

ANNA KOWALEWSKA - LIST OF PUBLICATIONS

1993-2016

- 1 J.Chojnowski*, K.Różga, W.Fortuniak, A.Kowalewska, *Makromol. Chem., Makromol. Symp.*, **73** (1993) 183-201 "Synthesis of Polysiloxanes with Electron-donating Groups by Anionic Ring-opening polymerization"
- 2 W.A.Stańczyk*, A.Kowalewska, E.Białecka-Forjańczyk, I.Śledzińska, J.Softysiak, *Int. Soc. Opt. Eng.*, **2372** (1995) 262-267 "Synthesis of Structurally Well Defined Organosilicon LC Polymers"
- 3 D.A.Antonov, C.Eaborn*, W.A.Stańczyk, A.Kowalewska, *J. Organomet. Chem.*, **521** (1996) 109-112 "A Bulky Tris(trimethylsilyl)methyl Ligand Incorporating a Donor Sulfur Atom: Some $(\text{Me}_3\text{Si})_2(\text{PhSMe}_2\text{Si})\text{CSnMe}_2\text{X}$ "
- 4 C.Eaborn*, P.B.Hitchcock, A.Kowalewska, Z.-R.Lu, J.D.Smith, W.A.Stańczyk, *J. Organomet. Chem.*, **521** (1996) 113-120 "Iodo(methoxydimethylsilyl)-bis(trimethylsilyl)methane : A Reagent for the Preparation of Novel Organometallic Compounds. Crystal Structures of $\text{Mg}\{\text{C}(\text{SiMe}_3)_2(\text{SiMe}_2\text{OMe})\}_2$ and $\text{MgI}_2(\text{OEt}_2)_2$ "
- 5 C.Eaborn, A.Kowalewska, W.A.Stańczyk*, *J. Organomet. Chem.*, **560** (1998) 41-46 "1,3-Migration of a Phenyl Group in the Conversion of $(\text{Me}_3\text{Si})_2(\text{PhMe}_2\text{Si})\text{CSiMePhX}$ into $(\text{Me}_3\text{Si})_2(\text{Ph}_2\text{MeSi})\text{CSiMe}_2\text{Y}$ Species"
6. A.Kowalewska, W.A.Stańczyk*, S.Boileau, L.Lestel, J.D.Smith, *Polymer*, **40** (1999) 813-818 "Novel polymer systems with very bulky organosilicon side chain substituents"
7. A.Kowalewska, P.D.Lickiss, R.Lucas, W.A.Stańczyk*, *J. Organomet. Chem.*, **597** (2000) 111-115 "Reactions of the Si-H Bonds in tetrakis(dimethylsilyl)methane and -silane"
8. C.Eaborn, A.Kowalewska, J.D.Smith, W.A.Stańczyk*, *J. Organomet. Chem.*, **640** (2001) 29-36 "Anchimeric assistance by α -substituents Z, Z = MeO, PhO, MeS or PhS in reactions of the bromides $(\text{Me}_3\text{Si})_2(\text{ZMe}_2\text{Si})\text{CSiMe}_2\text{Br}$ with AgBF_4 "
9. A.Kowalewska*, W.A.Stańczyk, *Chem. Mater.*, **15** (2003) 2991-2997 "Highly thermally resistant UV-curable poly(siloxane)s bearing bulky substituents"
10. S.Boileau, L.Bouteiller*, A.Kowalewska, *Polymer*, **44** (2003) 6449-6455 "Telechelic polydimethylsiloxanes with terminal acetylenic groups prepared by phase-transfer catalysis"
11. S.Boileau, L.Bouteiller*, A.Kowalewska, *Polymer Int.*, **53** (2004) 191-197 "Polysiloxanes containing crosslinkable diacetylene units in the main chain"
12. A.Kowalewska*, W.A.Stańczyk, R.P.Eckberg, *Polimery*, **49** (2004) 479-485 "Zastosowanie pochodnych tris(trimetylosililo)metylowych („trisilowych”) w chemii polimerów"
13. A.Kowalewska, W.A.Stańczyk, pp.729-733 w "Organosilicon Chemistry VI. From molecules to materials", N. Auner (ed.), Wiley-VCH, Weinheim, Vol.2, (2005) „New UV-curable alkoxysilanes modified with tris(trimethylsilyl)methyl derivatives"
14. A.Kowalewska*, W.A.Stańczyk, R.P.Eckberg, *Appl. Catal. A-Gen.*, **287** (2005) 54-59 "Tris(silyl)trifluoromethanesulphonates and their tetrakis(silyl) analogues as potential catalysts in photoinitiated cationic polymerization"
15. T.Ganicz, A.Kowalewska, W.A.Stańczyk*, M.Butts, S.A.Nye, S.Rubinsztajn, *J. Mater. Chem.*, **15** (2005) 611-619 "A novel organometallic route to phenylethenyl-modified polysiloxanes"
16. A.Kowalewska, *J. Mater. Chem.*, **15** (2005) 4997-5006 "Photo-acid catalyzed sol-gel process"
17. A.Kowalewska*, W.A.Stańczyk, *ARKIVOC*, 2006, part (v), 110-115 "New dendrimeric systems based on sterically hindered carbosilane units – synthesis and application"
18. R.P.Eckberg*, A.Kowalewska, W.A.Stańczyk, Radtech IV 2006 (proceedings) "Novel iodonium imidazolide photocatalysts"
19. A.Kowalewska*, J.Kupcik, J.Pola, W.A.Stańczyk, *Polymer*, **49** (2008) 857-866 "Laser irradiation of oligosiloxane copolymer thin films functionalized with side chain bulky carbosilane moieties"
20. A.Kowalewska*, B. Delczyk, Chapter 8 (pp 99-118) in *Silicon Based Polymers, Advances in Synthesis and Supramolecular Organization*, F.Ganachaud, S.Boileau, B. Boury (Eds.), Springer-Verlag. London, 2008, część I "Star-shape poly(methylvinyl-co-dimethyl)siloxanes with carbosilane core – synthesis and application"
21. A.Kowalewska*, M.Handke, K.Różga-Wijas, *e-Polymers*, (2008) nr 150 "Alkoxymethylcyclosiloxanes - new efficient precursors of crystalline $(\text{CH}_3\text{SiO}_{3/2})_8$ silsesquioxane and polymethyl silsesquioxanes"
22. M.Handke*, A.Kowalewska, W.Mozgawa, *J. Molec. Struct.*; **887** (2008) 152-158 "Spectroscopic study of ceramic precursors obtained by hydrolytic condensation of ethoxycyclotetrasiloxanes"

23. B.Handke*, W.Jastrzębski, W.Mozgawa, A.Kowalewska, *J. Molec. Struct.*, **887** (2008) 159-164 "Structural studies of crystalline octamethylsilsesquioxane (CH₃)₈Si₈O₁₂"
24. A.Kowalewska, *J. Organomet. Chem.*, **693** (2008) 2193-2199 "Dendronized polystyrene supports for new catalytic systems"
25. A.Kowalewska*, B.Delczyk, J.Chruściel, *e-Polymers*, (2009) nr 013 "Chain mobility in bulky carbosilane modified polymeric siloxane systems"
26. A.Kowalewska*, W.Fortuniak, B.Handke, *J. Organomet. Chem.*, **694** (2009) 1345-1353 "New hybrid silsesquioxane materials with sterically hindered carbosilane side groups"
27. M.Handke*, W.Jastrzebski, A.Kowalewska, W.Mozgawa, *J. Molec. Struct.*, **924-26** (2009) 248-253 "Spectroscopic study of preceramic polymers (xerogels) obtained by hydrolytic condensation of ethoxycyclosiloxanes"
28. M.Handke*, B.Handke, A.Kowalewska, W.Jastrzebski, *J. Molec. Struct.*, **924-26** (2009) 254-263 "New polysilsesquioxane materials of ladder-like structure"
29. A.Kowalewska*, W.Fortuniak, K.Różga-Wijas, B.Handke, *Thermochim. Acta*, **494** (2009) 45-53 "Thermolysis of new hybrid silsesquioxane-carbosilane materials"
30. K.Różga-Wijas, W.Fortuniak, A.Kowalewska, J.Chojnowski*, *J. Inorg. Organomet. Polym.*, **20** (2010) 387-394 "Generation and polycondensation of 3-chloropropylsilanetriol – Fast and efficient route to polyhedral octa-3-chloropropylsilsesquioxanes"
31. M.Handke*, A.Kowalewska, *Spectrochimica Acta Part A*, **79** (2011) 749– 757 "Siloxane and silsesquioxane molecules—Precursors for silicate materials"
32. A.Kowalewska, *J. Inorg. Organomet. Polym.*, **21** (2011) 244–253 "Preparation of Microporous Hybrid Materials by Thermal Removal of Sterically Hindered Carbosilane Side Groups"
33. A.Kowalewska*, S.Każmierski, B.Delczyk-Olejniczak, *Silicon*, **3** (2011) 37–44 „Polymer Chain Relaxation Mechanisms in Siloxane-Carbosilane Systems"
34. A.Kowalewska*, W.Fortuniak, J.Chojnowski, A.Pawlak, K.Gadzinowska, M.Zaród, *Silicon*, **4** (2012) 95-107 "Polymer nano-materials through self-assembly of polymeric POSS systems"
35. A.Koleżyński*, W.Jastrzębski, W.Szczyпка, A.Kowalewska, M.Nowacka, M.Sitarz, *J. Molec. Struct.*, **1044** (2013) 314–322 "The structure and bonding properties of chosen phenyl ladder-like silsesquioxane clusters"
36. M.Kwaśny*, A.Kowalewska, K.Wodnicka, M.Handke, *J. Mater. Sci.*, **48** (2013) 5188–5195 "Mesoporous silica obtained by polycondensation of octahydrodoctasilsesquioxane"
37. A.Kowalewska*, M.Nowacka, Chapter 24, pp 371-379 w "Concise Encyclopedia of High Performance Silicones Eds. Atul Tiwari, Mark D. Soucek, Wiley-Scrivener, Edition1, ISBN: 978-1-118-46965-1 (2014) "Silicones for Microfluidic Systems"
38. A.Kowalewska, *RSC Advances*, **4** (2014) 9622-9631 "Hybrid polymeric systems bearing bulky derivatives of tris(trimethylsilyl)methane"
39. A.Żubrowska, E.Piorkowska*, A.Kowalewska, M.Cichorek, *Colloid Polym. Sci.*, **293** (2015) 23-33 "Novel blends of polylactide with ethylene glycol derivatives of POSS"
40. A.Kowalewska*, M.Nowacka, *Silicon*, **7** (2015) 133–146 „Synthesis of Ladder Silsesquioxanes by in situ Polycondensation of Cyclic Tetravinylsiloxanetraol.“
41. M.Nowacka*, A.Kowalewska, K.Gadzinowska, *Silicon*, **7** (2015) 147–153 „Alkali-metal-directed hydrolytic condensation of 3-mercaptopropyltrimethoxysilane"
42. A.Kowalewska*, M.Nowacka, A.Tracz, T.Makowski, *Soft Matter*, **11** (2015) 4818-4829 „Supramolecular Self-Assembly of Linear Oligosilsesquioxanes on Mica – AFM Surface Imaging and Hydrophilicity Studies"
43. A.Kowalewska*, M.Nowacka, T.Makowski, *eXPRESS Polymer Letters*, **9** (2015) 984–1000 "Macroporous materials by self-assembly of linear oligo(phenylsilsesquioxanes)"
44. M.Nowacka, A.Kowalewska*, T.Makowski, *Beilstein J. Nanotechnol.*, **6** (2015) 2377–2387 „Nanostructured surfaces by supramolecular self-assembly of linear oligosilsesquioxanes with biocompatible side groups"
45. A.Kowalewska*, M.Nowacka, "Silicones for Microfluidic Systems" Chapter 24, pp 371-379 in "Concise Encyclopedia of High Performance Silicones Eds. Atul Tiwari, Mark D. Soucek, Wiley-Scrivener, Edition1, ISBN: 978-1-118-46965-1 (2014)
46. T.Pawlak, A.Kowalewska, B.Zgardzińska, M.J.Potrzebowski*, *J. Phys. Chem. C*, **119** (2015) 26575–26587 „Structure, dynamics, and host-guest interactions in POSS functionalized cross-linked nanoporous hybrid organic–inorganic polymers"

47. M.Nowacka*, A.Kowalewska, T.Makowski, *Polymer*, **87** (2016) 81-89 „Structural studies on ladder phenylsilsesquioxane oligomers formed by polycondensation of cyclotetrasiloxanetetraols„
48. A.Kowalewska*, M.Nowacka, T.Makowski, A. Michalski, *Polymer*, **90** (2016) 147-155 „Thermal stability of self-assembled surfaces and micropatterns made of ladder polysilsesquioxanes”
49. A.Kowalewska*, M.Nowacka, W.Maniukiewicz, *J. Organomet. Chem.*, **810** (2016) 15-24 „Octa(3-mercaptopropyl)octasilsesquioxane - A reactive nanocube of unique self-assembled packing morphology”
50. K.Gradzińska*, K.Łabęcka, A.Kowalewska, W.A.Śtańczyk, *Polimery*, **61** (2016) 231-238 „Silseskwioxanowe nanonośniki w diagnostyce i biomedycynie”

Patents and patent applications (2001-2015):

1. S.Boileau, A.Kowalewska, L.Bouteiller, M.Butts, S.Rubinsztajn “Diacetylenic polyorganosiloxanes, intermediates therefor and cured compositions prepared therefrom” US Pat 6,271,280 (2001)
2. R.M.Griswold, R.P.Eckberg, S.Rubinsztajn, S.Slomkowski, A.Kowalewska, S.Sosnowski “Paper release compositions having improved adhesion to paper and polymeric films” US Pat 7,090,923 (2006)
3. A.Kowalewska*, J.Chojnowski, M.Handke, K.Wijas. „Sposób wytwarzania siloksanów o regularnej strukturze” patent PL 211806 (2012)
4. J.Chojnowski*, W.Fortuniak, A.Kowalewska, K.Wijas „Sposób wytwarzania klatkowych oligo-3-chloropropylosiloksanów oraz sposób wytwarzania związków pośrednich 3-chloropropylosilano-polioli” patent PL 215638 (2014)
5. E.Piórkowska-Gałęska*, A.Żubrowska, A.Kowalewska „Modyfikowana kompozycja zawierająca polimer laktydu oraz sposób jej wytwarzania” zgłoszenie P-398488E (2012)
6. A.Kowalewska*, M.Nowacka „Sposób wytwarzania liniowych siloksanów o regularnej strukturze” zgłoszenie P-399575 (2012)
7. A.Kowalewska*, M.Nowacka, T.Makowski „Modyfikowana powierzchniowo mika oraz sposób jej wytwarzania” zgłoszenie P-411408 (2015)