

Partial List of Publications using the Zeta 3D Optical Profiler

Publication Year	Publication	General Topic / Keywords	Title	Lead Author
2015	Forensic science international	Bio, Forensics	Quantitative bloodstain analysis: Differentiation of contact transfer patterns versus spatter patterns on fabric via microscopic inspection	Cho, Y.
2015	Phosphorus, Sulfur, and Silicon and the Related Elements	Chemistry	Synthesis and Surface Characterization Studies of Polyether-Linked Symmetric Higher Sulfanyl-1, 3, 4-Oxadiazoles	Yıldırım, A.
2015	Journal of Manufacturing Processes	Manufacturing, Steel, graphene	Graphene oxide colloidal suspensions mitigate carbon diffusion during diamond turning of steel	Smith, P. J.
2015	Journal of Adhesion Science and Technology	Steel, Corrosion	Inhibitive action of the acid extract of <i>Luffa aegyptiaca</i> leaves on the corrosion of mild steel in acidic medium	Jyothi, S.
2015	ACS Applied Materials & Interfaces	Composites	Robust Composite-Shell Microcapsules via Pickering Emulsification	Patchan, M. W.
2015	Journal of Materials Processing Technology	Semiconductor, Silver, Nanoparticles	Bonding strength of multiple SiC die attachment prepared by sintering of Ag nanoparticles	Li, J.
2015	Advanced Materials	Semiconductors, Nanoparticles	Mechanically Sintered Gallium-Indium Nanoparticles	Boley, J. W.
2015	Analytical and bioanalytical chemistry	Bio, tissue protein	Tissue protein imaging at 1 μm laser spot diameter for high spatial resolution and high imaging speed using transmission geometry MALDI TOF MS	Zavalin, A.
2015	Analytical and bioanalytical chemistry	Bio, protein	A method to prevent protein delocalization in imaging mass spectrometry of non-adherent tissues: application to small vertebrate lens imaging	Anderson, D. M.
2015	Journal of Food Engineering	Corrosion, fouling, steel	Influence of fluid milk product composition on fouling and cleaning of Ni-PTFE modified stainless steel heat exchanger surfaces	Huang, K
2015	Green Chemistry	Green, recycling	Electrocatalytic recovery of elements from complex mixtures using deep eutectic solvents	Abbott, A. P.
2015	Surface and Coatings Technology	Corrosion, Steel	Protection of carbon steel against molten aluminum attack and high temperature corrosion using high velocity oxygen-fuel WC-Co coatings	López, A. J.
2015	Journal of The American Society for Mass Spectrometry	Bio, proteins, lipids	High Spatial Resolution Imaging Mass Spectrometry of Human Optic Nerve Lipids and Proteins	Anderson, D. M.
2015	Journal of Analytical Atomic Spectrometry	Manufacturing, laser	Laser-ablation sampling for inductively coupled plasma distance-of-flight mass spectrometry	Gundlach-Graham, A.
2014	Journal of the Science of Food and Agriculture	Manufacturing, Failure Analysis	Effect of cleaning and sanitization agents on the surface characteristics of new and extended-wear produce picking bins	Joey N Talbert

2014	Journal of Surfactants and Detergents	Corrosion, manufacturing, surfactants, detergents	Synthesis of Quaternary, Long-Chain <i>N</i> -Alkyl Amides and Their Corrosion Inhibition in Acidic Media	Serkan Öztürk
2014	Journal of Materials Chemistry C	Resist, e-beam lithography	Towards novel non-chemically amplified (n-CARS) negative resists for electron beam lithography applications	Vikram Singh
2014	Microfluidics and Nanofluidics	Microfluidics, capillary	Automating fluid delivery in a capillary microfluidic device using low-voltage electrowetting valves	Fei He,
2014	International Journal of Hydrogen Energy	Fuel Cells, Battery, Energy	Contact resistance between bipolar plate and gas diffusion layer in high temperature polymer electrolyte fuel cells	Debanand Singdeo
2014	Journal of Alloys and Compounds	Materials, alloys	Temperature dependent magnetic ordering and electrical transport behavior of nano zinc ferrite from 20 to 800 K	B. Daruka Prasad
2014	Journal of Food Engineering	Steel, corrosion	Stability of nonfouling stainless steel heat exchanger plates against commercial cleaning agents	Jeffrey A. Barish,
2014	Langmuir	Bio, Dental, corrosion	Tuning the Pore Composition by Two Simultaneous Interfacial Self-Assembly Processes: Breath Figures and Coffee Stain	Alberto S. de León
2014	Journal of The American Society for Mass Spectrometry	Bio, Retina Tissue, Lipids	High Resolution MALDI Imaging Mass Spectrometry of Retinal Tissue Lipids	David M. G. Anderson,
2014	ACS Applied Materials & Interfaces	PDMS, CVD	Biaxially Mechanical Tuning of 2-D Reversible and Irreversible Surface Topologies through Simultaneous and Sequential Wrinkling	Jie Yin
2014	Materials Research Express	Thin film, Glass, Laser deposition	Surface and conformational characteristics of As ₄₀ S ₆₀ glass films prepared by continuous-wave laser deposition	J M González-Leal
2014	ACS Applied Materials & Interfaces	Nanowires	Facet Cutting and Hydrogenation of In ₂ O ₃ Nanowires for Enhanced Photoelectrochemical Water Splitting	
2014	Integrated Power Systems (CIPS), 2014 8th International Conference on	Silver nanoparticles, sintered joints, welds	Surface Profiles of Printed Ag Nanoparticle Paste and Their Implication on the Quality of Sintered Joints	Wang, Yun
2014	Carbohydrate Polymers	Bio, nanoparticles, antibacterial	Bio-approach: Ureolytic bacteria mediated synthesis of ZnO nanocrystals on cotton fabric and evaluation of their antibacterial properties	P. Dhandapani,
2014	Materials Technology	Bio, Silver, dental	Hot pressed silver doped hydroxyapatite biomaterials with bactericidal properties against magnetotactic bacteria	S. Mandal
2014	MATEC Web of Conferences	manufacturing, solvents, corrosion	Removal of casting defects from CMSX-4® and CMSX-10® alloys by electropolishing in a novel electrolyte; Deep Eutectic Solvent	Dsouza, N.

2014	Applied Surface Science	Bio, fingerprint, electrochemical	Electrochemical behaviour of brass in chloride solution concentrations found in eccrine fingerprint sweat	Bond, J. W.
2014	Applied Surface Science	Manufacturing, laser	One-step fabrication of superhydrophobic hierarchical structures by femtosecond laser ablation	Rukosuyev, M. V.,
2014	Langmuir	Fabrication, thin-film, polymer	Versatile approach for the fabrication of functional wrinkled polymer surfaces	Palacios-Cuesta, M
2014	Polymers	Bio, Adhesion, Polymer	Fabrication of Functional Wrinkled Interfaces from Polymer Blends: Role of the Surface Functionality on the Bacterial Adhesion	Palacios-Cuesta, M.
2014	Acta Metallurgica Sinica	Steel, Corrosion	Corrosion Inhibition of Mild Steel in Sulphuric Acid Using Luffa Aegyptiaca Leaves Extract	Jyothi, S.
2014	Electrochimica Acta	Forensics, steel, fingerprint	Latent fingerprint enhancement via conducting electrochromic copolymer films of pyrrole and 3, 4-ethylenedioxythiophene on stainless steel	Sapstead, R. M
2014	Nano Letters	Bio, Semiconductors, Sensors	Direct, Rapid, and Label-Free Detection of Enzyme-Substrate Interactions in Physiological Buffers Using CMOS-Compatible Nanoribbon Sensors	Mu, L.
2014	Trends in Prosthodontics and Dental Implantology (TPDI)	Bio, Dental, Tool wear	Changes in the diamond bur before and after tooth preparation	John, K.
2014	Molecular Crystals and Liquid Crystals	Tools, Nanoparticle, Silver	Quantitative Microstructure Characterization of Ag Nanoparticle Sintered Joints for Power Die Attachment	Wang, Y.
2014	Physica B: Condensed Matter	Thin-films	Two step growth mechanism of Cu ₂ ZnSnS ₄ thin films	Thota, N.
2013	Applied Surface Science	Corrosion, mineral oil, synthesis	Some higher N-substituted 1,3-thiazolidine-2,4-diones and 5,5-diphenylhydantoin, their synthesis and corrosion preventive properties in mineral oil medium	Serkan Öztürk
2013	ASME 2013 International Manufacturing Science and Engineering Conference	Manufacturing, milling, graphene composites	Micro-Milling Responses of Hierarchical Graphene Composites	Bryan Chu
2013	Nanotechnology, IEEE Transactions On	Copper films, manufacturing	Using an Office Inkjet Printer to Define the Formation of Copper Films on Paper	Kumar, S.
2013	Physics Procedia	Synthesis	Design of Ordered Wrinkled Patterns with Dynamically Tuned Properties	Jose Luis Yagüe,
2013	Journal of Nanoscience and Nanotechnology	manufacturing, micro-maching, graphene	Graphene-Enhanced Environmentally-Benign Cutting Fluids for High-Performance Micro-Machining Applications	Chu, Bryan

2013	Applied Materials and Interfaces, ACS	Corrosion, self-assembly, thin film, steel	Preparation of Self Assembled Sodium Oleate Monolayer on Mild Steel and Its Corrosion Inhibition Behavior in Saline water	H. N. Shubha
2013	Soft Matter	Bio, surfactant	Surfactant sculpting of biologically inspired hierarchical surfaces	Melanie L. Morris
2013	MRS Proceedings	Silver, Nanostructured	Deformation of Porous, Nanostructured Silver at Room Temperature and 150 °C	Guillaume Noiseau
2013	Advanced Materials	Crystal Surface, Electrochemical, Semiconductor Research	Enhanced Photocatalytic Oxygen Evolution by Crystal Cutting	Min Sun
2013	US Patent	Corrosion	Articles having non-fouling surfaces and processes for preparing the same without altering bulk physical properties	Douglas J. K. Weaver
2013	Journal of Micromechanics and Microengineering	Micromachining, microfluidics	Laser micromachining as a metallization tool for microfluidic polymer stacks	T Brettschneider
2013	Journal of Renewable and Sustainable Energy	energy, thin films	Influence of sulfurization temperature on physical properties of Cu ₂ ZnSnS ₄ thin films	Narayana, T.
2013	Faraday discussions	Bio, fingerprint	Nanoscale control of interfacial processes for latent fingerprint enhancement	Sapstead, R. M.
2013	Langmuir	Polymers	Tunable Wrinkle and Crease Surface Morphologies from Photoinitiated Polymerization of Furfuryl Alcohol	Gaillard, J. G.
2013	IJRET: International Journal of Research in Engineering and Technology	Manufacturing, Tape	OPTIMIZATION OF SHRINKAGE AND SURFACE-ROUGHNESS OF LTCC TAPE	Dubey, M.,
2013	International Journal of Science Research	thin-films, sol-gel	Effect of rotation speed and time on the surface structure of CeO ₂ thin films prepared by sol-gel spin coating technique	Sumana, K. S.
2012	Advanced Materials Research	Manufacturing, Laser, Welds	Application of Laser Texturization to Increase the Depth of AA5083 Welds	J.M. Sánchez-Amaya
2012	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Microfluidics, Capillary, Electrowetting	Development and surface characterization of an electrowetting valve for capillary-driven microfluidics	Tiphaine Mérian
2012	Vanderbilt University	Calibration, Mass Spectrometry	DEVELOPMENT OF A STANDARD RETICLE TARGET FOR CALIBRATION OF MALDI IMAGING MASS SPECTROMETRY INSTRUMENTS	Patrick Dale Rawhouser
2012	University of Texas	Nanoparticles, thin film	Film deposition and mechanical properties of silver produced by impaction of nanoparticles	Noiseau, Guillaume Jack Nicolas
2012	Nano Letters	Crystal Surface, Electrochemical, Semiconductor Research	High-Efficiency Electrochemical Hydrogen Evolution Based on Surface Autocatalytic Effect of Ultrathin 3C-SiC Nanocrystals	Chengyu He
2012	Advanced Materials Research	Manufacturing, Steel, Welds, Laser	Application of Laser Texturization to Increase the Depth of AA5083 Welds	.M. Sánchez-Amaya

2012	Photovoltaic Specialists Conference (PVSC), IEEE	Semiconductor, damage analysis	Analysis of saw damage in monocrystalline slurry sawn Si wafers using Raman spectroscopy	Radet, M.
2012	physica status solidi (c)	Photovoltaics, damage analysis	Non-destructive characterization of saw damage in silicon photovoltaics substrates by means of photomodulated optical reflectance	J. Bogdanowicz
2012	Physica Status Solidi	Non-destructive characterization of damage, semiconductors, photovoltaics, energy	Non-destructive characterization of saw damage in silicon photovoltaics substrates by means of photomodulated optical reflectance	J. Bogdanowicz
2012	Photovoltaic Specialists Conference (PVSC), IEEE	photovoltaics, manufacturing	Progress in production-worthy point contact solar cells process	Kumar, P
2012	Colloids and Surfaces A	Microfluidics, electrowetting	Development and surface characterization of an electrowetting valve for capillary-driven microfluidics	Mérian, T.
2012	Photovoltaic Specialists Conference (PVSC), IEEE	Automation, Process Metrology, Photovoltaics, Manufacturing	Automated process metrology in solar cell manufacturing	Velidandla, V.
2012	Phosphorus, Sulfur, and Silicon and the Related Elements	Corrosion, Manufacturing, Steel	Long chain alkylthia-benzimidazoles as corrosion inhibitors for carbon steel in H2SO4 solution	A. Yıldırım
2011	Colloids and Surfaces A	Manufacturing, fabrication	One-step Fabrication of Superhydrophobic Hierarchical	Seong, M. V. R. J. L
2011	Photovoltaic Specialists Conference (PVSC), IEEE	Semiconductor, Photovoltaic, manufacturing	Direct texturization of as sawed monocrystalline silicon solar wafers: Solar cell efficiency as a function of total silicon removal	Wijekoon, K.
2011	Photovoltaic Specialists Conference (PVSC), IEEE	Semiconductor, Photovoltaic, manufacturing	Texture process monitoring in solar cell manufacturing using optical metrology	Velidandla, V.
2010	Photovoltaic Specialists Conference (PVSC), IEEE	Semiconductor, Photovoltaic, manufacturing	Production ready noval texture etching process for fabrication of single crystalline silicon solar cells	Weidman, T.
2010	Photovoltaic Specialists Conference (PVSC), IEEE	Product development, semiconductors, photovoltaics, energy	Development of no-rinse screen printable etch paste for contact via in dielectric films	Mishra, R.