh Loc Duong, Gang Hee Han, Seung Mi Lee, Fethullah Gunes, Eun Sung Kim, Sung Tae Kim, Heetae Kim, Quang Huy Ta, Kang Pyo So, Seok Jun Yoon, Seung Jin Chae1, Young Woo Jo, Min Ho Park, Sang Hoon Chae, Seong Chu Lim, Jae Young Choi and Young Hee Lee,'Probing graphene grain boundaries with optical microscopy', *Nature*, 490(7419), 235-239(Oct. 11, 2012)

-" Published on Nature Online "

-" KBS News Boardcating "

365. Kang Pyo So, Jun Cheol Jeong, Jong Gil Park, Hyoent Ki Park, Yong Ho Choi, Dong Hwan Noh, Dong Hoon Keum, Hye Yun Jeong, Chandan Biswas, Chan Ho Hong and Young Hee Lee,'SiC formation on carbon nanotube surface for improving wettability with aluminum', *Composites Science and Technology*, 74, 6-13 (Oct. 29, 2012)

364. Kyoung-Duck Park, Seung Gol Lee, Chaejeong Heo, Young Hee Lee, and Mun Seok Jeong,'Sensitivity maximized near-field scanning optical microscope with dithering sample stage', *Rev. Sci. Instrum.*, 83(9),093710-1~5 (Sep, 2012)

363. Kyoung-Duck Park, Yong Hwan Kim, Jin-Ho Park, Jung Su Park, Hong Seok Lee, Sang-Youp Yim, Young Hee Lee and Mun Seok Jeong, 'Ultraviolet tip-enhanced nanoscale Raman imaging', *J. Raman Spectrosc.*, 43(12), 1931-1934 (Dec, 2012)

362. Sang Won Lee, Si Young Lee, Seoung Chu Lim, Young-dong Kwon, Joo-Sun Yoon, Keehan Uh, and Young Hee Lee, 'Positive Gate Bias Stress Instability of Carbon Nanotube Thin Film Transistor', *Applied Physics Letters*, 101(5), 053504-1~4 (Aug. 1, 2012)

361. Chaejeong Heo, Jeongwan Yoo, Si Young Lee, Sohee Lee, Eun Yeon Joo, Seung Bong Hong, Young Hee Lee, and Minah Suh, 'Enhanced Mobility of Neural Cells with a Transparent Electric Field Stimulator', *Journal of Nanoscience and Nanotechnology*, 12(7), 5222-5227 (Aug. 2012)

360. Seon-Mi Yoon, Won Mook Choi, Hionsuck Baik, Hyeyon-Jin Shin, Inyong Song, Moon-Seok Kwon, Jung Jun Bae, Hansu Kim, Young Hee Lee, and Jae-Young Choi, 'Synthesis of Multilayer Graphene Balls by Carbon Segregation from Nickel Nanoparticles', *ACS Nano*, 6(8), 6803-6811 (Aug. 28, 2012)

359. J. H. Woo, E. Choi, Boyoung Kang, E. S. Kim, J. Kim, Y. U. Lee, Tae Y. Hong, Jae H. Kim, Ilha Lee, Young Hee Lee, and J. W. Wu,' Anisotropic change in THz resonance of

planar metamaterials by liquid crystal and carbon nanotube', Optics Express, 20(14), 15440-15451, (July 2, 2012)

358. Kyeu-Yoon Sheem, Eui-Hwan Song, Young Hee Lee, 'High-rate charging performance using high-capacity carbon nanofilms coated on alumina nanoparticles for lithium ion battery anode', Electrochimica Acta , 78, 223-228 (1 September, 2012)

357. Fei Yao, Fethullah Gunes, Huy Quang Ta, Seung Mi Lee, Seung Jin Chae, Kyeu Yoon Sheem, Costel Sorin Cojocaru, Si Shen Xie, and Young Hee Lee, 'Diffusion Mechanism of Lithium Ion through Basal Plane of Layered Graphene', J. Am. Chem. Soc., 134(20), 8646-8654 (May 23, 2012)

356. Stephen Dongmin Kang, Seong Chu Lim, Eui-Sup Lee, Young Woo Cho, Yong-Hyun Kim, Ho-Ki Lyeo, and Young Hee Lee, 'Interfacial Thermal Conductance Observed to be Higher in Semiconducting than Metallic Carbon Nanotubes', ACS NANO, 6(5), 3853-3860 (May 22, 2012)

355. Dinh Loc Duong, Seung Mi Lee, Sang Hul Chae, Quang Huy Ta, Gang Hee Han, Jung Jun Bae, and Young Hee Lee, 'Band-gap engineering in chemically conjugated bilayer graphene: Ab initio calculations', Physical Review B , 85(20), 205413-1~5 (15 May, 2012)

354. Soo Min Kim, Ki Kang Kim, Duong Dinh Loc, Yasuhiko Hirana, Yasuhiko Tanaka, Yasuro Niidome, Naotoshi Nakashima, Jing Kong, Young Hee Lee, 'Spectroscopic Determination of the Electrochemical Potentials of n-Type Doped Carbon Nanotubes', Journal of Physical Chemistry C , 116(9), 5444-5449 (Mar. 8, 2012)

353. Titisa Ghosh, Chandan Biswas, Joonsuk Oh, Girish Arabale, Taeseon Hwang, Nguyen Dang Luong, Meihua Jin, Young Hee Lee, Jae-Do Nam, 'Solution-Processed Graphite Membrane from Reassembled Graphene Oxide', Chemistry of Materials, 24(3), 594-599 , (Feb. 14, 2012)

352. Inhee Maeng, Seong Chu Lim, Seung Jin Chae, Hyunyong Choi, Young Hee Lee, and Joo-Hiuk Son 'Gate-Controlled Nonlinear Conductivity of Dirac Fermion in Graphene Field-Effect Transistors Measured by Terahertz Time-Domain Spectroscopy', Nano Letters, 12(2), 551-555 , (Feb. 8, 2012)

-" [Highlighted in National Nanotechnology Policy Center](#)"

351. Arunabha Ghosh and Young Hee Lee, 'Carbon based electrochemical capacitors', CHEMSUSCHEM, 5(3), 480-499 (Mar. 12, 2012)

350. Dinh Loc Duong, Seung Mi Lee and Young Hee Lee, 'Origin of unipolarity in carbon nanotube field effect transistors', Journal of Materials Chemistry, 22(5), 1994 - 1997, (Feb. 7, 2012)

## JAN ~ DEC 2011

349. Chandan Biswas, Si Young Lee, Thuc Hue Ly, Arunabha Ghosh, Quoc Nguyen Dang and Young Hee Lee, 'Chemically Doped Random Network Carbon Nanotube p-n Junction Diode for Rectifier', ACS Nano, 5(12), 9817-9823 (Dec. 27, 2011)

-" [Highlighted in Korea Institute of Science and Technology Information](#)"

-" Highlighted in Research Information Center for Defense Science & Technology "  
-" Highlighted in Gyeonggi Technopark"

348. Tae Hoon Seo, Tae Su Oh, Seung Jin Chae, Ah Hyun Park, Kang Jea Lee, Young Hee Lee, and Eun-Kyung Suh, 'Enhanced Light Output Power of GaN Light-Emitting Diodes with Graphene Film as a Transparent Conducting Electrode', Japanese Journal of Applied Physics, 50(12), 125103-1~4 (Dec. 5, 2011)

347. Fethullah Gunes, Gang Hee Han, Hyeyon-Jin Shin, Si Young Lee, Meihua Jin, Dinh Loc Duong, Seung Jin Chae, Eun Sung Kim, Fei Yao, Anass Benayad, Jae-Young Choi and Young Hee Lee, 'UV-Light-Assisted Oxidative sp<sub>3</sub> Hybridization of Graphene', NANO, 6(5), 409-418 (Oct. 2011)

346. Eun Sung Kim, Hyeyon-Jin Shin, Seon-Mi Yoon, Gang Hee Han, Seung Jin Chae, Jung Jun Bae, Fethullah Gunes, Jae-Young Choi, and Young Hee Lee, 'Low-Temperature Graphene Growth Using Epochal Catalyst of PdCo Alloy', Appl. Phys. Lett., 99(22), 223102-1~3 (28. November, 2011)

345. L. Baraton, Z. B. He, C. S. Lee, C. S. Cojocaru, M. Chatelet, J. -L. Maurice, Y. H. Lee and D. Pribat, 'On the mechanisms of precipitation of graphene on nickel thin films', EPL, 96(4), 46003-1~6 (November. 2011)

344. Weiwei Tie, Gyu Hyung Yang, Surjya Sarathi Bhattacharyya<sup>1</sup>, Young Hee Lee, and Seung Hee Lee, 'Electric Field-Induced Dispersion of Multiwalled Carbon Nanotubes in Nematic Liquid Crystal', J. Phys. Chem. C, 115(44), 21652-21658 (Nov. 10, 2011)

343. Tae Hoon Seo, Kang Jea Lee, Ah Hyun Park, Chang-Hee Hong, Eun-Kyung Suh, Seung Jin Chae, Young Hee Lee, Tran Viet Cuong, Viet Hung Pham, Jin Suk Chung, Eui Jung Kim, and Seong-Ran Jeon, 'Enhanced light output power of near UV light emitting diodes with graphene/indium tin oxide nanodot nodes for transparent and current spreading electrode', OPTICS EXPRESS, 19(23), 23111-23117 (Nov. 7, 2011)

342. Kang Pyo So, Eun Sun Kim, Chandan Biswas, Hye Yun Jeong, Dong Hoon Keum, Kay Hyeok An, and Young Hee Lee, 'Low-temperature solid-state dissolution of carbon atoms into aluminum nanoparticles', Scripta Materialia, 66(1), 21-24, (Oct. 17, 2011)

341. Chaejeong Heo, Min Young Hong, Areum Jo, Young Hee Lee, Minah Suh 'Study of the Primo vascular System Utilizing a Melanoma Tumor Model in a Green Fluorescence Protein Expressing Mouse', J Acupunct Meridian Stud, 4(3), 198-202 (October 1, 2011)

340. Woo Jong Yu, Lei Liao, Sang Hoon Chae, Young Hee Lee, and Xiangfeng Duan, 'Toward Tunable Band Gap and Tunable Dirac Point in Bilayer Graphene with Molecular Doping', Nano Letters, 11(11), 4759-4763 (Nov. 09, 2011)

339. Chandan Biswas, Fethullah Gunes, Duong Dinh Loc, Seong Chu Lim, Mun Seok Jeong, Didier Pribat, Young Hee Lee, 'Negative and positive persistent photoconductance in graphene', Nano Letters, 11(11), 4682-4687 (Nov. 09, 2011)

-" Highlighted in NewsEdge Published in [Electronics Newsweekly]"  
-" Highlighted in National Center for Nanomaterials Technology "  
-" Highlighted in Korea association for photonics industry development "

338. Surjya Sarathi Bhattacharyya, Gyu Hyung Yang, Weiwei Tie, Young Hee Lee, and Seung Hee Lee, 'Electric-field induced elastic stretching of multiwalled carbon nanotube cluster: A realistic model', *Phys. Chem. Chem. Phys.*, 13(45), 20435-20440 (Oct. 13, 2011)

337. Hung T. Nguyen, Fei Yao, Mihai R. Zamfir, Chandan Biswas, Kang Pyo So, Young Hee Lee, Seong Min Kim, Seung Nam Cha, Jong Min Kim, Didier Pribat, 'Highly Interconnected Si Nanowires for Improved Stability Li-Ion Battery Anodes ', *Advanced Energy Materials* , 1(6), 1154-1164 (Nov, 2011)

336. Chandan Biswas and Young Hee Lee, 'Graphene Versus Carbon Nanotubes in Electronic Devices', *Advanced Functional Materials* , 21(20), 3806-3826 (Oct. 21, 2011)

-Selected for Inside Coverpage-

-" Article of nanowerk "

- " Most Read Advanced Functional Materials Papers for December 2011 "

335. Gang Hee Han, Fethullah Güneş, Jung Jun Bae, Eun Sung Kim, Seung Jin Chae, Hyeon-Jin Shin, Jae-Young Choi, Didier Pribat and Young Hee Lee, 'Influence of Copper Morphology in Forming Nucleation Seeds for Graphene Growth', *Nano Letters*, 11(10), 4144-4148 (Oct. 12, 2011)

334. Hyeyon-Jin Shin, Won Mook Choi, Seon-Mi Yoon, Gang Hee Han, Yun Sung Woo, Eun Sung Kim, Seung Jin Chae, Xiang-Shu Li, Anass Benayad, Duong Dinh Loc, Fethullah Gunes, Young Hee Lee, and Jae-Young Choi, 'Transfer-Free Growth of Few-Layer Graphene by Self-Assembled Monolayers', *Advanced Materials*, 23(38), 4392-4397 (Oct. 11, 2011)

333. Meihua Jin, Tae Hyung Kim, Seong Chu Lim, Dinh Loc Duong, Hyeyon-Jin Shin, Young Woo Jo, Hae Kyung Jeong, Jian Chang, Sishen Xie and Young Hee Lee 'Facile Physical Route to Highly Crystalline Graphene', *ADVANCED FUNCTIONAL MATERIALS*, 21(18), 3496-3501 (Sep. 23, 2011)

Highlighted in Materials view

332. Un Jeong Kim, Il Ha Lee, Jung Jun Bae, Sangjin Lee, Gang Hee Han, Seung Jin Chae, Fethullah Gunes, Jun Hee Choi, Chan Wook Baik, Sun Il Kim, Jong Min Kim, and Young Hee Lee, 'Graphene/Carbon Nanotube Hybrid-Based Transparent 2D Optical Array', *ADVANCED MATERIALS*, 23(33), 3809~3814 (Sep. 1. 2011)

-Selected for frontpiece-

331. Brijesh Kumar, Keun Young Lee, Hyun-Kyu Park, Seung Jin Chae, Young Hee Lee, and Sang-Woo Kim, 'Controlled Growth of Semiconducting Nanowire, Nanowall, and Hybrid Nanostructures on Graphene for Piezoelectric Nanogenerators', *ACS NANO*, 5(5), 4197-4204 (May 24. 2011)

330. Heetae Kim, Young Hee Lee, Hoonyoung Cho, 'Levitation Time Measurement of Water Drops on the Surface of Liquid Nitrogen', *Journal of the Korean Physical Society*, 58(6), 1628-1632 (June. 2011)

329. Heetae Kim, Seong Chu Lim, and Young Hee Lee, 'Size effect of two-dimensional thermal radiation', *Physics Letters A*, 375(27), 2661-2664 (July. 04. 2011)

328. Jin Sik Kim, Kyu Lee, Young Hee Lee, Hyun Sun Cho, Ki Heon Kim, Kyung Hee Choi, Sang Hee Lee, Kyung Seuk Song, Chang Soo Kang and Il Je Yu, 'Aspect ratio has no effect on genotoxicity of multi-wall carbon nanotubes', *Arch. Toxicol.*, 85(7), 775-786 (July. 2011)

327. Arunabha Ghosh, Eun Ju Ra, Meihua Jin, Hae-Kyung Jeong, Tae Hyung Kim, Chandan Biswas and Young Hee Lee, 'High Pseudocapacitance from Ultrathin V<sub>2</sub>O<sub>5</sub> Films Electrodeposited on Self-Standing Carbon-Nanofiber Paper', Advanced Functional Materials, 21(13), 2541-2547 (July 8. 2011)

-" Selected as Key Scientific Articles of Renewable Energy global innovations "

326. Woo Jong Yu and Young Hee Lee, 'Strategy for Carrier Control in Carbon Nanotube Transistors', ChemSusChem, 4(7), 890-904 (Jul. 18. 2011)

325. Yo-Sep Min, Il Ha Lee, Young Hee Lee, and Cheol Seong Hwang, 'Botryoidal growth of crystalline ZnO nanoparticles on a forest of single-walled carbon nanotubes by atomic layer deposition', CrystEngComm, 13(10), 3451-3454 (May. 21. 2011)

324. Seung Mi Lee, Young Hee Lee, 'Structures and Stabilities of Directly-linked and Oxygen-bridged Fullerene Dimers: A Density-functional-theory Study', Journal of the Korean Physical Society, 58(3), 482-486 (Mar. 2011)

323. Laurent Baraton, Zhanbing He, Chang Seok Lee, Jean-Luc Maurice, Costel Sorin Cojocaru, Anne-Francoise Gourgues-Lorenzon, Young Hee Lee and Didier Pribat, 'Synthesis of few-layered graphene by ion implantation of carbon in nickel thin films', Nanotechnology, 22(8), 085601-1~085601-5 (Feb. 25, 2011)

322. Si Young Lee, Sang Won Lee, Soo Min Kim, Woo Jong Yu, Young Woo Jo and Young Hee Lee, 'Scalable Complementary Logic Gates with Chemically Doped Semiconducting Carbon Nanotube Transistors', ACS NANO, 5(3), 2369-2375 (22. Mar. 2011)

321. Woo Jong Yu, Si Young Lee, Sang Hoon Chae, David Perello, Gang Hee Han, Minhee Yun and Young Hee Lee, 'Small Hysteresis Nanocarbon-Based Integrated Circuits on Flexible and Transparent Plastic Substrate', Nano Letters, 11(3), 1344-1350 (Mar. 9, 2011)

-" Selected as a Highlight in Nano Letters "

320. Kang Pyo So, Il Ha Lee, Dinh Loc Duong, Tae Hyung Kim, Seong Chu Lim, Kay Hyeok An, and Young Hee Lee, 'Improving the wettability of aluminum on carbon nanotubes', Acta Materialia, 59(9), 3313-3320 (May. 2011)

319. David J. Perello, Seong Chu Lim, Seung Jin Chae, Innam Lee, Moon. J. Kim, Young Hee Lee and Minhee Yun, 'Thermionic Field Emission Transport in Carbon Nanotube Transistors', ACS NANO, 5(3), 1756-1760 (22. Mar, 2011)

318. Woo Jong Yu, Sang Hoon Chae, Si Young Lee, Dinh Loc Duong, and Young Hee Lee, 'Ultra-Transparent, Flexible Single-walled Carbon Nanotube Non-volatile Memory Device with Oxygen-decorated Graphene Electrode', Advanced Materials, 23(16), 1889-1893 (Apr. 26, 2011)

-"Selected for cover page "

-" Cover Image "

317. Gang Hee Han, Hyeyon-Jin Shin, Eun Sung Kim, Seung Jin Chae, Jae-Young Choi, and Young Hee Lee, 'Poly(Ethylene Co-Vinyl Acetate)-Assisted One-Step Transfer of Ultra-Large Graphene', NANO, 6(1), 59-65 (Mar. 2011)

316. Fei Yao, Dinh Loc Duong, Seong Chu Lim, Seung Bum Yang, Ha Ryong Hwang, Woo Jong Yu, Il Ha Lee, Fethullah Gunes, and Young Hee Lee, 'Humidity-assisted selective reactivity between NO<sub>2</sub> and SO<sub>2</sub> gas on carbon nanotubes', Journal of Materials Chemistry, 21(12), 4502-4508, (Mar. 28, 2011)

315. Seon-Mi Yoon, Un Jeong Kim, Anass Benayad, Il Ha Lee, Hyungbin Son, Hyeon-Jin Shin, Won Mook Choi, Young Hee Lee, Yong Wan Jin, Eun-Hong Lee, Sang Yoon Lee, Jae-Young Choi, and Jong Min Kim, 'Thermal Conversion of Electronic and Electrical Properties of AuCl<sub>3</sub>-Doped Single-Walled Carbon Nanotubes', ACS NANO, 5(2), 1353-1359 (Feb. 22, 2011)

314. Soo Min Kim, Ki Kang Kim, Young Woo Jo, Min-Ho Park, Seung Jin Chae, Duong Dinh Loc, Cheol-Woong Yang, Jing Kong, and Young Hee Lee, 'Role of Anions in the AuCl<sub>3</sub>-Doping of Carbon Nanotubes', ACS NANO, 5(2), 1236-1242 (Feb. 22, 2011)

313. Gang Hee Han, Seung Jin Chae, Eun Sung Kim, Fethullah Gunes, Il Ha Lee, Sang Won Lee, Si Young Lee, Seong Chu Lim, Hae Kyung Jeong, Mun Seok Jeong, Young Hee Lee, 'Laser Thinning for Monolayer Graphene Formation: Heat Sink and Interference Effect', ACS Nano, 5(1), 263-268 (Jan. 25, 2011)

312. Kang Pyo So, Chandan Biswas, Seong Chu Lim, Kay Hyeok An and Young Hee Lee, 'Electroplating formation of Al-C covalent bonds on multiwalled carbon nanotubes', Synthetic Metals, 161(3-4), 208-212 (Feb. 2011)

#### **JAN ~ DEC 2010**

311. Il Ha Lee, Jiwoon Im, Un Jeong Kim, Eun Ju Bae, Kyoung-Kook Kim, Eun Hong Lee, Young Hee Lee, Seunghun Hong, and Yo-Sep Min, 'Low Temperature Growth of Single-walled Carbon Nanotube Forest', Bull. Korean Chem. Soc., 31(10), 2819-2822 (Oct. 20. 2010)

310. Lingmei Kong, Cameron Bjelkevig, Sneha Gaddam, Mi Zhou, Young Hee Lee, Gang Hee Han, Hae Kyung Jeong, Ning Wu, Zhengzheng Zhang, Jie Xiao, P. A. Dowben, and Jeffry A. Kelber, 'Graphene/Substrate Charge Transfer Characterized by Inverse Photoelectron Spectroscopy', J. Phys. Chem. C, 114(49), 21618~21624 (Nov. 17. 2010)

309. Hee Kyu Lee, Seung Eun Lee, Byeong Gyun Kang, Eun Jeong Jeon, Young Jin Lim, Kyu Lee, Young Hee Lee, and Seung Hee Lee, 'Effects of Carbon Nanotube Length on Electro-Optical Characteristics in Liquid Crystal Cell Driven by Fringe Field Switching', Molecular Crystals and Liquid Crystals, 530, 157-162 (Nov. 14. 2010)

308. Hyeon-Jin Shin, Won Mook Choi, Dukhyun Choi, Gang Hee Han, Seon-Mi Yoon, Hyun-Kyu Park, Sang-Woo Kim, Yong Wan Jin, Sang Yoon Lee, Jong Min Kim, Jae-Young Choi, and Young Hee Lee, 'Control of Electronic Structure of Graphene by Various Dopants and Their Effects on a Nanogenerator', J. Am. Chem. Soc., 132(44), 15603-15609 (Oct. 14. 2010)

307. Soo Min Kim, Young Woo Jo, Ki Kang Kim, Dinh Loc Duong, Hyeon-Jin Shin, Jong Hun Han, Jae-Young Choi, Jing Kong, and Young Hee Lee, 'Transparent Organic P-Dopant in Carbon Nanotubes: Bis(trifluoromethanesulfonyl)imide', ACS NANO, 4(11), 6998-7004, (Oct. 14. 2010)

306. Hae Kyung Jeong, Ki-jeong Kim, Soo Min Kim, Young Hee Lee, 'Modification of the electronic structures of graphene by viologen', Chemical Physics Letters, 498(1-3), 168-171 (30. Sep. 2010)

305. Chaejeong Heo, Jeongwan Yoo, Siyoung Lee, Hyosun Yoo, Areum Jo, Susie Jung, Young Hee Lee, and Minah Suh, 'The control of neural cell - to - cell interactions through noncontact electrical field stimulation using graphene electrodes', *Biomaterials*, 32(1), 19-27 (28. Sep. 2010)

304. Byeong Gyun Kang, Young Jin Lim, Kwang-Un Jeong, Kyu Lee, Young Hee Lee, and Seung Hee Lee, 'A tunable carbon nanotube polarizer', *Nanotechnology*, 21(40), 405202-1~405202-5 (10. Sep. 2010)

303. Woo Jong Yu, Sang Hoon Chae, David Perello, Si Young Lee, Gang Hee Han, Minhee Yun, and Young Hee Lee, 'Synthesis of Edge-Closed Graphene Ribbons with Enhanced Conductivity', *ACS NANO*, 4(9), 5480-5486 (24. Aug. 2010)

302. Sang Won Lee, Ki Kang Kim, Yan Cui, Seong Chu Lim, Young Woo Cho, Soo Min Kim, and Young Hee Lee, 'Adhesion test of carbon nanotube film coated onto transparent conducting substrates', *NANO*, 5(3), 133-138, (Jun. 2010)

" Selected for Cover page "

301. Dinh Loc Duong, Il Ha Lee, Ki Kang Kim, Jing Kong, Seung Mi Lee, and Young Hee Lee, 'Carbon Nanotube Doping Mechanism in a Salt Solution and Hygroscopic Effect: Density Functional Theory', *ACS NANO*, 4(9), 5430-5436 (4. Aug. 2010)

300. Fethullah Gunes, Hyeon-Jin Shin, Chandan Biswas, Gang Hee Han, Eun Sung Kim, Seung Jin Chae, Jae Young Choi, Young Hee Lee, 'Layer-by-Layer Doping of Few-Layer Graphene Film', *ACS NANO*, 4(8), 4595-4600 (27. Jul. 2010)

299. Dukhyun Choi, Min-Yeol Choi, Won Mook Choi, Hyeon-Jin Shin, Hyun-Kyu Park, Ju-Seok Seo, Jongbong Park, Seon-Mi Yoon, Seung Jin Chae, Young Hee Lee, Sang-Woo Kim, Jae-Young Choi, Sang Yoon Lee, and Jong Min Kim, 'Fully Rollable Transparent Nanogenerators Based on Graphene Electrodes', *ADVANCED MATERIALS*, 22(19), 2187-2192,(May. 18. 2010) -Selected for cover page

298. Ki Kang Kim, Alfonso Reina, Yumeng Shi, Hyesung Park, Lain-Jong Li, Young Hee Lee, and Jing Kong , 'Enhancing the conductivity of transparent graphene films via doping', *Nanotechnology*,21(28), 285205-1~285205-6,(Jun. 28. 2010)

297. Ki Kang Kim, Seon-Mi Yoon, Hyeon Ki Park, Hyeon-Jin Shin, Soo Min Kim, Jung Jun Bae, Yan Cui, Jong Min Kim, Jae Young Choi, and Young Hee Lee, 'Doping strategy of carbon nanotubes with redox chemistry', *New Journal of Chemistry*, 34(10), 2183-2188 (28. Jun. 2010)

296. Il Ha Lee, Un Jeong Kim, Hyung Bin Son, Seon-Mi Yoon, Fei Yao, Woo Jong Yu, Dinh Loc Duong, Jae-Young Choi, Jong Min Kim, Eun Hong Lee and Young Hee Lee, 'Hygroscopic Effects on AuCl<sub>3</sub>-Doped Carbon Nanotubes', *Journal of Physical Chemistry C*, 114(26), 11618~11622 ,(Jun. 10. 2010)

295. Meihua Jin , Hae-Kyung Jeong, Tae-Hyung Kim, Kang Pyo So, Yan Cui, Woo Jong Yu, Eun Ju Ra and Young Hee Lee, 'Synthesis and systematic characterization of functionalized graphene sheets generated by thermal exfoliation at low temperature', *J. Phys. D: Appl. Phys.*, 43(27), 275402-1~275402-7, (Jun. 21. 2010)

-" Highlighted as featured articles in 2010 in JPAD "

-"IOP Science-2010 Highlights "

294. David J. Perello, Seong Chu Lim, Seung Jin Chae, Innam Lee, Moon. J. Kim, Young Hee Lee and Minhee Yun, 'Anomalous Schottky Barrier and Contact Band-to-Band Tunneling in Carbon Nanotube Transistors ', ACS NANO, 4(6), 3103-3108 (May. 28. 2010)
293. David J. Perello, Seong Chu Lim, Seung Jin Chae, Innam Lee, Moon. J. Kim, Young Hee Lee, Minhee Yun, 'Current anisotropy of carbon nanotube diodes: Voltage and work function dependence', Appl. Phys. Lett., 96(26), 263107-1~263107-3,(29. Jun. 2010)
292. Kyeu Yoon Sheem, Minseok Sung, Young Hee Lee, 'Electrostatic heterocoagulation of carbon nanotube and LiCoO<sub>2</sub> particles for high-performance Li-ion cell', Electrochimica Acta., 55(20), 5808~5812 (1. Aug. 2010)
291. Dai-Ming Tang, Li-Chang Yin, Feng Li, Chang Liu, Wan-Jing Yu, Peng-Xiang hou, Bo Wu, Young Hee Lee, Xiu-Liang Ma and Hui-Ming Cheng, 'Carbon nanotube-clamped metal atomic chain', PNAS, 107(20), 9055-9059, (May. 18. 2010)  
-"[CNT-clamped MAC in a Chinese newspaper-Science Times](#)"  
-"[Front page Chinese newspaper-Science Times](#)"
290. Nguyen Thi Xuyen, David V. Sanchez, Tae Hyung Kim, Ho Il Park, Minhee Yun, and Young Hee Lee, 'Diffusion-limited Reduction of Organometallic Compound on Carbon Nanofiber Mat for Catalytic Applications', Journal of Materials Chemistry, 20(26),5468 - 5473 (Jun. 22. 2010) [-Selected for backcover](#)
289. Jin Ho Jang, Seong Chu Lim, Dihn Loc Duong, Gunn Kim, Woo Jong Yu, Kang Hee Han, Yo-Sep Min, and Young Hee Lee, 'Doping of Carbon Nanotubes Using Low Energy Ion Implantation', Journal of Nanoscience and Nanotechnology, 10(6), 3934-3939(Jun. 2010)
288. Il Ha Lee, Gang Hee Han, Seung Jin Chae, Jung Jun Bae, Eun Sung Kim, Soo Min Kim, Tae Hyung Kim, Hae Kyung Jeong and Young Hee Lee, 'Criteria for Producing Yarns from Vertically Aligned Carbon Nanotubes', NANO, 5(1), 31-38(Feb. 2010)
287. Fei Yao, Seong Chu Lim, Woo Jong Yu, Il Ha Lee, Fethullah Gunes, Ha Ryong Hwang, Seung Bum Yang, Kang Pyo So, Gang Hee Han, and Young Hee Lee, 'AC Response to Gas Exposure in Vertically Aligned Multiwalled Carbon Nanotube Electrode', Journal of Physical Chemistry C, 114(8), 3659-3663(Feb. 5, 2010)
286. Hae-Kyung Jeong, Meihua Jin, Eun Ju Ra, Kyeu Yoon Sheem, Gang Hee Han, Sivaram Areppalli and Young Hee Lee,'Enhanced Electric Double Layer Capacitance of Graphite Oxide Intercalated by Poly(sodium 4-styrenesulfonate) with High Cycle Stability ', ACS NANO, 4(2), 1162-1166 (Jan 25, 2010)
285. Hong-Zhang Geng, Tae Hyung Kim, Seong Chu Lim, Hae-Kyung Jeong, Mei Hua Jin, Young Woo Jo, Young Hee Lee, 'Hydrogen storage in microwave-treated multiwalled carbon nanotubes', International Journal of Hydrogen Energy,35(5), 2073-2082, (Mar. 2010)
284. Dinh Loc Duong, Gunn Kim, Hae-Kyung Jeong, Young Hee Lee, 'Breaking AB stacking order in graphite oxide: Ab initio approach', Phys. Chem. Chem. Phys., 12(7), 1595-1599, (Jan. 12. 2010)
283. Eun Ju Ra, Tae Hyung Kim, Woo Jong Yu, Kay Hyeok An and Young Hee Lee 'Ultramicropore formation in PAN/camphor-based carbon nanofiber paper',Chemical communications,46(8), 1320-1322 (Feb. 2010)

## JAN ~ DEC 2009

282. Soo Min Kim, Ki Kang Kim, Jung Jun Bae, Kay Hyeok An, and Young Hee Lee 'In situ Raman spectroscopy measurement for electrochemical selective doping on large-diameter carbon nanotubes by using nitronium ions', *Phys. Status Solidi B*, 246(11-12), A17-A20(Dec. 2009)

281. Seong Chu Lim, Jin Ho Jang, Dong Jae Bae, Gang Hee Han, Sun Woo Lee, In Seok Yeo, and Young Hee Lee, 'Contact resistance between metal and carbon nanotube interconnects: Effect of work function and wettability', *Appl. Phys. Lett.*, 95(26), 264103-1~264103-3 (28. Dec. 2009)

- Selected in "Virtual Journal of Nanoscale science & Technology"

280. Seong Chu Lim, Dae Sik Lee, Ki Kang Kim, Young Chul Choi, Hun Soo Kim, Jin Hyon Lee, Ungyu Paik, and Young Hee Lee, 'Fluidic Properties of Carbon Nanotube Inks and Field Emission Properties of Ink Jet-Printed Emitters', *Japanese Journal of Applied Physics*, 48(11), 111601-1~111601-5. (20. Nov. 2009)

279. Anoop Kumar Srivastava, Miyoung Kim, Sung Min Kim, Mi-Kyung Kim, Kyu Lee, Young Hee Lee, Myong-Hoon Lee, and Seung Hee Lee, 'Dielectrophoretic and electrophoretic force analysis of colloidal fullerenes in a nematic liquid-crystal medium', *Physical Review E*, 80(5), 051702-1~051702-6. (16. Nov. 2009)

278. Nguyen Thi Xuyen, Tae Hyung Kim, Hong-Zhang Geng, Il Ha Lee, Ki Kang Kim and Young Hee Lee 'Three-dimensional architecture of carbon nanotube-anchored polymer nanofiber composite', *Journal of Materials Chemistry*, 19(42), 7822-7825. (Sep. 2009)

277. Seong Chu Lim, Dae Sik Lee, Ha Kyu Choi, Il Ha Lee, Young Hee Lee 'Field emission of carbon-nanotube point electron source', *Diamond & Related Materials*, 18(12), 1435-1439(DEC. 2009)

276. Ki Kang Kim, Jung Jun Bae, Soo Min Kim, Hyeon Ki Park, Kay Hyeok An, and Young Hee Lee 'Control of p-doping on single-walled carbon nanotubes with nitronium hexafluoroantimonate in liquid phase', *Phys. Status Solidi B*, 246(11-12), 2419~2422(Dec. 2009) -Selected for cover page

275. Jun Hyung Lim, Chang Min Lee, Jin Hyun Park, Jun Hyuk Choi, Jong Hyun Shim, Jinho Joo, Young Hee Lee, Won Nam Kang, and Chan-Joong Kim, 'Doping Effect of CNT and Nano-Carbon in Magnesium Diboride Bulk', *Journal of Nanoscience and Nanotechnology*, 9(12), 7388-7392, (Dec. 2009)

274. Gunn Kim, Yong jin Park, Myung Joon Han, Jae jun Yu, Chae jeong Heo and Young Hee Lee, 'Structure and magnetism of small Gd and Fe nanoclusters:LDA+U calculations', *Solid State Communications*, 149(45-46), 2058-2060, (Oct.10. 2009)

273. E.J. Ra, E. Raymundo-Pinero, Y.H. Lee, F. Beguin, 'High power supercapacitors using polyacrylonitrile-based carbon nanofiber paper', *Carbon*, 47(13), 2984-2992 (Nov. 2009)

272. Jun Hyung Lim, Chang Min Lee, Jin Hyun Park, Won Kim, Jinho Joo, Seung-Boo Jung, Young Hee Lee, and Chan-Joong Kim 'Fabrication and Characterization of the MgB<sub>2</sub> Bulk Superconductors Doped by Carbon Nanotubes', *IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY*, 19(3), 2767-2770(JUNE, 2009)

271. Chandan Biswas, Ki Kang Kim, Hong-Zhang Geng, Hyeon Ki Park, Seong Chu Lim, Seung Jin Chae, Soo Min Kim, and Young Hee Lee, Michael Nayhouse and Mingeo Yun 'Strategy for High Concentration Nanodispersion of Single-Walled Carbon Nanotubes with Diameter Selectivity', *J. Phys. Chem. C.*, 113(23), 10044-10051(27. April, 2009) < - [Selected for cover page](#)

270. David J. Perello, Woo Jong Yu, Dong Jae Bae, Seung Jin Chae, M.J. Kim, Young Hee Lee, and Minhee Yun, 'Analysis of hopping conduction in semiconducting and metallic carbon nanotube devices', *J. Appl. Phys.*, 105(12), 124309-1~124309-5, (June, 15. 2009) - [Selected in "Virtual Journal of Nanoscale science & Technology"](#)

269. Hae-Kyung Jeong, Mei Hua Jin, Kay Hyeok An, and Young Hee Lee, 'Structural Stability and Variable Dielectric Constant in Poly Sodium 4-Styrenesulfonate Intercalated Graphite Oxide', *J. Phys. Chem. C*, 113(30), 13060~13064, (July. 2009),

268. Woo Jong Yu, Bo Ram Kang, Il Ha Lee, Yo-Sep Min, and Young Hee Lee, 'Majority Carrier Type Conversion with Floating Gates in Carbon Nanotube Transistors', *Adv. Mat.*, 21(47), 4821-4824 (12. Aug, 2009)

-[Selected for frontpiece](#)

267. David Perello, Dong Jae Bae, Moon J. Kim, Dong Kyu Cha, Seung Yol Jeong, Bo Ram Kang, Woo Jong Yu, Young Hee Lee, and Minhee Yun, "Quantitative experimental analysis of Schottky barriers and Poole-Frenkel emission in carbon nanotube devices", *IEEE Transactions on Nanotechnology*, 8(3), 355-360 (May. 2009)

266. Meihua Jin, Hae-Kyung Jeong, Woo Jong Yu, Dong Jae Bae, Bo Ram Kang, and Young Hee Lee, 'Graphene Oxide Thin Film Field Effect Transistor without Reduction', *J. Phys. D: Appl. Phys.*, 42(13), 135109-01~135109-05(19. June, 2009)

265. Seung Mi Lee, Xiang-Dong Kang, Ping Wang, Hui-Ming Cheng, and Young Hee Lee, 'A Comparative Study of the Structural, Electronic, and Vibrational Properties of NH<sub>3</sub>BH<sub>3</sub> and LiNH<sub>2</sub>BH<sub>3</sub>: Theory and Experiment', *ChemPhysChem*, 10(11), 1825-1833(Aug. 03. 2009)

264. J B Park, S H Jeong, M S Jeong, S C Lim, I H Lee and Young Hee Lee, 'The rapid growth of vertically aligned carbon nanotubes using laser heating', *Nanotechnology*, 20(18), 185604-1~185604-7(May. 06, 2009)

263. Hyeon-Jin Shin, Ki Kang Kim, Anass Benayad, Seon-Mi Yoon, Hyeon Ki Park, In-Sun Jung, Mei Hua Jin, Hae-Kyung Jeong, Jong Min Kim, Jae-Young Choi, and Young Hee Lee, 'Efficient Reduction of Graphite Oxide by Sodium Borohydride and Its Effect on Electrical Conductance', *ADVANCED FUNCTIONAL MATERIALS.*, 19(12), 1987-1992(June. 23, 2009)

262. Woo Jong Yu, Un Jeong Kim, Bo Ram Kang, Il Ha Lee, Eun-Hong Lee and Young Hee Lee, 'Adaptive Logic Circuits with Doping-Free Ambipolar Carbon Nanotube Transistors', *Nanoletters*, 9(4), 1401-1405( APR.12, 2009)

- [Selected for featured highlight " NPG Asia Materials "](#)

261. K. K. Kim, S. M. Kim, Y. Cui, M. S. Jeong, J. H. Han, Y. C. Choi, K. H. An, K. Oh, Y. H. Lee, 'Evaluating the degree of macrodispersion of carbon nanotubes using UV-VIS-NIR absorption spectroscopy', *Carbon Letters* 10(1), 14-18 (2009)

260. O. H. Cha, M. S. Jeong, C. C. Byeon, H. Jeong, J. H. Han, Y. C. Choi, K. H. An, K. Oh, K. K. Kim, Y. H. Lee, 'Relative content evaluation of singlewalled carbon nanotubes using UV-VIS-NIR absorption spectroscopy', *Carbon Letters* 10(1), 9-13 (2009)
259. R. Lahaye, H. K. Jeong, C. Y. Park, Y. H. Lee, 'Density functional theory study of graphite oxide for different oxidation levels', *Phys. Rev. B.* 79(12), 125435-1~125435-8 (March.27, 2009)
258. H K Jeong, M H Jin, K P So, S C Lim and Y H Lee, 'Tailoring the characteristics of graphite oxides by different oxidation times', *J. Phys. D.: Appl. Phys.* 42(6), 065418~1-065418~6 (March. 21, 2009)  
- selected to "Journal of Physics D's Highlights of 2009 collection"
257. Fethullah Gunes , Gang Hee Han, Ki Kang Kim, Eun Sung Kim, Seung Jin Chae, Min Ho Park, Hae Kyung Jeong, Seong Chu Lim, and Young Hee Lee, 'Large-Area graphene-based flexible transparent conducting films', *NANO*, 4(2), 83-90, (Apr. 2009)
256. Seung Jin Chae, Fethullah Gunes, Ki Kang Kim, Eun Sung Kim, Gang Hee Han, Soo Min Kim, Hyeon-Jin Shin, Seon-Mi Yoon, Jae-Young Choi, Min Ho Park, Cheol Woong Yang, Didier Pribat and Young Hee Lee, 'Synthesis of Large-Area Graphene Layers on Poly-Nickel Substrate by Chemical Vapor Deposition: Wrinkle Formation', *ADVANCED MATERIALS*, 21(22), 2328-2333 (Jun. 12. 2009)
255. Bo Ram Kang, Woo Jong Yu, Ki Kang Kim, Hyeon Ki Park, Soo Min Kim, Yongjin Park, Gunn Kim, Hyeon-Jin Shin, Un Jeong Kim, Eun-Hong Lee, Jae-Young Choi, and Young Hee Lee 'Restorable type conversion of carbon nanotube transistor using pyrolytically controlled antioxidant photosynthesis coenzyme', *Advanced Functional Materials.*, 19(16), 2553-2559 (18. June, 2009)
254. Hae-Kyung Jeong, Yun Pyo Lee, Mei Hua Jin, Eun Sung Kim, Jung Jun Bae, and Young Hee Lee, 'Thermal stability of graphite oxide', *Chemical Physics Letters*, 470(4-6), 255-258 (Mar. 5. 2009)
253. Soo Min Kim, Jin Ho Jang, Ki Kang Kim, Hyeon Ki Park, Jung Jun Bae, Woo Jong Yu, Il Ha Lee, Gunn Kim, Duong Dinh Loc, Un Jeong Kim, Eun-Hong Lee, Hyeon-Jin Shin, Jae-Young Choi, and Young Hee Lee, 'Reduction-Controlled Viologen in Bisolvent as an Environmentally Stable n-Type Dopant for Carbon Nanotubes', *J. Am Chem. Soc.*, 131(1), 327-331 (Jan. 14, 2009)
252. Jiwoon Im, Il-Ha Lee, Byung Yang Lee, Byeongju Kim, June Park, Woojong Yu, Un Jeong Kim, Young Hee Lee, Maeng-Je Seong, Eun Hong Lee, Yo-Sep Min, and Seunghun Hong 'Direct Printing of Aligned Carbon Nanotube Patterns for High-Performance Thin Film Devices', *Appl. Phys. Lett.* 94(5), 053109~1- 053109~3 (Feb. 2009)
251. Nguyen Thi Xuyen, Hae Kyung Jeong, Gunn Kim, Kang Pyo So, Kay Hyeok An, and Young Hee Lee, 'Hydrolysis-induced immobilization of Pt(acac)<sub>2</sub> on polyimide-based carbon nanofiber mat and formation of Pt nanoparticles', *Journal of Materials Chemistry*, 19(9), 1283-1288 (Feb. 2009)
250. Anass Benayad, Hyeon-Jin Shin, Hyeon Ki Park, Seon-Mi Yoon, Ki Kang Kim, Mei Hua Jin, Hae-Kyung Jeong, Jae Cheol Lee, Jae-Young Choi, and Young Hee Lee, 'Controlling Work Function of Reduced Graphite Oxide with Au-Ion Concentration ', *CHEMICAL PHYSICS LETTERS*, 475(1-3), 91-95 (16.Jun.2009)

249. Hae-Kyung Jeong, Han-Jin Noh, Jae-Young Kim, Leyla Colakerol, Per-Anders Glans, Mei Hua Jin, Kevin E. Smith, Young Hee Lee, 'Comment on "Near-Edge X-Ray Absorption Fine-Structure Investigation of Graphene"', Phys. Rev. Lett., 102(9), 099701 (Mar. 2009)

248. Eun Mi Jo, Anoop Kumar Srivastava, Jung Jun Bae, Miyoung Kim, Myong Hoon Lee, Hee Kyu Lee, Seung Eun Lee, Seung Hee Lee and Young Hee Lee, "Carbon Nanotube Effects on Electro-Optic Characteristics of Twisted Nematic Liquid Crystal Cells", Mol. Cryst. Liq. Cryst., 498, 74-82 (Feb. 2009).

247. Palanivelu Sureshkumar, Anoop Kumar Srivastava, Seok Jin Jeong, Miyoung Kim, Eun Mi Jo, Seung Hee Lee, and Young Hee Lee, 'Anomalous Electrokinetic Dispersion of Carbon Nanotube Clusters in Liquid Crystal Under Electric Field', Journal of Nanoscience and Nanotechnology, 9(8), 4741-4746 (Aug. 2009).

#### JAN ~ DEC 2008

246. Hee Jin Jeong, Laurent Eude, Manoharan Gowtham, Bernd Marquardt, Sung Hun Lim, Sha'ima Enouz, Costel Sorin Cojocaru, Kyung Ah Park, Young Hee Lee And Didier Pribat,, 'Atomic Hydrogen-driven Size Control of Catalytic Nanoparticles for Single-walled Carbon Nanotube Growth', NANO, 3(3), 145-153 (Jun. 2008)

245. Hong-Zhang Geng, Dae Sik Lee, Ki Kang Kim, Sung Jin Kim, Jung Jun Bae and Young Hee Lee, 'Effect of Carbon Nanotube Types in Fabricating Flexible Transparent Conducting Films', J Korean Phys Soc., 53(2), 979-985, (Aug. 2008)

244. Kyu Lee, Seong Chu Lim, Young Chul Choi and Young Hee Lee, 'Origin of enhanced field emission characteristics postplasma treatment of multiwalled carbon nanotube array', Appl. Phys. Lett. 93(6) , 063101~1-063101~3 (Aug. 11. 2008)  
- Selected in "Virtual Journal of Nanoscale science & Technology"

243. Hae-Kyung Jeong, Leyla Colakerol, Mei Hua Jin, Per-Anders Glans, Kevin E. Smith, Young Hee Lee, 'Unoccupied electronic states in graphite oxides', Chem. Phys. Lett., 460(4-6), 499-502 (Jul. 30, 2008)

242. Jeong Hee Han, Eun Jung Lee, Ji Hyun Lee, Kang Pyo So, Young Hee Lee, Gwi Nam Bae, Seung-Bok Lee, Jun Ho Ji, Myung Haing Cho, Il Je Yu, 'Monitoring Multiwalled Carbon Nanotube Exposure in Carbon Nanotube Research Facility', Inhalation Toxicology, 20(8), 741-749, (Jun. 2008)

241. Woo Jong Yu, Seung Yol Jeong, Ki Kang Kim, Bo Ram Kang, Dong Jae Bae, Min Baek Lee, Seung Hun Hong, Sunanda Prabhu Gaunkar, Didier Pribat, David Perello, Minhee Yun, Jae-Young Choi, and Young Hee Lee, 'Bias-induced doping engineering with ionic adsorbates on single-walled carbon nanotube thin film transistors', New Journal of Physics, 11, 113013-1~113013-13 Nov. 2008

240. Mun Seok Jeong, Clare C. Byeon, Ok Hwan Cha, Hun Jeong, Jong Hun Han, Young Chul Choi, Kay Hyeok An, Kyung Hui Oh, Ki Kang Kim and Young Hee Lee, 'Purity Measurement of Single-walled Carbon Nanotubes by Uv-vis-nir Absorption Spectroscopy and Thermogravimetric Analysis', NANO, 3(2), 101-108, Apr. 2008.

239. Ki Kang Kim, Jung Jun Bae, Hyeon Ki Park, Soo Min Kim, Hong-Zhang Geng, Kyung Ah Park, Hyeon-Jin Shin, Seon-Mi Yoon, Anass Benaya, Jae-Young Choi, and Young Hee

Lee, 'Fermi Level Engineering of Single-Walled Carbon Nanotubes by AuCl<sub>3</sub> Doping', J. Am. Chem. Soc., 130(38), 12757-12761, Sep. 24. 2008.

238. Seung Yol Jeong, Seong Chu Lim, Dong Jae Bae, Young Hee Lee, Hyun Jin Shin, Seon-Mi Yoon, Jae Young Choi, Ok Hwan Cha, Mun Seok Jeong, David Perello, and Minhee Yun, "Photocurrent of CdSe nanocrystals on single-walled carbon nanotube-field effect transistor", Appl. Phys. Lett., 92(24), 243103-1~243103-3, (Jun. 16, 2008.)  
- Selected in "Virtual Journal of Nanoscale science & Technology"

237. Hae-Kyung Jeong, Han-Jin Noh, Jae-Yeong Kim, Mei Hua Jin, Chong Yun Park, and Young Hee Lee, "X-ray absorption spectroscopy of graphite oxide", Euro. phys. Lett., 82(6), 67004~1-67004~5, (Jun. 2008)

236. Jin-Hyon Lee, Seon-Mi Yoon, Ki Kang Kim, In-Sung Cha, Young Jun Park, Jae-Young Choi, Young Hee Lee, and Ungyu Paik, 'Exfoliation of Single-walled Carbon Nanotubes Induced by the Structural Effect of Perylene Derivatives and Their Optoelectronic Properties', J. Phys. Chem. C, 112(39), 15267-15273, (Oct. 2. 2008).

235. Hong-Zhang Geng, Dae Sik Lee, Ki Kang Kim, Gang Hee Han, Hyeon Ki Park, and Young Hee Lee, 'Absorption spectroscopy of surfactant-dispersed carbon nanotube film: Modulation of electronic structures', Chem. Phys. Lett. 455(4-6), 275-278 (Apr. 10, 2008).

234. Seon-Mi Yoon, Sung Jin Kim, Hyeon-Jin Shin, Anass Benayad, Seong Jae, Choi, Ki Kang Kim, Soo Min Kim, Yong Jin Park. Gunn Kim, Jae Young Choi and Young Hee Lee, "Selective oxidation on metallic carbon nanotubes by halogen oxoanions", J. Am. Chem. Soc., 130(8), 2610-2616 Feb. 27, 2008.

233. Hyeon-Jin Shin, Soo Min Kim, Seon-Mi Yoon, Anass Benayad, Ki Kang Kim, Sung Jin Kim, Hyun Ki Park, Jae Young Choi and Young Hee Lee, "Tailoring Electronic Structures of Carbon Nanotubes by Solvent with Electron-Donating and -Withdrawing Groups", J. Am. Chem. Soc., 130(6), 2062-2066, Feb. 13, 2008.

232. Yongjin Park, Gunn Kim, and Young Hee Lee "Adsorption and dissociation of hydrogen molecules on a Pt atom on defective carbon nanotubes", Appl. Phys. Lett., 92(8), 083108-1 ~ 083108-3, Feb. 2008.

- Selected in "Virtual Journal of Nanoscale science & Technology"

231. Hong-Zhang Geng, Ki Kang Kim, Chulho Song, Nguyen Thi Xuyen, Soo Min Kim, Kyung Ah Park, Dae Sik Lee, Kay Hyeok An, Young Sil Lee, Youngkyu Chang, Young Jun Lee, Jae Young Choi, Anass Benayad and Young Hee Lee, 'Doping and de-doping of carbon nanotube transparent conducting films by dispersant and chemical treatment', J. Mater. Chem., 2008, 18(11), 1261 - 1266, Mar. 2008.

230. Hae-Kyung Jeong, Yun Pyo Lee, Rob J. W. E. Lahaye, Min-Ho Park, Kay Hyeok An, Ick Jun Kim, Cheol-Woong Yang, Chong Yun Park, Rodney S. Ruoff, Young Hee Lee, "Evidence of Graphitic AB Stacking Order of Graphite Oxides", J. Am. Chem. Soc. 130(4), 1362-1366, Jan. 30, 2008

229. Seung Yol Jeong, Sang Hyun Jeon, Gang Hee Han, Kay Hyeok An, Dong Jae Bae, Seong Chu Lim, Ha Ryong Hwang, Chang Soo Han, and Young Hee Lee, 'Efficient Synthesis of Individual Single-Walled Carbon Nanotube by Water-Based Catalyst with Poly(vinylpyrrolidone)', Journal of Nanoscience and nanotechnology, 8(1), 329-334 , (Jan. 2008.)

**JAN ~ DEC 2007**

228. Hong-Zhang Geng and Young Hee Lee, 'Transparent Conducting Films by Using Carbon Nanotubes', *Nanoscale Phenomena-Basic Sceince to Device Applications*, Edited by Zikang Tang, Ping Sheng, Springer Publishers, p. 15-28, Nov. 2007.
227. Y. J. Park, Rob J.W.E. Lahayeand Young Hee Lee, "Adsorption of Pt on defective carbon nanotube walls: a DFT approach", *Computer Physics Communications*, 177(1-2), 46, July. 2007.
226. Ick-Jun Kim, Sunhye Yang, Min-Je Jeon, Seong-In Moon, Hyun-Soo Kim, Yoon-Pyo Lee, Kye-Hyeok An, Young-Hee Lee, "Structures and electrochemical performances of pyrolyzed carbons from graphite oxides for electric double-layer capacitor", *Journal of Power Sources*, 173(1), 621-625, Nov. 2007
225. Sang Youn Jeon, Seung Hwan Shin, Ju-Hyun Lee, Seung Hee Lee and Young Hee Lee, 'Effects of carbon nanotubes on nematic backflow in a twisted nematic liquid-crystal cell' , *Jpn. J. Appl. Phys.*, 46(12). 7801-7802, (Dec. 2007).
224. S. Y. Jeong, David Perello, S. J. Kim, J. H. Jang, B. R. Kang, W. J. Yu, D. J. Bae, Minhee Yun, and Y. H. Lee, 'Chirality-specific transport phenomena of isolated single-walled carbon nanotube', *Physica status solidi B*, 244(11), 4204-4211, Nov. 2007
223. Anoop Kumar Srivastava, Seok Jin Jeong, Myong Hoon Lee, Seung Hee Lee, S. H. Jeong and Y. H. Lee, 'Dielectrophoresis force driven dynamics of carbon nanotubes in liquid crystal medium', *J. Appl. Phys.* 102(4), 043503~1-043503~5, Aug. 15, 2007)
222. S. C. Lim, K. Lee, I. H. Lee, and Y. H. Lee, 'Field Emission And Application of Carbon Nanotubes', *NANO*, 2(2), 69-89. (Apr. 2007)
221. Nguyen Thi Xuyen, E. J. Ra, Hong-zhang Geng, K. K. Kim, K. H. An and Y. H. Lee, 'Enhancement of Conductivity by Diameter Control of Polyimide-Based Electrospun Carbon Nanofibers', *J. Phys. Chem. B*, 111(39), 11350-11353, (Oct. 4, 2007)
220. Hong-Zhang Geng, Ki Kang Kim, Kang Pyo So, Young Sil Lee, Youngkyu Chang, and Young Hee Lee, 'Effect of acid treatment on carbon nanotube-based flexible transparent conducting films', *J. Am. Chem. Soc.* 129(25), 7758-7759, (Jun, 27, 2007)
219. Seok Jin Jeong, Kyung Ah Park, Seok Ho Jeong, Hee Jin Jeong, Kay Hyeok An, Chang Woon Nah, Didier Pribat, Seung Hee Lee, and Young Hee Lee, 'Electroactive Superelongation of Carbon Nanotube Aggregates in Liquid Crystal Medium', *Nano. Lett.*, 7(8), 2178-2182, Aug. 8, 2007.
218. Hong-zhang Geng., Ki Kang Kim, Kyu Lee, Gil Yong Kim, Ha Kyu Choi, Dae Sik Lee, Kay Hyeok An, Youngkyu Chang, Young Sil Lee, Byeongyeol Kim, And Young Jun Lee and Young Hee Lee, 'Dependence of Material Quality on Performance of Flexible Transparent Conducting Films With Single-walled Carbon Nanotubes', *NANO*, 2(3), 157-167 Jun, 2007.
217. S. H. Jeong, K. K. Kim, S. J. Jeong, K. H. An, S. H. Lee, Y. H. Lee, 'Optical absorption spectroscopy for determining carbon nanotube concentration in solution', *Synthe. Metals*, 157(13-15), 570-574, Jul. 2007

216. Ki Kang Kim, Jin Sung Park, Sung Jin Kim, Hong Zhang Geng, Kay Hyeok An, Cheol-Min Yang , Kentaro Sato, Riichiro Saito, Young Hee Lee, 'Dependence of Raman spectra G ' band intensity on metallicity of single-wall carbon nanotubes', PRB, 76(20), 205426~1-205426~8, Nov. 2007,

- Selected in "Virtual Journal of Nanoscale science & Technology"

215. Seok Jin Jeong, Palanivelu Sureshkumar, Kwang-Un Jeong, Seung Hee Lee, Seok Ho Jeong, Young Hee Lee, Ruibo Lu, and Shin-Tson Wu, 'Unusual double four-lobe textures generated by the motion of carbon nanotubes in a nematic liquid crystals', Optics Express, 15(18), 11698-11705, Sep. 2007.

214. Sunhye Yang, Ick-Jun Kim, Min-Je Jeon, Seong-In Moon, Hyun-Soo Kim, Kye-Hyeok An, Yun-Pyo Lee, and Young-Hee Lee,'Preparation of Graphite Oxide and its Electrochemical Double Layer Capacitor's Performances using Non-Aqueous Electrolyte (TEABF4 & TEMABF4)', J. Korean Ind. Eng. Chem, 18(3), 291-295. Jun, 2007.

213. Sang Youn Jeon, Seung Hwan Shin, Seok Jin Jeong, and Seung Hee Lee, Seok Ho Jeong, Hyun Chul Choi, Kyeong Jin Kim, and Young Hee Lee,'Effects of carbon nanotubes on electro-optical characteristics of liquid crystal cell driven by in-plane field',Appl. Phys. Lett. 90(12), 121901-1~121901-3 , Mar. 19, 2007.

- Selected in "Virtual Journal of Nanoscale science & Technology"

212. Seong Chu Lim, Ki Kang Kim, Seong Hun Jeong, Kay Hyeok An, Soon-Bo Lee, Young Hee Lee , 'Dual quartz crystal microbalance for hydrogen storage in carbon nanotubes ', International Journal of Hydrogen Energy, 32(15), 3442-3447, Oct. 2007.

211. Ki Kang Kim, Seon-Mi Yoon, Jae-Young Choi, Jeonghee Lee, Byung-Ki Kim, Jong Min Kim, Jin-Hyon Lee, Ungyu Paik, Min Ho Park, Cheol Woong Yang, Kay Hyeok An, Youngsu Chung, and Young Hee Lee, 'Design of Dispersants for the Dispersion of Carbon Nanotubes in an Organic Solvent', Adv. Func. Mat. 17(11), 1775-1783, July 23, 2007.

210. Jin-Hyon Lee, Hyun-Jung Kang, Ungyu Paik, Jae-Young Choi,\* Seon-Mi Yoon, Jeonghee Lee, Byung-Ki Kim, Jong Min Kim, Ki Kang Kim, Kay Hyeok An, and Young Hee Lee, 'Dispersion Stability of Single-Walled Carbon Nanotubes Using Nafion in Bisolvent', JPCC, 111(6), 2477-2483, Feb. 15. 2007.

209. S. Y. Jeon, K. A. Park, I. S. Baik, S. J. Jeong, S. H. Jeong, K. H. An, S. H. Lee, and Y. H. Lee 'Dynamic response of carbon nanotubes dispersed in nematic liquid crystal', NANO,2(1), 41-49, Feb. 2007.

208. Inhee Maeng, Chul Kang, Seung Jae Oh, Joo-Hiuk Son, Kay Hyeok An and Young Hee Lee, 'Terahertz electrical and optical characteristics of double-walled carbon nanotubes and their comparison with single-walled carbon nanotubes', APPLIED PHYSICS LETTERS 90(5), 051914~1-051914~3 (Jan. 29, 2007)

207. Chul Kang, In Hee Maeng, Seung Jae Oh, Seong Chu Lim, Kay Hyeok An, Young Hee Lee, Joo-Hiuk Son,'Terahertz optical and electrical properties of hydrogen-functionalized carbon nanotubes', PHYSICAL REVIEW B 75(8), 085410-1~085410~5, (Feb. 7 2007)

206. S. J. Kim, Y. J. Park, E. J. Ra, K. K. Kim, K. H. An, J. Y. Choi, C. H. Park, S. K. Doo, M. H. Park. C. W. Yang, Y. H. Lee, 'Defect-induced loading of Pt nanoparticles on carbon nanotubes', Appl. Phys. Lett. 90(2), 023114~1-023114~3, (Jan. 11, 2007)

205. Kyung Ah Park, Seung Mi Lee, Seung Hee Lee, and Young Hee Lee, 'Anchoring a liquid Crystal Molecule on Single-Walled Carbon Nanotube', *J. Phys. Chem. C*, 111(4), 1620-1624, Feb. 1, 2007.

#### **JAN ~ DEC 2006**

204. Jeonghee Lee, Taewon Jeong, Jungna Heo, Shang-Hyeun Park, DongHun Lee, Jong-Bong Park, HyoukSoo Han, YoungNam Kwon, Igor Kovalev, Seon Mi Yoon, Jae-Young Choi, Yongwan Jin, Jong M. Kim, Kay Hyeok An, Young Hee Lee, SeGi Yu, 'Short carbon nanotubes produced by cryogenic crushing', *Carbon*, 44(14), 2984-2989, (Nov. 2006).

203. Seung Yol Jeong, Ki Kang Kim, Kay Hyeok An, Ha Ryong Hwang, Chang Soo Han, Min Hee Yun, and Young Hee Lee, 'Fabrication of Gas Sensor using Single Walled Carbon Nanotubes Dispersed in Dichloroethane', *NANO*, 1(3), 235-241, Nov. 2006.

202. Woon Ih Choi, Sohee Park, Tae-Eun Kim, Noejung Park, Kwang-Ryeol Lee, Young Hee Lee, Jisoon Ihm and Seungwu Han 'Band-gap sensitive adsorption of fluorine molecules on sidewalls of carbon nanotubes: an ab initio study', *Nanotechnology*, 17(23), 5862-5865, Dec. 14, 2006.

201. Kay Hyeok An, Cheol-Min Yang, Kwanyong Seo, Kyung Ah Park, Young Hee Lee, 'A diameter-dependent separation of semiconducting from metallic single-wall carbon nanotubes by using nitronium ions', *Current Applied Physics*. 6S1, e99-e109, Aug., 2006.

200. Hankil Boo, Ran-A Jeong, Sejin Park,† Keun Soo Kim, Kay Hyeok An, Young Hee Lee, Ji Hyung Han, Hee Chan Kim, and Taek Dong Chung,, 'Electrochemical nanoneedle biosensor based on multiwall carbon nanotube ', *Anal. Chem.* 78(2), 617-620, Jan. 15, 2006.

199. In-Su Baik, Sang Yeon Jeon, Seok Jin Jeong, Kay Hyeok An, Seok Ho Jeong, Seung Hee Lee, and Young Hee Lee, 'Local deformation of liquid crystal director induced by translational motion of carbon nanotubes under in-plane field', *J. Appl. Phys.*, 100(7), 074306-1~074306-5, Oct. 1, 2006.

- Selected in "Virtual Journal of Nanoscale science & Technology"

198. K. H. An and Y. H. Lee, 'ELECTRONIC-STRUCTURE ENGINEERING OF CARBON NANOTUBES', *NANO*, 1(2), 115-138, Sep. 2006.

197. Kyuyun Sheem, Young Hee Lee, Hong S. Lim, 'High-density positive electrodes containing carbon nanotubes for use in Li-ion cells', *J. Power Source*, 158(2), 1425-1430, Aug. 25, 2006.

196. Seong Chu Lim, Ha Kyu Choi, Hee Jin Jeong, Young Il Song, Gil Yong Kim, and Young Hee Lee, 'A strategy for forming robust adhesion with substrate in a carbon-nanotube field-emission array', *Carbon*, 44(13) 2809-2815, Nov. 2006..

195. S. Y. Jeon, S. H. Lee, and Y. H. Lee, 'Response to "Comment on Electrical-field effect on carbon nanotubes in a twisted nematic liquid crystal cell', *Appl. Phys. Lett.* 89(5), 056102 (July 31, 2006).

194. Y.I. Song, G. Y. Kim, H. K. Choi, H. J. Jeong, K. K. Kim, C.-M. Yang, S. C. Lim, K. H. An, K. T. Jung, Y. H. Lee, 'Fabrication of carbon nanotube field emitters using a dip-coating method', *Chem. Vapor. Dep.*, 12(6) 375-379, Jun. 19, 2006.

193. H. J. Jeong, H. K. Choi, G. Y. Kim, Y. I. Song, Y. Tong, S. C. Lim, Y. H. Lee, 'Fabrication of efficient field emitters with thin multiwalled carbon nanotubes using spray method', *Carbon* 44(13), 2689-2693 (Nov. 2006)..

192. K. H. An, C.-M. Yang, J. Y. Lee, S. C. Lim, C. Kang, J. H. Son, M. S. Jeong, and Y. H. Lee, 'A diameter-selective chiral separation of single-wall carbon nanotubes using nitronium ions', *J. Elect. Mater.* 35(2), 235-242, Feb. 22, 2006.

191. Cheol-Min Yang, Kay Hyeok An, Jin Sung Park, Kyung Ah Park, Seong Chu Lim, Young Seak Lee, Wan Jun Park, and Young Hee Lee, 'Preferential etching of metallic single-walled carbon nanotubes with small diameter by fluorine gas ', *Phys. Rev. B*, 73(7), 075419-1~075419-6, Feb. 14, 2006.

#### **JAN ~ DEC 2005**

190. C. Kang, I. H. Maeng, S. J. Oh, J. H. Son, T. I. Jeon, K. H. An, S. C. Lim, and Y. H. Lee, 'Frequency-dependent optical constants and conductivities of hydrogen-functionalized single-walled carbon nanotubes', *Appl. Phys. Lett.* 87(4), 041908-1~041908-3 (Jul. 25, 2005)

189. Y. H. Lee, '탄소나노튜브 물성 및 응용', *Saemulli* (Kor.) 51(2), 84-144, (2005.08)

188. T. I. Jeon, J. H. Son, K. H. An, and Y. H. Lee, 'Terahertz absorption and dispersion of fluorine-doped single-walled carbon nanotube', *J. Appl. Phys.* 98(3), 034316-1~034316-4 (Aug. 1, 2005)

187. I. Belabbas, M. Akli Belkhir, Y. H. Lee, A. Bere, P. Ruterana, J. Chen, G. Nouet , 'Atomic structure and energy of threading screw dislocations in wurtzite GaN', *physica status solidi (c)*, 2(7), 2492-2495, May, 2005.

186. Hee-Won Seo, Chang-Soo Han, Dae-Geun Choi, Keun-Soo Kim, Young Hee Lee, 'Controlled assembly of single SWNTs bundle using dielectrophoresis', *Microelectronic Engineering*, 81(1), 83-89, Jul., 2005.

185. K. J. Lee, H. S. Lee, J. Y. Lee, S. C. Lim, K. H. An, Y. H. Lee, Y. S. Lee 'Optical properties of hydrogen- and fluorine-doped single-walled carbon nanotubes', *JKPS*, 46(4), 906-912. Apr. 2005.

184. Kyuhong Lee, K. H. Kang, B. J. Mean, Moohee Lee, Jae-Kap Jung, Kwon-San Ryu, Young Hee Lee, 'C-13 NMR study of single-walled carbon nanotubes ', *Physica B*. 359, 1412-1414 (Apr. 30, 2005).

183. Cheol-Min Yang, Dong Young Kim, and Young Hee Lee, 'Formation of Densely Packed Single-Walled Carbon Nanotube Assembly', *Chem. Mat.*, 17(25), 6422-6429, Dec., 2005.

182. Kwanyong Seo, Kyung Ah Park, Changwook Kim, Seungwu Han, Bongsoo Kim, and Young Hee Lee, 'Chirality- and Diameter-Dependent Reactivity of NO<sub>2</sub> on Carbon Nanotube Walls', *J. Am. Chem. Soc.* 127(45), 15724-15729 (Nov. 16, 2005).

181. Yu Tong, Seong Chu Lim, Kyung Ah Park, Hee Jin Jeong, Seung Yoi Jeong, Chang Liu, Hui-Ming Cheng, Yoon Choi, Young Hee Lee, 'Controlling field-emission patterns of isolated single-walled carbon nanotube rope', *Appl. Phys. Lett.*, 87(4), 043114-1~043114-3, July, 25 2005.
180. Cheol-Min Yang, Jin Sung Park, Kay Hyeok An, Seong Chu Lim, Kwanyong Seo, Bongsoo Kim, Kyung Ah Park, Seungwu Han, Chong Yun Park, and Young Hee Lee, 'Selective removal of metallic single-walled carbon nanotubes with small diameters by using nitric and sulfuric acids ', *J. Phys. Chem. B*, 109(41), 19242-19248 Oct. 20, 2005.
179. Eun Ju Ra, Kay Hyeok An, Ki Kang Kim, Seung Yol Jeong, Young Hee Lee, 'Anisotropic electrical conductivity of MWCNT/PAN nanofiber paper', *Chem. Phys. Lett.* 413(1-3), 188-193, Sep. 15, 2005.
178. In-Su Baik, Sang Youn Jeon, Seung Hee Lee, Kyung Ah Park, Seok Ho Jeong, Kay Hyeok An, and Young Hee Lee, 'Electrical-field effect on carbon nanotubes in a twisted nematic liquid crystal cell', *Appl. Phys. Lett.* 87(26), 263110-1~263110-3 Dec. 26 , 2005.
177. D. Y. Kim, C. M. Yang, Y. S. Pakr, K. K. Kim, S. Y. Jeong, J. H. Han, Y. H. Lee, 'Characterization of thin multi-walled carbon nanotubes synthesized by catalytic chemical vapor deposition', *Chem. Phys. Lett.*, 413(1-3), 135-141 Sep. 15, 2005.
176. Ki Kang Kim, Dong Jae Bae, Cheol-Min Yang, Kay Hyeok An, Ji Yeong Lee, and Young Hee Lee, 'Nanodispersion of single-walled carbon nanotubes using dichloroethane ', *J. Nanosci. Nanotech.* 5(7), 1055~1059, July, 2005.
175. Seong Chu Lim, Keun Soo Kim, Im Bok Lee, Seung Yol Jeong, Shinje Cho, Jae-Eun Yoo, and Young Hee Lee, 'Nanomanipulator-assisted fabrication and characterization of carbon nanotubes inside scanning electron microscope', *Micron*, 36(5), 471-476, Jul. 2005
174. C. M. Yang, D. Y. Kim and Y. H. Lee, 'Single-walled carbon nanotube network with bimodal pore structures of uniform microporosity and mesoporosity', *J. Nanosci. Nanotech.* 5(6), 970-974, June, 2005
173. K. H. An, C. M. Yang, J. S. Park, S. Y. Jeong, and Y. H. Lee, 'Intercalant-induced superbundle formation of single-wall carbon nanotubes', *J. Phys. Chem. B*. 109(20), 10004-10008, May 26, 2005.
172. Kyung Ah Park, Sang Jin Kim, Kwanyong Seo and Young Hee Lee, 'Adsorption of atomic hydrogen on single-walled carbon nanotubes', *J. Phy. Chem. B*, 109(18), 8967-8972, May 12, 2005.
171. S. C. Lim, H. J. Jeong, K. S. Kim, I. B. Lee, D. J. Bae, and Y. H. Lee, 'Extracting independently the work function and field enhancement factor from thermal-field emission of multi-walled carbon nanotube tips', *Carbon*, 43(13), 2801-2807,(Nov. 2005).
170. K. S. Kim, I. B. Lee, S. C. Lim, S. Cho, J. H. Han and Y. H. Lee, "Multiwalled Carbon Nanotube Bridges and Junctions Using Nanomanipulators ", *J. Nanosci. Nanotech.*,5(6) 895-898 June, 2005
169. J. Y. Lee, Kui Liang, K. H. An, Y. H. Lee , 'Nickel Oxide/Carbon Nanotubes Nanocomposite for Electrochemical Capacitance' *Synth. Met.* 150(2) 153-157, Apr. 30, 2005.

168. J. Y. Lee, J. S. Kim, K. H. An, K. Lee, D. Y. Kim, D. J. Bae and Y. H. Lee, 'Electrophoretic and Dynamic Light Scattering in Evaluating Dispersion and Size Distribution of Singlewalled Carbon Nanotubes' *J. Nanosci. Nanotech.* 5(7), 1045~1049, July, 2005.

167. K. H. An, J. S. Park, C. M. Yang, S. Y. Jeong, S. C. Lim, C. Kang, J. H. Son, M. S. Jeong and Y. H. Lee, 'A Diameter-Selective Attack of Metallic Carbon Nanotubes by Nitronium Ions', *J. Am. Chem. Soc.* 127(14), 5196-5203, Apr. 13, 2005.

#### **JAN ~ DEC 2004**

166. Eun-Young Choi, Kyungsoo Park, Cheol-Min Yang, Hyejin Kim, Jung-Ho Son, Soon W. Lee, Young Hee Lee, Dongwon Min, Young-Uk Kwon, 'Benzene-templated hydrothermal synthesis of metal-organic frameworks with selective sorption properties', *Chem. Eur. J.*, 10(21) 5535-5540, Oct. 25, 2004

165. Hee Jin Jeong, Ki Kang Kim, Seung Yol Jeong, Min Ho Park, Cheol Woong Yang and Young Hee Lee, 'High-yield catalytic synthesis of thin multiwalled carbon nanotubes', *J. Phys. Chem. B*, 108(46), 17695-17698, Nov. 18 2004.

164. K. S. Kim, D. J. Bae, J. R. Kim, K. A. Park, K. G. Jeon, S. C. Lim, J.-J. Kim W. B. Choi, C. Y. Park and Y. H. Lee, 'Band gap engineering of a carbon nanotube by hydrogen functionalization', *Current Applied Physics*, 4(5), 559-562, Aug. 2004

163. K. H. An, S. Y. Jeong, H. R. Hwang and Y. H. Lee, 'Enhanced sensitivity of a gas sensor incorporating single-walled carbon nanotube-polypyrrole nanocomposites', *Adv. Mat.*, 16(12), 1005-1009, June 17 2004

162. K. Y. Seo, C. W. Kim, B. S. Kim, Y. H. Lee and K. H. song.'Growth Energetics of Single-Wall Carbon Nanotubes with Carbon Monoxide', *J. Phys. Chem. B*, 108(14), 4308-4313, (Apr. 8. 2004)

161. T. I. Jeon, K. K. Kim, C. Kang, I. H. Maeng, J.-H. Son K. H. An, J. Y. Lee, and Y. H. Lee, 'Optical and electrical properties of preferentially anisotropic single-walled carbon-nanotube films in terahertz region', *J. Appl. Phys.*, 95(10), 5736-5740, (May 15 2004)

160. H. J. Jeong, S. C. Lim, K. S. Kim and Y. H. Lee, 'Edge effect on the field emission properties from vertically aligned carbon nanotube arrays', *Carbon*, 42(14) 3036-3039, (August 14, 2004)

159. Y. M. Shin, S. Y. Jeong, H. J. Jeong, S. J. Eum, C. W. Yang, C. Y. Park, and Y. H. Lee, 'Influence of morphology of catalyst thin film on vertically aligned carbon nanotube growth', *J. Cryst. Growth*, 271(1-2), 81-89, (October. 15 2004).

158. Y. S. Choi, K. A. Park, C. W. Kim, and Y. H. Lee, 'Oxygen gas-induced lip-lip interactions on a double-walled carbon nanotube edge', *J. Am. Chem. Soc.* 126(30), 9433-9438, (Aug. 4, 2004).

157. Y. H. Lee, K. H. An, J. Y. Lee, and S. C. Lim, 'Carbon nanotube-based supercapacitors', Encyclopedia of Nanoscience and Nanotechnology, edited by H. S. Nalwa, American Scientific Publishers, p. 625-634, 2004.

156. S. C. Lim, H. J. Jeong, K. H. An, D. J. Bae, Y. C. Choi, Y. M. Shin, and Y. H. Lee, 'Carbon nanotube-based field emitters', Encyclopedia of Nanoscience and Nanotechnology, edited by H. S. Nalwa, American Scientific Publishers, p. 611-624, 2004.

155. K. H. An, K. K. Jeon, J. M. Moon, J. K. Heo, D. J. Bae, G. S. Park, C. Y. Park, and Y. H. Lee, 'Transformation of singlewalled carbon nanotubes to multiwalled carbon nanotubes and onion-like structures by nitric acid treatment', *Synth. Met.* 140(1), 1-8 (Jan. 6 2004).

### JAN ~ DEC 2003

154. C. W. Kim, K. Y. Seo, B. S. Kim, N. J. Park, Y. S. Choi, K. A. Park and Y. H. Lee, 'Tip-functionalized carbon nanotubes under electric fields', *Phys. Rev. B* 68(11), 115403-1~115403-7, (Sep. 5. 2003.)

153. H. S. Lee, T. D. Kang, K. H. An, D. J. Bae, and Y. H. Lee, 'Visible-ultraviolet polarized reflectivity spectra of anisotropically aligned single-walled carbon nanotube films', *Jpn. J. Appl. Phys.* 42(9), 5880~5886 (Sep. 2003).

152. K. Y. Seo, C. W. Kim, Y. S. Choi, K. A. Park, Y. H. Lee, B. S. Kim, 'Tuning Chirality of Single-wall Carbon Nanotubes by Selective Etching with Carbon Dioxide', *J. Am. Chem. Soc.* 125(46), 13946-13947, (Nov. 2003).

151. T. I. Jeon, K. J. Kim, C. Kang, S. J. Oh, J. H. Son, K. H. An, D. J. Bae, and Y. H. Lee, 'Characterization of singlewalled carbon nanotube films by terahertz spectroscopy', *Synth. Met.*, 135(1-3), 429-430, (Apr. 4. 2003.)

150. J. Y. Lee, K. H. An, J. K. Heo, and Y. H. Lee, 'Fabrication of supercapacitor electrodes using fluorinated singlewalled carbon nanotubes', *J. Phys. Chem. B*, 107(34), 8812-8815, (Aug. 25, 2003.)

149. K. S. Kim, S. C. Lim, K. H. An, D. J. Bae, S. J. Choi, J. E. Yoo, and Y. H. Lee, 'In situ manipulation and characterization using nanomanipulator inside field emission-scanning electron microscope', *Rev. Sci. Instrum.*, 74(9), 4021-4025, (Sep. 2003.)

148. K. A. Park, Y. S. Choi, C. W. Kim, and Y. H. Lee, 'Atomic and electronic structures of fluorinated single-walled carbon nanotubes', *Phys. Rev. B*, 68(4), 045429-1~045429-8, (July 2003.)

147. H. J. Kim, K. K. Jeon, J. G. Heo, C. Kim, K. H. An, S. C. Lim, D. J. Bae, and Y. H. Lee, 'Exfoliation of Single-Walled Carbon Nanotubes by Electrochemical Treatment Treatment in a Nitric Acid', *Adv. Mater.*, 15(20), 1757-1760, (Oct. 16, 2003.)

146. H. J. Jeong, K. H. An, S. C. Lim, M. S. Park, J. S. Chang, S. E. Park, S. J. Eum, C. W. Yang, C. Y. Park, and Y. H. Lee, 'Narrow diameter distribution of singlewalled carbon nanotubes grown on Ni-MgO by thermal chemical vapor deposition', *Chem. Phys. Lett.*, 380, 263-268, (October 21 2003.)

145. S. Y. Jeong, J. Y. Kim, H. D. Yang, B. N. Yoon, S. H. Choi, S. J. Eum, C. W. Yang, and Y. H. Lee, 'Synthesis of silicon nanotubes on porous alumina using molecular beam epitaxy', *Adv. Mater.* 15(14), 1172-1176, (July 17 2003).
144. Y. G. Hwang and Y. H. Lee, 'Adsorption of H<sub>2</sub>O molecules at the open ends of singlewalled carbon nanotubes', *J. Kor. Phys. Soc.* 42, 267-271, (Feb. 2003).
143. K. S. Kim, K. A. Park, H. J. Kim, D. J. Bae, S. C. Lim, and Y. H. Lee, 'Band gap modulation of a carbon nanotube by hydrogen functionalization', *J. Kor. Phys. Soc.* 42, S137-S142 (Feb. 2003).
142. K. H. An, K. A. Park, J. G. Heo, J. Y. Lee, K. K. Jeon, S. C. Lim, C. W. Yang, Y. S. Lee, and Y. H. Lee, 'Structural Transformation of Fluorinated Carbon Nanotubes Induced by in Situ Electron-Beam Irradiation', *J. Am. Chem. Soc.* 125(10), 3507-3061, (Feb. 2003)
141. Y. S. Lee, T. H. Cho, B. K. Lee, J. S. Rho, K. H. An, Y. H. Lee, 'Surface properties of fluorinated single-walled carbon nanotubes', *J. Fluorine chem.* 120(2), 99-104, (Apr. 2003).

#### **JAN ~ DEC 2002**

140. W. B. Choi and Y. H. Lee, 'Carbon nanotube and its application to nanoelectronics', *Industrial Applications of Electron Microscopy*, edited by Zhigang Li, Publisher: Marcel Dekker, New York, NY, USA, Published date: December 2002. Chapter 14, p. 614.
139. S. C. Lim, C. S. Jo, H. J. Jeong, Y. M. Shin, Y. H. Lee, Iran Amildo Samayoa and Jeawu Choi, 'Effect of Oxidatin on Electronic and Geometric Properties of Carbon Nanotubes', *Jpn. J. Appl. Phys.* 41(9), 5635~5639 (Sep. 2002).
138. K. S. Kim and Y. H. Lee, '탄소나노튜브의 응용', *기계저널*, vol. 42(11), p. 61-70, 2002.
137. S. G. Yu, W. K. Yi, T. W. Jeong, W. S. Kim, J. H. Lee, J. N. Heo, C. S. Lee, J. B. Yoo, Y. H. Lee, and J. M. Kim, 'Field emission energy distribution of MgO-coated MWCNTs', *Physica B* 323, 177-179 (Oct. 2002).
136. J. N. Heo, W. S. Kim, T. W. Jeong, S. G. Yu, J. H. Lee, C. S. Lee, W. H. Yi, Y. H. Lee, J. B. Yoo, and J. M. Kim, 'Effect of MgO film thickness on secondary electron emission from MgO-coated carbon nanotubes', *Physica B* 323, 174-176 (Oct. 2002).
135. K. S. Kim, D. J. Bae, J. R. Kim, K. A. Park, S. C. Lim, J. J. Kim, W. B. Choi, C. Y. Park, and Y. H. Lee, 'Modification of electronic structures of a carbon nanotube by hydrogen functionalization', *Adv. Mater.*, 14(24), p. 1818-1821 (Dec. 17, 2002).
134. C. W. Kim, Y. S. Choi, S. M. Lee, J. T. Park, B. S. Kim, and Y. H. Lee, 'The effect of gas adsorption on the field emission mechanism of carbon nanotubes', *J. Am. Chem. Soc.* 124(33), p. 9906-9911 (July 25, 2002).
133. W. S. Kim, W. K. Yi, S. G. Yu, J. N. Heo, T. W. Jeong, J. H. Lee, C. S. Lee, J. M. Kim, H. J. Jeong, Y. M. Shin, and Y. H. Lee, 'Secondary electron emission from magnesium oxide on multiwalled carbon nanotubes', *Appl. Phys. Lett.*, 81(6), 1098-1100 (August 5, 2002).

132. K. H. An, J. G. Heo, K. G. Jeon, D. J. Bae, C. W. Yang, C. Y. Park, Y. H. Lee, 'X-ray photoemission spectroscopy study of fluorinated single-walled carbon nanotubes', *Appl. Phys. Lett.* 80(22), 4235~4237 (June 3, 2002).
131. T. I. Jeon, K. J. Kim, C. Kang, S. J. Oh, J. H. Son, K. H. An, D. J. Bae, Y. H. Lee, 'Terahertz conductivity of anisotropic singlewalled carbon nanotube films', *Appl. Phys. Lett.* 80(18), 3403~3405 (May 6, 2002).
130. C. W. Kim, B. S. Kim, S. M. Lee, C. S. Jo, and Y. H. Lee, 'Electronic stuructures of capped carbon nanotubes under electric fields', *Phys. Rev. B* 65, 165418-1~165418-6 (Apr. 5, 2002).
129. Y. H. Lee, S. C. Lim, K. H. An, W. S. Kim, H. J. Jeong, Y. M. Shin, H. G. Lee, and J. M. Kim, "Applications of carbon nanotubes to electron emitters", *New Diamond & Frontier Carbon Technology* 12(4), 181-207 (June 2002).
128. Y. H. Lee, K. H. An, S. C. Lim, W. S. Kim, H. J. Jeong, C. H. Doh, and S. I. Moon, "Applications of carbon nanotubes to energy storage devices", *New Diamond & Frontier Carbon Technology* 12(4), 209-228 (June 2002).
127. S. M. Lee, D.-C. Chung, and Y. H. Lee, 'Dimer-exchange mechchnism in surfactant-mediated Si/Ge epitaxial growth', *J. Phys. Chem. B* 106(5), 891-894 (Feb. 7, 2002).
126. C. S. Jo, C. -W. Kim, and Y. H. Lee, 'Electronic properties of K-doped single-wall carbon nanotube bundles', *Phys. Rev. B* 65(3), 035420-1~035420-5 (Jan. 2, 2002).
125. Y. S. Park, K. S. Kim, H. J. Jeong, W. S. Kim, J. M. Moon, K. H. An, D. J. Bae, G. S. Park, and Y. H. Lee, 'Low pressure synthesis of single-walled carbon nanotubes by arc discharge', *Synth. Met.* 126, 245-251 (Feb. 2002).
124. H. J. Jeong, S. Y. Jeong, Y. M. Shin, J. H. Han, S. C. Lim, S J. Eum, C. W. Yang, N. G. Kim, C. Y. Park, and Y. H. Lee, "Dual-catalyst growth of vertically aligned carbon nanotubes at low temperature in thermal chemical vapor deposition", *Chem. Phys. Lett.* 361, 189-195 (30 July, 2002).
123. K. H. An, W. S. Kim, K. K. Jeon, Y. S. Park, J. M. Moon, S. C. Lim, D. J. Bae, and Y. H. Lee, "High capacitance supercapacitor using a nanocomposite electrode of single-walled carbon nanotube and polypyrrole", *J. Electrochem. Soc.* 149(8), A1058\_A1062 (June. 2002).
122. H. J. Jeong, Y. M. Shin, S. Y. Jeong, Y. C. Choi, Y. S. Park, S. C. Lim, G. S. Park, N. S. Lee, J. M. Kim, and Y. H. Lee, "Anomalies in the Growth Temperature and Time Dependence of Carbon Nanotube Growth", *Chemical Vapor Deposition.* 8(1), 11-15 (Jan. 2002).
121. Jaewu Choi, Iran Amildo Samayoa, Seung-Chu Lim, Chulsu Jo, Young Chul Choi, Young Hee Lee, and P.A. Dowben "Band Filling and Correlation Effects in Alkali Metal Doped Carbon Nanotubes", *Phys. Lett. A* 299, 601-606 (July 15, 2002).

120. Y. H. Lee, D. J. Bae, K. H. An, S. C. Lim, J. M. Moon, Y. C. Choi, Y. S. Park, W. S. Kim, and K. S. Kim, "Synthesis and Applications of Carbon Nanotubes", *Carbon Science* 2(2), 120-141 (June, 2001).
119. H. J. Chang, J. D. Lee, S. M. Lee, and Y. H. Lee, "Adsorption of NH<sub>3</sub> and NO<sub>2</sub> molecules on carbon nanotubes", *Appl. Phys. Lett.* 79(23), 3863-3865, (Dec. 3, 2001).
118. C.-W. Kim, B. S. Kim, S. M. Lee, C. S. Jo, and Y. H. Lee, 'Effect of electric field on the electronic structures of carbon nanotubes', *Appl. Phys. Lett.* 79(8), 1187-1189 (Aug. 20, 2001).
117. D. J. Bae, K. S. Kim, Y. S. Park, E. K. Suh, K. H. An, J. M. Moon, S. C. Lim, S. H. Park, Y. H. Jeong, and Y. H. Lee, 'Transport Phenomena in an anisotropically aligned single-wall carbon nanotubes film', *Phys. Rev. B* 64(23), 233401-1~233401-4, (Nov. 8, 2001).
116. J. M. Moon, Y. S. Park, K. H. An, G. S. Park, and Y. H. Lee, 'High-yield purification process of singlewalled carbon nanotubes', *J. Phys. Chem. B* 105(24), 5677-5681 (May 26, 2001).
115. S. C. Lim, H. J. Jeong, Y. S. Park, D. J. Bae, Y. C. Choi, Y. M. Shin, W. S. Kim, K. H. An, and Y. H. Lee, 'Field-emission properties of vertically aligned carbon-nanotube array dependent on gas exposures and growth conditions', *J. Vac. Sci. Technol. A* 19(4), 1786-1789 (Jul/Aug 2001).
114. T. I. Jeon, J. H. Son, K. H. An, and Y. H. Lee, 'Characterization of carbon nanotubes by THz time domain spectroscopy', *J. Kor. Phys. Soc.* 39, S185-S188 (Dec. 2001).
113. K. H. An, W. S. Kim, Y. S. Park, Y. C. Choi, S. M. Lee, D. C. Chung, D. J. Bae, S. C. Lim, and Y. H. Lee, 'Characterization of supercapacitors using singlewalled carbon nanotubes electrodes', *J. Kor. Phys. Soc.* 39, S511-S516 (Dec. 2001).
112. K. H. An, W. S. Kim, Y. S. Park, Y. C. Choi, S. M. Lee, D. C. Chung, D. J. Bae, S. C. Lim, and Y. H. Lee, 'Electrochemical properties of high-power supercapacitors using single-walled carbon nanotube electrodes', *Adv. Funct. Mater.* 11(5), 387-392, (Oct. 5, 2001).
111. J.-w. Choi, S. M. Lee, Y. C. Choi, Y. H. Lee, and J. C. Jiang, 'Electronic Band Dispersion of Vertically Aligned Multi-wall Carbon Nanotubes', *Chem. Phys. Lett.*, 349, 185-190 (Dec. 2001).
110. S. M. Lee, Y. H. Lee, G. Seifert, and T. Frauenheim, 'Novel mechanism of hydrogen storage in carbon nanotubes', *J. Kor. Phys. Soc.* 38(6), 686-691 (June 2001).
109. S. M. Lee, K. H. An, Y. H. Lee, G. Seifert, and Th. Frauenheim, 'A hydrogen storage mechanism in single-walled carbon nanotubes', *J. Am. Chem. Soc.* 123(21), 5059-5063 (May, 2001).
108. K. H. An, W. S. Kim, Y. C. Park, D. J. Bae, Y. C. Choi, S. M. Lee, D. C. Chung, S. C. Lim, and Y. H. Lee, 'Supercapacitors using single-walled carbon nanotube electrodes', *Adv. Mater.*, 13(7), 497-500 (Apr. 2001).
107. S. C. Lim, Y. C. Choi, H. J. Jeong, Y. M. Shin, K. H. An, D. J. Bae, Y. H. Lee, N. S. Lee, and J. M. Kim, 'Effect of gas exposures on field emission properties of carbon nanotube arrays', *Adv. Mat.* 13(20), 1563-1567 (Oct. 16, 2001).

106. Y. C. Choi, Y. M. Shin, D.J.Bae, S. C. Lim, Y.H. Lee, and B. S. Lee, 'Patterned growth and field emission properties of vertically aligned carbon nanotubes', Diamond and Related Materials 10(8), 1457-1464 (Aug. 2001).

105. S. M. Lee, K. H. An, W. S. Kim, Y. H. Lee, Y. S. Park, G. Seifert, and T. Frauenheim, 'Hydrogen storage in carbon nanotubes', Synth. Met. 121(1-3), 1189-1190 (Mar. 15, 2001).

104. Y. S. Park, K. S. Kim, Y. C. Choi, X. Y. Zhu, and Y. H. Lee, 'High yield purification of multiwalled carbon nanotubes by selective oxidation during thermal annealing', Carbon 39(5), 655-661 (Apr. 2001).

103. X. Y. Zhu, S. M. Lee, J. Y. Kim, Y. H. Lee, N. G. Kim, and T. Frauenheim, 'Structural and vibrational properties of carbon impurities in crystalline silicon', Semicond. Sci. Tech. 16(5), R41-R49 (May, 2001).

102. Y. C. Choi, D. W. Kim, T. J. Lee, C. J. Lee, and Y. H. Lee, 'Growth mechanism of vertically aligned carbon nanotubes on silicon substrates', Synth. Met., 117(1-3), 81-86 (Feb. 15, 2001).

#### **JAN ~ DEC 2000**

101. K. S. Kim, Y. S. Park, K. H. An, H. J. Jeong, W. S. Kim, Y. C. Choi, S. M. Lee, J. M. Moon, D. C. Chung, D. J. Bae, S. C. Lim, Y. S. Lee, and Y. H. Lee, 'Synthesis of High Purity Multiwalled and Singlewalled Carbon Nanotubes by Arc Discharge', Carbon Science 1, 53-59 (2000).

100. K. H. Lee, H. M. Eun, S. S. Park, K. W. Jung, S. M. Lee, Y. H. Lee, and E. Osawa, 'Structures and energetics of regioisomers of C-60 dimer and trimers', J. Phys. Chem. B 104(30), 7038-7042 (Aug. 3, 2000).

99. G. S. Park, W. B. Choi, J. M. Kim, Y. C. Choi, Y. H. Lee, and C. B. Lim, 'Structural investigation of gallium oxide ( $\beta$ -Ga<sub>2</sub>O<sub>3</sub>) nanowires grown by arc-discharge', J. Cryst. Growth 220(4), 494-500 (Dec. 2000).

98. S. M. Lee, Y. H. Lee, and N. G. Kim, 'Role of hydrogen for adsorption and diffusion of a Si adatom on monohydride and dihydride Si(001) surfaces', Surf. Sci. 470, 89-105 (2000).

97. Y. C. Choi, Y. M. Shin, S. C. Lim, D. J. Bae, Y. H. Lee, B. S. Lee, and D.-C. Chung, 'Effect of the surface morphology of Ni thin film on the growth of aligned carbon nanotubes by microwave plasma-enhanced chemical vapor deposition' J. Appl. Phys. 88(8), 4898-4903 (Oct. 15, 2000).

96. X. Y. Zhu, S. M. Lee, Y. H. Lee, and T. Frauenheim, 'Adsorption and desorption of an O<sub>2</sub> molecule on carbon nanotubes', Phys. Rev. Lett. 85(13), 2757-2760 (Sep. 25, 2000).

95. Y. C. Choi, W. S. Kim, Y. S. Park, S. M. Lee, D. J. Bae, Y. H. Lee, G.-S. Park, W. B. Choi, N. S. Lee, and J. M. Kim, 'Catalytic Growth of  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> Nanowires by Arc Discharge' Adv. Mater. 12(10), 746-750 (2000).

94. S. M. Lee, M. A. Belkhir, X. Y. Zhu, Y. H. Lee, Y. G. Hwang, and Th. Frauenheim, 'Electronic structures of GaN edge dislocations', Phys. Rev. B 61(23), 16033-16039 (Jun. 15, 2000).
93. W. B. Choi, Y. H. Lee, D. S. Chung, N. S. Lee, and J. M. Kim, 'Field emission from 4.5 in. single-walled and multiwalled carbon nanotube films', J. Vac. Sci. Tech. B. 18(2), 1054-1058 (Mar.-Apr. 2000).
92. W. B. Choi, Y. H. Lee, D. S. Chung, N. S. Lee, and J. M. Kim, in 'Science and Applications of Nanotubes", edited by D. Tomanek and R. J. Enbody, p. 355, Kluwer Academic Publishing/Plenum Press, (2000).
91. Y. C. Choi, Y. M. Shin, Y. H. Lee, B. S. Lee, G.-S. Park, W. B. Choi, N. S. Lee, and J. M. Kim, 'Controlling the diameter, growth rate, and density of vertically aligned carbon nanotubes synthesized by microwave plasma-enhanced chemical vapor deposition', Appl. Phys. Lett. 76(17), 2367-2369 (Apr. 24, 2000).
90. S. M. Lee, Th. Frauenheim, M. Elstner, Y. G. Hwang, and Y. H. Lee, 'Hydrogen storage in single-walled and multi-walled carbon nanotubes', MRS proceed. 593, 187-192 (2000).
89. Y. C. Choi, D. J. Bae, S. M. Lee, Y. S. Park, and Y. H. Lee, 'Arc discharge for the synthesis of monoclinic Ga<sub>2</sub>O<sub>3</sub> nanowires', MRS proceed. 581, 239-243(2000).
88. S. M. Lee and Y. H. Lee, 'Hydrogen storage in single-walled carbon nanotubes', Appl. Phys. Lett. 76(20), 2877-2879 (May 15, 2000).
87. W. B. Choi, Y. H. Lee, N. S. Lee, J. H. Kang, S. H. Park, H. Y. Kim, D. S. Chung, S. M. Lee, S. Y. Chung, and J. M. Kim, 'Carbon-nanotubes for full-color field-emission displays', Jpn. J. Appl. Phys. 39(5A), 2560-2564 (May 2000).
86. Y. C. Choi, D. J. Bae, Y. H. Lee, B. S. Lee, G.-S. Park, W. B. Choi, N. S. Lee, and J. M. Kim, 'Growth of carbon nanotubes by microwave plasma-enhanced chemical vapor deposition at low temperature', J. Vac. Sci. Technol. A 18(4), 1864-1868 (Jul.-Aug. 2000).
85. S. M. Lee, K. S. Park, Y. C. Choi, Y. S. Park, J. M. Bok, D. J. Bae, K. S. Nahm, Y. G. Choi, S. C. Yu, N. G. Kim, T. Frauenheim, and Y. H. Lee, 'Hydrogen adsorption and storage in carbon nanotubes', Synth. Metals 113(3), 209-216 (Jul, 3, 2000).
84. Y. C. Choi, Y. S. Park, Y. H. Lee, W. B. Choi, N. S. Lee, J. M. Kim, C. J. Lee, D. W. Kim, and T. J. Lee, 'Fabrication of electron field emitters using carbon nanotubes', Int. J. High Speed Elect. & Syst. 10, 5-11 (2000).
83. Y. C. Choi, D. J. Bae, Y. H. Lee, B. S. Lee, I. T. Han, W. B. Choi, N. S. Lee, and J. M. Kim, 'Low temperature synthesis of carbon nanotubes by microwave plasma-enhanced chemical vapor deposition', Synth. Metal 108(2), 159-163 (Jan. 17, 2000).

#### JAN ~ DEC 1999

82. J. R. Hahn, H. Kang, S. M. Lee, and Y. H. Lee, 'Mechanistic study of defect-induced oxidation of graphite', J. Phys. Chem. B 103(45), 9944-9951 (Nov. 11 1999).

81. K. H. Lee, H. M. Eun, S. S. Park, J. Y. Lee, C. K. Cho, C. H. Lee, S. M. Lee, Y. H. Lee, X. Sun, 'Trimerization of C<sub>60</sub>', *Synth. Metals* 103(1-3), 2434-2434 (Jun. 1999).

80. D.-C. Chung, B. S. Han, Y. H. Lee, O. B. Hyun, and H. S. Choi, 'Anomalous microwave properties of high-T<sub>c</sub> superconducting microstrip antennas around the critical temperature', *J. Appl. Phys.* 86(12), 7192-7194 (Dec. 15 1999).

79. W. B. Choi, D. S. Chung, J. H. Kang, H. Y. Kim, Y. W. Jin, I. T. Han, Y. H. Lee, J. E. Jung, N. S. Lee, G.-S. Park, and J. M. Kim, 'Fully sealed, high-brightness carbon-nanotube field-emission display', *Appl. Phys. Lett.* 75(20), 3129-3131 (Nov. 15 1999).

[- "Top 50 Most Cited Papers from 50 Years of Applied Physics Letters "](#)

78. C. J. Lee, D. W. Kim, T. J. Lee, Y. C. Choi, Y. S. Park, W. S. Kim, Y. H. Lee, W. B. Choi, N. S. Lee, G.-S. Park, J. M. Kim, 'Synthesis of aligned carbon nanotubes using thermal chemical vapor deposition', *Chem. Phys. Lett.* 312(5-6), 461-468 (Oct. 29, 1999).

77. C. J. Lee, D. W. Kim, T. J. Lee, Y. C. Choi, Y. S. Park, W. S. Kim, W. B. Choi, N. S. Lee, J. M. Kim, Y. G. Choi, S. C. Yu, and Y. H. Lee, 'Synthesis of uniformly distributed carbon nanotubes on a large area of Si substrates by thermal chemical vapor deposition', *Appl. Phys. Lett.* 75(12), 1721-1723 (Sep. 29, 1999).

76. X. Y. Zhu and Y. H. Lee, 'Si/Ge intermixing phenomena on Ge/Si(100) surfaces', *J. Kor. Phys. Soc.* 34, S299-S304 (Jun. 1999).

75. S. M. Lee, Y. H. Lee, Y. G. Hwang, and C. J. Lee, 'Electronic structures of GaN nanotubes', *J. Kor. Phys. Soc.* 34, S253-S257 (Jun. 1999).

74. Y. S. Lee, J.-H. Han, K.-S. Nahm, E.-H. Cho, S.-B. Ko, C.-J. Kim, I.-C. Jeon, W.-H. Lee, E.-K. Suh, and Y. H. Lee, 'Correlation between energy transfer and phase separation in emissive polymer blends', *Bull. Kor. Chem. Soc.* 20(9), 1093-1096 (Sep. 20, 1999).

73. S. M. Lee, Y. H. Lee, Y. G. Hwang, J. Joachim, and T. Frauenheim, 'Stability and electronic structures of GaN nanotubes from density-functional calculations', *Phys. Rev. B* 60(11), 7788-7791 (Sep. 15, 1999).

72. E. Kim, C. Chen, T. Pang, and Y. H. Lee, 'Ordering of dimer vacancies on the Si(100) surface', *Phys. Rev. B* 60(12), 8680-8685 (Sep. 15, 1999).

71. S. M. Lee, Y. H. Lee, Y. G. Hwang, J. Joachim, and T. Frauenheim, 'GaN nanotubes', *MRS Internet Journal of Nitride Semiconductor Research*, 4S1, G6.3 (1999).

70. S. M. Lee, Y. H. Lee, Y. G. Hwang, J. R. Hahn, and H. Kang, 'Defect-Induced Oxidation of Graphite', *Phys. Rev. Lett.* 82(1), 217-220 (Jan. 4, 1999).

69. E. Kim, Y. H. Lee, C. Chen, and T. Pang, 'Vacancies in amorphous silicon: A tight-binding molecular-dynamics simulation', *Phys. Rev. B* 59(4), 2713-2721 (Jan. 15, 1999).

68. X. Y. Zhu and Y. H. Lee, 'Defect-induced Si/Ge intermixing on the Ge/Si(100) surface', *Phys. Rev. B* 59(15), 9764-9767 (Apr. 15, 1999).

67. D. H. Oh and Y. H. Lee, 'Stability and cap formation mechanism of single-walled carbon nanotubes', Phys. Rev. B 58(11), 7407-7411 (Sep. 15, 1998).
66. Young-Kyun Kwon, David Tomanek, Young Hee Lee, Kee Hag Lee, and Susumu Saito, 'Do carbon nanotubes spin when bundled?', J. Mater. Res. 13(9), 2363-2367 (Sep. 1998).
65. Y. G. Hwang and Y. H. Lee, 'Adsorption of a carbon atom on the dimerized diamond (100) surface', J. Kor. Phys. Soc. 33(4), 467-471 (Oct. 1998).
64. S. M. Lee, E. Kim, Y. H. Lee, and N.-K. Kim, 'Ge(Si) ordering on a double-layer, stepped Si(Ge)(001) surface', J. Kor. Phys. Soc. 33(6), 684-688 (Dec. 1998).
63. S. G. Kim, Y. H. Lee, P. Nordlander, and D. Tomanek, 'Disintegration of finite carbon chains in an electric field', Chem. Phys. Lett. 264(3-4), 345-350 (Jan. 10, 1997).
62. Y. H. Lee, S. G. Kim, and D. Tomanek, 'Field-induced unraveling of carbon nanotubes', Chem. Phys. Lett. 265(6), 667-672 (Feb. 14, 1997).
61. Y. H. Lee, S. G. Kim, and D. Tomanek, 'Catalytic growth of single-wall carbon nanotubes: An ab initio study', Phys. Rev. Lett. 78(12), 2393-2396 (Mar. 24, 1997).
60. K. Kim, M. S. Suh, D. H. Oh, Y. H. Lee, C. J. Youn, K. B. Lee, and H. J. Lee, 'Visible photoluminescence from the Si-rich oxide and electronic structures of Si quantum dots', J. Kor. Phys. Soc. 30(3), 580-587 (Jun. 1997).
59. Young Kyun Kwon, Young Hee Lee, Seong Gon Kim, Philippe Jund, Richard E. Smalley, and David Tomanek, 'Morphology and stability of growing multi-wall carbon nanotubes', Phys. Rev. Lett. 79(11), 2065-2068 (Sep. 15, 1997).
58. E. Kim, Y. H. Lee, H. J. Lee, and Y. G. Hwang, 'Defects in amorphous a-Si<sub>1-x</sub>Ge<sub>x</sub> alloys: An explanation of electron spin resonance signals', Europhys. Lett. 40(2), 147-152 (Oct. 15, 1997)
57. E. Kim, C. W. Oh, and Y. H. Lee, 'Diffusion mechanism of Si adatoms on a double-layer stepped Si(001) surface', Phys. Rev. Lett. 79(23), 4621-4624 (Dec. 8, 1997).
56. E. Kim and Y. H. Lee, Changfeng Chen and Tao Pang 'Structural and vibrational properties of a-Si<sub>1-x</sub>Ge<sub>x</sub> alloys: An ab initio molecular dynamics study', Phys. Rev. B, 56(16), 10200-10207 (Oct. 15, 1997)
55. E. Kim, C. W. Oh, and Y. H. Lee, 'Surfactant-mediated Si/Ge epitaxial crystal growth', Mat. Res. Soc. Proc. 448, 135-140 (1997).
54. Young Hee Lee, 'Fast scooter motion of transition metal in single-wall carbon nanotube growth', J. Kor. Phys. Soc. 31, S263-S266 (Sep. 1997).
53. E. Kim, Y. H. Lee, C. Chen, and T. Pang, 'Structural relaxation of vacancies in amorphous silicon', Mat. Res. Soc. Proc. 467 , 555-560 (1997).
52. K. Kim, H. S. Kim, J. Y. Kim, Y. H. Lee, H. J. Lee, H. J. Lee, and H. Ryu, 'Solid-state interdiffusion mechanism in strained Si<sub>1-x</sub>Ge<sub>x</sub>/Si heterostructures', J. Solid State Electr. 1(3), 221-226 (Dec. 1997).

51. S. M. Lee and Y. H. Lee, 'Microscopic role of a surfactant in epitaxial crystal growth', Mat. Res. Soc. Proc. 501, 267-272 (1997).
50. C. W. Oh, E. Kim, and Y. H. Lee, 'Kinetic role of a surfactant in island formation', Phys. Rev. Lett. 76(5), 776-779 (Jan. 29, 1996).
49. S. M. Lee and Y. H. Lee, 'Electronic structure of hydrogenated Si (001) surface', Surf. Sci. 347(3), 329-336 (Feb. 20, 1996).
48. C. W. Oh, Y. H. Lee, and H. J. Lee, 'Role of surfactant for suppression of island formation on Si(001) surface', Compound Semiconductors, (Inst. Phys. Conf. Ser.) No. 145, 1267 (1996), (IOP Publishing Ltd).
47. S. Y. Hoon, K. S. Nahm, Y. H. Lee, H. J. Lee, and Y. G. Hwang, 'Epitaxial growth of 3C-SiC(111) thin film on Si wafer by rapid thermal chemical vapor deposition using tetramethylsilane', Compound Semiconductors, (Inst. Phys. Conf. Ser.) No. 145, 209 (1996), (IOP Publishing Ltd).
46. A. Thess, R. Lee, P. Nikolaev, H. Dai, P. Petit, J. Robert, C. Xu, Y. H. Lee, S. G. Kim, D. T. Colbert, G. Scuseria, D. Tomanek, J. E. Fischer, and R. E. Smalley, 'Crystalline ropes of metallic carbon nanotubes', Science 273(5274), 483-487 (Jul. 26, 1996).
45. E. Kim, C. W. Oh, Y. H. Lee, K. Y. Lim, and H. J. Lee, 'Kinetic role of a surfactant in epitaxial crystal growth: Surface diffusion and exchange mechanism', The Physics of Semiconductors (World Scientific), vol. 23, 1019 (1996).
44. K. Kim, Y. H. Lee, M. H. An, M. S. Suh, C. J. Youn, K. B. Lee, and H. J. Lee, 'Growth law of silicon oxides by dry oxidation', Semicond. Sci. Tech. 11(7), 1059-1064 (Jul. 1996).
43. K. Kim, Y. H. Lee, M. S. Suh, C. Y. Youn, K. B. Lee, and H. J. Lee, 'Thermal oxynitridation of silicon in N<sub>2</sub>O ambients', J. Electrochem. Soc. 143(10), 3372-3376 (Oct. 1996)
42. K. Kim, M. H. An, Y. G. Shin, M. S. Suh, C. Y. Youn, Y. H. Lee, K. B. Lee, and H. J. Lee, 'Oxide growth on Si(100) in the plasma phase of dry oxygen using an electron cyclotron resonance source', J. Vac. Sci. Technol. B, 14(4), 2667-2673 (Jul.-Aug. 1996)
41. C. W. Oh, E. Kim, and Y. H. Lee, 'Diffusion mechanism on a double-layer stepped Si(001) surface without (with) a surfactant', J. Kor. Phys. Soc. 29, S38-S45 (Aug. 1996)
40. Y. H. Lee, E. Kim, D.-H. Oh, C. W. Oh, 'Fragmentation of C-60, C-70 By Tight-binding Molecular-dynamics Approach', Synth. Met. 70(1-3), 1495-1498 (Mar. 15, 1995)
39. E. Kim and Y. H. Lee, 'Electronic structure of vacancies in amorphous silicon', Phys. Rev. B. 51(8), 5429-5432 (Feb. 15, 1995)
38. Y. H. Seo, K. S. Nahm, H. I. Jeon, E.-K. Suh, Y. H. Lee, and H. J. Lee, 'Light emitting mechanism and pore size control of porous silicon layers', J. Kor. Phys. Soc. 28, S75-S79 (Feb. 1995)
37. D.- H. Oh and Y. H. Lee, 'Higher ordering of Si (100) surface', J. Kor. Phys. Soc. 28, s167-s171 (Feb. 1995)

36. S. S. Cha, Y. K. Shin, H. I. Jeon, Z. S. Piao, K. Y. Lim, E.-K. Suh, Y. H. Lee, D. K. Kim, B. T. Lee, and H. J. Lee, 'Composition and structure analyses on spontaneously formed AlGaAs superlattice-like structures on (100) GaAs', Compound Semiconductors (Inst. Phys. Ser.) No. 141, 213 (1995), (IOP Publishing Ltd).
35. S. M. Lee and Y. H. Lee, 'Phonon spectra of hydrogenated Si(100) surface: Monohydride, dihydride, and (3x1) phase', J. Kor. Phys. Soc. 28, S285-S291, (May 1995)
34. E. Kim and Y. H. Lee, 'Structure of Si<sub>1-x</sub>Gex alloys', J. Kor. Phys. Soc. 28, 172-178 (Feb. 1995).
33. M. S. Jeong, Y. H. Lee, and Y. G. Hwang, 'Equilibrium Structure and Migration of a Single Dimer Vacancy on the Si(001) Surface', Phys. Rev. B 51(23), 17151-17157 (Jun. 15, 1995)
32. K. Kim and Y. H. Lee, 'Temperature-dependent critical layer thickness for strained-layer heterostructures', Appl. Phys. Lett. 67(15), 2212-2214 (Oct. 9, 1995)
31. E. Kim and Y. H. Lee, 'Phase separation of Si<sub>1-x</sub>Gex alloys', Proc. Mat. Res. Soc. 378, 1031 (1995).
30. D.-H. Oh and Y. H. Lee, 'Orientational ordering of solid C\_70', Phys. Rev. Lett. 75(23), 4230-4233 (Dec. 4, 1995)
29. I. H. Lee, K. J. Chang, and Y. H. Lee, 'A Tight binding molecular dynamics study of the equilibrium structures of small silicon clusters', J. Phys-Condens. Mat. 6(3), 741-750 (Jan. 17, 1994).
28. E. Kim and Y. H. Lee, 'Structural, electronic, vibrational properties of liquid and amorphous silicon: Tight-binding molecular dynamics approach', Phys. Rev. B, 49(3), 1743-1749 (Jan. 15, 1994)
27. H.-J. Lee, Y. H. Seo, D.-H. Oh, K. S. Nahm, Y. B. Han, Y. H. Lee, E.-K. Suh, H. J. Lee, 'Light emission phenomena from porous silicon: Siloxene compounds and quantum size effect', J. Appl. Phys. 75(12), 8060-8065 (Jun. 15, 1994)
26. Y. T. Hwang, S. S. Cha, B. C. Lee, K. Y. Lim, Y. H. Lee, E.-K. Suh, C. T. Choi, and H. J. Lee 'Semiinsulating Substrate Effects on Pure Gaas Epilayers', Jpn. J. Appl. Phys, 33(5A), 2457-2462 (May, 1994).
25. E. Kim, Y. H. Lee, and J. M. Lee, 'Transferable tight-binding model for hydrogen silicon interactions', J. Phys-condens. Mat. 6(45), 9561-9570 (Nov. 7, 1994).
24. Y. H. Seo, K. S. Nahm, M. H. An, E.-K. Suh, Y. H. Lee, K. B. Lee, and H. J. Lee, 'Formation mechanism and pore size control of light emitting porous silicon', Jpn. J. Appl. Phys, 33(12A), 6425-6431 (Dec. 1994).
23. E. Kim and Y. H. Lee, 'Is the vacancy in a-Si different from c-Si?', The Physics of Semiconductors, (World Scientific, 1994), 3, 2685 (1994).
22. S. J. Woo, E. Kim, and Y. H. Lee, 'Geometric, electronic, and vibrational structures of C50, C60, C70, and C80', Phys. Rev. B, 47(11), 6721-6727 (Mar. 15, 1993)

21. H.-J. Lee, Y. H. Seo, D.-H. Oh, K. S. Nahm, E.-K. Suh, Y. H. Lee, H. J. Lee, Y. G. Hwang, K.-H. Park, S. H. Chang, E. H. Lee, 'Correlation of optical and structural properties of light emitting porous silicon', *Appl. Phys. Lett.* 62(8), 855-857 (Feb. 22, 1993)
20. H.-J. Lee, Y. H. Seo, D.-H. Oh, K. S. Nahm, E.-K. Suh, H. J. Lee, Y. G. Hwang, K.-H. Park, S. H. Chang, E. H. Lee, 'Temperature dependence of optical properties of light emitting porous silicon', *J. Kor. Phys. Soc.* 26, s103 (1993)
19. H.-J. Lee, Y. H. Seo, D.-H. Oh, K. S. Nahm, E.-K. Suh, Y. H. Lee, H. J. Lee, and Y. G. Hwang, 'Photoluminescence, Raman-scattering, and Infrared-absorption Studies af Porous Silicon ', *Appl. Phys. Lett.* 62(15), 1812-1814 (Apr. 12, 1993)
18. E. Kim, Y. H. Lee, and B. J. Min, 'Thermal dissociation of H<sub>2</sub>\* complexes in silicon', *J. Kor. Phys. Soc.* 26, s107-s110 (Jan. 1993)
17. E. K. Song, E. Kim ,Y. H. Lee, and Y. G. Huang, 'Fully relaxed point defects in crystalline silicon', *Phys. Rev. B*, 48(3), 1486-1489 (Jul. 15, 1993)
16. J. M. Jun, K. C. Park, S. K. Kim, K. H. Lee, M. K. Chu, M. K. Han, J. Jang , and Y. H. Lee, 'Hydrogen radical annealing effect on the growth of microcrystalline silicon', *Proc. Mat. Res. Soc.* 298, 163 (1993).
15. E. Kim, Y. H. Lee, and J. Y. Lee, 'Fragmentation Of C-60 and C-70 ClusterS', *Phys. Rev. B*, 48(24), 18230-18234 (Dec. 15, 1993)
14. S. J. Woo, E. Kim, S. H. Lee, Y. H. Lee, I. C. Jeon, and S. Y. Hwang, 'Bulk modulus of the C-60 molecule via the tight-binding method', *Phys. Lett. A*, 162(6), 501-505 (Mar. 2, 1992).
13. B. J. Min, Y.H. Lee, C. Z. Wang, C. T. Chan, and K. M. Ho, 'Tight-binding Model For Hydrogen-silicon Interactions', *Phys. Rev. B*, 45(12), 6839-6843 (Mar. 15 1992)
12. E. Kim, K. H. Lee, Y. H. Lee, and H. J. Lee, 'Structural stability and vibrational properties of hydrogen complexes in silicon', *J. Phys.: Condens. Matter* 4(30), 6443-6450 (1992)
11. B. J. Min, Y. H. Lee, C. Z. Wang, C. T. Chan, and K. M. Ho, 'Tight binding molecular dynamics of hydrogen spectrum on a silicon (111) surface', *Phys. Rev. B*, 46(15), 9677-9682 (Oct. 15, 1992)
10. Y. H. Lee, R. Biswas, C. M. Soukoulis, C. Z. Wang, C. T. Chan, and K. M. Ho , 'Molecular dynamics simulation of thermal conductivity in amorphous silicon', *Phys. Rev. B*, 43(8), 6573-6580 (Mar. 15, 1991)
9. C. M. Soukoulis, S. Datta, and Y. H. Lee, 'Spin wave theory for anisotropic Heisenberg antiferromagnets', *Phys. Rev. B*, 44(1) , 446-449 (Jul. 1, 1991)
8. Y. H. Lee, 'Dynamics of defects in semiconductor: Hydrogen complexes in silicon', *Proc. Kor.-Japan Symp.* 21 (1991).
7. Y. H. Lee, C. Z. Wang , C. T. Chan, R. Biswas, K. M. Ho, and C. M. Soukoulis, 'Thermal conductivity in amorphous silicon by molecular dynamics', *Proc. of Seoul-ISPSA 90*, 212 (1990).

6. Y. H. Lee, D. Kim, S. H. Lee, and W. G. Jung, 'An exact analysis of the optical Kerr effect for an arbitrary field strength', *J. Chem. Phys.* 91(9), 5628-5632 (Nov. 1, 1989)
5. B. J. Min, Y. H. Lee, C. Z. Wang, R Biswas, K. M. Ho, and C. M. Soukoulis, 'Vibrational spectra and relaxation of hydrogenated silicon surface', *Proc. of Seoul-ISPSA 90*, 207 (1990).
4. Y. H. Lee and M. A. Lee, 'Treating nodes and singularities in quantum simulation of electronic structure: A sampling technique using multiple time step', *Phys. Rev. A*, 40(3), 1207-1214 (Aug. 1, 1989)
3. K. B. Lee and Y. H. Lee, 'Periodic characteristics of composite membrane permeability', *J. Microencapsul* 6(1), 59-70 (Jan-Mar 1989).
2. Y. H. Lee and M. A. Lee, 'An analytic approach of the time propagator near nodes in the quantum simulation of electronic ground states using one-dimensional system', *J. Phys. Soc. Jpn.* 58(1), 91-100 (Jan 1989)
1. Y. H. Lee and M. A. Lee, 'Computer simulation of molecular orientational order', *Superlattice. Microst.*, 1(6), 529-533 (1985)

#### ▶ non-International Journals (Korea)

- K16. G. Y. Jeong, W. Y. Song, B. H. Oh. B. C. Park, Y. H. Lee, '나노조작기를 이용한 우너자간력 현미경용 나노튜브 탐침의 제작',
- K15. Y. H. Lee, 'Hydrogen storage in carbon nanotubes', *Bulletin of the Korean Institute of Electrical and Electronic Material Engineers*, vol 13 (5), 39-43 (2000).
- K14. M. S. Jeong, Y. H. Lee, J. Y. Kim, and Y. G. Hwang, 'Study of a single dimer vacancy on Si (100) surface', *New Phys.* 35 (Kor.), 214 (1995).
- K13. S.S. Cha, Y. G. Shin, H. I. Jeon, E. K. Suh, K. Y. Lim, Y. H. Lee, and H. J. Lee, 'DCXD rocking curve analysis of spontaneously formed multi-layer structures of Al<sub>x</sub>Ga<sub>1-x</sub>As/AlyGa<sub>1-y</sub>As layers grown by MOCVD', *New Phys.* 35, 224 (1995).
- K12. S. M. Lee, and Y. H. Lee, 'Study of clean and hydrogenated Si (100) surfaces', *New Phys.* 35, 363 (1995).

K11. S. M. Lee, and Y. H. Lee, 'Hydrogen desorption pathways on hydrogenated Si (100) surfaces', New Phys. 35, 358 (1995).

K10. Y. H. Lee, 'Fullerenes', Physics & high technology, (Kor.) 3, 25 (1994).

K9. M. S. Ko, E. Kim, S. J. Woo, D. H. Oh, E. K. Song, and Y. H. Lee, 'Study of C:H interactions via tight binding method', New Phys. (Kor.), 33 (1), 68 (1993).

K8. G. C. Bae, B. J. Min, and Y. H. Lee, 'Tight binding interaction of Ge', New Phys. (Kor), 33 (5), October, 513-516 (1993).

K7. Yong Ho Lee, Y. D. Shin, Y. H. Lee, and J. R. Lee, 'Magnetic hysteresis curve tracer using pulsed electromagnet', J. Kor. Magn. Soc. 3(2), June, 121 (1993).

K6. Yong-Ho Lee, Y. D. Shin, Y. H. Lee, and C. R. Rhee, 'Pulsed high magnetic field generation', Appl. Phys. 5(Kor.), 438 (1992).

K5. Y. H. Lee, 'Tight binding molecular dynamics of hydrogenated silicon(111) surface', Proc. 1st solid State Theory Symp., Taejon(1991).

K4. H. Lee, I. S. Kim, H. D. Shin, Y. H. Lee, and Y. S. Lee, 'Study on basic magnetic characteristics in new magnetic materials', J. Kor. Magn. Soc. 1,85 (1991).

K3. J. Ihm, C. Park, Y. G. Hwang, J. S. Kim, and Y. H. Lee, 'Monte Carlo simulation for lattice misfit effects in epitaxial growth on a square lattice', New Phys. 30, 27 (1990).

K2. Y. H. Lee, Y. Shin, H. Kim, Y. H. Lee, and I. K. Kang, 'A megnetostriction measurement system using simple transformer- ratio-armbridge', Kor. Appl. Phys. 2, 437 (1989).

K1. T. Park, S. Peak, K. B. Lee, and Y. H. Lee, 'Vibrational frequencies of adatom on crystal surfaces', New Phys. 28, 1479 (1988).