

Professor Andrew de Mello

Honours and Awards

SAC Silver Medal, Royal Society of Chemistry, 2002

Scientists for the New Century Finalist, The Royal Institute of Great Britain, 1999

Unilever Award for Physical Chemistry, University of London, 1991

Entrance Scholarship to Imperial College of Science, Technology & Medicine, 1988

Publications

2005 and 2006

1. A one-step protocol for the chemical derivatisation of glass microfluidic devices. Wootton RCR, deMello AJ, Lab on a Chip, 2006, 6, 471-473.
2. Quantitative 3D mapping of fluidic temperatures within microchannel networks using fluorescence lifetime imaging. Benninger RKP, Koc Y, Hofmann O, Requejo-Isidro J, Neil MAA, French PMW, deMello AJ, Analytical Chemistry, 2006, 78, 2272-2278.
3. Role of electron injection in polyfluorene-based light emitting diodes containing PEDOT : PSS. Brewer PJ, Lane PA, Huang JS, DeMello AJ, Bradley DDC, DeMello JC, Physical Review B, 2005, 71, Art. No. 205209.
4. Thermal Optimisation of the Reimer–Tiemann Reaction using Thermochromic Liquid Crystals on a Microfluidic Reactor. A. Iles, R. Fortt and A.J. de Mello Lab on a Chip, 2005, 5, In press.
5. Towards microalbuminuria determination on a disposable diagnostic microchip with integrated fluorescence detection based on thin-film organic light emitting diodes, Oliver Hofmann, Xuhua Wang, John C. deMello, Donal D. C. Bradley and Andrew J. deMello* Lab on a Chip, 2005, 5, 863-868.
6. Detection of Single Molecules in Liquids
Andrew J de Mello, J.B. Edel & E.K. Hill
Encyclopaedia of Modern Optics (Eds. B.D. Guenther, A. Miller, D. Steel), Academic press, London, 2005
7. Time-resolved fluorescence imaging of solvent interactions in microfluidic devices. Benninger RKP, Hofmann O, McGinty J, Requejo-Isidro J, Munro I, Neil MAA, deMello AJ, French PMW, OPTICS EXPRESS, 2005, 13, 6275-6285.
8. Investigation of the Effects of Doping and Post-Deposition Treatments on the Conductivity, Morphology and Work Function of Poly(3,4-ethylenedioxythiophene)/Poly(styrene sulfonate) Films
J. Huang, P.F. Miller, J.S. Wilson, A.J. deMello, J.C. deMello, D.D.C. Bradley
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9. Thin-film Organic Photodiodes as Integrated Detectors for Microscale Chemiluminescence Assays
Oliver Hofmann, Paul Miller, Paul Sullivan, Timothy S. Jones, John C. deMello, Donal D.C. Bradley & Andrew J. deMello
Sensors & Actuators B: Chemical, 2005, 106, pp. 878-884

10. Method for Rapid Reaction Optimisation in Continuous-Flow Microfluidic Reactors Using Online Raman Spectroscopic Detection
Shee-Ann Leung, Richard F. Winkle, Robert C.R. Wootton & Andrew J. deMello
Analyst, 2005, 130, pp. 46-52 * HOT ARTICLE *

2004

11. Microfluidic Systems for High-Throughput & Combinatorial Chemistry
Christopher J. Cullen, Robert C.R. Wootton & Andrew J. deMello
Current Opinion in Drug Discovery and Development, 2004, 7, pp. 798-806

12. Integrated On-Chip derivatization and Electrophoresis for the Rapid Analysis of Biogenic Amines
Nigel P. Beard, Joshua B. Edel & A.J. deMello
Electrophoresis, 2004, 25, pp. 2363-2373

13. Precise Temperature Control in Microfluidic Devices using Joule Heating of Ionic Liquids
Andrew J. de Mello, Matthew Habgood, N. Llewellyn Lancaster, Tom Welton and Robert C. R. Wootton
Lab on a CHip, 2004, 4, pp. 417 - 419. * HOT ARTICLE *

14. On-Line Analysis of Cdse Nanoparticle Formation in a Continuous Flow Chip-Based Microreactor
S. Krishnadasan, J. Tovilla, R. Vilar, A. J. deMello and J. C. deMello
J. Mat. Chem., 2004, 14, pp. 2655 - 2660

15. Integrated Optical detection For Microfluidic systems using Thin-Film polymer light emitting diodes and Organic photodiodes
Oliver Hofmann, Paul Miller, John C. deMello, Donal D.C. Bradley & Andrew J. deMello
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16. Integrated Optical Detectors for Point-of-Care Diagnostics
O. Hofmann, X. Wang, J.C. deMello, D.D.C. Bradley & A.J. deMello
GIT Lab J Europe, 2004, 8, pp. 28-29

17. Microscale reactors: nanoscale products
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18. Continuous Laminar Evaporation: Micron-Scale Distillation
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19. Thin-Film Polymer Light Emitting Diodes as Integrated Excitation Sources for Microscale Capillary Electrophoresis
J.B. Edel, N. Beard, O. Hofmann, J.C. deMello, D.D.C. Bradley & A.J. deMello
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20. Internal Field Screening in Polymer Light-Emitting Diodes
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21. Continuous Real-time Bubble Monitoring in Microchannels Using Refractive Index Detection
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2003

22. Controlled Synthesis Of Compound Semiconductor Nanoparticles Using Microfluidic Reactors
Joshua B. Edel, Siva Krishnadasan, Jorge Torvilla cao-Romero, Ramon Vilar-Compte, John C. deMello & Andrew J. deMello
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26. Continuous Real-Time Monitoring Of Quantum Dot Synthesis Within Microfluidic Reactors
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27. Precise Control Of The Reimer-Tiemann Reaction Using Integrated Heating And Thermo-chromic Liquid Crystals
R. Fortt, A. Iles and A.J. de Mello
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28. Seeing Single Molecules

A. J. de Mello
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29. Single Particle Confocal Fluorescence Spectroscopy in Microchannels: Dependence of Burst Width and Burst Area Distributions on Particle Size and Flow Rate

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30. DNA Amplification in Motion

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2002

33. Life, the Universe and Microfluidics

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N. P. Beard, A. J. De Mello
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41. Trends: Miniaturisation

A. J. de Mello

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A.J. de Mello & R.C.R. Wootton

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57. Single-molecule detection using confocal fluorescence detection: Assessment of optical probe volumes

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66. Chemical Amplification: Continuous-Flow PCR on a Chip
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A.J. de Mello & A. Manz
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J.C.T. Eijkel, A.J. de Mello & A. Manz
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1996

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