

PEER REVIEWED

(A) BOOKS

- 1 B **Brook, M. A.** *SILICON IN ORGANIC, ORGANOMETALLIC AND POLYMER CHEMISTRY*, WILEY: NEW YORK, 2000, 608 pages, (704 including tables, and indices, SOLE AUTHOR).

(B) CONTRIBUTIONS TO BOOKS

12. F Michael A. Brook, **Lihua Liu**, **Shigui Zhao**, and **Zaid N. Mammo**, *Etching of Silicone Elastomers: Controlled Manipulation of Surface Roughness*, in *Synthesis and Properties of Silicones and Silicone-Modified Materials*, Clarkson, S. J.; Fitzgerald, J. J.; Owen, M. J.; Smith, S. D.; Van Dyke, M. E., Eds, accepted, Jan 5, 2009.
11. **Weian Zhao**, Michael A. Brook and Yingfu Li. (invited) Protocols in Nanostructure Design. The Methods in Molecular Biology series by Humana Press. 2007, Submitted.
10. F **David B. Thompson**, **Amanda S. Fawcett** and **Michael A. Brook**, *Simple Strategies to Manipulate Hydrophilic Domains in Silicones*, in “Silicon Based Polymers”, Ganachaud, F.; Boileau, S.; Boury, B., Eds., Springer, 2008, pp 29-38.
9. F **Paul M. Zelisko**, **Amro M. Ragheb**, **Michael Hrynyk**, and Michael A. Brook, *Proteins at Silicone Interfaces*, in *Synthesis and Properties of Silicones and Silicone-Modified Materials*, Clarkson, S. J.; Fitzgerald, J. J.; Owen, M. J.; Smith, S. D.; Van Dyke, M. E., Eds, 2007, ACS Symposium Series 964, (Science and Technology of Silicones and Silicone-Modified Materials), 256-266.
8. F **M. Liu**, **A. Ragheb**, **P. Zelisko**, and M. A. Brook, *Preparation and Application of Silicone Emulsions Using Biopolymers*, In *Colloidal Biomolecules, Biomaterials, and Biomedical Applications* (Surfactant Science, Vol. 116), Elaïssari, Abdelhamid, Ed.; Marcel Dekker Inc., 2004, Chapter 11, pages-309-329, invited manuscript.
7. F Brook, Michael A.; **Zelisko, Paul**; **Walsh, Meaghan**. *Permeability of silicone - water interfaces in water-in-oil emulsions*. In: *Organosilicon Chemistry V: From Molecules to Materials*, Auner, N.; Weis, J. Eds. (Scientific Contributions presented at the European Silicon Days, Munich, Germany, Sept., 2001), , invited manuscript, Wiley-VCH, Weinheim, 2005, pp. 606-611.
6. F **Paul Zelisko**, **Vasiliki Bartzoka** and **Michael A. Brook**, *Exploiting Favorable Silicone-Protein Interactions: Stabilization Against Denaturation At Oil-Water Interfaces*, in *Synthesis and Properties of Silicones and Silicone-Modified Materials*, Clarkson, S. J.; Fitzgerald, J. J.; Owen, M. J.; Smith, S. D.; Van Dyke, M. E., Eds, ACS Symposium Series 838, 2003, Ch. 19, pp. 212-221, invited manuscript (ISBN 0-8412-3804-9).
5. N **Laronde, F.**; **Brook, M. A.** *Amino acid catalysts for the enantioselective hydrosilane reduction of carbonyl groups*, In *Catalysts for the Fine Chemical Synthesis, Vol. 1, Hydrolysis, Oxidation and Reduction*, Roberts, Stan M.; Poignant, G., Eds., 2002, pp. 169-172.
4. F **Bartzoka, V.**; McDermott, M. R.; **Brook, M. A.**, *Protein-Silicone Interactions at Liquid/Liquid Interfaces*, In *Emulsions, Foams and Thin Films*, Mittal, K. L.; Kumar, P., Eds., Dekker, New York, 2000, Chap. 21, pp. 371-380, Invited manuscript.
3. R Adrian G. Brook and Michael A. Brook, *The Chemistry of Silenes*, *Adv. Organomet. Chem.*, **1996**, 39, 71-158.
2. R **Michael A. Brook**, *1,2-bis-(Trimethylsilyloxy)cyclohexene*, in *Encyclopaedia of Reagents in Organic Synthesis*, L. Paquette, Ed., John Wiley and Sons, Vol 1, 1995, p. 602, invited manuscript.
1. R **Michael A. Brook**, *tert-Butyl α -chloro- α -trimethylsilylacetate*, in *Encyclopaedia of Reagents in Organic Synthesis*, L. Paquette, Ed., John Wiley and Sons, Vol. 2, 1995, p. 862, invited manuscript.

(C) JOURNAL ARTICLES (C = COMMUNICATION, N = NOTE, L = LETTER, F = FULL PAPER, R = REVIEW)

ACCEPTED FOR PUBLICATION

173. C Johan G. Alauzun, Heather Sheardown,* Ferdinand Gonzaga, Renita D'Souza and Michael A. Brook* *Generic, S_N2 Reactive Silicone Surfaces: Facile Routes to New Materials*, accepted to *J. Mater. Chem.* Apr. 14, 2009. DOI: 10.1039/b904396a
172. F Andrew S. Mikhail, Jill J. Ranger, Lihua Liu, Ryan Longenecker, David B. Thompson, Heather D. Sheardown,* Michael A. Brook* *Rapid and Efficient Assembly of Functional Silicone Surfaces Protected by PEG: Cell Adhesion to Peptide-Modified PDMS*, *J. Biomat. Sci., Polym. Ed.*, accepted Apr. 3, 2009.

PUBLICATIONS

171. F Mustafa Mohamed and Michael A. Brook*, *α -(3,5-Bis(silyl)allyl)amino acid derivatives from the Claisen rearrangement of propargyl glycinates*, *Collect. Czech. Chem. Commun.* **2009**, *74*, 927-934, Issue in honour of Alfred Bader, invited manuscript.
170. F Lucy Ye, Carlos D. M. Filipe, Mojgan Kavooosi, Charles A. Haynes, Robert Pelton, and Michael A. Brook, *Immobilization of TiO₂ nanoparticles onto cellulose fibers through bioconjugation*, *J. Mater. Chem.*, **2009**, *19*, 2189–2198. DOI=10.1039/b818410k.
169. F Rebecca Cademartiri, Michael A. Brook, Robert Pelton, and John D. Brennan, *Macroporous Silica Using a "Sticky" Stöber Process*, *J. Mater. Chem.*, **2009**, *19*, 1583–1592. DOI: 10.1039=b815447c.
168. F Weian Zhao, Elodie Pacard, Carole Chaix-Bauvais, Christian Pichot and Michael A. Brook, *Covalent Assembly of Silica Nanoparticle Aggregates for Oligonucleotide*, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2009**, *339*, 25-34. DOI 10.1016/j.colsurfa.2009.01.010
167. C F. Gonzaga, G. Yu, M. A. Brook, *Highly efficient derivatization of polysiloxanes via Click technology*, *Chem. Commun.* **2009**, 1730 – 1732, DOI:10.1039/B821788B.
166. F Klenkler, B. J.; Chen, H.; Chen, Y.; Brook, M. A.; Sheardown, H. *A high-density PEG interfacial layer alters the response to an EGF tethered polydimethylsiloxane surface*, *Journal of Biomaterials Science-Polymer Edition*, **2008**, *19*, 1411-1424.
165. F Weian Zhao, M. Monsur Ali, Sergio D. Aguirre, Michael A. Brook* and Yingfu Li,* *Paper-based Bioassays Using Gold Nanoparticle Colorimetric Probes*, *Anal. Chem.* **2008**, *80*, 8431-37. DOI: 10.1021/ac801008q.
164. F John H. Kaldis, Michael A. Brook, and Michael J. McGlinchey, *Solvent-Mediated Generation of Cobalt Cluster Stabilized Propargyl Cations and Radicals: Allyl Migration versus Peroxide Formation*, *Chem. Eur. J.* **2008**, *14*, 10074-10084, DOI: 10.1002/chem.200801402
163. F David B. Thompson, Ferdinand Gonzaga, Amanda S. Fawcett and Michael A. Brook, *Hydrolytically stable linkers derived from hydrodiisopropylsilanes*, *Silicon Chem.* **2008**, *3*, 327-334, 2008 DOI: 10.1007/s11201-008-9035-5
162. R Weian Zhao, Michael A. Brook, Yingfu Li, *Design of Gold Nanoparticle-Based Colorimetric Biosensing Assays*, *ChemBioChem* **2008**, *9*, 2363-2371.
161. F Paul M. Zelisko, Kulwinder K. Flora, John D. Brennan, and Michael A. Brook, *Properties of Human Serum Albumin and α,ω -Triethoxysilyl-Polydimethylsiloxane in Water-in-Silicone Oil Emulsions*, *Biomacromolecules*, 2008, *9*, 2153-2161. DOI: 10.1021/bm800226z
160. F F. Gonzaga, S. Singh, M. A. Brook, *Biomimetic Synthesis of Gold Nanocrystals Using a Reducing Amphiphile*, *Small* **2008**, *4*, 1390-1398. DOI 10.1002/smll.200701163.
159. F Lucy Ye, Chuanwei Miao, Michael A. Brook, and Robert Pelton, *Photo-flocculation of TiO₂ Microgel Mixed Suspensions*, *Langmuir*, **2008**, *24*; 9341-9343. DOI: 10.1021/la801514t

158. F **Hong Chen**, Liang Wang, Yanxia Zhang, Dan Li, W. Glenn McClung, Michael A. Brook, Heather Sheardown, John L. Brash, *Fibrinolytic Poly(dimethylsiloxane) Surfaces*, *Macromol. Biosci.* **2008**, *8*, 863 – 870. DOI: 10.1002/mabi.200800014.
157. F **Lawson, G.**; Brook, M. A.; **Gonzaga, F.**; de Silveira, G.; **Adronov, A.** Au carbon nanotube composites from self-reduction of Au³⁺ upon poly(ethylene imine) functionalized SWNT thin films, *J. Mater. Chem.*, **2008**, *18*, 1694–1702. DOI: 10.1039/b715277a.
156. R **Weian Zhao, M. Monsur Ali**, Michael A. Brook* and Yingfu Li*. Rolling circle amplification: new applications in nanotechnology and functional nucleic acid-based biodetection. *Angew. Chem. Int. Ed.*, **2008**, *47*, 6330 – 6337. DOI: 10.1002/anie.200705982.
155. F **Weian Zhao, Jeffrey Lam, William Chiuman**, Michael A. Brook,* Yingfu Li.* *Enzymatic cleavage of nucleic acid on gold nanoparticle: a generic platform for facile biosensors*. *Small*, **2008**, *4*, 810–816, DOI: 10.1002/smll.200700757.
154. F Michael A. Brook, Alison C. Holloway, **Kenneth K. Ng, Michael Hrynyk, Carly Moore**, and **Ryan Lall**, *Using a Drug to Structure Its Release Matrix and Release Profile*, *International Journal of Pharmaceutics* **2008**, *358*,121-127; DOI: 10.1016/j.ijpharm.2008.02.029
153. F **Zhao, Weian; Chiuman, William; Lam, Jeff; McManus, Simon; Chen, Wei; Cui, Yuguo**; Brook, Michael; Li, Yingfu DNA Aptamer Folding on Gold Nanoparticle: from Colloid Chemistry to Biosensors, *J. Am. Chem. Soc.* **2008**, *130*, 3610-18, DOI: [10.1021/ja710241b](https://doi.org/10.1021/ja710241b)
152. C **David B. Thompson** and Michael A. Brook, *Rapid Assembly of Complex 3D Siloxane Architectures*, *J. Am. Chem. Soc.* **2008**, *130*, 32-33. DOI: [10.1021/ja0778491](https://doi.org/10.1021/ja0778491).
151. F **Michael A. Brook**, Hanns – Ulrich Saier, Julia Schnabel, Kaitlin Town, and Michael Maloney, Pretreatment of Liquid Silicone Rubbers (LSR) to Remove Volatile Siloxanes, *IECR (Industrial and Engineering Chemical Research)* **2007**, *46*, 8796-8805. DOI: [10.1021/ie061666q](https://doi.org/10.1021/ie061666q).
150. F **Rebecca Voss**, Michael A. Brook,* **Jordan Thompson, Yang Chen**, Robert H. Pelton and John D. Brennan. *Non-destructive horseradish peroxidase immobilization in porous silica nanoparticles*, *Journal of Materials Chemistry*, **2007**, *17*, 4854 – 4863 DOI:10.1039/B709847B.
149. C **Weian Zhao, William Chiuman, Jeffrey C. F. Lam**, Michael A. Brook,* and Yingfu Li*, *Simple and rapid colorimetric enzyme sensing assays using non-crosslinking gold nanoparticle aggregation*, *Chem. Commun.* **2007**, 3729-3731.
148. C **Weian Zhao, Ferdinand Gonzaga**, Yingfu Li,* and Michael A. Brook*, *Highly Stabilized Nucleotide-capped Small Gold Nanoparticles (d < 5 nm) with Tunable Size*, *Advanced Materials* **2007**, *19*, 1766-71 <http://dx.doi.org/10.1002/adma.200602449>.
147. C **Weian Zhao, William Chiuman**, Michael A. Brook,* and Yingfu Li*, *Simple and Rapid Colorimetric Biosensors Based on DNA Aptamer and Non-crosslinking Gold Nanoparticle Aggregation*, *ChemBiochem*, **2007**, *8*, 727-731.
146. F **Lu Ye**, Robert Pelton, **Michael A. Brook** *Biotinylation of TiO₂ Nanoparticles and Their Conjugation with Streptavidin*, *Langmuir*, **2007**, *23*, 5630-5637.
145. F **Paul M. Zelisko, Aimé Lopez Aguilar**, and **Michael A. Brook**, *Delivery of both active enzyme and bleach from water-in-silicone oil (D₄) emulsions*, *Langmuir*, **2007**, *23*, 3620-3625. [doi=10.1021/la063340s](https://doi.org/10.1021/la063340s).
144. F **Sanela Martić**, John D. Brennan, Michael A. Brook, Suzanne Ackloo and Noemi Nagy, *Towards the development of a covalently tethered MALDI system: A study of allyl-modified MALDI matrices*, *Can. J. Chem.*, **2007**, *85*, 66-76.
143. F **Li Gan** and Michael A. Brook, *Competitive Substitution Reactions at Extracoordinate Silicon During Asymmetric Hydrosilylation*, *Organometallics* **2007**, *26*, 945-951.
142. F **Li Gan** and Michael A. Brook, *Hydrosilylation of Ketones Catalyzed by C₂-Symmetric, Proline Derived Complexes*, *Can. J. Chem.* **2006**, *84*, 1416-1425.
141. R **Robert Pelton, Xinglian Geng**, and Michael Brook, *Photocatalytic Paper From Colloidal TiO₂ – Fact or Fantasy*, *Adv. Colloid Interface Sci.*, **2006**, *127*, 43-53.

140. F Yunyu Yi, Yang Chen, Michael A. Brook and John D. Brennan, *Development of Macroporous Titania Monoliths by a Biocompatible Method. Part 2: Enzyme Entrapment Studies*, *Chem. Mater.* **2006**, *18*, 5336-42.
139. F Yang Chen, Yunyu Yi, John D. Brennan, Michael A. Brook, *Development of Macroporous Titania Monoliths using a Biocompatible Method. Part 1: Material Fabrication and Characterization*, *Chem. Mater.* **2006**, *18*, 5326-35.
138. C Weian Zhao, Yan Gao, Michael A. Brook,* and Yingfu Li,* *Wrapping Single-Walled Carbon Nanotubes with Long Single-Stranded DNA Molecules Produced by Rolling Circle Amplification*, *Chem. Commun.* **2006**, 3582-84, DOI: 10.1039/b606518j
137. L Brook, Michael A., *Comments on Total Platinum Concentration and Platinum Oxidation States in Body Fluids, Tissue, and Explants from Women Exposed to Silicone and Saline Breast Implants by IC-ICPMS*, *Anal. Chem.* **2006**, *76*, 5609-5611.
136. F Liang Liang, James M. Dickson, Jianxiong Jiang, Michael A. Brook, *Mass Transfer of Dilute 1,2-Dimethoxyethane Aqueous Solutions During Pervaporation Process*, *J. Appl. Poly. Sci.* **2006**, *100*, 2075-2084.
135. C Weian Zhao, Yan Gao, Srinivas A. Kandadai, Michael A. Brook* and Yingfu Li. *DNA Polymerization on Gold Nanoparticles via Rolling Circle Amplification: Towards Novel Scaffolds for Three-Dimensional Periodical Nanoassembly*, *Angew. Chem. Ed. Engl.* **2006**, *45*, 2409 -2413.
134. F Elodie Pacard, Michael A. Brook, Amro M. Ragheb, Christian Pichot and Carole Chaix, *Elaboration of silica colloid/polymer hybrid support for oligonucleotide synthesis*, *Colloids Surf. B: Biointerfaces* **2006**, *47*, 176-188.
133. R Michael A. Brook, *Platinum in Silicone Breast Implants*, *Biomaterials*, **2006**, *27*, 3274-86 (doi:10.1016/j.biomaterials.2006.01.027)
132. F Sui, Xihua; Lin, Tsai-Yin; Tleugabulova, Dina; Chen, Yang; Brook, Michael A.; Brennan, John D. *Monitoring the Distribution of Covalently Tethered Sugar Moieties in Sol-Gel-Based Silica Monoliths with Fluorescence Anisotropy: Implications for Entrapped Enzyme Activity*. *Chem. Mater.* **2006**, *18*, 887-896.
131. F Chen, H., Brook, M. A., Sheardown, H. D., Chen, Y., Klenkler, B. *A Generic Bioaffinity Surfaces, Bioconjugate Chemistry* **2006**, *17*, 21-28.
130. F Ragheb, A.M.; Hileman, O.E.; Brook, M. *The use of poly(ethylene oxide) for the efficient stabilization of entrapped alpha-chymotrypsin in silicone elastomers: A chemometric study*, *Biomaterials* 2005, 266973-6983, doi:10.1016/j.biomaterials.2005.05.016
129. F Hodgson, Richard J.; Besanger, Travis R.; Brook, Michael A.; Brennan, John D. *Inhibitor Screening Using Immobilized Enzyme Reactor Chromatography/Mass Spectrometry*. *Anal. Chem.* **2005**, *77*, 7512-7519.
128. Liang, L.; Dickson, J. M.; Zhu, Z.; Jiang, J.; Brook, M. A., *Removal of 1,2-dichloroethane from aqueous solutions with novel composite polydimethylsiloxane pervaporation membranes*. *J. Appl. Polym. Sci.* **2005**, *98*, 1477-1491.
127. F Chen, H.; Chen, Y.; Sheardown, H.; Brook, M. A. *Immobilization of heparin on a silicone surface through a PEG spacer*, *Biomaterials*, **2005**, *26*, 7418-7424.
126. C Ragheb, A. M.; Brook, M. A. *Highly stable chymotrypsin entrapped in silicone elastomers*, *Biomaterials* **2005**, *26*, 6973-6983.
125. F Yang Chen, Zheng Zhang, Xihua Sui, John D. Brennan and Michael A. Brook, *Reduced Shrinkage of Sol-Gel Derived Silica Using Sugar-based Silsesquioxane Precursors*, *J. Mater. Chem.* **2005**, *15*, 3132 - 3141.
124. F Hodgson, Richard J.; Brook, Michael A.; Brennan, John D., *Capillary-Scale Monolithic Immunoaffinity Columns for Immunoextraction with In-Line Laser-Induced Fluorescence Detection*. *Anal. Chem.* **2005**, *77*, 4404-4412

123. F [Dong, Hanjiang](#); [Brook, Michael A.](#); [Brennan, John D.](#), *A New Route to Monolithic Methylsilsesquioxanes: Gelation Behavior of Methyltrimethoxysilane and Morphology of Resulting Methylsilsesquioxanes under One-Step and Two-Step Processing*, *Chem. Mater.* **2005**, *17*, 2807-2816.
122. F [Sonya Balduzzi](#), [Michael A. Brook](#) and [Michael J. McGlinchey](#), *Diastereoselective Addition of Allyl- and Crotylstannanes to Dicobalt-Complexed Acetylenic Aldehyde*, *Organometallics* **2005**, *24*, 2617-2627. 121. F [Kovarik, Peter](#); [Hodgson, Richard J.](#); [Covey, Tom](#); [Brook, Michael A.](#); [Brennan, John D.](#), *Capillary-Scale Frontal Affinity Chromatography/MALDI Tandem Mass Spectrometry Using Protein-Doped Monolithic Silica Columns*, *Anal. Chem.* **2005**, *77*, 3340-3350.
120. F [Masaaki Amako](#), [Jonathan Schinkel](#), [Michael A. Brook](#), [Michael J. McGlinchey](#) and [James F. Britten](#), *Rac/meso Transformations of Disiloxane-bis(1-indenyl)-ansa-ferrocenes: An x-ray Crystallographic and NMR Study*, *Organometallics*, **2005**, *24*, 1533-1543. 119. F. [Xihua Sui](#), [Jorge A. Cruz-Aguado](#), [Yang Chen](#), [Zheng Zhang](#), [Michael A. Brook](#) and [John D. Brennan](#), *Properties of Human Serum Albumin Entrapped in Sol-Gel-Derived Silica Bearing Covalently Tethered Sugars*, *Chem. Mater.* **2005**, *17*, 1174-1182.
118. F [Hong Chen](#), [Michael A. Brook](#), [Yang Chen](#), and [Heather Sheardown](#), *Surface properties of PEO-silicone composites: reducing protein adsorption* *J. Biomaterials Sci., Polym. Ed.*, **2005**, *16*, 531-548.
117. F [Hong Chen](#), [Zheng Zhang](#), [Yang Chen](#), [Michael A. Brook](#), [Heather Sheardown](#), *Protein Repellent Silicone Surfaces by Covalent Immobilization of Poly(Ethylene Oxide)*, *Biomaterials*, **2005**, *26*, 2391-2399.
116. F [Amro Ragheb](#), [Michael A. Brook](#) and [Michael Hrynyk](#), *Highly active, lipase silicone composites*, *Biomaterials*, **2005**, *26*, 1653-1664.
115. F. [Masaaki Amako](#), [Jonathan Schinkel](#), [Lee Freiburger](#) and [Michael A. Brook](#), *Silicone Compatible, Siloxane-Supported Organometallic Compounds and Their Catalytic Activities for the Hydrosilylation of Vinylsilanes and Dienes*, *J. Chem. Soc., Dalton Trans.*, **2005**, 74 – 81.
114. F [Michael A. Brook](#), [Yang Chen](#), [Kui Guo](#), [Zheng Zhang](#) and [John D. Brennan](#), *Sugar-Modified Silanes: Precursors for Silica Monoliths*, *J. Sol. Gel. Sci. Technol.* **2004**, *31*, 343-348.
113. F [Dina Tleugabulova](#), [Andy M. Duft](#), [Zheng Zhang](#), [Yang Chen](#), [Michael A. Brook](#) and [John D. Brennan](#), *Evaluating Growth Mechanisms of Silica Particles using Fluorescence Anisotropy Decay Analysis*, *Langmuir* **2004**, *20*, 5924-5932.
112. F [Cruz-Aguado, Jorge A.](#); [Chen, Yang](#); [Zhang, Zheng](#); [Brook, Michael A.](#); [Brennan, John D.](#), *Entrapment of Src Protein Tyrosine Kinase in Sugar-Modified Silica*. *Anal. Chem.* **2004**, *76*(14), 4182-4188.
111. F [Jorge A. Cruz-Aguado](#), [Yang Chen](#), [Zheng Zhang](#), [Nadine H. Elowe](#), [Michael A. Brook](#) and [John D. Brennan](#), *Ultrasensitive ATP Detection Using Firefly Luciferase Entrapped in Sugar-Modified Sol-Gel Derived Silica*, *J. Am. Chem. Soc.* **2004**, *126*, 6878-6879.
110. F [R. J. Hodgson](#), [Y. Chen](#), [Z. Zhang](#), [D. Tleugabulova](#), [H. Long](#), [X. Zhao](#), [M. Organ](#), [M. A. Brook](#), [J. D. Brennan](#), *Protein-Doped Monolithic Silica Columns for Capillary Liquid Chromatography Prepared by the Sol-Gel Method: Applications to Frontal Affinity Chromatography*, *Anal. Chem.* **2004**, *76*, 2780-2790.
109. F [Liang, Liang](#); [Dickson, James M.](#); [Jiang, Jianxiong](#); [Brook, Michael A.](#) *Pervaporation of 1,2-dimethoxyethane from aqueous solutions by crosslinked oligosilylstyrene-poly(dimethylsiloxane) composite membranes*. *J. Appl. Poly. Sci.* **2004**, *92*, 2284-2294.
108. F [Liang, Liang](#); [Dickson, James M.](#); [Jiang, Jianxiong](#); [Brook, Michael A.](#) *Effect of low flow rate on pervaporation of 1,2-dichloroethane with novel polydimethylsiloxane composite membranes*. *J. Membrane Sci.* **2004**, *231*(1-2), 71-79.

107. F [Michael A. Brook](#), [Yang Chen](#), [Kui Guo](#), [Zheng Zhang](#) and John D. Brennan, Sugar-Modified Silanes: Precursors for Silica Monoliths, *J. Mater. Chem.* **2004**, *14*, 1469 – 1479.
106. F [Dina Tleugabulova](#), [Zheng Zhang](#), [Yang Chen](#), [Michael A. Brook](#) and [John D. Brennan](#) Fluorescence Anisotropy in Studies of Solute Interactions with Covalently Modified Colloidal Silica Nanoparticles, *Langmuir* **2004**, *20*, 848-854.
105. F [Michael A. Brook](#), [Hong Chen](#) and [Heather Sheardown](#), Silicone elastomers for reduced protein adsorption, *Biomaterials*, **2004**, *25*, 2273-2282.
104. F [Frank J. LaRonde](#) and [Michael A. Brook](#), Alkylation of aldehydes catalyzed by chiral *N,N'*-bis(*N*-methyl-2-methylene-4,5-bisphenyl-imidazole)-1,2-cyclohexane diamine rhodium (III) complexes, *Can. J. Chem.* **2003**, *81*, 1206-1212, issue dedicated to John Harrod, invited manuscript.
103. F [Amro Ragheb](#), [Michael A. Brook](#) and [Michael Hrynyk](#), Highly activated, silicone entrapped, lipase, *Chem. Commun.*, **2003**, 2314–2315.
102. F [Travis R. Besanger](#), [Yang Chen](#), [Anil K. Deisingh](#), [Richard Hodgson](#), [Wen Jin](#), [Stanislas Mayer](#), [Michael A. Brook](#) and [John D. Brennan](#), Screening of Inhibitors using Enzymes Entrapped in Sol-Gel Derived Materials, *Anal. Chem.* **2003**, *75*, 2382 – 2391.
101. F [Brook, M. A.](#), [Laronde, F. J.](#), [Ragheb, A.](#), Controlling Silica Surfaces Using Responsive Coupling Agents, *Colloid Polym. Sci.* **2003**, *281*, 391–400, invited manuscript.
99. F [M. Mohamed](#), [M. A. Brook](#), Allylsilane-Modified Amino Acids from the Claisen Rearrangement, *Helv. Chim. Acta* **2002**, *85*, 4165-4181 invited manuscript
98. F [P. Zelisko](#), [M. A. Brook](#), Stabilization of α -Chymotrypsin and Lysozyme Entrapped in Water-In-Silicone Oil Emulsions, *Langmuir*, **2002**, *18*, 8982-8987.
97. F [Gang Hu](#), [Frank LaRonde](#) and [Michael A. Brook](#), Amino Acid-Terminated Silicones, *Silicon Chem.* **2002**, *1*, 215–222.
96. F [Michael A. Brook](#), [Paul M. Zelisko](#), [Maeghan J. Walsh](#) and [Janinne N. Crowley](#), Silicone-protein surfactants: stability of water-in-silicone oil emulsions, *Silicon Chem.* **2002**, *1*, 99–106.
95. F [M. S. Eikeland](#), [M.-B. Hägg](#), [Michael A. Brook](#), [M. Ottøy](#), [A. Lindbråthen](#), Durability of Poly(dimethylsiloxane) when exposed to Chlorine Gas, *J. Appl. Poly. Sci. A.*, **2002**, *85*, 2458-2470.
94. F [Brook, M. A.](#); [Ragheb, A.](#) Oxidizable Coupling Agents: Introduction of Surface Functionality, *J. Adhesion*, **2002**, *78*, 521-541.
93. F [Gilles Sèbe](#) and [Michael A. Brook](#), Hydrophobization of Wood Surfaces: Covalent Grafting of Silicone Polymers, *Wood Sci. Tech.* **2001**, *35*, 269-282.
92. C [Mohamed, M.](#); [Brook, M. A.](#) Synthesis of Allylsilane-Containing Amino Acids via the Claisen Rearrangement, *Tetrahedron Lett.* **2001**, *42*, 191-193.
91. F [Mustafa Mohamed](#) and [Michael A. Brook](#), Photolysis of Tris(trimethylsilyl)silane: Trapping of Silyl Radicals, *Can. J. Chem.* **2000**, *78*, 1357-1362.
90. N [Bain, A.](#), [Brook, M. A.](#); [Hazendonk, P.](#); [Reid, D. L.](#); [Stan, R. S.](#) Analysis of NMR Spectra of Some Dimethylsilanes, *Magn. Res. Chem.* **2000**, *38*, 894-895.
89. F [Vasiliki Bartzoka](#), [Gladys Chan](#) and [Michael A. Brook](#), Protein-Silicone Synergism at Liquid/Liquid Interfaces, *Langmuir* **2000**, *16*, 4589-4593.
88. F [Sonya Balduzzi](#), [Krista Kerr](#) and [Michael A. Brook](#), Alkoxyallylsilanes: Functional Protecting Groups, *Tetrahedron* **2000**, *56*, 1617-1622.
87. F [Stradiotto, M.](#); [Brook, M. A.](#); [McGlinchey, M. J.](#) The Molecular Dynamics and Reactivity of Tris(1-Indenylsilane): An NMR Spectroscopic and X-ray Crystallographic Study, *J. Chem. Soc., Perkin Trans. 2*, **2000**, 611–618.
86. F [Stradiotto, M.](#); [Hazendonk, P.](#); [Bain, A. D.](#); [Brook, M. A.](#); [McGlinchey, M. J.](#) Probing the Effect of Organic and Organometallic Functionalization on [1,5]-Silicon Shifts in Indenylsilanes, *Organometallics*, **2000**, *19*, 590-601.
85. F [LaRonde, F. J.](#); [Brook, M. A.](#) Stereoselective Reduction of Ketones Using Extracoordinate Silicon: C₂-Symmetric Ligands, *Inorg. Chim. Acta* **1999**, *296*, 208-221.

84. C M. R. McDermott, M. A. Brook, V. Bartzoka, *Adjuvancy effect of different types of silicone gel* (Letter to the Editor commenting on the paper by Naim *et al.* (*J. Biomed. Mater. Res.* **1997**, 37, 5341), *J. Biomed. Mater. Res.* **1999**, 46, 132-133.
83. F Michael A. Brook, Christine Gottardo, Sonya Balduzzi and Mustafa Mohamed, *The Photolytic and Hydrolytic Lability of Sisyl (Si(SiMe₃)₃) Ethers: A Fluoride Resistant, Photolabile Alcohol Protecting Group*, *Tetrahedron* **1999**, 55, 10027-10040.
82. F James A. Dunn, William J. Hunks, Ralph Ruffolo, Suzie S. Rigby, Michael A. Brook, and Michael J. McGlinchey *Metal Cluster Stabilized Fluorenyl, Indenyl, and Cyclopentadienyl Antiaromatic Cations: An NMR and X-ray Crystallographic Study*, *Organometallics* **1999**, 18, 3372-3382.
81. C Frank J. Laronde and Michael A. Brook, *Stereoselective Reduction of Ketones By Histidine:Alkoxysilane Complexes*, *Tetrahedron Lett.* **1999**, 40, 3507-3510.
80. F Stradiotto, M.; Brook, M. A.; McGlinchey, M. J. *The Molecular Dynamics and Cycloaddition Chemistry of Tris(1-Indenyl)allylsilane: Generation of the First Crystallographically-Characterised Tris(benzonorbornyl)silane*, *New J. Chem.* **1999**, 317-321.
79. R Vasiliki Bartzoka, Mark R. McDermott and Michael A. Brook *Protein-Silicone Interactions*, *Advan. Mater.* **1999**, 11, 257-259.
78. F Heritage, P. L.; Underdown, B. J.; Brook, M. A.; and McDermott, M. R.; *Oral Administration of Polymer-Grafted Starch Microparticles Activates Gut-Associated Lymphocytes and Primes Mice for a Subsequent Systemic Antigen Challenge*, *Vaccine* **1998**, 16, 2010-2017.
77. N Brook, M. A.; Urschey, J.; Stradiotto, M. *Hexacarbonyldicobalt-Complexed 1,2-Dioxo-2-Silacycloheptynes*, *Organometallics* **1998**, 17, 5342-5346.
76. F Ruffolo, R.; Brook, M. A.; McGlinchey, M. J. *Metal-Mediated Allyl Transfers in (Alkynyl-allylsilane)Co₂(CO)₆ Complexes: A Synthetic and Structural Study*, *Organometallics* **1998**, 17, 4992-4996.
75. F Paul A. Charpentier, Shiping Zhu, Archie E. Hamielec and Michael A. Brook, *Continuous Solution Polymerization of Ethylene Using Metallocene Catalyst System, Cp₂ZrCl₂/MMAO/TMA*, *Ind. Chem. Eng. Res.* **1997**, 36, 5074-5082. DOI: [10.1021/ie9704152](https://doi.org/10.1021/ie9704152)
74. F McDermott, M. R.; Heritage, P. L.; Bartzoka, V.; Brook, M. A. *Polymer-grafted Starch Microparticles for Oral and Nasal Administration*, *Immunol. Cell Biol.* **1998**, 76, 256-262.
73. C Stradiotto, M.; Brook, M. A.; McGlinchey M. J. *Can metal clusters assist silicon migrations? An NMR spectroscopic and X-ray crystallographic study*, *Inorg. Chem. Commun.* **1998**, 1, 105-108.
72. F Charpentier, P. A.; Hamielec, A. E.; Zhu, S.; Brook, M. A., *Effect of Aluminoxane on Semi-Batch Polymerization of Ethylene Using Zirconocene Dichloride*, *Polymer*, **1998**, 39, 6501-6511.
71. F Vasiliki Bartzoka, Michael A. Brook, and Mark R. McDermott, *Silicone-Protein Films: Establishing the Strength of the Protein-Silicone Interaction*, *Langmuir* **1998**, 14, 1892-1898.
70. F Vasiliki Bartzoka, Michael A. Brook, and Mark R. McDermott, *Protein-Silicone Interactions: How Compatible Are The Two Species?* *Langmuir* **1998**, 14, 1887-1891.
69. F Howard A. Ketelson, Robert Pelton, and Michael A. Brook, *Surface and Colloidal Properties of Hydrosilane Modified Stöber Silica*, *Colloids and Surfaces A* **1998**, 132, 229-239.
68. F Heritage, P. L.; Brook, M. A.; Underdown, B. J. and McDermott, M. R.; *Intranasal Immunization with Polymer-Grafted Microparticles Activates the Nasal-Associated Lymphoid Tissue and Draining Lymph Nodes*, *Immunology* **1998**, 93, 249-256.
67. F Michael A. Brook and Tomislav M. Stefanac, *Hydrovinylsilanes for Sequential Radical Reactions: A New Route to Block Copolymers*, *Heteroatom Chem.* **1998**, 9, 241-251.
66. F Le Roux, C.; Yang, H.; Wenzel, S.; Brook, M. A. *Using "Anhydrous" Hydrolysis to Favor Formation of Hexamethylcyclotrisiloxane from Dimethyldichlorosilane*, *Organometallics* **1998**, 17, 556-564.

65. **Ralph Ruffolo**, **Sabine Kainz**, **Hari K. Gupta**, **Michael A. Brook**, and **Michael J. McGlinchey**, *A Synthetic and Structural Study on Metal Cluster Complexes of Allyl-Alkynyl-Silanes: Does Protonation Lead to Metal-Stabilized Silyl Cations?*, *J. Organomet. Chem.* **1997**, 547, 217-226.
64. F **Lau, W. W. Y.**; **Finlayson, J.**; **Dickson, J. M.**; **Jiang, J.**; **Brook, M. A.** *Pervaporation performance of oligosilylstyrene-polydimethylsiloxane membrane for separation of organics from water.* *J. Membr. Sci.* **1997**, 134, 209-217.
63. F **Michael A. Brook**, **Jianxiong Jiang**, **Philippa Heritage**, **Brian Underdown** and **Mark R. McDermott**, *Silicone-Protein Interaction at the Interface between a Functional Silicone and a Protein/Starch Microparticle*, *Colloids and Surfaces B: Biointerfaces* **1997**, 9, 285-295.
62. F **Michael A. Brook**, **Jianxiong Jiang**, **Philippa Heritage**, **Vasiliki Bartzoka**, **Brian Underdown** and **Mark R. McDermott**, *The Silicone-Protein Interaction at the Interface between a Functional Silicone and a Protein/Starch Microparticle*, *Langmuir* **1997**, 13, 6279-6286.
61. F **Stradiotto, M.**; **Hughes, D. W.**; **Bain, A. D.**; **Brook, M. A.**; **McGlinchey, M. J.**, *The Fluxional Character of $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2(\eta^1\text{-C}_9\text{H}_7)$: Evidence for the [4+2] Cycloaddition of a Metal-Substituted Isoindene with Tetracyanoethylene*, *Organometallics* **1997**, 16, 5563-5568.
60. F **T. Kuhnen**, **M. Stradiotto**, **R. Ruffolo**, **D. Ulbrich**, **M. J. McGlinchey** and **Michael A. Brook**, *Oligo(alkynylsilanes): Templates for Organometallic Polymers*, *Organometallics* **1997**, 16, 5048-5057.
59. F **T. Kuhnen**, **M. Stradiotto**, **R. Ruffolo**, **D. Ulbrich**, **M. J. McGlinchey** and **Michael A. Brook**, *Using Hydrosilylation To Assemble Organometallic Polymers Containing Combinations of Silicon-Based Functional Groups*, *Organometallics* **1997**, 16, 5042-5047.
58. C **Brook M. A.**; **Gottardo, C.**; **Balduzzi, S.**; **Mustafa, M.** *The Silyl (tris(Trimethylsilyl)silyl) Group: A Fluoride Resistant, Photolabile Alcohol Protecting Group*, *Tetrahedron Lett.* **1997**, 38, 6997-7000.
57. F **Michael A. Brook**, **Howard A. M. Ketelson**, **F. LaRonde** and **Robert H. Pelton**, *Pt⁰ compounds bound in a silsesquioxane layer: active hydrosilylation catalysts protected by the gel*, *Inorg. Chim. Acta* **1997**, 264, 125-135, (invited manuscript).
56. F **Yeom, C.-K.**; **Dickson, J. M.**; **Brook, M. A.** *A Characterization of PDMS Pervaporation Membranes for the Removal of Trace Organic from Water*, *Korean. J. Chem. Eng.* **1996**, 13, 482-488.
55. F **Stephen Urquhart**, **Cássia C. Turci**, **Tolek Tylliszczak**, **Michael A. Brook** and **Adam P. Hitchcock**, *Core Excitation Spectroscopy of Phenyl- and Methyl-Substituted Silanol, Disiloxane and Disilane Compounds: Evidence for π Delocalization Across the Si-C_{Phenyl} Bond*, *Organometallics*, **1997**, 16, 2080-2088.
54. C **Mark J. Stradiotto**, **Grant Crowe**, **Ralph Ruffolo** and **Michael A. Brook**, *The Structure of 1-Styrylsilatrane*, *Acta Cryst.* **1997**, C53, 637-639.
53. F **Mark Stradiotto**, **Suzie S. Rigby**, **Donald W. Hughes**, **Michael A. Brook**, **Alex D. Bain** and **Michael J. McGlinchey**, *A Multidimensional NMR Study of Tris(indenyl)methylsilane: Molecular Dynamics Mapped onto a Hypercube*, *Organometallics*. **1996**, 15, 5645-5652.
52. F **Michael A. Brook**, **Bjørn Ramacher**, **Carol Dallaire**, **Hari K. Gupta**, **Dagmar Ulbrich** and **Ralph Ruffolo**, *Comparing the Reactivity to Acids of Group 14 Tetrakis(alkynes) and Their Dicobalthexacarbonyl Complexes*, *Inorg. Chim. Acta*, **1996**, 250, 49-57, invited manuscript.
51. F **Michael J. Roth**, **Michael A. Brook** and **Helen B. Penny**, *Hydrosilane Cleavage Reactions Accelerated By Tartaric Acid and Dimethyl Sulfoxide*, *J. Organomet. Chem.*, **1996**, 521, 65-74, invited manuscript dedicated to Robert Corriu.
50. F **Christopher Roos**, **Graham A. McGibbon** and **Michael A. Brook**, *The Thermolysis of ϵ -Halodisilanes: An Attempt to Coerce Si=O Bond Formation Using Si-F Bond Formation*, *Can. J. Chem.* **1996**, 74, 1470-1479.
49. C **Michael A. Brook**, **Howard A. M. Ketelson**, **Robert H. Pelton**, and **Yew. M. Heng**, *Surface Nucleation of Silica-Supported Platinum Nanoparticles*, *Chem. Mater.* **1996**, 8, 2195-2199.

48. F Tomislav M. Stefanac, Michael A. Brook, and R. Stan, *The Radical Reactivity of Hydrovinylsilanes: Homooligomers*, *Macromolecules* **1996**, 29, 4549-4555.
47. F Wan Zhang, John A. Stone, Michael A. Brook and Graham A. McGibbon, *Stabilization of Vinyl Cations by β -Silicon: A Quantitative Mass Spectrometric Study*, *J. Am. Chem. Soc.* **1996**, 118, 5764-5771.
46. F Howard A. Ketelson, M. A. Brook and R. H. Pelton, *Colloidal Stability of Stöber Silica in Acetone-Water Mixtures*, *J. Colloid Interface Sci.* **1996**, 179, 600-607.
45. F R. Pelton, Huining Xiao, Michael A. Brook and Archie Hamielec, *The flocculation of polystyrene latex with mixtures of poly(*p*-vinyl phenol) and poly(ethylene oxide)*, *Langmuir*, **1996**, 12, 5756-5762.
44. F P.L. Heritage, L. M. Loomes, J. Jiang, M.A. Brook, B.J. Underdown and M.R. McDermott, *Novel Polymer-Grafted Starch Microparticles for Mucosal Delivery of Vaccines*, *Immunology*, **1996**, 88, 162-168.
43. F Howard A. Ketelson, M. A. Brook and R.H. Pelton, *Colloidal Stability of Stöber Silica in Acetone*, *Langmuir*, **1996**, 12, 1134-1140.
42. F Michael A. Brook and Courtney Henry, *Competitive Acylation Of Arylstyrilsilanes: Controlling Silanucleophile Reactivity*, *Tetrahedron* **1996**, 52, 861-868.
41. F Michael A. Brook, Thomas Sebastian, Peter Hülser, Ralf Jüschke, Stefan Wenzel, Jennifer A. Townsend and Patricia R. Falletta, *β -Trichlorosilylstyrene Oligomers*, *Can. J. Chem.*, **1995**, 73, 1794-1802.
40. F Michael A. Brook, Courtney Henry, Elizabeth Jefferson, Ralf Jüschke, Thomas Sebastian, Mirek Tomaszewski and Stefan Wenzel, *Electrophilic Additions to Styrylsilanes: The Effect of Changing the Ligands on Silicon*, issue dedicated to Raymond Calas, *Bull. Soc. Chim. Fr.* **1995**, 132, 559-568, invited manuscript.
39. F H. A. M. Ketelson, Michael A. Brook, and Robert H. Pelton, *Colloidal Silica Bearing Hydrosilane Groups*, *Chem. Mater.* **1995**, 7, 1376-1383.
38. F Howard A.M. Ketelson, Michael A. Brook and Robert H. Pelton, *Sterically stabilized silica colloids: Radical grafting of poly(methyl methacrylate) and Hydrosilylative grafting of silicones to Functionalized Silica*, *Polym. Adv. Technol.* **1995**, 6, 335-344.
37. F Ralph Ruffolo, Andreas Decken, Luc Girard, Hari K. Gupta, Michael A. Brook and Michael J. McGlinchey, *Toward Metal-Stabilized Silylium Cations: An EHM O Study of $[(HC\equiv C-SiH_2)Co_2(CO)_6]^+$ and X-ray Crystal Structures of $(Me_3C\equiv C-SiPh_2H)Mo_2(CO)_4Cp_2$ and $[(Me_3SiC\equiv C-SiMe_2)Co_2(CO)_6]_2$* , *Organometallics* **1994**, 13, 4328-4335.
36. F Courtney Henry and Michael A. Brook, *Proton Additions to Silylstyrenes: Overcoming the Predilection for Protodesilylation*, *Tetrahedron*, **1994**, 50, 11379-11390.
35. F Jianxiong Jiang, Michael A. Brook and J. M. Dickson, *A ^{29}Si NMR Study of the Solution Reactions Between Methyltrichlorosilane and Octamethylcyclotetrasiloxane in the Presence of Triflic Acid*, *Heteroatom Chemistry*, **1994**, 5, 275-285.
34. F Courtney Henry and Michael A. Brook, *Electrophilic addition to styrylsilanes: Sequential carbon-carbon bond forming reactions*, *Inorg. Chim. Acta* **1994**, 220, 145-154.
33. C Michael A. Brook, Henk Hiemstra and Grant Crowe, *Allyldimethylsilyl Triflate: A Self-Catalyzed Silyl Nucleophile*, *Can. J. Chem.*, **1994**, 72, 264-267.
32. C Michael A. Brook, Daniel Chau, Michael J. Roth, Weifeng Yu and Helen Penny, *The Surprising Reactivity of Alkoxyhydrosilanes Towards α -Hydroxy Carboxylic Acids*, *Organometallics*, **1994**, 13, 750-752.
31. F Carol Dallaire, Michael A. Brook, Alex D. Bain, Christopher S. Frampton and James F. Britten, *Tetrakis[(Trimethylsilyl)Ethynyl] Group 14 Metal Derivatives: An Examination Of The Electronic Interaction Between Two Group 14 Metals Connected By An Acetylene Wire*, *Can. J. Chem.* **1993** 71, 1676-1683.

30. F [Eric C. Roos](#), [M. Carmina López](#), [Michael A. Brook](#), [Henk Hiemstra](#) and [W. Nico Speckamp](#), *Synthesis of α -Substituted α -Amino Acids via Cationic Intermediates*, *J. Org. Chem.* **1993**, 58, 3259-3268.
29. F [Carol Dallaire](#) and [Michael A. Brook](#), *The β -Effect with Vinyl Cations: A Kinetic Study of the Protiodemetallation of Silyl, Germyl and Stannyl Alkynes*, *Organometallics* **1993**, 12, 2332-2338.
28. N [Michael A. Brook](#), [Pankaj Modi](#) and [James M. Dickson](#), *Silicon Functionalized Styrene Polymers*, *Macromolecules* **1993**, 26, 2624-2627.
27. F [Michael A. Brook](#), [Courtney Henry](#), [Ralf Jueschke](#) and [Pankaj Modi](#), *Balancing Leaving Group Ability and the β -Effect: Exploring the Synthetic Utility of Chlorosilyl Groups*, *Synlett* **1993**, 2, 97-104.
26. C [Graham A. McGibbon](#), [Michael A. Brook](#) and [Johan K. Terlouw](#), *The Gas Phase Determination of the Stabilization Energy for α - and β -Silyl Substituents on Vinyl Cations by Mass Spectrometry*, *J. Chem. Soc., Chem. Commun.* **1992**, 360-362.
25. F [Robert H. Pelton](#), [Andrea Osterroth](#) and [Michael A. Brook](#), *Silicone Stabilized Poly(methyl methacrylate) Nonaqueous Latex. 2 Flocculation By Degradation of the Steric Layer*, *J. Colloid Interface Sci.* **1991**, 147, 523-530.
24. C [Michael A. Brook](#), [Thomas Sebastian](#), [Ralf Jueschke](#) and [Carol Dallaire](#), *The Diastereoselective Addition of Carbon Electrophiles to Styrylsilanes: The Dimerization of β -E-Halosilylstyrenes*, *J. Org. Chem.* **1991**, 56, 2273-2274.
23. C [Michael A. Brook](#) and [Carol Dallaire](#), *Vinyl Cations Stabilized by Silyl, Germyl and Stannyl Groups: An Examination of the β -Effect*, *Organometallics* **1990**, 9, 2873-2875.
22. F [Michael A. Brook](#) and [Axel Neuy](#), *The β -Effect: Changing the Ligands on Silicon*, *J. Org. Chem.* **1990**, 55, 3609-3616.
21. F [Robert H. Pelton](#), [Andrea Osterroth](#) and [Michael A. Brook](#), *Silicone Stabilized Poly(methyl methacrylate) Nonaqueous Latexes*, *J. Colloid Interface Sci.* **1990**, 137, 120-127.
20. F [Albert Elmer](#) and [Michael A. Brook](#), *Draw2D, Draw3D: MOPAC 2- and 3-Dimensional Graphical Output Written Using the PHIGS Graphics Standard*, *Tetrahedron Computer Method.* **1990**, 2, 223-232.
19. C [Michael A. Brook](#), [Peter Hülser](#) and [Thomas Sebastian](#), *Oligo(trichlorosilyl)styrenes: Highly Functionalized Silicone Precursors*, *Macromolecules* **1989**, 22, 3814-3816.
18. C [Michael A. Brook](#), [Mahmud A. Hadi](#) and [Axel Neuy](#), *An Examination of the β -Effect in an Addition Reaction with Different Ligands on Silicon*, *J. Chem. Soc., Chem. Commun.* **1989**, 957-958.
17. C [Michael A. Brook](#), [Christina H. Kremers](#), [Thomas Sebastian](#) and [Weifeng Yu](#), *A Novel Glycol-Silicone Polymer*, *J. Poly. Sci., Polymer Lett.* **1989**, 27, 229-234.
16. C [Michael A. Brook](#), [Romolo Faggiani](#), [C.J.L. Lock](#) and [Dieter Seebach](#), *u,l-4a,5,6,7,8,8a-Hexahydro-4-phenyl-8a-(trimethylsiloxy)-4H-1,2-benzoxazine-2-oxide*, *Acta Cryst.* **1988**, C44, 1981-1984.
15. C [Pierre G. Potvin](#), [Patrick C.C. Kwong](#) and [Michael A. Brook](#), *Solution Structures of Sharpless Epoxidation Catalysts*, *J. Chem. Soc., Chem. Commun.*, **1988**, 773-775.
14. F [Nick Henry Werstiuk](#), [Michael A. Brook](#) and [Peter Hülser](#), *Thermolysis of Trimethylsilyl Esters: An Ultraviolet Photoelectron Study*, *Can. J. Chem.* **1988**, 66, 1430-1439.
13. C [Michael A. Brook](#) and [Jahangir](#), *The Activation of Imines to Attack by Grignard Reagents*, *Synth. Commun.* **1988**, 18, 893-898.
12. F [Jahangir](#), [Michael A. Brook](#), [David B. MacLean](#) and [Herbert H. Holland](#), *A New Route to the Indolopyridonaphthyridine Ring System: Synthesis of N-Benzyl-13b,14-dihydroaucléfine and N-Benzyl-13b,14-dihydroaugustine*, *Tetrahedron* **1987**, 43, 5761-5768.
11. F [Jahangir](#), [M.A. Brook](#), [D.B. MacLean](#), and [H. L. Holland](#), *8H-Isoquino[2,1-b][2,7]naphthyridine-8-ones: synthesis of the Alangium alkaloids, alangimaridine and alangimarine*, *Can. J. Chem.* **1987**, 65, 2362-2368.

10. R Michael A. Brook, *The Nomenclature of Relative Stereochemistry: Choosing Between likes and preferences*, *J. Chem. Educ.* **1987**, 64, 218-220.
9. C Jahangir, D.B. MacLean, M.A. Brook and H.L. Holland, *Activated Imines as Carbon Electrophiles: Applications in Alkaloid Synthesis*, *J. Chem. Soc., Chem. Commun.* **1986**, 1608-1609.
8. F Michael A. Brook and Dieter Seebach, *Cyclic Nitronates from the Diastereoselective Addition of 1-Trimethylsilyloxy-cyclohexene to Nitroolefins. - Starting Materials for Stereoselective Henry Reactions and 1,3-Dipolar Cycloadditions*, *Can. J. Chem.* **1987**, 65, 836-850.
7. C T.H. Chan and M.A. Brook, *INEPT-²⁹Si NMR Study of a TiCl₄-Mediated Reaction of an Enol Silyl Ether*, *Tetrahedron Lett.* **1985**, 2943-2947.
6. C Dieter Seebach and Michael A. Brook, *Reversed Stereochemical Course of the Michael Addition of Cyclohexanone to β-Nitrostyrenes by Using 1-Trimethylsilyloxy-cyclohexene /Dichlorodiiisopropoxytitanium*, *Helv. Chim. Acta* **1985**, 68, 319-324.
5. C S.D. Lee, Michael A. Brook and T.H. Chan, *Conversion of Primary Amides into Active Acylating Agents via Acylpyrroles*, *Tetrahedron Lett.* **1983**, 1569-1572.
4. F P. Brownbridge, T.H. Chan, M.A. Brook and G.J. Kang, *Chemistry of Silyl Enol Ethers. A General Synthesis of 3-Hydroxyhomophthalates and a Biomimetic Synthesis of Sclerin*, *Can. J. Chem.* **1983**, 61, 688-693.
3. C T. H. Chan, Michael A. Brook and T. Chaly, *A Simple Procedure for the Acetalization of Carbonyl Compounds*, *Synthesis* **1983**, 203-205.
2. C Michael A. Brook and T.H. Chan, *A Simple Procedure for the Esterification of Carboxylic Acids*, *Synthesis* **1983**, 201-203.
1. F M.A. Nazar, W.H. Rapson, M.A. Brook, S. May and J. Tarhanen, *Mutagenic Reaction Products of the Aqueous Chlorination of Catechol*, *Mutat. Res.* **1981**, 89, 45-55.

(D) JOURNAL ABSTRACTS

(E) OTHER, INCLUDING PROCEEDINGS OF MEETINGS

12. Brook, Michael A.; Liu, Lihua; Sheardown, Heather; Chen, Hong; Chen, Yang; Morarescu, Diana, *Building biological layers on silicone elastomers using redistributive erosion/growth mechanisms*, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006 POLY-337.
- 11 Voss, Rebecca; Chen, Yang; Brennan, John D.; Brook, Michael A. *A biocompatible process for the preparation of macro-porous silica materials*. 38th Central Regional ACS Meeting, Frankenmuth, MI, United States, May 16-20 (2006), CRM-341.
- 10 Brook, Michael A.; Sheardown, Heather D.; Chen, Daniel; Ragheb, Amro; Chen, Hong. *Structuring silicone interfaces with hydrophilic biocompatible polymers*. 38th Central Regional Meeting of the American Chemical Society, Frankenmuth, MI, United States, May 16-20 2006, CRM-322.
- 9 Ye, Lu; Pelton, Robert; Brook, Michael, *Bio-Conjunction of Streptavidin on SiO₂ and TiO₂ Particles*. 38th Central Regional Meeting of the American Chemical Society, Frankenmuth, MI, United States, May 16-20 2006, CRM-299.
- 8 Brook, Michael A. Review of: "Macromolecules Containing Metal and Metal-like Elements, Volume 4: Group IVA Polymers. Edited by Alaa S. Abd-El-Aziz (University of Winnipeg), Charles E. Carraher Jr. (Florida Atlantic University), Charles U. Pittman Jr. (Mississippi State University) and Martel Zeldin (Hobart and William Smith Colleges). John Wiley & Sons, Inc.: Hoboken, NJ. 2005. 0-471-68238-1." *J. Am. Chem. Soc.* **2005**, 127, 15659. DOI: [10.1021/ja059736s](https://doi.org/10.1021/ja059736s)
7. F Zhang Zheng, Yang Chen, Richard J. Hodgson, Michael A. Brook* and John D. Brennan, *Macroporous Silica Monoliths Derived from Glyceroxysilanes: Controlling Gel Formation and Pore Structure*, *Macromol. Symp.* **2005**, 226, 253-261.

6. R Muxin Liu, Elodie Pacard, Amro M. Ragheb, Paul M. Zelisko and Michael A. Brook, Stabilisation of Protein-Containing Water-in-Oil Emulsions, *Cahiers de Formulation*, **2004**, *11*, 152-162 (Developed from the conference, "Formulation des composés silicones et fluorés" presented at the Journées de formulation: Formulation des composés silicones et fluorés: Concurrence ou complémentarité Lyon, France 9, 10 décembre 2002), Lanteri, P.; Bordes, C., Eds., invited manuscript.
5. A Amro Ragheb, Hong Chen, Meghan L. Marshall, Michael Hrynyk, Heather Sheardown and Michael A. Brook, Controlling Protein Deposition at Silicone Elastomer Interfaces, *Polym. Prep. (Amer. Chem. Soc., Div. Polym. Chem.)* **2004**, *45(1)*, 602-603.
4. C Paul M. Zelisko, Jill J. Coo-Ranger, and Michael A. Brook, *The Interaction of Proteins with Functionalized Silicones*, *Polym. Prep. (Amer. Chem. Soc., Div. Polym. Chem.)* **2004**, *45(1)*, 604-605.
3. C Jill J. Coo-Ranger, Paul M. Zelisko, Michael A. Brook, *Ionic silicone surfactants in water-in-silicone oil emulsions containing proteins*. *Polym. Prep. (Amer. Chem. Soc., Div. Polym. Chem.)* **2004**, *45(1)*, 674-675.
2. C Paul M. Zelisko, and Michael A. Brook, *Modified silicones for the stabilisation of proteins and enzymes in emulsions: Potential Vaccine Delivery Systems*, *Polym. Prep. (Am. Chem. Soc., Div. Polym. Chem.)*, **2001**, *42(2)*, 115-116.
1. N Michael A. Brook and Paul Zelisko, *Exploiting Silicone-Protein Interactions: Stabilization Against Denaturation At Interfaces*, *Polym. Prep. (Am. Chem. Soc., Div. Polym. Chem.)*, **2001**, *42(1)*, 97-98.

PATENTS

PROVISIONAL (NOTE: PROVISIONAL PATENTS SUPERCEDED BY A FULL PATENT ARE NOT SHOWN)

18. Gilbert Yu, Ferdinand Gonzaga, and Michael A. Brook, Preparation of Organosilicon-Containing Triazoles, US Provisional (file B&P 3244-185) filed Sept. 29, 2008.
17. Michael A. Brook, Yingfu Li, Weian Zhao, William Chiuman, Ferdinand Gonzaga. Nucleotide-capped gold nanoparticles and non-crosslinking aggregation-based gold nanoparticle biosensors. B&P File No. 3244-161 United States Provisional **2007**.
16. Yang Chen, Yunyu Yi, John D. Brennan, Michael A. Brook Methods and compounds for forming monolithic titania, optionally biomolecule doped, with controlled morphology using biocompatible sol-gel processes, submitted, 60/826662.

FULL, FILED

14. Michael A. Brook, John D. Brennan, Robert Pelton, Rebecca Voss and Lucy Ye, *Biomolecule Compatible Silica Particles*, PCT Filing Nov. 26, 2007.
13. Brook, M. A.; Gonzaga, F.; Tian, H. *Chelating Silicon-Based Polymers*, PCT filed Aug 2007 to McMaster University).
12. Sheardown, H.; Brook, M. A.; Chen, H. Biocompatible Silicone and Methods of Preparation, US Provisional Patent Application, PCT/CA2005/000739
10. Dong, H.; Brook, M.A.; Brennan, J.D. *Methods for Forming Macroporous Monolithic Methylsilsesquioxanes*. PCT and US patents filed April 29, 2005.
9. Besanger, T.R.; Hodgson, R.J.; Brook, M.A.; Brennan, J.D. *Methods for Substrate and Inhibitor Screening Using Enzyme-Reactor Chromatography/Tandem Mass Spectrometry*. PCT and US patents filed March 16, 2005.
8. Brennan, J.D.; Brook, M.A.; Besanger, T.R. *Method of Immobilizing Membrane-Associated Molecules*. Continuation in Part to Application 60/426,018, filed April 2, 2004.
7. Besanger, T.; Brook, M.A.; Brennan, J.D. *Method of Immobilizing of Membrane-Bound Proteins*. U.S. Patent Application No. 10/712,015 and PCT Patent application PCT/CA03/01757; filed November 14, 2003.

6. Brook, M.A.; Brennan, J.D.; **Chen, Y.** *Polyol-Modified Silanes as Precursors for Silica*. U.S. Patent Application No. 10/449,511 and PCT application PCT/CA03/00790; Filed May 31, 2003.
GRANTED
4. Zheng Zhang, Yang Chen, Jorge Cruz-Aguado, Richard J. Hodgson, Dina Tleugabulova, John D. Brennan, Michael A. Brook, *Protein Compatible Methods and Compounds for Controlling the Morphology and Shrinkage of Silica Derived from Polyol-Modified Silanes*, US Patent 7,375,168 (to McMaster University) May 20,2008.
3. **Stan, R. S.**; Brook, M. A. *Chelating silicone polymers*, US Patent 6,566,322 (to McMaster University), filed May 26, 2000; issued May 20, 2003.
1. McDermott, M. R., Brook, M. A., **Heritage, P. L.**, Underdown, B. J., **Loomes, L. M.**, **Jiang, J.**, Microparticle delivery system with a functionalized silicone bonded to the matrix (to McMaster University), US Patent 5,571,531, Nov. 5, 1996.

ABANDONED

15. **Sébe, G.**, **Thompson, D. B.**; Brook, M. A., *Silicone Hydrophobization of Polysaccharides*, US Provisional Patent Application (to McMaster University), abandoned.
 5. Ketelson, H.; Brook, M.A. *Cleaning formulation for Optical Surfaces*, U.S. patent appl. Ser. No. 60/207,187, 20020039984 Oct. 2000. and PCT appl. PCT/CA01/00742 Nov. 29, 2001.
 2. **Howard A. M. Ketelson**, Michael A. Brook, and Robert H. Pelton, A Platinum Catalyst, Method of Making and Use of Thereof, US Provisional Patent Application: 60/025,365, Sept. 3, 1996, abandoned.
-