Publications:

For reprints or information, contact:-
Dr. Derek G. Gray Department of Chemistry, McGill University,
Room 107, Pulp and Paper Building, 3420 University St, Montreal, Canada H3A 2A7
Phone (514) 398-6182 Fax (514) 398-8234
E-mail derek.gray@mcgill.ca
Web page www.gray-group.mcgill.ca
Up-to-date publications http://scholar.google.ca/citations?user=xhu4_SsAAAAJ&hl=en

213 Twist–Bend Stage in the Relaxation of Sheared Chiral Nematic Suspensions of Cellulose Nanocrystals
Derek G. Gray and Xiaoyue Mu
ACS Omega, 1(2), 212–219 (2016). doi.org/10.1021/acsomega.6b00100

212 Chiral Nematic Structure of Cellulose Nanocrystal Suspensions and Films; Polarized Light and Atomic Force Microscopy.
Derek G. Gray and Xiaoyue Mu

211. Droplets of cellulose nanocrystal suspensions on drying give iridescent 3-D “coffee-stain” rings
Xiaoyue Mu and Derek G. Gray

210. Isolation and handedness of helical coiled cellulosic thickenings from plant petiole tracheary elements
Derek G. Gray

209. Formation of chiral nematic films from cellulose nanocrystal suspensions is a two-stage process
Xiaoyue Mu and Derek G. Gray
Langmuir, 30(31), 9256–9260 (2014) DOI: 10.1021/la501741r

208. Preparation and properties of cellulose nanocrystals prepared by oxidation with ammonium persulfate
Carlos F. Castro–Guerrero and Derek G. Gray
Cellulose, 21(4), 2567-2577 (2014) DOI: 10.1007/s10570-014-0308-1

207. Functionalization of cellulose nanocrystal films via “thiol–ene” click reaction
Jian-Lin Huang, Chao-Jun Li and Derek G. Gray

206. Iridescent films from nanocrystalline cellulose: chiral nematic or smectic multilamellar structure?
Derek G. Gray
J-FOR, 3(2), 6-8 (2013).


204. A3-coupling catalyzed by robust Au nanoparticles covalently bonded to HS-functionalized cellulose nanocrystalline films
Jian-Lin Huang, Derek G. Gray* and Chao-Jun Li*

203. Cellulose nanocrystals incorporating fluorescein methyleoumarin groups
Jian-Lin Huang, Chao-Jun Li* and Derek G. Gray
ACS Sustainable Chemistry and Engineering, 1, 1160-1164 (2013) DOI:10.1021/sc400074e

202. Estimation of the surface sulfur content of cellulose nanocrystals prepared by sulfuric acid hydrolysis
Tiffany Abitbol, Elisabeth Kloser and Derek G. Gray

201. SEM imaging of chiral nematic films cast from cellulose nanocrystal suspensions
Johanna Majoinen, Eero Kontturi, Olli Ikala and Derek G. Gray

200. Viscosity measurements of dilute aqueous suspensions of cellulose nanocrystals using a rolling ball viscometer
Erick González-Labrada and Derek G. Gray

199. Gelation of cellulose nanocrystal suspensions in glycerol
Annie Dorris and Derek G. Gray,

Dieter Klemm, Friederike Kramer, Sebastian Moritz, Tom Lindström, Mikael Ankerfors, Derek Gray, and Annie Dorris,

197. Electrospinning of Fluorescent Fibers from CdSe/ZnS Quantum Dots in Cellulose Triacetate
Tiffany Abitbol, Jordan T. Wilson and Derek G. Gray,

196. Bactericidal Paper Impregnated with Silver Nanoparticles for Point-of-Use Water Treatment
Theresa A. Dankovich  and Derek G. Gray

195. Contact Angle Measurements on Smooth Nanocrystalline Cellulose (I) Thin Films
Theresa A. Dankovich and Derek G. Gray

194. Reinforcement with cellulose nanocrystals of poly(vinyl alcohol) hydrogels prepared by cyclic freezing and thawing
Tiffany Abitbol, Timothy Johnstone, Thomas M. Quinn and Derek G. Gray
*Soft Matter, 7*(6), 2373-2379 (2011)


192. Direct surface force measurements of polyelectrolyte multilayer films containing nanocrystalline cellulose
Emily D. Cranston, Derek G. Gray and Mark W. Rutland

191. Surface PEG-grafting of cellulose nanocrystals in aqueous media
Elisabeth Kloser and Derek G. Gray

190. Protein alignment using cellulose nanocrystals: practical considerations and range of application
Alexey Y. Denisov, Elisabeth M. Kloser, Derek G. Gray, Anthony K. Mittermaier
*J. Biomolecular NMR, 47*(3), 195–204 (2010)

189. Composition of lignocellulosic surfaces: comments on the interpretation of XPS spectra
Derek G. Gray, Morag Weller, Nilgun Ulkem and Agnès Lejeune

188. Chiral structure in petiole vascular bundles.
Derek G. Gray and Joshua G. Lucate

187. Review of Polyelectrolyte Multilayers Containing Cellulose
Emily D. Cranston and Derek G. Gray

186. Model Cellulose I Surfaces; a review
Emily D. Cranston and Derek G. Gray,

185. Incorporation into paper of cellulose triacetate films containing semiconductor nanoparticles
Tiffany Abitbol and Derek G. Gray

184. Cationic Surface Functionalization of Cellulose Nanocrystals
Merima Hasani, Emily D. Cranston, Gunnar Westman and Derek G. Gray,
183. Birefringence in Spin-Coated Films Containing Cellulose Nanocrystals
Emily D. Cranston and Derek G. Gray,

182. Synthesis and characterization of blue dextrins,
David R. Viet, Stephanie C. Beck-Candanedo and Derek G. Gray

181. Partitioning of charged and neutral dextran–dye derivatives in biphasic cellulose nanocrystal suspensions
Stephanie Beck-Candanedo, David Viet and Derek G. Gray

180. Transcrystallization of polypropylene at cellulose nanocrystal surfaces
D.G. Gray

179. CdSe/ZnS quantum dots embedded in cellulose triacetate films with hydrophilic surfaces.
Tiffany Abitbol and Derek G. Gray.

178. Triphase equilibria in cellulose nanocrystal suspensions containing neutral and charged macromolecules.
Stephanie C. Beck-Candanedo, David R. Viet and Derek G. Gray

177. Dispersion of Cellulose Nanocrystals in Polar Organic Solvents
David Viet, Stephanie Beck-Candanedo and Derek G. Gray,

176. Induced Phase Separation in Low Ionic Strength Cellulose Nanocrystal Suspensions Containing High Molecular Weight Blue Dextrans
Stephanie Beck-Candanedo, David Viet and Derek G. Gray

175. Induced Phase Separation in Cellulose Nanocrystal Suspensions Containing Ionic Dye Species
Stephanie Beck-Candanedo, David Viet and Derek G. Gray,

Johanna Stiernstedt, Niklas Nordgren, Lars Wagberg, Harry Brumer, Derek G. Gray, Mark W. Rutland,

173. Isolation of Cellulose Structures from the Petiole of *Apium graveolens L.*.
Nilgun Ulkem and Derek G. Gray,

172. Morphological and Optical Characterization of Polyelectrolyte Multilayers Incorporating Nanocrystalline Cellulose
Emily D. Cranston and Derek G. Gray

171. Formation of Cellulose-Based Electrostatic Layer-By-Layer Films in a Magnetic Field
Emily D. Cranston and Derek G. Gray,


169. Surface forces measurements of spin-coated cellulose thin films with different crystallinity
Shannon M. Notley, Malin Eriksson, Lars Wågberg, Stephanie Beck, Derek G. Gray

168. Critical comparison of methods for surface coverage by extractives and lignin in pulp fibres by X-Ray Photoelectron Spectroscopy (XPS)
Pedro Fardim, Anette Hejnnesson Hultén, Jean-Phillippe Boisvert, Leena-Sisko Johansson, Marie Ernstsson, Joseph M. Campbell, Agnes Lejeune, Bjarne Holmbom, Janne Laine and Derek Gray

166 Parabolic Focal Conics in Self-Assembled Solid Films of Cellulose Nanocrystals
Maren Roman and Derek G. Gray,

165 Effect of Reaction Conditions on the Properties and Behaviour of Wood Cellulose Nanocrystal Suspensions
Stephanie Beck-Candanedo, Maren Roman, and Derek G. Gray,
*Biomacromolecules*, 6(2), 1048-1054 (2005)

164 AFM of Adsorbed Polyelectrolytes on Cellulose I Surfaces spin-coated on Silicon Wafers
Julie Lefebvre and Derek G. Gray,
*Cellulose*, 12, 127-134 (2005)

163 Evidence for a Chiral Internal Stress in Paper Handsheets
M. Yu, T Abitbol and D.G. Gray,

162 Cellulose
A.D. French, N.R. Bertoniere, R.M. Brown, H. Chanzy, D. Gray, K. Hattori and W. Glasser,

161 Smooth Model Cellulose I Surfaces from Nanocrystal Suspensions.
C. Edgar and D.G. Gray

160 Structural and Mechanical Properties of Polyelectrolyte Multilayer Films Studied by AFM
Ozzy Mermut, Julie Lefebvre, Derek G. Gray, Christopher J. Barrett

159 Chiral Fibre Twisting at the Edge of Wetted Newsprint Sheets
M. Yu and D.G. Gray

158 Influence of Dextran on the Phase Behaviour of Suspensions of Cellulose Nanocrystals
C.D. Edgar and D.G. Gray

157 Interfacial Tension Between Isotropic and Anisotropic Phases of a Suspension of Rod-like Particles
W. Chen and D.G. Gray

156 Conformability of Wet Pulp Fibres at Small Length Scales
B. Nilsson, L Wågberg and D.G. Gray

155 Induced Circular Dichroism of Chiral Nematic Cellulose Films
C. Edgar and D.G. Gray,
*Cellulose*, 8(1), 5-12 (2001)

154 Cellulose Crystallites
Kieran Fleming, Derek Gray, and Stephen Matthews

153 Cellulose Crystallites: A new and robust liquid crystalline medium for the measurement of residual dipolar couplings
Kieran Fleming, Derek Gray, Sunil Prasannan and Stephen Matthews

151 Imaging Kraft Pulp Fibres in Air and Water by Atomic Force Microscopy

150 Chiral Nematic Cellulose Acetate Films; Reflectivity and Effect of Deacetylation
S. Shimamoto and D.G. Gray,

149 Heterogeneous Fibrillation of Kraft Pulp Fibre Surfaces Observed by Atomic Force Microscopy
L. Pang and D.G. Gray,
T. Furuta and D.G. Gray

147 A Method to Preserve the Chiral Nematic Order of Lyotropic Ethyl Cellulose and (Acetyl)(ethyl)cellulose Mesophases in Solid Films
S. Shimamoto and D.G. Gray,

146 Solid films of cellulose with chiral nematic order and optically variable properties
J.-F. Revol, L. Godbout and D.G. Gray,

145 Scanning Force Microscopy; Application to Cellulose, Wood-Pulp and Paper
D.G. Gray,

144 Effect of Microcrystallite Preparation Conditions on the formation of Colloid Crystals of Cellulose
X.M. Dong, J.-F. Revol and D.G. Gray,

143 Fluorescence Spectroscopy of Cellulose, Lignin and Mechanical Pulps
J.A. Olmstead and D.G. Gray

S. J. Hanley, L. Godbout, J.-F. Revol and D.G. Gray

141 Sodium \(\alpha\)-hydroxyalkyl Phosphinates as Inhibitors of Photoyellowing of High-Yield Pulps.
J.-X Guo, Y.C. Lin and D.G. Gray

140 The Influence of Mechanochemical Action on the Photosensitivity of Refiner Pulps.
Jian. H. Zhu, Corey Archer, Finlay MacNab, Mark P. Andrews, George Kubes, and Derek G. Gray

139 Induced Circular Dichroism of Isotropic and Magnetically-Oriented Chiral Nematic Suspensions of Cellulose Crystallites.
Xue Min Dong and Derek G. Gray

138 Solidified Liquid Crystals of Cellulose with Optically Variable Properties.
J.-F. Revol, L. Godbout and D.G. Gray,
United States Patent 5,629,055 May 13, 1997 (to Paprican); Canada 2,182,387, issued 2000/06/27; European Patent 0 745 112 B1, Sept 20, 2000

137 Effect of Counterions on Ordered Phase Formation in Suspensions of Charged Rodlike Cellulose Crystallites.
Xue Min Dong and Derek G. Gray

136 Chiral Properties of Thin Wood Sections.
D.G. Gray and A. Kam,

135 Chirality in Cellulose and Cellulose-based Materials.
D.G. Gray

134 Effects of Ionic Strength on the Phase Separation of Suspensions of Cellulose Crystallites.
X.M. Dong, T. Kimura, J.-F. Revol and D.G. Gray,

133 Inhibition of light-induced yellowing of high-yield pulp by sodium hydroxymethylphosphinate.
J.-X Guo and D.G. Gray

132 Fluorescence Spectroscopy of Mechanical Pulps III Effect of Chlorite Delignification.
J.A. Olmstead, J.H. Zhu and D.G. Gray
131. Chiral Nematic Suspensions of Cellulose.
J.-F. Revol, L. Godbout, X.-M. Dong and D.G. Gray,

130. Atomic Force Microscopy.

J. H. Zhu and D.G. Gray

128. Fluorescence Emission and Conformation of 6-O-α-(1-Naphthylmethyl)-2,3-di-O-pentylcellulose in Dilute Solution.

127. Induced Circular Dichroism as a Probe of Handedness in Chiral Nematic Polymer Solutions.
J.-X. Guo and D.G. Gray

126. Homogeneous Alkylation of Cellulose in Lithium chloride/dimethyl sulfoxide Solvent with Dimsyl sodium Activation.
L. Petrus, D.G. Gray and J.N. BeMiller,

125. IR and UV Spectroscopic Study of Borohydride Reduced Mechanical Pulp During Monochromatic and Wide Band Irradiation.
J.A. Schmidt, F. Kimura and D.G. Gray

124. A Kinetic Analysis of the Changes in Infra-red Spectra of Mechanical Pulps during Irradiation
F. Kimura, T. Kimura and D.G. Gray,

123. Fluorescent Detection of o-Quinones in Lignin-containing Wood Pulps
J.H. Zhu, J. Olmstead and D.G. Gray

122. Chiral Nematic Ordering of Polysaccharides.
D.G. Gray

121. Effect of Degree of Acetylation and Solvent on the Chiroptical properties of Lyotropic Acetyl(ethyl)cellulose Solutions.
J.-X. Guo and D.G. Gray

120. Lyotropic Cellulosic Liquid Crystals.
J.-X. Guo and D.G. Gray

119. Chiral Nematic Mesophases of Lyotropic and Thermotropic Cellulose Derivatives.
D.G. Gray and B.R. Harkness,

118. FTIR Measurements of the Effect of Irradiation Wavelength on the Colour Reversion of Thermomechanical Pulps
F. Kimura, T. Kimura and D.G. Gray

117. Preparation, Characterization and Mesophase Formation of Esters of Ethylcellulose and Methylcellulose.
J.-X. Guo and D.G. Gray

116. Chiral Twisting Curl of Paper Sheets; Effect of Fibre Orientation
M.E. Astrom, R. Amiri and D.G. Gray
115. Characterization of Hydrogen Bonding in Cellulose-Synthetic Polymer Blend Systems with Regioselectively Substituted Methylcellulose
   T. Kondo, C. Sawatari, R. St.J. Manley and D.G. Gray

114. Chiral Nematic Suspensions of Cellulose Crystallites; Phase Separation and Magnetic Field Orientation.
   Liquid Crystals, 16, 127-134 (1994)

   S.J. Hanley and D.G. Gray

112 Photochromic behavior of UV-irradiated Mechanical Pulps,
   M. Ek, H. Lennholm, G. Lindblad, T. Iversen and D.G. Gray.

111. Fluorescence Emission from Mechanical Pulp Sheets. II Estimation of Quantum Yields.
   J. Zhu and D.G. Gray

110. Fluorescence Emission from Mechanical Pulp Sheets.
   J. Olmstead and D.G. Gray

   J.-F. Revol, J. Giasson, J.-X. Guo, S.J. Hanley, B. Harkness, R.H. Marchessault and D.G. Gray,

108. An Annealing Method for Modeling Liquid Crystal Textures
   T. Kimura and D.G. Gray

107. Orientational Order and Dynamics of CDCl3 in Ethylcellulose/Chloroform Liquid Crystalline Phases.
   C.T. Yim, D.F.R. Gilson D.R. Budgell and D.G. Gray

   T. Kimura, J. Azuma and D.G. Gray,

   T. Kimura and D.G. Gray

104. FT-IR Study of UV-irradiated Stoneground Wood Pulp.
   F. Kimura, T. Kimura and D.G. Gray,
   Holzforschung, 46, 529-532 (1992).

   S.J. Hanley, J. Giasson, J.-F. Revol and D.G. Gray,
   Polymer 33, 4639-4642 (1992).

102. 13C CP/MAS NMR Study of Photodegraded Stoneground Wood Pulp
   T. Kimura, F. Kimura, D.S. Argyropoulos and D.G. Gray,

101. Order Parameters and Side-chain Conformation in Ethylcellulose/Chloroform Liquid Crystal Phases
   C.T. Yim, D.F.R. Gilson, T. Kondo and D.G. Gray,

100. Helicoidal Self-ordering of Cellulose Microfibrils in Aqueous Suspension.
   J.-F. Revol, H. Bradford, J. Giasson, R.H. Marchessault and D.G. Gray,

   T. Kondo and D.G. Gray,

98. Effect of Temperature on the Reflective Properties of Chiral Nematic (Trityl)(hexyl)cellulose Films.
   B.R. Harkness and D.G. Gray,
97. *Effect of Temperature, Solvent and Substitution on the Cholesteric Pitch of (Ethyl)cellulose Mesophases.*
D.R. Budgell and D.G. Gray,

96. *Preparation of Methyl- and Ethylcelluloses with a Controlled Distribution of Substituents.*
T. Kondo and D.G. Gray,

95. *Chiral Twisting Curl in Newsprint Sheets.*
I. Dionne, R.S. Werbowyj and D.G. Gray,

94. *Chiroptical Properties of 6-O-α-(1-methylnaphthalene)-2,3-O-pentyl cellulose.*
B.R. Harkness and D.G. Gray,

93. *Preparation of Chiral Nematic Gels by Radiation Crosslinking.*
J. Giasson, J.-F. Revol, D.G. Gray and J. St-Pierre,

92 *Texture of Cholesteric Cellulosic Gels and Films observed by Electron Microscopy.*
J. Giasson, J.-F. Revol and D.G. Gray

91 *Chiroptical Properties of a New Liquid Crystalline Polymer: (trityl)(pentyl)cellulose.*
B.R. Harkness and D.G. Gray,

90. *Left- and Right-handed Chiral Nematic Mesophases of (Trityl)(alkyl)cellulose Derivatives.*
B.R. Harkness and D.G. Gray,

89. *Preparation and Chiroptical Properties of Tritylated Cellulose Derivatives.*
B.R. Harkness and D.G. Gray.

88. *Solvent Effects on the Optical Rotatory Dispersion from Liquid Crystalline Solutions of (Hydroxypropyl)cellulose.*

87. *Optical Rotatory Dispersion from Liquid Crystalline Solutions and Films of (Hydroxypropyl)cellulose.*
A.M. Ritcey and D.G. Gray,
Liquid Crystals, 6, 717-726 (1989).

86. *Cholesteric Structure in Cellulosic Films.*


84. *Chirality and Structure of Cellulose and Cellulose Derivatives.*

83. *Chirality and Curl of Paper Sheets.*
D.G. Gray.

82. *Chiroptical Properties of (Acetyl)(Ethyl)cellulose Liquid Crystalline Solutions in Chloroform.*
J.-X.Guo and D.G. Gray.

J.-X. Guo and D.G. Gray.

80. *Chiroptical Filters from Aqueous (Hydroxypropyl)cellulose Liquid Crystals.*
G.Charlet and D.G. Gray.
79. *Inverse Gas Chromatographic Study of Carbon Fibre Surfaces*  
A.J. Vukov and D.G. Gray.  

J.Giasson, J.-F. Revol, A.M. Ritcey and D.G. Gray.  

A.M. Ritcey, K.R. Holme and D.G. Gray.  

76. *Cholesteric Order in Gels and Films of Regenerated Cellulose.*  
A.M. Ritcey and D.G. Gray.  

75. *Effect of Residual Linear Orientation on the Optical Properties of Cholesteric Films.*  
A.M. Ritcey, G. Charlet and D.G. Gray.  

74. *Adsorption of n-Alkanes on Carbon Fibers at Zero Surface Coverage.*  
A.J. Vukov and D.G. Gray.  

73. *Circular Reflectivity from the Cholesteric Liquid Crystalline Phase of (2-Ethoxypropyl)cellulose.*  
A.M. Ritcey and D.G. Gray.  

72. *Induced Circular Dichroism Provides Evidence for Helical Solution Conformation in Cellulosic Chains.*  
A.M. Ritcey and D.G. Gray.  

N. Gurnagul and D.G. Gray.  

70. *The Response of Paper Sheet Surface Areas to Changes in Relative Humidity.*  
N. Gurnagul and D.G. Gray.  

F.G.T. St-Germain and D.G. Gray.  

68. *Solid Cholesteric Films Cast from Aqueous (Hydroxypropyl)cellulose.*  
G. Charlet and D.G. Gray.  

67. *Birefringence of a Polymer Cholesteric Liquid Crystal Measured by Refractometry.*  
G.V. Laivins and D.G. Gray.  

66. *The Cholesteric Properties of (Acetoxypropyl)cellulose; Effect of Chain Length and Degree of Acetylation.*  
G.V. Laivins, D.G. Gray and P. Sixou.  

N. Gurnagul, F.G.T. St-Germain and D.G. Gray.  

64. *Chemical Characteristics of Cellulosic Liquid Crystals.*  
D.G. Gray.  

63. *Optical Properties of (Acetoxypropyl)cellulose Mesophases; Factors Influencing the Cholesteric Pitch.*  
G.V. Laivins and D.G. Gray.  
Polymer, 26, 1435-1442 (1985).

62. *The Liquid Crystalline Phase Transition of a Semiflexible Polymer; (Acetoxypropyl)cellulose.*  
G.V. Laivins and D.G. Gray.  
51. **Surface Characterization of Polymers by Inverse Gas Chromatography. Poly(Ethylene Terephthalate) Film.**

50. **The Propanoate Ester of (2-Hydroxypropyl)cellulose; a Thermotropic Cholesteric Polymer which Reflects Visible Light at Ambient Temperatures.**
   G.V. Laivins, S.-L. Tseng and D.G. Gray.

49. **Liquid Crystal Formation from the Benzoic Acid Ester of (2-Hydroxypropyl)cellulose.**
   S.N. Bhadani and D.G. Gray.

48. **Surface Properties of Cellulose and Wood Fibres.**

47. **An ESCA Study of the Chemisorption of Stearic Acid Vapour on Cellulose.**
   S. Takeyama and D.G. Gray.

46. **Surface Characterization of Polyethylene Terephthalate Film by Inverse Gas Chromatography.**
   J. Anhang and D.G. Gray.

45. **The Interaction of Organic Vapors with Hydroxypropyl Cellulose.**
   J.S. Aspler and D.G. Gray.
   Polymer, 23, 43-46 (1982).
44. Adsorption of Hydrocarbons on Silica-Supported Water Surfaces.
   G.M. Dorris and D.G. Gray.

43. Mixing of Water with Hydroxypropyl Cellulose Liquid Crystalline Mesophases.
   J.S. Aspler and D.G. Gray.

42. Cholesteric Liquid Crystalline Phases Based on Acetoxypropyl Cellulose.
   S.-L. Tseng, A. Valente and D.G. Gray.

41. The Adsorption of Hydrocarbons on Cellophane. III. Effect of Relative Humidity.
   S. Katz and D.G. Gray.

40. The Adsorption of Hydrocarbons on Cellophane. II. Finite Coverage Region.
   S. Katz and D.G. Gray.

   S. Katz and D.G. Gray.

38. The Adsorption of Hydrocarbons on the Surface of Water-Swollen Paper.
   G.M. Dorris and D.G. Gray.

   G.M. Dorris and D.G. Gray.

   G.M. Dorris and D.G. Gray.

   Tappi, 63, 139-140 (1980).

34. The Surface Analysis of Some Sulphite Pulps by ESCA.
   S. Takeyama and D.G. Gray.

33. Solvent Extraction for the ESCA Analysis of Paper.
   S. Katz and D.G. Gray.
   Svensk Papperstidn., 83, 226-228 (1980).

32. The Effect of Corona Discharge on the Wettability of Aged Corrugating Medium.
   Tappi, 63, 153-154 (1980).

31. Ordered Phase Formation in Concentrated Hydroxypropyl Cellulose Solutions.
   R.S. Werbowyj and D.G. Gray.

30. Gas Chromatographic and Static Measurements of Solute Activity for a Polymeric Liquid Crystalline Phase.
   J.S. Aspler and D.G. Gray.

   G.M. Dorris and D.G. Gray.

28. The Surface Tension of Aqueous Hydroxypropyl Cellulose Solutions.
   S.A. Chang and D.G. Gray.

27. The Surface Analysis of Paper and Wood Fibres by ESCA. III. Interpretation of C(1s) Peak Shape.
   D.G. Gray.
26. The Surface Analysis of Paper and Wood Fibres by ESCA.
   II. Surface Composition of Mechanical Pulps.
   G.M. Dorris and D.G. Gray.

25. The Surface Analysis of Paper and Wood Fibres by ESCA.
   I. Application to Cellulose and Lignin.
   G.M. Dorris and D.G. Gray.

   D.G. Gray in "Fibre-water Interactions in Paper-making."

   D.G. Gray.

22. The Adsorption of N-Decane on the Surface of Water-Swollen Cellulose Fibers.
   P.R. Tremaine, U.-B. Mohlin and D.G. Gray.

   R.S. Werbowyj and D.G. Gray.

   G.J. Courval and D.G. Gray.

   G.J. Courval and D.G. Gray.

18. Chemical Modification of Polyethylene in a Nitrogen Corona.

17. The Determination of Bet Monolayer Capacities by Gas Solid Chromatography.
   P.R. Tremaine and D.G. Gray.

   G.J. Courval and D.G. Gray.
   Macromolecules, 8, 916-920 (1975).

15. The Adsorption of Non-Swelling Vapours on the Surface of Cellulose.
   P.R. Tremaine and D.G. Gray.

14. The Effect of Surface Adsorption on Gas Chromatographic Measurements Near Polymer Melting Transitions.
   G. Courval and D.G. Gray.
   Macromolecules, 8, 326-331 (1975).

13. "Transcrystallization" Induced by Mechanical Stress on a Polypropylene Melt.
   D.G. Gray.

12. Polypropylene Transcrystallization at the Surface of Cellulose Fibers.
   D.G. Gray.

11. Open Tubular Columns for Studies on Polymer Stationary Phases by Gas Chromatography.
   D.G. Gray and J.E. Guillet.

10. Gas Chromatography on Polymers at Temperatures Close to the Glass Transition.
   D.G. Gray and J.E. Guillet.
   Macromolecules, 7, 244-247 (1974).

   U.-B. Mohlin and D.G. Gray.
   D.G. Gray and J.E. Guillet.  

   D.G. Gray and J.E. Guillet.  

   A.N. Stein, D.G. Gray and J.E. Guillet.  

5. *The Application of the Molecular Probe Technique to a Study of Polymer Crystallization Rates.*  
   D.G. Gray and J.E. Guillet.  

   D.G. Gray and J.A. Harrison.  

3. *A Study of Some Primary Processes in Electropolymerization by Cyclic Voltammetry of Phenyl-Substituted Ethylenes.*  
   B.L. Funt and D.G. Gray.  

2. *The Cyclic Voltammetry of Diphenylpicrylhydrazyl in Tetrahydrofuran.*  
   B.L. Funt and D.G. Gray.  

1. *Electrolytically Initiated Copolymerization of Styrene and Methylmethacrylate.*  
   B.L. Funt and D.G. Gray.  