

2013

H. Caglayan, S.-H. Hong, B. Edwards, C. R. Kagan, and N. Engheta, "Near-IR Metatronic Nanocircuits by Design" *Phys. Rev. Lett.* 111, 2013.

T. Gordon, T. Paik, D. Klein, G. Naik, H. Caglayan, A. Boltasseva, and C. Murray, "Shape-Dependent Plasmonic Response and Directed Self-Assembly in a New Semiconductor Building Block, Indium-Doped Cadmium Oxide (ICO)" *Nano Lett.* 13 (6), 2857-63, 2013.

E. J. R. Vesseur, T. Coenen, H. Caglayan, N. Engheta, and A. Polman, "Experimental verification of $n=0$ structures for visible light" *Phys. Rev. Lett.* 110, 2013.

G.A. Shah, V. C. Gungor, O. B. Akan, "A Cross-Layer QoS-Aware Communication Framework in Cognitive Radio Sensor Networks for Smart Grid Applications", to appear in *IEEE Transactions on Industrial Informatics*, 2013.

G. Tuna, V.C. Gungor, K. Gulez, "An Autonomous Wireless Sensor Network Deployment System using Mobile Robots for Human Existence Detection in Case of Disasters," to appear in *Ad Hoc Networks Journal (Elsevier)*, 2013.

G. Tuna, K. Gulez, V. C. Gungor, "The Effects of Exploration Strategies and Communication Models on the Performance of Cooperative Exploration", to appear in *Ad Hoc Networks (Elsevier)*, 2013.

B. Yilmaz, E. Çiftçi "An FDTD-Based Computer Simulation Platform for Shock Wave Propagation in Electrohydraulic Lithotripsy", *Computer Methods and Programs in Biomedicine*, 110, 389-398, 2013.

K.A. Kaya, B. Yilmaz, "A new tool for QT interval analysis during sleep in healthy and obstructive sleep apnea subjects: A study on women", *Turkish Journal of Electrical Engineering and Computer Sciences*, 21, 1504-1513, 2013.

I. Ozdur, P. Toliver, A. Agarwal and T. K. Woodward, "Free-space to single-mode collection efficiency enhancement using photonic lanterns" *Optics Letters*, 38, 3554-3557, 2013.

X. Yang, Y. Ma, E. Mutlugun, Y. Zhao, K. S. Leck, S. T. Tan, H. V. Demir, Q. Zhang, H. Du, X. W. Sun, " Stable, Efficient, and All Solution-Processed Quantum Dot Light-Emitting Diodes with Double-Sided Metal-Oxide Nanoparticle Charge Transport Layers," accepted for publication, *ACS Appl. Mater. Interfaces*, 2013.

U. O. S Seker*, E. Mutlugun*, P. L. Hernandez-Martinez, V. K. Sharma, V. Lesnyak, N. Gaponik, A. Eychmuller and H. V. Demir "Excitonic Bio-Nanohybrids of Quantum Dots and Photoproteins Facilitating Strong Nonradiative Energy Transfer," (*equal contribution), *Nanoscale*, 5, 7034-7040, 2013.

Y. Zhao, R. Chen, Y. Gao, K. S. Leck, X. Yang, S. Liu, A. P. Abiyasa, Y. Divayana, E. Mutlugun, S. T. Tan, H. Sun, H. V. Demir, X. W. Sun, "AC-driven, color- and brightness-tunable organic light-emitting diodes constructed from an electron only device," *Organic Electronics*, in press 2013.

X. Yang, E. Mutlugun, Y. B. Zhao, K. S. Leck, S. T. Tan, H. V. Demir, and X. W. Sun, "Solution Processed Tungsten Oxide Interfacial Layer for Efficient Hole-Injection in Quantum Dot Light-Emitting Diodes, " in press, *Small*, 2013.

T. Ozel, P. L. Hernandez-Martinez, E. Mutlugun, O. Akin, S. Nizamoglu, I. O. Ozel, Q. Zhang, Q. Xiong and H. V. Demir, "Observation of Selective Plasmon-Exciton Coupling in Nonradiative Energy Transfer: Donor-Selective vs. Acceptor-Selective Plexcitons," *Nano Letters*, 13 (7), 3065–3072, 2013.

A. F. Cihan, P. L. Hernandez-Martinez, Y. Kelestemur, E. Mutlugun and H. V. Demir "Observation of Biexcitons in Nanocrystal Solids in the Presence of Photocharging," *ACS Nano*, 7 (6), 4799–4809, 2013.

K. S. Leck, Y. Divayana, D. Zhao, X. Yang, A. P. Abiyasa, E. Mutlugun, Y. Gao, S. Liu, S. T. Tan, X. W. Sun, and H. V. Demir, "A Quantum Dot Light-Emitting Diode with Quantum Dots Inside the Hole Transporting Layers," *ACS Appl. Mater. Interfaces*, 5 (14), 6535–6540, 2013.

S. Akhavan, K. Gungor, E. Mutlugun and H. V. Demir, "Plasmonic light-sensitive skins of nanocrystal monolayers," *Nanotechnology*, 24, 155201, 2013.

G. Abay, "Online condition monitoring of battery systems with a nonlinear estimator", *IEEE Energy Conversion*, pp. 1-8, 2013.

G. Abay, "A modeling and control approach to advanced nuclear power plants with gas turbines," *Energy Conversion and Management*, vol. 76, pp. 899-909, 2013.

G. Abay, "Robust reactivity, neutron source, and precursor estimators for nuclear reactors," *Nuclear Engineering and Design*, pp. 526-533, 2013.

G. Abay, "A robust estimator-based optimal algebraic approach to steam generator feedwater control system", *Turkish Journal of Electrical Engineering and Computer Sciences*, 2013.

G. Abay and T. Aldemir, "Fault detection in nuclear systems using sliding mode observers," *Nuclear Science and Engineering*, vol. 173, no.1, pp. 82-98, 2013.

G. Tuna, V. C. Gungor, K. Gulez, "Wireless Sensor Networks for Smart Grid Applications: A Case Study on Link Reliability and Node Lifetime Evaluations in Power Distribution Systems", in *International Journal of Distributed Sensor Networks*, 2013.