

► Cover image from R. J. Martín-Palma, C. G. Pantano, and A. Lakhtakia, *Appl. Phys. Lett.* **93**, 083901 (2008).

LASERS, OPTICS, AND OPTOELECTRONICS

- 081101 **UV polaritonic emission from a perovskite-based microcavity**
(3 pages)
G. Lanty, J. S. Lauret,
E. Deleporte, S. Bouchoule,
X. Lafosse
- 081102 **GaNAsSb/GaAs waveguide photodetector with response up to
1.6 μm grown by molecular beam epitaxy** (3 pages)
W. K. Loke, S. F. Yoon, Z. Xu,
K. H. Tan, T. K. Ng, Y. K. Sim,
S. Wicaksono, N. Saadsaoud,
D. Decoster, J. Chazelas
- 081103 **Liquid crystal display using combined fringe and in-plane electric
fields** (3 pages)
Ji Woong Park, Young Joo Ahn,
Jun Ho Jung, Seung Hee Lee,
Ruibo Lu, Hyang Yul Kim,
Shin-Tson Wu
- 081104 **Extraordinary midinfrared transmission of rectangular coaxial
nanoaperture arrays** (3 pages)
Ahmet Ali Yanik, Xihua Wang,
Shyamsunder Erramilli,
Mi K. Hong, Hatice Altug
- 081105 **Unidirectional single-frequency lasing from a ring-spiral coupled
microcavity laser** (3 pages)
Xiang Wu, Hao Li, Liying Liu,
Lei Xu
- 081106 **Photonic crystal fiber microtaper supporting two selective
higher-order modes with high sensitivity to gas molecules** (3 pages)
D. Monzón-Hernández,
Vladimir P. Minkovich,
Joel Villatoro, Mark P. Kreuzer,
Gonçal Badenes
- 081107 **GaSb based light emitting diodes with strained InGaAsSb type I
quantum well active regions** (3 pages)
Sergey Suchalkin,
Seungyong Jung, Gela Kipshidze,
Leon Shterengas,
Takashi Hosoda,
David Westerfeld, Donald Snyder,
Gregory Belenky
- 081108 **Nanoscale epitaxial lateral overgrowth of GaN-based light-emitting
diodes on a SiO₂ nanorod-array patterned sapphire template**
(3 pages)
C. H. Chiu, H. H. Yen, C. L. Chao,
Z. Y. Li, Peichen Yu, H. C. Kuo,
T. C. Lu, S. C. Wang, K. M. Lau,
S. J. Cheng
- 081109 **High efficiency operation of butt joint line-defect-waveguide
microlaser in two-dimensional photonic crystal slab** (3 pages)
Wanhua Zheng, Gang Ren,
Mingxin Xing, Wei Chen,
Anjin Liu, Wenjun Zhou,
Toshihiko Baba, Kango Nozaki,
Lianghui Chen
- 081110 **Strain relaxation induced microphotoluminescence characteristics of
a single InGaN-based nanopillar fabricated by focused ion beam
milling** (3 pages)
Peichen Yu, C. H. Chiu,
Yuh-Renn Wu, H. H. Yen,
J. R. Chen, C. C. Kao,
Han-Wei Yang, H. C. Kuo,
T. C. Lu, W. Y. Yeh, S. C. Wang
- 081111 **A hybrid green light-emitting diode comprised of
n-ZnO/(InGaN/GaN) multi-quantum-wells/*p*-GaN** (3 pages)
C. Bayram, F. Hosseini Teherani,
D. J. Rogers, M. Razeghi
- 081112 **Electrical spin injection and optical detection in InAs based light
emitting diodes** (3 pages)
A. V. Stier, C. J. Meining,
B. D. McCombe, I. Chado,
P. Grabs, G. Schmidt,
L. W. Molenkamp
- 081113 **Dense wavelength conversion and multicasting in a resonance-split
silicon microring** (3 pages)
Qiang Li, Ziyang Zhang,
Fangfei Liu, Min Qiu, Yikai Su

- 081114 **Optimized photocathode for spin-polarized electron sources**
(3 pages) Yu. A. Mamaev, L. G. Gerchikov, Yu. P. Yashin, D. A. Vasiliev, V. V. Kuzmichev, V. M. Ustinov, A. E. Zhukov, V. S. Mikhrin, A. P. Vasiliev
- 081115 **Modulation of single quantum dot energy levels by a surface-acoustic-wave** (3 pages) J. R. Gell, M. B. Ward, R. J. Young, R. M. Stevenson, P. Atkinson, D. Anderson, G. A. C. Jones, D. A. Ritchie, A. J. Shields
- 081116 **Indium incorporation dynamics into AlInN ternary alloys for laser structures lattice matched to GaN** (3 pages) H. P. D. Schenk, M. Nemoz, M. Korytov, P. Vennéguès, A. D. Dräger, A. Hangleiter
- 081117 **Tunable lasers on GaSb using the concept of binary superimposed gratings** (3 pages) M. Müller, T. Lehnhardt, K. Röbner, A. Forchel
- 081118 **High output power GaN-based light-emitting diodes using an electrically reverse-connected p-Schottky diode and p-InGaN-GaN superlattice** (3 pages) Ja-Soon Jang

PLASMAS AND ELECTRICAL DISCHARGES

- 081501 **Spectrum modulation of relativistic electrons by laser wakefield**
(3 pages) N. Nakanii, K. Kondo, Y. Kuramitsu, Y. Mori, E. Miura, K. Tsuji, K. Kimura, S. Fukumochi, M. Kashihara, T. Tanimoto, H. Nakamura, T. Ishikura, K. Takeda, M. Tampo, H. Takabe, R. Kodama, Y. Kitagawa, K. Mima, K. A. Tanaka
- 081502 **The role of the relative voltage and phase for frequency coupling in a dual-frequency capacitively coupled plasma** (3 pages) D. O'Connell, T. Gans, E. Semmler, P. Awakowicz
- 081503 **Plasma characterization in a diode with a carbon-fiber cathode**
(3 pages) V. Vekselman, J. Gleizer, D. Yarmolich, J. Felsteiner, Ya. Krasik, L. Liu, V. Bernshtam
- 081504 **Temperature-dependent transition of discharge pattern of He/air cryoplasma** (3 pages) Jai Hyuk Choi, Yuri Noma, Takaaki Tomai, Kazuo Terashima

STRUCTURAL, MECHANICAL, THERMODYNAMIC, AND OPTICAL PROPERTIES OF CONDENSED MATTER

- 081901 **Investigation of the nanomechanical properties in relation to the microstructure of Zn_{1-x}Be_xTe alloys** (3 pages) S. E. Grillo, H. Glénat, T. Tite, O. Pages, O. Maksimov, M. C. Tamargo
- 081902 **Low-temperature negative thermal expansion of the antiperovskite manganese nitride Mn₃CuN codoped with Ge and Si** (3 pages) Rongjin Huang, Laifeng Li, Fangshuo Cai, Xiangdong Xu, Lihe Qian
- 081903 **Phase transformations during rapid heating of Al/Ni multilayer foils**
(3 pages) Jonathan C. Trenkle, Lucas J. Koerner, Mark W. Tate, Sol M. Gruner, Timothy P. Weihs, Todd C. Hufnagel
- 081904 **Characterization of indirect and direct interband transitions of anatase TiO₂ by thermorefectance spectroscopy** (3 pages) Ching-Hwa Ho, Ming-Cheng Tsai, Ming-Show Wong
- 081905 **The determination of Young's modulus in noble metal nanowires**
(3 pages) Z. M. Ao, S. Li, Q. Jiang
- 081906 **Surface roughness effects on the terahertz reflectance of pure explosive materials** (3 pages) M. Ortolani, J. S. Lee, U. Schade, H.-W. Hübers
- 081907 **Long-time evolution of the photoluminescence in C- and M-plane GaN/AlN quantum dots upon intense ultraviolet irradiation** (3 pages) O. Brandt, T. Flissikowski, D. M. Schaadt, U. Jahn, A. Trampert, H. T. Grahn

(Continued)

- 081908 **Band-edge emission enhancement by longitudinal stress field in GaN** (3 pages)
Duanjun Cai, Junyong Kang, Pierre Gibart, Bernard Beaumont, Takachi Sekiguchi, Shun Ito
- 081909 **Local strain measurement in a strain-engineered complementary metal-oxide-semiconductor device by geometrical phase analysis in the transmission electron microscope** (3 pages)
Jayhoon Chung, Guoda Lian, Lew Rabenberg
- 081910 **Resonant coherent Bragg rod analysis of strained epitaxial heterostructures** (3 pages)
D. P. Kumah, A. Riposan, C. N. Cionca, N. S. Hussein, R. Clarke, J. Y. Lee, J. M. Millunchick, Y. Yacoby, C. M. Schlepütz, M. Björck, P. R. Willmott
- 081911 **Effect of adsorption-induced surface stress change on the stiffness of a microcantilever used as a salinity detection sensor** (3 pages)
S. Kim, K. D. Kihm
- 081912 **The high-pressure phase behavior and compressibility of 2,4,6-trinitrotoluene** (3 pages)
Lewis L. Stevens, Nenad Velisavljevic, Daniel E. Hooks, Dana M. Dattelbaum
- 081913 **Improving selective thermal emission properties of three-dimensional macroporous silicon through porosity tuning** (3 pages)
M. Garin, T. Trifonov, A. Rodríguez, R. Alcubilla, F. Marquier, C. Arnold, J.-J. Greffet
- 081914 **Measurement of crack opening stresses and crack closure stress profiles from heat generation in vibrating cracks** (3 pages)
Jeremy Renshaw, Stephen D. Holland, R. Bruce Thompson
- 081915 **Influence of annealing temperature on optical properties of InGaN quantum dot based light emitting diodes** (3 pages)
Q. Wang, T. Wang, J. Bai, A. G. Cullis, P. J. Parbrook, F. Ranalli
- 081916 **Enhancement of terahertz electromagnetic wave emission from an undoped GaAs/n-type GaAs epitaxial layer structure** (3 pages)
Hideo Takeuchi, Junichi Yanagisawa, Takayuki Hasegawa, Masaaki Nakayama
- 081917 **Light reflection from a metal surface with subwavelength cavities** (3 pages)
Cheng-ping Huang, Jia-qi Li, Qian-jin Wang, Xiao-gang Yin, Yong-yuan Zhu
- 081918 **Atomic-scale bonding of bulk metallic glass to crystalline aluminum** (3 pages)
K. X. Liu, W. D. Liu, J. T. Wang, H. H. Yan, X. J. Li, Y. J. Huang, X. S. Wei, J. Shen
- ELECTRONIC TRANSPORT AND SEMICONDUCTORS**
- 082101 **Nonlinear magnetoresistance of an irradiated two-dimensional electron system** (3 pages)
X. L. Lei, S. Y. Liu
- 082102 **High performance indium gallium zinc oxide thin film transistors fabricated on polyethylene terephthalate substrates** (3 pages)
Wantae Lim, Jung Hun Jang, S.-H. Kim, D. P. Norton, V Craciun, S. J. Pearton, F. Ren, H. Shen
- 082103 **N-type behavior of ferroelectric-gate carbon nanotube network transistor** (3 pages)
Jun Wei Cheah, Yumeng Shi, Hock Guan Ong, Chun Wei Lee, Lain-Jong Li, Junling Wang
- 082104 **Visible photoemission from InN** (3 pages)
J. W. Glesener, J. P. Estrera
- 082105 **Band offsets of atomic-layer-deposited Al₂O₃ on GaAs and the effects of surface treatment** (3 pages)
N. V. Nguyen, Oleg A. Kirillov, W. Jiang, Wenyong Wang, John S. Suehle, P. D. Ye, Y. Xuan, N. Goel, K.-W. Choi, Wilman Tsai, S. Sayan
- 082106 **Nonpolar 4H-AlN grown on 4H-SiC (1 $\bar{1}$ 00) with reduced stacking fault density realized by persistent layer-by-layer growth** (3 pages)
Masahiro Horita, Tsunenobu Kimoto, Jun Suda

(Continued)

- 082107 **Effect of atomic hydrogen on boron-doped germanium: An *ab initio* study** (3 pages) R. Q. Wu, M. Yang, Y. P. Feng, Y. F. Ouyang
- 082108 **Valence band offset of ZnO/Zn_{0.85}Mg_{0.15}O heterojunction measured by x-ray photoelectron spectroscopy** (3 pages) S. C. Su, Y. M. Lu, Z. Z. Zhang, C. X. Shan, B. H. Li, D. Z. Shen, B. Yao, J. Y. Zhang, D. X. Zhao, X. W. Fan
- 082109 **Interstitial-based boron diffusion dynamics in amorphous silicon** (3 pages) Ning Kong, Taras A. Kirichenko, Gyeong S. Hwang, Sanjay K. Banerjee
- 082110 **Enhancement of multiple-phonon resonant Raman scattering in Co-doped ZnO nanorods** (3 pages) The-Long Phan, Roger Vincent, David Cherns, Nguyen Huy Dan, Seong-Cho Yu
- 082111 **Very high channel conductivity in low-defect AlN/GaN high electron mobility transistor structures** (3 pages) A. M. Dabiran, A. M. Wowchak, A. Osinsky, J. Xie, B. Hertog, B. Cui, D. C. Look, P. P. Chow
- 082112 **Carrier doping in anatase TiO₂ film by perovskite overlayer deposition** (3 pages) K. S. Takahashi, H. Y. Hwang

MAGNETISM AND SUPERCONDUCTIVITY

- 082501 **Tunable anisotropic nonlinearity in superconductors with asymmetric antidot array** (3 pages) A. Yu. Aladyshkin, J. Van de Vondel, C. C. de Souza Silva, V. V. Moshchalkov
- 082502 **Direct visualization of dipolar ferromagnetic domain structures in Co nanoparticle monolayers by electron holography** (3 pages) Kazuo Yamamoto, Sara A. Majetich, Martha R. McCartney, Madhur Sachan, Saeki Yamamuro, Tsukasa Hirayama
- 082503 **Fast domain wall motion in nanostripes with out-of-plane fields** (3 pages) Andrew Kunz, Sarah C. Reiff
- 082504 **Magnetic behavior of graphene absorbed with N, O, and F atoms: A first-principles study** (3 pages) M. Wu, En-Zuo Liu, J. Z. Jiang
- 082505 **Imaging of magnetic colloids under the influence of magnetic field by cryogenic transmission electron microscopy** (3 pages) Jinsong Wu, M. Aslam, Vinayak P. Dravid
- 082506 **Input impedance and gain of a gigahertz amplifier using a dc superconducting quantum interference device in a quarter wave resonator** (3 pages) Lafe Spietz, Kent Irwin, José Aumentado
- 082507 **Defect dependent ferromagnetism in MgO doped with Ni and Co** (3 pages) J. Narayan, Sudhakar Nori, D. K. Pandya, D. K. Avasthi, A. I. Smirnov
- 082508 **Tunnel magnetoresistance of 604% at 300 K by suppression of Ta diffusion in CoFeB/MgO/CoFeB pseudo-spin-valves annealed at high temperature** (3 pages) S. Ikeda, J. Hayakawa, Y. Ashizawa, Y. M. Lee, K. Miura, H. Hasegawa, M. Tsunoda, F. Matsukura, H. Ohno

DIELECTRICS AND FERROELECTRICITY

- 082901 **Response of polar nanoregions in 68%Pb(Mg_{1/3}Nb_{2/3})O₃-32%PbTiO₃ to a [001] electric field** (3 pages) Jinsheng Wen, Guangyong Xu, C. Stock, P. M. Gehring
- 082902 **Thickness-dependent structural and electrical properties of multiferroic Mn-doped BiFeO₃ thin films grown epitaxially by pulsed laser deposition** (3 pages) X. H. Zhu, H. Béa, M. Bibes, S. Fusil, K. Bouzehouane, E. Jacquet, A. Barthélémy, D. Lebeugle, M. Viret, D. Colson
- 082903 **Rhombohedral-to-tetragonal phase transformation and thermal depolarization in relaxor-based ferroelectric single crystal** (3 pages) W. S. Chang, L. C. Lim, P. Yang, C.-S. Tu

082904 **Germanium-induced stabilization of a very high-*k* zirconia phase in ZrO₂/GeO₂ gate stacks** (3 pages)

P. Tsipas, S. N. Volkos, A. Sotiropoulos, S. F. Galata, G. Mavrou, D. Tsoutsou, Y. Panayiotatos, A. Dimoulas, C. Marchiori, J. Fompeyrine

NANOSCALE SCIENCE AND DESIGN

083101 **High-density one-dimensional well-aligned germanium quantum dots on a nanoridge array** (3 pages)

Yan-Ru Chen, Chieh-Hsiung Kuan, Yuen-Wuu Suen, Yu-Hwa Peng, Peng-Shiu Chen, Cha-Hsin Chao, Elh-Zhe Liang, Ching-Fuh Lin, Hung-Chun Lo

083102 **Ultrafast dynamics of photoexcited charge carriers in nanocrystalline diamond** (3 pages)

P. Němec, J. Preclíková, A. Kromka, B. Rezek, F. Trojánek, P. Malý

083103 **Structural properties of GaAsN/GaAs quantum wells studied at the atomic scale by cross-sectional scanning tunneling microscopy** (3 pages)

J. M. Ulloa, P. M. Koenraad, M. Hopkinson

083104 **Low-loss left-handed metamaterials at millimeter waves** (3 pages)

Fuli Zhang, Davy P. Gaillot, Charles Croëne, Eric Lheurette, Xavier Mélique, Didier Lippens

083105 **Influence of interface roughness on the performance of nanoparticulate zinc oxide field-effect transistors** (3 pages)

Koshi Okamura, Norman Mechau, Donna Nikolova, Horst Hahn

083106 **Direct observation of the size dependence of Dexter energy transfer from polymer to small PbS quantum dots** (3 pages)

Yating Zhang, Zhangcheng Xu

083107 **Effect of defects on oscillation characteristics and instability of carbon nanotube-based oscillators** (3 pages)

P. Liu, H. J. Gao, Y. W. Zhang

083108 **Epitaxial nanotwinned Cu films with high strength and high conductivity** (3 pages)

O. Anderoglu, A. Misra, H. Wang, F. Ronning, M. F. Hundley, X. Zhang

083109 **Reversible work function changes induced by photoisomerization of asymmetric azobenzene dithiol self-assembled monolayers on gold** (3 pages)

Lloyd F. N. Ah Qune, H. Akiyama, T. Nagahiro, K. Tamada, Andrew T. S. Wee

083110 **Partially coherent extreme ultraviolet interference lithography for 16 nm patterning research** (3 pages)

M. Goldstein, A. Wüest, D. Barnhart

083111 **Strain-compensated InAs/GaNAs quantum dots for use in high-efficiency solar cells** (3 pages)

Ryuji Oshima, Ayami Takata, Yoshitaka Okada

083112 **Phonon backscattering and thermal conductivity suppression in sawtooth nanowires** (3 pages)

Arden L. Moore, Sanjoy K. Saha, Ravi S. Prasher, Li Shi

083113 **Direct electrical measurement of an individual α -Fe₂O₃ nanobridge field effect transistor formed via one-step thermal oxidation** (3 pages)

Li-Chieh Hsu, Yuan-Yao Li

083114 **Dilution effects on the photoluminescence of ZnSe quantum-dot dispersions** (3 pages)

Bing C. Mei, Jun Wang, Qi Qiu, Tracy Heckler, Athos Petrou, T. J. Mountziaris

083115 **Electronic and transport properties of contacts between molybdenum sulfide nanowires and gold electrodes** (3 pages)

Igor Popov, Alessandro Pecchia, Shinya Okano, Nitesh Ranjan, Aldo Di Carlo, Gotthard Seifert

083116 **Visualization of weak confinement potentials by near-field optical imaging spectroscopy of exciton and biexciton in a single quantum dot** (3 pages)

Y. Sugimoto, T. Saiki, S. Nomura

083117 **Room temperature luminescent InGaAs/GaAs core-shell nanowires** (3 pages)

F. Jabeen, S. Rubini, V. Grillo, L. Felisari, F. Martelli

083118 **Bandgap bowing in BGaN thin films** (3 pages)

A. Ougazzaden, S. Gautier, T. Moudakir, Z. Djebbour, Z. Lochner, S. Choi, H. J. Kim, J.-H. Ryou, R. D. Dupuis, A. A. Sirenko

(Continued)

- 083119 **rf resistance and inductance of massively parallel single walled carbon nanotubes: Direct, broadband measurements and near perfect 50 Ω impedance matching** (3 pages)
Chris Rutherglen, Dheeraj Jain, Peter Burke
- 083120 **Reversible separation of single-walled carbon nanotubes in bundles** (3 pages)
Sangeeta Sahoo, Ravi Maranganti, Sarah Lastella, Govind Mallick, Shashi Karna, Pradeep Sharma, Pulickel M. Ajayan
- 083121 **High-bias breakdown of Au/1,4-benzenedithiol/Au junctions** (3 pages)
Yumi Teramae, Kazunori Horiguchi, Shuhei Hashimoto, Makusu Tsutsui, Shu Kurokawa, Akira Sakai
- 083122 **Visualization of nanoscale peeling of carbon nanotube on graphite** (3 pages)
Makoto Ishikawa, Ryuichi Harada, Naruo Sasaki, Kouji Miura
- 083123 **Sub-30-nm patterning on quartz for imprint lithography templates** (3 pages)
Charan Srinivasan, J. Nathan Hohman, Mary E. Anderson, Paul S. Weiss, Mark W. Horn
- 083124 **Fabrication of zinc oxide nanorods based heterojunction devices using simple and economic chemical solution method** (3 pages)
N. Koteeswara Reddy, Q. Ahsanulhaq, Y. B. Hahn
- ORGANIC ELECTRONICS AND PHOTONICS**
- 083301 **Memory effect and negative differential resistance in tris-(8-hydroxy quinoline) aluminum/bathocuproine bilayer devices** (3 pages)
Z. S. Su, M. K. Fung, C. S. Lee, W. L. Li, S. T. Lee
- 083302 **Low-voltage high-performance C₆₀ thin film transistors via low-surface-energy phosphonic acid monolayer/hafnium oxide hybrid dielectric** (3 pages)
Orb Acton, Guy Ting, Hong Ma, Alex K.-Y. Jen
- 083303 **Lifetime of organic light emitting diodes on polymer anodes** (3 pages)
Karsten Fehse, Rico Meerheim, Karsten Walzer, Karl Leo, Wilfried Lövenich, Andreas Elschner
- 083304 **Mechanism of charge generation in p-type doped layer in the connection unit of tandem-type organic light-emitting devices** (3 pages)
X. D. Gao, J. Zhou, Z. T. Xie, B. F. Ding, Y. C. Qian, X. M. Ding, X. Y. Hou
- 083305 **Efficient tandem organic solar cells with an Al/MoO₃ intermediate layer** (3 pages)
D. W. Zhao, X. W. Sun, C. Y. Jiang, A. K. K. Kyaw, G. Q. Lo, D. L. Kwong
- 083306 **Indium tin oxide modified transparent nanotube thin films as effective anodes for flexible organic light-emitting diodes** (3 pages)
Jianfeng Li, Liangbing Hu, Jun Liu, Lian Wang, Tobin J. Marks, George Grüner
- 083307 **Using thin film transistors to quantify carrier transport properties of amorphous organic semiconductors** (3 pages)
C. H. Cheung, K. K. Tsung, K. C. Kwok, S. K. So
- 083308 **The density of states in thin film copper phthalocyanine measured by Kelvin probe force microscopy** (3 pages)
K. Celebi, P. J. Jadhav, K. M. Milaninia, M. Bora, M. A. Baldo
- 083309 **A comparison of CuO and Cu₂O hole-injection layers for low voltage organic devices** (3 pages)
G. B. Murdoch, M. Greiner, M. G. Helander, Z. B. Wang, Z. H. Lu
- 083310 **A combined experimental and simulation study on thickness dependence of the emission characteristics in multicolor single layer organic light-emitting diodes** (3 pages)
N. A. Stathopoulos, M. Vasilopoulou, L. C. Palilis, D. G. Georgiadou, P. Argitis
- 083311 **Contact formation at the C₆₀/alkali-metal fluoride/Al interface** (3 pages)
M. G. Helander, Z. B. Wang, Z. H. Lu

(Continued)

DEVICE PHYSICS

- 083501 **Suppression of the intermode plasmon scattering due to total internal reflection of oblique plasmons in a multichannel high-electron-mobility transistor** (3 pages) V. V. Popov
- 083502 **Confining and slowing airborne sound with a corrugated metawire** (3 pages) J. Christensen, P. A. Huidobro, L. Martín-Moreno, F. J. García-Vidal
- 083503 **Diamond solid state ionization chambers for x-ray absorption spectroscopy applications** (3 pages) A. De Sio, A. Bocci, E. Pace, C. Castellano, G. Cinque, N. Tartoni, F. D'Acapito
- 083504 **Surface property controllable multilayered gate dielectric for low voltage organic thin film transistors** (3 pages) Sung Jin Jo, Chang Su Kim, Jong Bok Kim, Joohee Kim, Min Jung Lee, Hyeon Seok Hwang, Hong Koo Baik, Youn Sang Kim
- 083505 **Electrical characterization of organic light-emitting diodes using dipotassium phthalate as n-type dopant** (3 pages) Meng-Huan Ho, Ming-Ta Hsieh, Teng-Ming Chen, Jenn-Fang Chen, Shiao-Wen Hwang, Chin H. Chen
- 083506 **Thermal SiO₂ gated Ge metal-oxide-semiconductor capacitor on Si substrate formed by thin amorphous Ge oxidation and thermal annealing** (3 pages) Yung-Hsien Wu, Jia-Rong Wu, Yuan-Sheng Lin, Min-Lin Wu
- 083507 **Thin-film sensing with planar asymmetric metamaterial resonators** (3 pages) Ibraheem A. Ibraheem Al-Naib, Christian Jansen, Martin Koch
- 083508 **Investigation on doping dependency of solution-processed Ga-doped ZnO thin film transistor** (3 pages) Won Jun Park, Hyun Soo Shin, Byung Du Ahn, Gun Hee Kim, Seung Min Lee, Kyung Ho Kim, Hyun Jae Kim
- 083509 **Observation of near interface oxide traps in single crystalline Nd₂O₃ on Si(111) by quasistatic C-V method** (3 pages) Qing-Qing Sun, Apurba Laha, Shi-Jin Ding, David Wei Zhang, H. Jörg Osten, A. Fissel
- 083510 **Energy distribution of interface traps in germanium metal-oxide-semiconductor field effect transistors with HfO₂ gate dielectric and its impact on mobility** (3 pages) Ruilong Xie, Nan Wu, Chen Shen, Chunxiang Zhu
- 083511 **Influence of metal capping layer on the work function of Mo gated metal-oxide semiconductor stacks** (3 pages) Z. Li, T. Schram, A. Stesmans, A. Franquet, T. Witters, L. Pantisano, N. Yamada, T. Tsunoda, J. Hooker, S. De Gendt, K. De Meyer
- 083512 **Fully epitaxial Fe(110)/MgO(111)/Fe(110) magnetic tunnel junctions: Growth, transport, and spin filtering properties** (3 pages) J. O. Hauch, M. Fonin, M. Fraune, P. Turban, R. Guerrero, F. G. Aliev, J. Mayer, U. Rüdiger, G. Güntherodt
- 083513 **Experimental investigations on channel backscattering characteristics of gate-all-around silicon nanowire transistors from top-down approach** (3 pages) Runsheng Wang, Ru Huang, Liangliang Zhang, Hongwei Liu, Dong-Won Kim, Donggun Park, Yangyuan Wang

APPLIED BIOPHYSICS

- 083901 **Biomimetization of butterfly wings by the conformal-evaporated-film-by-rotation technique for photonics** (3 pages) R. J. Martín-Palma, C. G. Pantano, A. Lakhtakia
- 083902 **Gain optimization in ion sensitive field-effect transistor based sensor with fully depleted silicon on insulator** (3 pages) Gil Shalev, Amihod Doron, Udi Virobnik, Ariel Cohen, Yosi Sanhedrai, Ilan Levy

(Continued)

INTERDISCIPLINARY AND GENERAL PHYSICS

- 084101 **Different curvatures of tunable liquid microlens via the control of laminar flow rate** (3 pages)
Y. C. Seow, A. Q. Liu, L. K. Chin,
X. C. Li, H. J. Huang,
T. H. Cheng, X. Q. Zhou
- 084102 **Thermochemical control of oil droplet motion on a solid substrate** (3 pages)
Chaeyeon Song, Kipom Kim,
Kyuyong Lee, Hyuk Kyu Pak
- 084103 **Stretching DNA with electric fields beneath submicron interfacial constriction created by a closely fitting microdroplet in a microchannel** (3 pages)
Shu-Fu Hsieh, Chia-Pu Chang,
Yi-Je Juang, Hsien-Hung Wei

COMMENTS

- 086101 **Comment on "Deformation mechanisms of face-centered-cubic metal nanowires with twin boundaries"** [Appl. Phys. Lett. 90, 151909 (2007)] (1 page)
Frederic Sansoz, Chuang Deng
- 086102 **Response to "Comment on 'Deformation mechanisms of face-centered-cubic metal nanowires with twin boundaries'"** [Appl. Phys. Lett. 93, 086101 (2008)] (2 pages)
A. J. Cao, Y. G. Wei,
Scott X. Mao

ERRATA

- 089901 **Publisher's Note: "Near-field radiative heat transfer enhancement via surface phonon polaritons coupling in thin films"** [Appl. Phys. Lett. 93, 043109 (2008)] (1 page)
Mathieu Francoeur,
M. Pinar Mengüç,
Rodolphe Vaillon
- 089902 **Erratum: "The great improvement effect of pores on ZT in $\text{Co}_{1-x}\text{Ni}_x\text{Sb}_3$ system"** [Appl. Phys. Lett. 93, 042108 (2008)] (1 page)
Qinyu He, Shejun Hu,
Xingui Tang, Yucheng Lan,
Jian Yang, Xiaowei Wang,
Zhifeng Ren, Qing Hao,
Gang Chen

- A11 **CUMULATIVE AUTHOR INDEX** (14 pages)