

Research Applications with

New Era Pump Systems, Inc. Syringe Pumps

University	Title	Application	URL
California Institute of Technology	The crossover from two dimensions to one dimension in granular electronic materials	Nanotechnology	www.its.caltech.edu/~heathgrp/Papers/Paperfiles/nnano200981.pdf
Cornell University	Cavity-enhanced on-chip absorption spectroscopy using microring resonators	Microfluidics	nanophotonics.ece.cornell.edu/Publications/Cavity-enhanced%20on-chip%20absorption%20spectroscopy%20using%20microring%20resonators.pdf
Drexel University	Preparation of Electrospun Chitosan-PEO Fibers	Electrospinning	idea.library.drexel.edu/bitstream/1860/1542/1/2007005028.pdf
Georgia Institute of Tech	Electro-kinetically Enhanced Nano-metric Material Removal	Microfluidics	etd.gatech.edu/theses/submitted/etd-08192008-133035/unrestricted/Thesis_final_version%5B2%5D.pdf
Harvard University	Biocompatible surfacants for water-in-flurocarbon emulsions	Microfluidics	peple.seas.harvard.edu/~rowat/publications/holtze.labchip.2008.pdf
Harvard University	Nonmuscle myosin heavy chain IIA mediates integrin LFA-1 de-adhesion during T lympho-	Biology	www.idi.harvard.edu/uploads/investigators/Morin_2008Suppl_18475.pdf

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Lund University	Buffer medium exchange in continuous cell and particle streams using ultrasonic standing wave focusing	Microfluidics	www.elmat.lth.se/fileadmin/user_upload/_temp_/09_MicroChimAct_Augustsson.pdf
Massachusetts Institute of Technology	Development of Opposed-Nozzle Fixture for Measuring the Extensional Properties of Low Viscosity Liquids	Microfluidics	web.mit.edu/soulages/www/MIT/Extensional_Rheometry_files/ICR08_Poster.pdf
Massachusetts Institute of Technology	Investigating the Stability of Viscoelastic Stagnation	Microfluidics	web.mit.edu/nnf/publications/GHM131.pdf
Massachusetts Institute of Technology	A rodent model for the study of invariant visual object recognition	Neuroscience	web.mit.edu/dicarlo-lab/pubs/zoccolan%20et%20al%202009.pdf
National Institute of Health	A transparent cell-culture microchamber with a variably controlled concentration gradient generator and flow field Rectifier	Microfluidics	www.ncbi.nlm.nih.gov/pmc/articles/PMC2719264/

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North Carolina State University	Electrospinning Chitosan-Based Nanofibers for Biomedical Applications	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/13/1/etd.pdf
North Carolina State University	Fabrication and Characterization of Novel Single and Bicomponent Electrospun Nanofibrous Mats	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/785/1/etd.pdf
North Carolina State University	Electrospun Nanofibrous Poly(ϵ -Caprolactone) (PCL) Scaffolds for Liver Tissue Engineering	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/2269/1/etd.pdf
North Carolina State University	Vascular Tissue Engineering Scaffolds from Elastometric Biodegradable Poly (L-lactide-co- ϵ -caprolactone) (PLCL) via Melt Spinning and Electrospinning	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/2584/1/etd.pdf
North Carolina State University	Core-Sheath Differentially Biodegradable Nanofiber Structures for Tissue Engineering	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/5676/1/etd.pdf

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North Carolina State University	Characterization of Structure and Tensile Properties of Electrospun Web	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/1485/1/etd.pdf
North Carolina State University	Mechanical and Physical Properties of Electrospun Nanofibers	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/179/1/etd.pdf
North Carolina State University	De-Bottlenecking the Electrospinning Process Using Superparamagnetic Particles	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/529/1/etd.pdf
North Carolina State University	Hyaluronic Acid-based Nanofibers via Electrospinning	Electrospinning	repository.lib.ncsu.edu/ir/bitstream/1840.16/484/1/etd.pdf
North Carolina State University	Remotely powered distributed microfluidic pumps and mixers based on miniature Diodes	Microfluidics	crystal.che.ncsu.edu/pdfs/LabChip_Diodes_08.pdf
North Carolina State University	New Electrokinetic Techniques for Material Manipulation on the Microscale	Microfluidics	repository.lib.ncsu.edu/ir/bitstream/1840.16/4558/1/etd.pdf

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North Carolina State University	Microdroplet Engineering of Microbioassay and Synthesis of Functional Structured Porous Particles	Microfluidics	repository.lib.ncsu.edu/ir/bitstream/1840.16/5541/1/etd.pdf
North Carolina State University	Kinetics Studies of Dehaloperoxidase-Hemoglobin From Amphitrite Ornata	Physics	repository.lib.ncsu.edu/ir/bitstream/1840.16/107/1/etd.pdf
University of Arizona	Coiling, Entrainment, and Hydrodynamic Coupling of Decelerated Fluid Jets	Microfluidics	www.physics.arizona.edu/~kessler/coiling_jets_prl.pdf
University of California Berkeley	Endothelialized Microvasculature Based on a Biodegradable Elastomer	Tissue Engineering	biomechanics.berkeley.edu/assets/papers/TissueEng2005.pdf
University of Hong Kong & Chinese Academy of Sciences	Microwave plasma treatment of polymer surface for irreversible sealing of microfluidic devices	Microfluidics	www.rsc.org/delivery/_ArticleLinking/DisplayHTMLArticlefor-free.cfm?Journal-Code=LC&Year=2005&ManuscriptID=b504271b&Iss=10

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University of Illinois- Urbana Campus	The Fe(PDP)-catalyzed aliphatic C-H oxidation: a slow addition protocol	Chemistry	www.scs.uiuc.edu/white/pubs/pub13.pdf
University of Massachusetts	Cavitation rheology for soft materials	Chemistry	www.pse.umass.edu/gtew/documents/Tew-SoftMatter-2007-763.pdf
University of Michigan	The "Spin-Grower": A Machine for Rapid Layer-by-Layer Assembly of Nanostructured Materials	Mechanical Engineering	deepblue.lib.umich.edu/bit-stream/2027.42/58685/1/me450w08project17_report.pdf
University of Texas	A Continuous-Flow Polymerase Chain Reaction Microship With Regional Velocity Control	Microfluidics	www.me.utexas.edu/~scchen/pdf/2006JMEMS.pdf
University of Wisconsin-Madison	Microencapsulation of Cells	Microfluidics	home-pages.cae.wisc.edu/~bme200/microencapsulation_fall05/reports/BME_400_Microencapsulation_Final_Report.pdf