

Maria Theresa Dulay

Senior Research Scientist, Basic Life, Rad/Molecular Imaging Program at Stanford

Publications

PUBLICATIONS

- **Detecting bacteria using an artificial antibody**
Dulay, M., Mody, A., Zare, R., Da-Silva-Granja, C.
AMER CHEMICAL SOC.2019
- **Selective and sensitive detection of pathogens with pathogen-imprinted polymers**
Dulay, M.
AMER CHEMICAL SOC.2018
- **Taking back my power: My story of sexual harassment**
Dulay, M.
AMER CHEMICAL SOC.2018
- **Polymer-spray mass spectrometry for rapid analysis of drugs in biofluids**
Dulay, M.
AMER CHEMICAL SOC.2018
- **Polymer-spray mass spectrometric detection and quantitation of hydrophilic compounds and some narcotics.** *Rapid communications in mass spectrometry : RCM*
Dulay, M. T., Zare, R. N.
2017; 31 (19): 1651-58
- **Monitoring Enzymatic Reactions in Real Time Using Venturi Easy Ambient Sonic-Spray Ionization Mass Spectrometry** *ANALYTICAL CHEMISTRY*
Jansson, E. T., Dulay, M. T., Zare, R. N.
2016; 88 (12): 6195-6198
- **Protein Analysis by Ambient Ionization Mass Spectrometry Using Trypsin-Immobilized Organosiloxane Polymer Surfaces** *ANALYTICAL CHEMISTRY*
Dulay, M. T., Eberlin, L. S., Zare, R. N.
2015; 87 (24): 12324-12330
- **Droplet Spray Ionization from a Glass Microscope Slide: Real-Time Monitoring of Ethylene Polymerization** *ANALYTICAL CHEMISTRY*
Jiang, J., Zhang, H., Li, M., Dulay, M. T., Ingram, A. J., Li, N., You, H., Zare, R. N.
2015; 87 (16): 8057-8062
- **Droplet spray ionization from a glass microscope slide: real-time monitoring of ethylene polymerization.** *Analytical chemistry*
Jiang, J., Zhang, H., Li, M., Dulay, M. T., Ingram, A. J., Li, N., You, H., Zare, R. N.
2015; 87 (16): 8057-62
- **Visible light-induced photopolymerization of an in situ macroporous sol-gel monolith** *JOURNAL OF SEPARATION SCIENCE*
Dulay, M. T., Choi, H. N., Zare, R. N.
2007; 30 (17): 2979-2985
- **On-line biological sample cleanup for electrospray mass spectrometry using sol-gel columns** *JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES*
Johannesson, N., Pearce, E., Dulay, M., Zare, R. N., Bergquist, J., Markides, K. E.
2006; 842 (1): 70-74

- **Enhanced proteolytic activity of covalently bound enzymes in photopolymerized sol gel.** *Analytical chemistry*
Dulay, M. T., Baca, Q. J., Zare, R. N.
2005; 77 (14): 4604-4610
- **Enhanced proteolytic activity enzymes in photopolymerized of covalently bound sol gel** *ANALYTICAL CHEMISTRY*
Dulay, M. T., Baca, Q. J., Zare, R. N.
2005; 77 (14): 4604-4610
- **Capillary electrophoretic and micellar electrokinetic separations of asymmetric dimethyl-L-arginine and structurally related amino acids: Quantitation in human plasma** *JOURNAL OF SEPARATION SCIENCE*
Trapp, G., Sydow, K., Dulay, M. T., Chou, T., Cooke, J. P., Zare, R. N.
2004; 27 (17-18): 1483-1490
- **Integration of on-line protein digestion, peptide separation, and protein identification using pepsin-coated photopolymerized sol-gel columns and capillary electrophoresis/mass spectrometry** *ANALYTICAL CHEMISTRY*
Kato, M., Sakai-Kato, K., Jin, H. M., Kubota, K., Miyano, H., Toyo'oka, T., Dulay, M. T., Zare, R. N.
2004; 76 (7): 1896-1902
- **Determination of glutamine and serine in rat cerebrospinal fluid using capillary electrochromatography with a modified photopolymerized sol-gel monolithic column** *JOURNAL OF CHROMATOGRAPHY A*
Kato, M., Jin, H. M., Sakai-Kato, K., Toyo'oka, T., Dulay, M. T., Zare, R. N.
2003; 1004 (1-2): 209-215
- **Toward sol-gel electrochromatographic separations on a chip** *JOURNAL OF SEPARATION SCIENCE*
Morishima, K., Bennett, B. D., Dulay, M. T., Quirino, J. P., Zare, R. N.
2002; 25 (15-17): 1226-1230
- **Capillary electrophoresis separation and native laser-induced fluorescence detection of metallotexaphrins** *JOURNAL OF SEPARATION SCIENCE*
Quirino, J. P., Dulay, M. T., Fu, L., Mody, T. D., Zare, R. N.
2002; 25 (13): 819-824
- **Effect of preparatory conditions on the performance of photopolymerized sol-gel monoliths for capillary electrochromatography** *International Symposium on High Performance Liquid Phase Separations and Related Techniques (HPLC Kyoto)*
Kato, M., Sakai-Kato, K., Toyo'oka, T., Dulay, M. T., Quirino, J. P., Bennett, B. D., Zare, R. N.
ELSEVIER SCIENCE BV.2002: 45-51
- **Genetic screening using the colour change of a PNA-DNA hybrid-binding cyanine dye** *NUCLEIC ACIDS RESEARCH*
Wilhelmsson, L. M., Norden, B., Mukherjee, K., Dulay, M. T., Zare, R. N.
2002; 30 (2)
- **Bonded-phase photopolymerized sol-gel monoliths for reversed phase capillary electrochromatography** *JOURNAL OF SEPARATION SCIENCE*
Dulay, M. T., Quirino, J. P., Bennett, B. D., Zare, R. N.
2002; 25 (1-2): 3-9
- **Strategy for on-line preconcentration in chromatographic separations** *ANALYTICAL CHEMISTRY*
Quirino, J. P., Dulay, M. T., Bennett, B. D., Zare, R. N.
2001; 73 (22): 5539-5543
- **On-line preconcentration in capillary electrochromatography using a porous monolith together with solvent gradient and sample stacking** *ANALYTICAL CHEMISTRY*
Quirino, J. P., Dulay, M. T., Zare, R. N.
2001; 73 (22): 5557-5563
- **Photopolymerized sol-gel monoliths for capillary electrochromatography** *ANALYTICAL CHEMISTRY*
Dulay, M. T., Quirino, J. P., Bennett, B. D., Kato, M., Zare, R. N.
2001; 73 (16): 3921-3926
- **Photopolymerized sol-gel frits for packed columns in capillary electrochromatography** *14th International Symposium on Microscale Separations and Analysis*
Kato, M., Dulay, M. T., Bennett, B. D., Quirino, J. P., Zare, R. N.
ELSEVIER SCIENCE BV.2001: 187-95

- **Enantiomeric separation of amino acids and nonprotein amino acids using a particle-loaded monolithic column** *ELECTROPHORESIS*
Kato, M., Dulay, M. T., Bennett, B., Chen, J. R., Zare, R. N.
2000; 21 (15): 3145-3151
- **Softening of fused-silica capillaries during particle packing** *ELECTROPHORESIS*
Chen, J. R., Dulay, M. T., Zare, R. N.
2000; 21 (7): 1430-1431
- **Macroporous photopolymer frits for capillary electrochromatography** *ANALYTICAL CHEMISTRY*
Chen, J. R., Dulay, M. T., Zare, R. N., Svec, F., Peters, E.
2000; 72 (6): 1224-1227
- **Preparation and characterization of monolithic porous capillary columns loaded with chromatographic particles** *ANALYTICAL CHEMISTRY*
Dulay, M. T., Kulkarni, R. P., Zare, R. N.
1998; 70 (23): 5103-5107
- **Evidence for the extraterrestrial origin of polycyclic aromatic hydrocarbons in the Martian meteorite ALH84001** *General Discussion on Chemistry and Physics of Molecules and Grains in Space*
Clemett, S. J., Dulay, M. T., Gillette, J. S., Chillier, X. D., Mahajan, T. B., Zare, R. N.
ROYAL SOC CHEMISTRY.1998: 417-436
- **The template synthesis and X-ray characterization of pyrrole-derived hexadentate uranyl(VI) Schiff-base macrocyclic complexes** *INORGANICA CHIMICA ACTA*
Sessler, J. L., Mody, T. D., Dulay, M. T., ESPINOZA, R., Lynch, V.
1996; 246 (1-2): 23-30
- **Automated capillary electrochromatography: Reliability and reproducibility studies** *JOURNAL OF CHROMATOGRAPHY A*
Dulay, M. T., Yan, C., Rakestraw, D. J., Zare, R. N.
1996; 725 (2): 361-366