

## Nanomaterials

Grasseschi, Daniel, Filipe S. Lima, Marcelo Nakamura, and Henrique E. Toma. "Hyperspectral dark-field microscopy of gold nanodisks." *Micron* 69 (2015): 15-20.

Bootharaju, M. S., Kamalesh Chaudhari, and T. Pradeep. "Real time plasmonic spectroscopy of the interaction of Hg 2+ with single noble metal nanoparticles." *RSC Advances* 2, no. 26 (2012): 10048-10056.

Zhang, Peng, Sangyoon Park, and Seong Ho Kang. "Microchip Electrophoresis with Enhanced Dark-Field Illumination Detection for Fast Separation of Native Single Super-Paramagnetic Nanoparticles." *Bulletin of the Korean Chemical Society* 36, no. 4 (2015): 1172-1177.

Chaudhari, Kamalesh, and Thalappil Pradeep. "Optical rotation by plasmonic circular dichroism of isolated gold nanorod aggregates." *Applied Physics Letters* 105, no. 20 (2014): 203105.

Debasu, Mengistie L., Carlos DS Brites, Sangeetha Balabhadra, Helena Oliveira, João Rocha, and Luís D. Carlos. "Nanoplatfoms for Plasmon-Induced Heating and Thermometry." *ChemNanoMat* (2016)

Dal Farra, Anna, Susan Kaspari, James Beach, Thomas D. Bucheli, Michael Schaeppman, and Margit Schwikowski. "Spectral signatures of submicron scale light-absorbing impurities in snow and ice using hyperspectral microscopy." *Journal of Glaciology* 64, no. 245 (2018): 377-386.

Wonner, Kevin, Mathies V. Evers, and Kristina Tschulik. "Simultaneous Opto-and Spectro-Electrochemistry: Reactions of Individual Nanoparticles Uncovered by Dark-Field Microscopy." *Journal of the American Chemical Society* 140, no. 40 (2018): 12658-12661.

Li, Bowen, Shuai Zu, Jiadong Zhou, Qiao Jiang, Bowen Du, Hangyong Shan, Yang Luo, Zheng Liu, Xing Zhu, and Zheyu Fang. "Single-Nanoparticle Plasmonic Electro-optic Modulator Based on MoS2 Monolayers." *ACS Nano* 11, no. 10 (2017): 9720-9727.

Zhou, Jing, Sajanalal R. Panikkanvalappil, Saewon Kang, Shengtao Yu, Shuaidi Zhang, Mostafa El-Sayed, and Vladimir V. Tsukruk. "Enhanced Electrochemical Dark-Field Scattering Modulation on a Single Hybrid Core-Shell Nanostructure." *The Journal of Physical Chemistry C* 123, no. 46 (2019): 28343-28352.

Wonner, Kevin, Mathies V. Evers, and Kristina Tschulik. "The electrochemical dissolution of single silver nanoparticles enlightened by hyperspectral dark-field microscopy." *Electrochimica Acta* 301 (2019): 458-464.

Obiakara, Chinedu, and Mahmoud A. Mahmoud. "Electromagnetic plasmonic field of nanoparticles tune the band gap of two-dimensional semiconducting materials." *Journal of Materials Chemistry C* 7, no. 12 (2019): 3675-3687.

Liao, Chih-Kai, Jasmine Phan, Maura Herrera, and Mahmoud A. Mahmoud. "Modifying the Band Gap of Semiconducting Two-Dimensional Materials by Polymer Assembly into Different Structures." *Langmuir* 35, no. 14 (2019): 4956-4965.

Gonell, Francisco, Alexandre MP Botas, Carlos DS Brites, Pedro Amorós, Luís D. Carlos, Beatriz Julián-López, and Rute AS Ferreira. "Aggregation-induced heterogeneities in the emission of upconverting nanoparticles at the submicron scale unfolded by hyperspectral microscopy." *Nanoscale Advances* 1, no. 7 (2019): 2537-2545.

Bhardwaj, Amit, Vimala Sridurai, Navas Meleth Puthoor, Aswathi B. Nair, Tripti Ahuja, and Geetha G. Nair. "Evidence of Tunable Fano Resonance in a Liquid Crystal-Based Colloidal Metamaterial." *Advanced Optical Materials* (2020).

Botas, Alexandre MP, Carlos DS Brites, Jeslin Wu, Uwe Kortshagen, Rui N. Pereira, Luis D. Carlos, and Rute AS Ferreira. "A New Generation of Primary Luminescent Thermometers Based on Silicon Nanoparticles and Operating in Different Media." *Particle & Particle Systems Characterization* 33, no. 10 (2016): 740-748.

Geldmeier, Jeffrey, Lexy Rile, Young Jun Yoon, Jaehan Jung, Zhiqun Lin, and Vladimir V. Tsukruk. "Dewetting-Induced Photoluminescent Enhancement of Poly (lauryl methacrylate)/Quantum Dot Thin Films." *Langmuir* 33, no. 50 (2017): 14325-14331.

Malak, Sidney T., Young Jun Yoon, Marcus J. Smith, Chun Hao Lin, Jaehan Jung, Zhiqun Lin, and Vladimir V. Tsukruk. "Decay-to-recovery behavior and on-off recovery of photoluminescence intensity from core/shell quantum dots." *ACS Photonics* 4, no. 7 (2017): 1691-1704.

Malak, Sidney T., Marcus J. Smith, Young Jun Yoon, Chun Hao Lin, Jaehan Jung, Zhiqun Lin, and Vladimir V. Tsukruk. "Programmed Emission Transformations: Negative-to-Positive Patterning Using the Decay-to-Recovery Behavior of Quantum Dots." *Advanced Optical Materials* 5, no. 1 (2017): 1600509.

Malak, Sidney T., Guanquan Liang, Ramathasan Thevamaran, Young Jun Yoon, Marcus J. Smith, Jaehan Jung, Chun Hao Lin, Zhiqun Lin, Edwin L. Thomas, and Vladimir V. Tsukruk. "High-resolution quantum dot photopatterning via interference lithography assisted microstamping." *The Journal of Physical Chemistry C* 121, no. 24 (2017): 13370-13380.

Mehta, Nishir, Amirreza Mahigir, Georgios Veronis, and Manas Ranjan Gartia. "Orientational imaging of a single plasmonic nanoparticle using dark-field hyperspectral imaging." In *Plasmonics: Design, Materials, Fabrication, Characterization, and Applications XV*, vol. 10346, p. 1034631. International Society for Optics and Photonics, 2017.

## Nanotoxicology

Sanpui, Pallab, Xiao Zheng, Julia C. Loeb, Joseph H. Bisesi Jr, Ifthekeer A. Khan, ARM Nabiul Afrooz, Keira Liu et al. "Single-walled carbon nanotubes increase pandemic influenza A H1N1 virus infectivity of lung epithelial cells." *Particle and fibre toxicology* 11, no. 1 (2014): 1.

María del Pilar Sosa Idelchik, Nicole M. Neu-Baker, Akshaya Chandrasekaran, Adam J. Friedman, Mary D. Frame, Sara A. Brenner. "Relative quantitation of metal oxide nanoparticles in a cutaneous exposure model using enhanced darkfield microscopy and hyperspectral mapping." *NanoImpact*, 3-4, 2016, 12-21,

Peña, María Del Pilar Sosa, Abhishek Gottipati, Sahil Tahiliani, Nicole M. Neu-Baker, Mary D. Frame, Adam J. Friedman, and Sara A. Brenner. "Hyperspectral imaging of nanoparticles in biological samples: Simultaneous visualization and elemental identification." *Microscopy research and technique* (2016).

Roth, Gary A., Maria del Pilar Sosa Peña, Nicole M. Neu-Baker, Sahil Tahiliani, and Sara A. Brenner. "Identification of metal oxide nanoparticles in histological samples by enhanced darkfield microscopy and hyperspectral mapping." *Journal of visualized experiments: JoVE* 106 (2015).

Austin, Carlye A., Georgia K. Hinkley, Anurag R. Mishra, Qin Zhang, Thomas H. Umbreit, Martha W. Betz, Bridget E. Wildt et al. "Distribution and accumulation of 10 nm silver nanoparticles in maternal tissues and visceral yolk sac of pregnant mice, and a potential effect on embryo growth." *Nanotoxicology* 10, no. 6 (2016): 654-661.

Basnet, Mohan, Alexander Gershanov, Kevin J. Wilkinson, Subhasis Ghoshal, and Nathalie Tufenkji. "Interaction between palladium-doped zerovalent iron nanoparticles and biofilm in granular porous media: characterization, transport and viability." *Environmental Science: Nano* 3, no. 1 (2016): 127-137.

Botha, Tarryn Lee, Kailen Boodhia, and Victor Wepener. "Adsorption, uptake and distribution of gold nanoparticles in *Daphnia magna* following long term exposure." *Aquatic Toxicology* 170 (2016): 104-111.

DeBrosse, Madeleine C., Kristen K. Comfort, Emily A. Untener, Donald A. Comfort, and Saber M. Hussain. "High aspect ratio gold nanorods displayed augmented cellular internalization and surface chemistry mediated cytotoxicity." *Materials Science and Engineering: C* 33, no. 7 (2013): 4094-4100.

Badireddy, Appala Raju, Mark R. Wiesner, and Jie Liu. "Detection, characterization, and abundance of engineered nanoparticles in complex waters by hyperspectral imagery with enhanced darkfield microscopy." *Environmental science & technology* 46, no. 18 (2012): 10081-10088.

Konduru, Nagarjun V., Renato J. Jimenez, Archana Swami, Sherri Friend, Vincent Castranova, Philip Demokritou, Joseph D. Brain, and Ramon M. Molina. "Silica coating influences the corona and biokinetics of cerium oxide nanoparticles." *Particle and Fibre Toxicology* 12, no. 1 (2015): 1.

Shannahan, Jonathan H., Hari Sowrirajan, Indushekhar Persaud, Ramakrishna Podila, and Jared M. Brown. "Impact of Silver and Iron Nanoparticle Exposure on Cholesterol Uptake by Macrophages." *Journal of Nanomaterials* 2015 (2015).

Husain, Mainul, Dongmei Wu, Anne T. Saber, Nathalie Decan, Nicklas R. Jacobsen, Andrew Williams, Carole L. Yauk, Hakan Wallin, Ulla Vogel, and Sabina Halappanavar. "Intratracheally instilled titanium dioxide nanoparticles translocate to heart and liver and activate complement cascade in the heart of C57BL/6 mice." *Nanotoxicology* 9, no. 8 (2015): 1013-1022.

Ilves, Marit, Jaana Palomäki, Minnamari Vippola, Maili Lehto, Kai Savolainen, Terhi Savinko, and Harri Alenius. "Topically applied ZnO nanoparticles suppress allergen induced skin inflammation but induce vigorous IgE production in the atopic dermatitis mouse model." *Particle and fibre toxicology* 11, no. 1 (2014): 1.

Arnold, M. C., A. R. Badireddy, M. R. Wiesner, R. T. Di Giulio, and J. N. Meyer. "Cerium oxide nanoparticles are more toxic than equimolar bulk cerium oxide in *Caenorhabditis elegans*." *Archives of environmental contamination and toxicology* 65, no. 2 (2013): 224-233.

Husain, Mainul, Anne T. Saber, Charles Guo, Nicklas R. Jacobsen, Keld A. Jensen, Carole L. Yauk, Andrew Williams, Ulla Vogel, Hakan Wallin, and Sabina Halappanavar. "Pulmonary instillation of low doses of titanium dioxide nanoparticles in mice leads to particle retention and gene expression changes in the absence of inflammation." *Toxicology and applied pharmacology* 269, no. 3 (2013): 250-262.

Allouni, Zouhir E., Paul J. Høl, Miguel A. Cauqui, Nils R. Gjerdet, and Mihaela R. Cimpan. "Role of physicochemical characteristics in the uptake of TiO<sub>2</sub> nanoparticles by fibroblasts." *Toxicology In Vitro* 26, no. 3 (2012): 469-479.

Digigow, Reinaldo G., Dimitri Vanhecke, Barbara Rothen-Rutishauser, Martin JD Clift, and Alke Petri-Fink. "Uptake and Intracellular Fate of Peptide Surface-Functionalized Silica Hybrid Magnetic Nanoparticles In Vitro." *Particle & Particle Systems Characterization* 32, no. 2 (2015): 188-196.

Mercer, Robert R., James F. Scabilloni, Ann F. Hubbs, Liying Wang, Lori A. Battelli, Walter McKinney, Vincent Castranova, and Dale W. Porter. "Extrapulmonary transport of MWCNT following inhalation exposure." *Particle and fibre toxicology* 10, no. 1 (2013): 1.

Zhang, Yongbin, Yang Xu, Zhiguang Li, Tao Chen, Susan M. Lantz, Paul C. Howard, Merle G. Paule et al. "Mechanistic toxicity evaluation of uncoated and PEGylated single-walled carbon nanotubes in neuronal PC12 cells." *ACS nano* 5, no. 9 (2011): 7020-7033.

Wang, Liying, Vincent Castranova, Anurag Mishra, Bean Chen, Robert R. Mercer, Diane Schwegler-Berry, and Yon Rojanasakul. "Dispersion of single-walled carbon nanotubes by a natural lung surfactant for pulmonary in vitro and in vivo toxicity studies." *Particle and fibre toxicology* 7, no. 1 (2010): 1.

Cameron, Pamela, Birgit K. Gaiser, Bidha Bhandari, Paul M. Bartley, Frank Katzer, and Helen Bridle. "Silver nanoparticles decrease the viability of *Cryptosporidium parvum* oocysts." *Applied and environmental microbiology* 82, no. 2 (2016): 431-437.

Mortimer, Monika, Alexander Gogos, Nora Bartolomé, Anne Kahru, Thomas D. Bucheli, and Vera I. Slaveykova. "Potential of hyperspectral imaging microscopy for semi-quantitative analysis of nanoparticle uptake by protozoa." *Environmental science & technology* 48, no. 15 (2014): 8760-8767.

Fakhrullina, Gölnur I., Farida S. Akhatova, Yuri M. Lvov, and Rawil F. Fakhrullin. "Toxicity of halloysite clay nanotubes in vivo: a *Caenorhabditis elegans* study." *Environmental Science: Nano* 2, no. 1 (2015): 54-59.

Wang, Yifei, Wanyi Fu, Yuxiang Shen, Appala Raju Badireddy, Wen Zhang, and Haiou Huang. "Hyperspectral Imaging Microscopy of Acetaminophen Adsorbed on Multiwalled Carbon Nanotubes." *Langmuir* 34, no. 44 (2018): 13210-13218.

Javed, Ibrahim, Guotao Peng, Yanting Xing, Tianyu Yu, Mei Zhao, Aleksandr Kakinen, Ava Faridi et al. "Inhibition of amyloid beta toxicity in zebrafish with a chaperone-gold nanoparticle dual strategy." *Nature Communications* 10, no. 1 (2019): 1-14.

Vales, Gerard, Satu Suhonen, Kirsi M. Siivola, Kai M. Savolainen, Julia Catalán, and Hannu Norppa. "Genotoxicity and Cytotoxicity of Gold Nanoparticles In Vitro: Role of Surface Functionalization and Particle Size." *Nanomaterials* 10, no. 2 (2020).

Kim, Soohyun, Brooke L. Gates, Brian C. Leonard, Megan M. Gragg, Kent E. Pinkerton, Laura S. Van Winkle, Christopher J. Murphy et al. "Engineered metal oxide nanomaterials inhibit corneal epithelial wound healing in vitro and in vivo." *NanoImpact* 17 (2020): 100198.

Boyadzhiev, Andrey, Colleen Trevithick-Sutton, Dongmei Wu, Nathalie Decan, Marc Bazin, Girish M. Shah, and Sabina Halappanavar. "Enhanced Dark-Field Hyperspectral Imaging and Spectral Angle Mapping for Nanomaterial Detection in Consumer Care Products and in Skin Following Dermal Exposure." *Chemical Research in Toxicology* (2020).

Fuchs, Christine SK, Marco Ardigo, Merete Haedersdal, and Mette Mogensen. "In Vivo Reflectance Confocal Microscopy of Gold Microparticles Deposited in the Skin. A Case Report on Cutaneous Chrysiasis." *Lasers in Surgery and Medicine* 52, no. 1 (2020): 13-16.

Théoret, Trevor, and Kevin J. Wilkinson. "Evaluation of enhanced darkfield microscopy and hyperspectral analysis to analyse the fate of silver nanoparticles in wastewaters." *Analytical Methods* 9, no. 26 (2017): 3920-3928.

Mattsson, Karin, Elyse V. Johnson, Anders Malmendal, Sara Linse, Lars-Anders Hansson, and Tommy Cedervall. "Brain damage and behavioural disorders in fish induced by plastic nanoparticles delivered through the food chain." *Scientific Reports* 7, no. 1 (2017): 1-7.

## Nano Bio Sensors and Nano biological Interactions

Chen, Allen L., Ying S. Hu, Meredith A. Jackson, Adam Y. Lin, Joseph K. Young, Robert J. Langsner, and Rebekah A. Drezek. "Quantifying spectral changes experienced by plasmonic nanoparticles in a cellular environment to inform biomedical nanoparticle design." *Nanoscale research letters* 9, no. 1 (2014): 1-16.

Chaudhari, Kamalesh, and Thalappil Pradeep. "Spatiotemporal mapping of three dimensional rotational dynamics of single ultrasmall gold nanorods." *Scientific reports* 4 (2014).

Regivaldo G. Sobral-Filho, Lindsay DeVorkin, Sarah Macpherson, Andrew Jirasek, Julian J. Lum, and Alexandre G. Brolo. "Ex Vivo Detection of Circulating Tumor Cells from Whole Blood by Direct Nanoparticle Visualization." *ACS Nano* 2018 12 (2): 1902-1909.

White, Brittany, Andrew Strawbridge, Christin M. Grabinski, and Saber M. Hussain. "Hyperspectral imaging (HSI) to evaluate the interaction of optically active nanoparticles in biological media and cells." *Bios* 84, no. 4 (2013): 210-217.

Vetten, Melissa A., Nonhlanhla Tlotleng, Delia Tanner Rascher, Amanda Skepu, Frankline K. Keter, Kailen Boodhia, Leigh-Anne Koekemoer, Charlene Andraos, Robert Tshikhudo, and Mary Gulumian. "Label-free in vitro toxicity and uptake assessment of citrate stabilised gold nanoparticles in three cell lines." *Particle and fibre toxicology* 10, no. 1 (2013): 1.

Roth, Gary A., Maria del Pilar Sosa Peña, Nicole M. Neu-Baker, Sahil Tahiliani, and Sara A. Brenner. "Identification of metal oxide nanoparticles in histological samples by enhanced darkfield microscopy and hyperspectral mapping." *Journal of visualized experiments: JoVE* 106 (2015).

Jenkins, Samir V., Haiou Qu, Thilak Mudalige, Taylor M. Ingle, Rongrong Wang, Feng Wang, Paul C. Howard, Jingyi Chen, and Yongbin Zhang. "Rapid determination of plasmonic nanoparticle agglomeration status in blood." *Biomaterials* 51 (2015): 226-237.

Sasidharan, Abhilash, Jim E. Riviere, and Nancy A. Monteiro-Riviere. "Gold and silver nanoparticle interactions with human proteins: impact and implications in biocorona formation." *Journal of Materials Chemistry B* 3, no. 10 (2015): 2075-2082.

Yohan, Darren, Charmainne Cruje, Xiaofeng Lu, and Devika Chithrani. "Elucidating the uptake and distribution of nanoparticles in solid tumors via a multilayered cell culture model." *Nano-Micro Letters* 7, no. 2 (2015): 127-137.

Naumenko, Ekaterina A., Maria R. Dzamukova, Gölner I. Fakhrullina, Farida S. Akhatova, and Rawil F. Fakhrullin. "Nano-labelled cells—a functional tool in biomedical applications." *Current opinion in pharmacology* 18 (2014): 84-90.

Vishnupriya, Sudarsan, Kamalesh Chaudhari, Ramya Jagannathan, and Thalappil Pradeep. "Single-Cell Investigations of Silver Nanoparticle–Bacteria Interactions." *Particle & Particle Systems Characterization* 30, no. 12 (2013): 1056-1062.

Weinkauff, Heidi, and Byron F. Brehm-Stecher. "Enhanced dark field microscopy for rapid artifact-free detection of nanoparticle binding to *Candida albicans* cells and hyphae." *Biotechnology journal* 4, no. 6 (2009): 871-879.

Skebo, Jeanne E., Christin M. Grabinski, Amanda M. Schrand, John J. Schlager, and Saber M. Hussain. "Assessment of metal nanoparticle agglomeration, uptake, and interaction using high-illuminating system." *International journal of toxicology* 26, no. 2 (2007): 135-141.

Wen, Chih-Jen, Li-Wen Zhang, Saleh A. Al-Suwayeh, Tzu-Chen Yen, and Jia-You Fang. "Theranostic liposomes loaded with quantum dots and apomorphine for brain targeting and bioimaging." *Int J Nanomedicine* 7 (2012): 1599-611.

Lee, Woo-Mi, Jin Il Kwak, and Youn-Joo An. "Effect of silver nanoparticles in crop plants *Phaseolus radiatus* and *Sorghum bicolor*: media effect on phytotoxicity." *Chemosphere* 86, no. 5 (2012): 491-499.

Toma, Henrique E., Jorge da Silva Shinohara, and Daniel Grasseschi. "Confocal Raman microscopy and hyperspectral dark field microscopy imaging of chemical and biological systems." In *SPIE BiOS*, pp. 933702-933702. International Society for Optics and Photonics, 2015.

Jacobson, Kurt H., Ian L. Gunsolus, Thomas R. Kuech, Julianne M. Troiano, Eric S. Melby, Samuel E. Lohse, Dehong Hu et al. "Lipopolysaccharide density and structure govern the extent and distance of nanoparticle interaction with actual and model bacterial outer membranes." *Environmental science & technology* 49, no. 17 (2015): 10642-10650.

Sankar, Mohan Udhaya, Sahaja Aigal, Shihabudheen M. Maliyekkal, Amrita Chaudhary, Avula Anil Kumar, Kamalesh Chaudhari, and Thalappil Pradeep. "Biopolymer-reinforced synthetic granular nanocomposites for affordable point-of-use water purification." *Proceedings of the National Academy of Sciences* 110, no. 21 (2013): 8459-8464.

Sobral-Filho, Regivaldo G., Lindsay DeVorkin, Sarah Macpherson, Andrew Jirasek, Julian J. Lum, and Alexandre G. Brolo. "Ex Vivo Detection of Circulating Tumor Cells from Whole Blood by Direct Nanoparticle Visualization." *ACS Nano* 12, no. 2 (2018): 1902-1909.

Kashani, Ahmad Sohrabi, Simona Badilescu, Alisa Piekny, and Muthukumaran Packirisamy. "Perspective—Bio-Nano-Interaction in treatment and management of cancer." *Journal of The Electrochemical Society* 166, no. 9 (2018): B3007.

Zamora-Perez, Paula, Dionysia Tsoutsis, Ruixue Xu, and Pilar Rivera\_Gil. "Hyperspectral-enhanced dark field microscopy for single and collective nanoparticle characterization in biological environments." *Materials* 11, no. 2 (2018): 243.

Javed, Ibrahim, Jiacheng He, Aleksandr Kakinen, Ava Faridi, Wen Yang, Thomas P. Davis, Pu Chun Ke, and Pengyu Chen. "Probing the aggregation and immune response of human islet amyloid polypeptides with ligand-stabilized gold nanoparticles." *ACS Applied Materials & Interfaces* 11, no. 11 (2019): 10462-10471.

Mehta, Nishir, Sushant Sahu, Shahensha Shaik, Syed M. Hasan, Ram Devireddy, and Manas Ranjan Gartia. "Dark-field hyperspectral imaging of single plasmonic gold nanorods and their scattering characteristics in complex biological environments." In *Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues XVII*, vol. 10881, p. 1088119. International Society for Optics and Photonics, 2019.



Pinto, Ricardo JB, Daniela Bispo, Carla Vilela, Alexandre MP Botas, Rute AS Ferreira, Ana C. Menezes, Fábio Campos et al. "One-Minute Synthesis of Size-Controlled Fucoïdan-Gold Nanosystems: Antitumoral Activity and Dark Field Imaging." *Materials* 13, no. 5 (2020): 1076.

Rzagalinski, Beverly A., Holly M. Giovinco, and Byron J. Cheatham. "Cerium Oxide Nanoparticles Improve Lifespan of Stored Blood." *Military Medicine* 185, no. Supplement\_1 (2020): 103-109.

Kuruvínashetti, Kiran, Ahmad Sohrabi Kashani, Simona Badilescu, Daniel Beaudet, Alisa Piekny, and Muthukumaran Packirisamy. "Intracellular Localized Surface Plasmonic Sensing for Subcellular Diagnosis." *Plasmonics* 13, no. 5 (2018): 1639-1648.

SoRelle, Elliott D., Orly Liba, Jos L. Campbell, Roopa Dalal, Cristina L. Zavaleta, and Adam de la Zerda. "Machine learning-assisted hyperspectral analysis of plasmonic contrast agent microbiodistribution with single-particle sensitivity and sub-cellular resolution." In *Plasmonics in Biology and Medicine XIV*, vol. 10080, p. 10080L. International Society for Optics and Photonics, 2017.

## Nanomedicine

Cruje, C., C. Yang, J. Uertz, M. van Prooijen, and B. D. Chithrani. "Optimization of PEG coated nanoscale gold particles for enhanced radiation therapy." *RSC Advances* 5, no. 123 (2015): 101525-101532.

Sotiriou, Georgios A., Fabian Starsich, Athanasia Dasargyri, Moritz C. Wurnig, Frank Krumeich, Andreas Boss, Jean-Christophe Leroux, and Sotiris E. Pratsinis. "Photothermal killing of cancer cells by the controlled plasmonic coupling of silica-coated Au/Fe<sub>2</sub>O<sub>3</sub> nanoaggregates." *Advanced Functional Materials* 24, no. 19 (2014): 2818-2827.

Yang, Celina, Jamie Uertz, and Devika B. Chithrani. "Colloidal Gold-Mediated Delivery of Bleomycin for Improved Outcome in Chemotherapy." *Nanomaterials* 6, no. 3 (2016): 48.

Amreddy, Narsireddy, Ranganayaki Muralidharan, Anish Babu, Meghna Mehta, Elyse V. Johnson, Yan D. Zhao, Anupama Munshi, and Rajagopal Ramesh. "Tumor-targeted and pH-controlled delivery of doxorubicin using gold nanorods for lung cancer therapy." *International journal of nanomedicine* 10 (2015): 6773.

WeiáYap, Lim. "Plasmonic caged gold nanorods for near-infrared light controlled drug delivery." *Nanoscale* 6, no. 23 (2014): 14388-14393.

Neshatian, Mehrnoosh, Stephen Chung, Darren Yohan, Celina Yang, and Devika B. Chithrani. "Determining the size dependence of colloidal gold nanoparticle uptake in a tumor-like interface (hypoxic)." *Colloids and Interface Science Communications* 1 (2014): 57-61.

Yang, C., J. Uertz, D. Yohan, and B. D. Chithrani. "Peptide modified gold nanoparticles for improved cellular uptake, nuclear transport, and intracellular retention." *Nanoscale* 6, no. 20 (2014): 12026-12033.

Zarogoulidis, Paul, Kaid Darwiche, Leslie Krauss, Haidong Huang, George A. Zachariadis, Anna Katsavou, Wolfgang Hohenforst-Schmidt et al. "Inhaled cisplatin deposition and distribution in lymph nodes in stage II lung cancer patients." *Future Oncology* 9, no. 9 (2013): 1307-1313.

Zarogoulidis, P., W. Hohenforst-Schmidt, K. Darwiche, L. Krauss, D. Sparopoulou, L. Sakkas, A. Gschwendtner et al. "2-diethylaminoethyl-dextran methyl methacrylate copolymer nonviral vector: still a long way toward the safety of aerosol gene therapy." *Gene therapy* 20, no. 10 (2013): 1022-1028.

Darwiche, Kaid, Paul Zarogoulidis, Leslie Krauss, Filiz Oezkan, Robert Fred Henry Walter, Robert Werner, Dirk Theegarten et al. "One-stop shop" spectral imaging for rapid on-site diagnosis of lung cancer: a future concept in nanomedicine." *International journal of nanomedicine* 8 (2013): 4533-42.

Mikulova, V., K. Kolostova, and T. Zima. "Methods for detection of circulating tumour cells and their clinical value in cancer patients." *Folia biologica* 57, no. 4 (2011): 151.

Smith, Bryan Ronain, Eliver Eid Bou Ghosn, Hari Krishna Rallapalli, Jennifer A. Prescher, Timothy Larson, Leonore A. Herzenberg, and Sanjiv Sam Gambhir. "Selective uptake of single-walled carbon nanotubes by circulating monocytes for enhanced tumour delivery." *Nature nanotechnology* 9, no. 6 (2014): 481-487.

Yang, Celina, Kyle Bromma, Wonmo Sung, Jan Schuemann, and Devika Chithrani. "Determining the Radiation Enhancement Effects of Gold Nanoparticles in Cells in a Combined Treatment with Cisplatin and Radiation at Therapeutic Megavoltage Energies." *Cancers* 10, no. 5 (2018): 150.

Bromma, Kyle, Kristy Rieck, Jayesh Kulkarni, Connor O'Sullivan, Wonmo Sung, Pieter Cullis, Jan Schuemann, and Devika B. Chithrani. "Use of a lipid nanoparticle system as a Trojan horse in delivery of gold nanoparticles to human breast cancer cells for improved outcomes in radiation therapy." *Cancer Nanotechnology* 10, no. 1 (2019): 1.

## Biomedical and Disease Detection

Swati S. More and Robert Vince. "Hyperspectral Imaging Signatures Detect Amyloidopathy in Alzheimer's Mouse Retina Well before Onset of Cognitive Decline" *ACS Chemical Neuroscience* 2015 6 (2), 306-315

More, Swati S., James M. Beach, and Robert Vince. "Early Detection of Amyloidopathy in Alzheimer's Mice by Hyperspectral Endoscopy Early Detection of Amyloidopathy in Alzheimer's Mice." *Investigative Ophthalmology & Visual Science* 57, no. 7 (2016): 3231-3238.

Verebes, Giulia Sacco, Michele Melchiorre, Adiane Garcia-Leis, Carla Ferreri, Carla Marzetti, and Armida Torreggiani. "Hyperspectral enhanced dark field microscopy for imaging blood cells." *Journal of biophotonics* 6, no. 11-12 (2013): 960-967.

Nishir Mehta, Shahensha Shaik, Sushant Sahu, Ram Devireddy, Manas Ranjan Gartia. "Non-invasive spectral analysis of osteogenic and adipogenic differentiation in adipose derived stem cells using dark-field hyperspectral imaging technique." *Proceedings of SPIE*, 10890, (2019)

Oh, Eung Seok, 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, no. 5 (2014): 051207-051207.

Conti, Marco, Roberta Scanferlato, Maria Louka, Anna Sansone, Carla Marzetti, and Carla Ferreri. "Building up spectral libraries for mapping erythrocytes by hyperspectral dark field microscopy." *Biomedical Spectroscopy and Imaging* 5, no. 2 (2016): 175-184.

Michael, Minto. "Radio frequency dielectric heating and hyperspectral imaging of common foodborne pathogens." PhD diss., Kansas State University, 2014.

Riggs, Rebecca D., I-Hsuan Chen, Oleg Pustovyy, Bertram Zinner, Iryna Sorokulova, and Vitaly Vodyanoy. "Hyperspectral Imaging of a Single Bacterial Cell." *Food and Public Health*, 10(1) (2020): 19-25

Giacometti, Giorgia, Carla Ferreri, Anna Sansone, Chryssostomos Chatgililoglu, Carla Marzetti, Ellas Spyratou, Alexandros G. Georgakilas, Marina Marini, Provvidenza M. Abruzzo, Alessandra Bolotta, Alessandro Ghezzi, Renato Minguzzi, Annio Posar & Paola Visconti. "High predictive values of RBC membrane-based diagnostics by biophotonics in an integrated approach for Autism Spectrum Disorders." *Scientific Reports* 7, no. 1 (2017): 1-9.