# Ian Hamerton

## List of Publications by Citations



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|---|---|---|---|
| 197 papers | 4,647 citations | 31 h-index | 60 g-index |
| 203 ext. papers | 5,110 ext. citations | 4.7 avg, IF | 5.8 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 197 | Recent developments in the chemistry of halogen-free flame retardant polymers. *Progress in Polymer Science*, **2002**, 27, 1661-1712 | 29.6 | 1226 |
| 196 | Modern advances in bismaleimide resin technology: A 21st century perspective on the chemistry of addition polyimides. *Progress in Polymer Science*, **2017**, 69, 1-21 | 29.6 | 132 |
| 195 | Recent developments in the chemistry of cyanate esters *Polymer International*, **1998**, 47, 465-473 | 3.3 | 107 |
| 194 | Recent Technological Developments in Cyanate Ester Resins. *High Performance Polymers*, **1998**, 10, 163-174 | 1.6 | 97 |
| 193 | Octasilsesquioxane-reinforced DGEBA and TGDDM epoxy nanocomposites: Characterization of thermal, dielectric and morphological properties. *Acta Materialia*, **2010**, 58, 3345-3356 | 8.4 | 86 |
| 192 | Studies of cure schedule and final property relationships of a commercial epoxy resin using modified imidazole curing agents. *Polymer*, **1998**, 39, 1929-1937 | 3.9 | 73 |
| 191 | Stability of various metalloporphyrin catalysts during hydrogen peroxide epoxidation of alkene. *Journal of Molecular Catalysis A*, **2002**, 185, 25-31 | | 69 |
| 190 | Electrocatalytic properties of monometallic and bimetallic nanoparticles-incorporated polypyrrole films for electro-oxidation of methanol. *Journal of Power Sources*, **2006**, 160, 940-948 | 8.9 | 66 |
| 189 | High-Performance Thermoset Thermoset Polymer Blends: A Review of the Chemistry of Cyanate Ester Bismaleimide Blends. *High Performance Polymers*, **1996**, 8, 83-95 | 1.6 | 62 |
| 188 | Low temperature growth of carbon nanotubes on carbon fibre to create a highly networked fuzzy fibre reinforced composite with superior electrical conductivity. *Carbon*, **2014**, 74, 319-328 | 10.4 | 60 |
| 187 | Characterisation of commercially CVD grown multi-walled carbon nanotubes for paint applications. *Progress in Organic Coatings*, **2016**, 90, 44-53 | 4.8 | 59 |
| 186 | Nanocatalysts impregnated polythiophene electrodes for the electrooxidation of formic acid. *Applied Catalysis B: Environmental*, **2007**, 73, 172-179 | 21.8 | 56 |
| 185 | Metals and coordination compounds as modifiers for epoxy resins. *Coordination Chemistry Reviews*, **2002**, 224, 67-85 | 23.2 | 55 |
| 184 | Multi-Functional Carbon Fibre Composites using Carbon Nanotubes as an Alternative to Polymer Sizing. *Scientific Reports*, **2016**, 6, 37334 | 4.9 | 53 |
| 183 | Examining the Initiation of the Polymerization Mechanism and Network Development in Aromatic Polybenzoxazines. *Macromolecules*, **2013**, 46, 5117-5132 | 5.5 | 52 |
| 182 | The synthesis, characterisation and thermal behaviour of functionalised aryl cyanate ester monomers. *Polymer International*, **1992**, 29, 145-156 | 3.3 | 52 |
| 181 | Preparation and characterization of imidazole metal complexes and evaluation of cured epoxy networks. *Journal of Materials Chemistry*, **1994**, 4, 379-384 | | 51 |

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|---|---|---|---|
| 180 | Development of a closed-loop recycling process for discontinuous carbon fibre polypropylene composites. *Composites Part B: Engineering*, **2018**, 146, 222-231 | 10 | 50 |
| 179 | Hydrogen bonding. Part 18. Gas–liquid chromatographic measurements for the design and selection of some hydrogen bond acidic phases suitable for use as coatings on piezoelectric sorption detectors. *Journal of the Chemical Society Perkin Transactions II*, **1991**, 1417-1423 | | 43 |
| 178 | Development of Novel Functionalized Aryl Cyanate Ester Oligomers. 1. Synthesis and Thermal Characterization of the Monomers. *Macromolecules*, **1994**, 27, 4927-4935 | 5.5 | 42 |
| 177 | A study of the thermal and dynamic mechanical properties of functionalized aryl cyanate esters and their polymers. *Polymer International*, **1993**, 31, 95-106 | 3.3 | 42 |
| 176 | An evaluation of life cycle assessment and its application to the closed-loop recycling of carbon fibre reinforced polymers. *Composites Part B: Engineering*, **2020**, 184, 107665 | 10 | 40 |
| 175 | Low surface free energy cyanate ester–silica hybrid (CE–SiO2) nanomaterials for low k dielectric applications. *RSC Advances*, **2013**, 3, 12915 | 3.7 | 39 |
| 174 | Compatible poly(vinyl chloride)/chlorinated polyurethane blends: thermal characteristics. *European Polymer Journal*, **2000**, 36, 171-181 | 5.2 | 39 |
| 173 | Evidence for parallel destructive, and competitive epoxidation and dismutation pathways in metalloporphyrin-catalysed alkene oxidation by hydrogen peroxide. *Tetrahedron*, **2001**, 57, 6847-6853 | 2.4 | 38 |
| 172 | New Method To Predict the Thermal Degradation Behavior of Polybenzoxazines from Empirical Data Using Structure Property Relationships. *Macromolecules*, **2013**, 46, 7605-7615 | 5.5 | 36 |
| 171 | Solvation of gaseous non-electrolytes. *Faraday Discussions of the Chemical Society*, **1988**, 85, 107 | | 36 |
| 170 | Investigating the mechanism through which ionic liquids initiate the polymerisation of epoxy resins. *Polymer*, **2018**, 139, 163-176 | 3.9 | 34 |
| 169 | Mechanical properties of tough, high temperature carbon fibre composites from novel functionalized aryl cyanate ester polymers. *Polymer*, **1996**, 37, 4519-4528 | 3.9 | 33 |
| 168 | Developing predictive models for polycyanurates through a comparative study of molecular simulation and empirical thermo-mechanical data. *Polymer*, **2006**, 47, 690-698 | 3.9 | 32 |
| 167 | Multivariate analysis of spectra of cyanate ester/bismaleimide blends and correlations with properties. *Polymer*, **2002**, 43, 3381-3386 | 3.9 | 32 |
| 166 | Molecular modelling of the physical and mechanical properties of two polycyanurate network polymers. *Journal of Materials Chemistry*, **1996**, 6, 311 | | 31 |
| 165 | Hydrogen bonding. *Journal of Chromatography A*, **1993**, 646, 351-360 | 4.5 | 30 |
| 164 | Water uptake effects in resins based on alkenyl-modified cyanate ester–bismaleimide blends. *Polymer International*, **2001**, 50, 475-483 | 3.3 | 29 |
| 163 | A closed-loop recycling process for discontinuous carbon fibre polyamide 6 composites. *Composites Part B: Engineering*, **2019**, 179, 107418 | 10 | 27 |

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|---|---|---|---|
| 162 | The ene reaction between maleimides and allyl-substituted aromatics. *Tetrahedron*, **1997**, 53, 13473-13494 | 2.4 | 27 |
| 161 | The development of novel functionalised aryl cyanate esters. Part 2. Mechanical properties of the polymers and composites. *Polymer*, **2001**, 42, 2307-2319 | 3.9 | 26 |
| 160 | High temperature 1H NMR studies of epoxy cure: A neglected technique. *Polymer Bulletin*, **1994**, 33, 215-219 | 2.4 | 26 |
| 159 | Toughening Mechanisms in Aromatic Polybenzoxazines Using Thermoplastic Oligomers and Telechelics. *Macromolecules*, **2014**, 47, 1946-1958 | 5.5 | 25 |
| 158 | Preparation, characterization, and thermal properties of controllable metal-imidazole complex curing agents for epoxy resins. *Journal of Applied Polymer Science*, **2000**, 75, 201-217 | 2.9 | 25 |
| 157 | A study of the polymerization of novel cyanate ester/acrylate blends. *Polymer*, **2000**, 41, 1647-1656 | 3.9 | 25 |
| 156 | Effect of complexation with copper (II) on cured neat resin properties of a commercial epoxy resin using modified imidazole curing agents. *Journal of Materials Chemistry*, **1996**, 6, 305 | | 25 |
| 155 | Reclaimed Carbon and Flax Fibre Composites: Manufacturing and Mechanical Properties. *Recycling*, **2018**, 3, 52 | 3.2 | 25 |
| 154 | Systematic examination of thermal, mechanical and dielectrical properties of aromatic polybenzoxazines. *Reactive and Functional Polymers*, **2012**, 72, 736-744 | 4.6 | 24 |
| 153 | Synthesis and Characterization of a POSS-Maleimide Precursor for Hybrid Nanocomposites. *High Performance Polymers*, **2008**, 20, 67-85 | 1.6 | 23 |
| 152 | Developing poly(bis-benzoxazines) with improved fracture toughness. 1: Using molecular simulation to determine and predict structure□property relationships. *Reactive and Functional Polymers*, **2006**, 66, 21-39 | 4.6 | 23 |
| 151 | Double cantilever beam testing of repaired carbon fibre composites. *Composites Part A: Applied Science and Manufacturing*, **2000**, 31, 603-608 | 8.4 | 23 |
| 150 | Comparative kinetic analyses for epoxy resins cured with imidazole□metal complexes. *Journal of Materials Chemistry*, **1994**, 4, 1793-1797 | | 23 |
| 149 | Studies on a series of bis-arylimides containing four phenylene rings and their polymers: 2. Polymerization of monomers and thermal analysis of the polymers. *Polymer*, **1991**, 32, 2482-2490 | 3.9 | 23 |
| 148 | Characterisation of Natural Fibres for Sustainable Discontinuous Fibre Composite Materials. *Materials*, **2020**, 13, | 3.5 | 22 |
| 147 | Development of sizing-free multi-functional carbon fibre nanocomposites. *Composites Part A: Applied Science and Manufacturing*, **2016**, 90, 306-319 | 8.4 | 22 |
| 146 | A model of the surface of oxidatively treated carbon fibre based on calculations of adsorption interactions with small molecules. *Composites Part A: Applied Science and Manufacturing*, **1998**, 29, 1283-1290 | 8.4 | 22 |
| 145 | Conformational studies of polycyanurates: a study of internal stress versus molecular structure. *Polymer*, **2002**, 43, 4599-4604 | 3.9 | 22 |

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|---|---|---|---|
| 144 | A study of the cyclotrimerisation and polymerisation of aryl cyanates using 13C and 15N nuclear magnetic resonance spectroscopy, fourier transform infra-red spectroscopy and differential scanning calorimetry. *Polymer Bulletin*, **1991**, 25, 475-482 | 2.4 | 22 |
| 143 | The development of controllable complex curing agents for epoxy resins. I. Preparation, characterization, and storage behavior of transition metal diamine complexes. *Journal of Applied Polymer Science*, **2001**, 80, 1489-1503 | 2.9 | 21 |
| 142 | The development of controllable metal-chelate curing agents with improved storage stability. *Polymer Bulletin*, **1994**, 33, 347-353 | 2.4 | 21 |
| 141 | A Life Cycle Engineering Perspective on Biocomposites as a Solution for a Sustainable Recovery. *Sustainability*, **2021**, 13, 1160 | 3.6 | 21 |
| 140 | Cycloaliphatic epoxy-based hybrid nanocomposites reinforced with POSS or nanosilica for improved environmental stability in low Earth orbit. *Composites Part B: Engineering*, **2018**, 138, 66-76 | 10 | 21 |
| 139 | Solving the problem of building models of crosslinked polymers: an example focussing on validation of the properties of crosslinked epoxy resins. *PLoS ONE*, **2012**, 7, e42928 | 3.7 | 20 |
| 138 | Studies on a series of bisarylimides containing four phenylene rings and their polymers: 1. Synthesis and characterization of the monomers. *Polymer*, **1991**, 32, 358-363 | 3.9 | 20 |
| 137 | Fused Deposition Modelling of Fibre Reinforced Polymer Composites: A Parametric Review. *Journal of Composites Science*, **2021**, 5, 29 | 3 | 20 |
| 136 | Theoretical studies of conducting polymers based on substituted polypyrroles. *Computational and Theoretical Polymer Science*, **1998**, 8, 265-271 | | 19 |
| 135 | Developing improved models of oxidatively treated carbon fibre surfaces, using molecular simulation. *Composites Part A: Applied Science and Manufacturing*, **2004**, 35, 1161-1173 | 8.4 | 19 |
| 134 | Covalent Incorporation of 2,5-Diphenyloxazole in Sol Gel Matrices and Their Application in Radioanalytical Chemistry. *Chemistry of Materials*, **2000**, 12, 568-572 | 9.6 | 19 |
| 133 | Molecular simulation of the comparative flexibility of bridging linkages in poly(aryl ether sulfone)s and poly(aryl ether ketone)s from a study of isolated oligomers. *Macromolecular Theory and Simulations*, **1996**, 5, 305-320 | 1.5 | 19 |
| 132 | A study of the thermal degradation of poly(vinyl chloride) in the presence of carbazole and potassium carbazole using t.g.a./FTi.r.. *Polymer*, **1994**, 35, 336-338 | 3.9 | 19 |
| 131 | Examination of the Thermal and Thermomechanical Behavior of Novel Cyanate Ester Homopolymers and Blends with Low Coefficients of Thermal Expansion. *Macromolecules*, **2009**, 42, 7718-7735 | 5.5 | 18 |
| 130 | The development of controllable complex curing agents for epoxy resins. II. Examining the dissociation and thermal behavior of transition metal-diamine complex-epoxy blends. *Journal of Applied Polymer Science*, **2002**, 84, 2411-2424 | 2.9 | 18 |
| 129 | Studies on a dicyanate containing four phenylene rings and polycyanurate blends. 2. Application of mathematical models to the catalysed polymerization process. *Polymer*, **2003**, 44, 4839-4852 | 3.9 | 18 |
| 128 | Development of quantitative structure property relationships for poly(arylene ether)s. *Journal of Molecular Graphics*, **1995**, 13, 14-7, 51 | | 18 |
| 127 | Studies of temperature and time-dependent network formation in commercial epoxy resins using modified imidazole curing agents. *Polymer International*, **1996**, 41, 159-168 | 3.3 | 18 |

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|---|---|---|---|
| 126 | Examining the influence of bisphenol A on the polymerisation and network properties of an aromatic benzoxazine. *Polymer*, **2016**, 88, 52-62 | 3.9 | 17 |
| 125 | Quasi-Isotropic and Pseudo-Ductile Highly Aligned Discontinuous Fibre Composites Manufactured with the HiPerDiF (High Performance Discontinuous Fibre) Technology. *Materials*, **2019**, 12, | 3.5 | 17 |
| 124 | Antimicrobial and anticancer efficacy of antineoplastic agent capped gold nanoparticles. *Journal of Biomedical Nanotechnology*, **2010**, 6, 129-37 | 4 | 17 |
| 123 | Molecular modelling of a polyarylethersulfone under bulk conditions. *Modelling and Simulation in Materials Science and Engineering*, **1996**, 4, 151-159 | 2 | 17 |
| 122 | Analytical detection and biological assay of antileukemic drug using gold nanoparticles. *Electrochimica Acta*, **2006**, 52, 1152-1160 | 6.7 | 17 |
| 121 | Atomic oxygen degradation mechanisms of epoxy composites for space applications. *Polymer Degradation and Stability*, **2019**, 166, 108-120 | 4.7 | 16 |
| 120 | Ductility potential of brittle epoxies: Thermomechanical behaviour of plastically-deformed fully-cured composite resins. *Polymer*, **2017**, 120, 43-51 | 3.9 | 16 |
| 119 | Examining the thermo-mechanical properties of novel cyanate ester blends through empirical measurement and simulation. *Reactive and Functional Polymers*, **2012**, 72, 596-605 | 4.6 | 16 |
| 118 | TGA/FTi.r. studies on the thermal stability of poly(vinyl chloride) blends with a novel colourant and stabilizer: 3-(2,4-dichlorophenylazo)-9-(2,3-epoxypropane)carbazole. *Polymer*, **1998**, 39, 241-244 | 3.9 | 16 |
| 117 | Introduction to cyanate ester resins **1994**, 1-6 | | 16 |
| 116 | Molecular modelling of high performance polymers. *Polymer International*, **1996**, 41, 151-157 | 3.3 | 15 |
| 115 | The synthesis, characterization and polymerization kinetic study of a series of related addition polyimides. *High Performance Polymers*, **1994**, 6, 21-34 | 1.6 | 15 |
| 114 | Development of epoxy-cyanate ester-clay nanocomposites offering enhanced thermally stability. *Journal of Applied Polymer Science*, **2019**, 136, 47754 | 2.9 | 14 |
| 113 | Remanufacturing of Woven Carbon Fibre Fabric Production Waste into High Performance Aligned Discontinuous Fibre Composites. *Journal of Composites Science*, **2020**, 4, 68 | 3 | 13 |
| 112 | Kinetics and Cure Mechanism in Aromatic Polybenzoxazines Modified Using Thermoplastic Oligomers and Telechelics. *Macromolecules*, **2014**, 47, 1935-1945 | 5.5 | 13 |
| 111 | Using POSS reagents to reduce hydrophobic character in polypropylene nanocomposites. *Journal of Materials Chemistry A*, **2013**, 1, 12971 | 13 | 13 |
| 110 | Molecular modelling of interactions at the composite interfacesbetween electrolytically surface-treated carbon fibre and epoxyresin. *Journal of Materials Chemistry*, **1997**, 7, 169-174 | | 13 |
| 109 | The application of molecular simulation to the rational design of new materials: 2. Prediction of the physico-mechanical properties of linear epoxy systems. *Polymer*, **1997**, 38, 4305-4310 | 3.9 | 13 |

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|---|---|---|---|
| 108 | Studies on a dicyanate containing four phenylene rings and polycyanurate blends. 1. Synthesis and polymerization of the monomers and characterization of the polymer blends using thermal and mechanical methods. *Polymer*, **2002**, 43, 5737-5748 | 3.9 | 13 |
| 107 | New force-field parameters for molecular simulations of s-triazine and cyanurate-containing systems. 2. Application and comparison with different simulation methods. *Polymer*, **2003**, 44, 793-799 | 3.9 | 13 |
| 106 | Synthesis and characterization of functionalized thermoplastics as reactive modifiers for bismaleimide resins. *Polymer International*, **2001**, 50, 1309-1317 | 3.3 | 13 |
| 105 | Using combined computational techniques to predict the glass transition temperatures of aromatic polybenzoxazines. *PLoS ONE*, **2013**, 8, e53367 | 3.7 | 13 |
| 104 | Examining the effects of storage on the initiation behaviour of ionic liquids towards the cure of epoxy resins. *Reactive and Functional Polymers*, **2018**, 133, 9-20 | 4.6 | 13 |
| 103 | Towards the rational design of polymers using molecular simulation: Predicting the effect of cure schedule on thermo-mechanical properties for a cycloaliphatic amine-cured epoxy resin. *Reactive and Functional Polymers*, **2014**, 74, 1-15 | 4.6 | 12 |
| 102 | Studying the co-reaction of propenyl-substituted cyanate ester-bismaleimide blends using model compounds. *Reactive and Functional Polymers*, **2012**, 72, 279-286 | 4.6 | 12 |
| 101 | The use of thermosets in aerospace applications **2012**, 189-227 | | 12 |
| 100 | Validating software and force fields for predicting the mechanical and physical properties of poly(bisbenzoxazine)s. *Molecular Simulation*, **2008**, 34, 1259-1266 | 2 | 12 |
| 99 | Kinetics and mechanism of the titanium tetrachloride-catalysed cyclotrimerisation of aryl cyanates. *Journal of the Chemical Society Perkin Transactions II*, **1994**, 1937 | | 12 |
| 98 | A comparative study of the relative reactivity of alkenyl-functionalized toughening modifiers for bis-maleimides. *Polymer Bulletin*, **1991**, 27, 163-170 | 2.4 | 12 |
| 97 | Development and application of a quality control and property assurance methodology for reclaimed carbon fibers based on the HiPerDiF (High Performance Discontinuous Fibre) method and interlaminated hybrid specimens. *Advanced Manufacturing: Polymer and Composites Science*, 2018, 4, 48-55 | 0.6 | 11 |
| 96 | Studies on a dicyanate containing four phenylene rings and polycyanurate copolymers. 3. Application of mathematical models to determine the kinetics of the thermal degradation processes. *Polymer*, **2004**, 45, 2193-2199 | 3.9 | 11 |
| 95 | A new synthetic route for the preparation of alkenyl functionalized aryl cyanate ester monomers. *Polymer*, **1999**, 40, 5421-5427 | 3.9 | 11 |
| 94 | Properties of unreinforced cyanate ester matrix resins **1994**, 193-229 | | 11 |
| 93 | Studies on a series of bis-arylimides containing four phenylene rings and their polymers: 3. Kinetic analysis of the thermal polymerizations. *Polymer*, **1992**, 33, 3664-3669 | 3.9 | 11 |
| 92 | Matrix-graded and fibre-steered composites to tackle stress concentrations. *Composite Structures*, **2019**, 207, 72-80 | 5.3 | 11 |
| 91 | Radiation-grafted cation-exchange membranes: an initial ex situ feasibility study into their potential use in reverse electrodialysis. *Sustainable Energy and Fuels*, **2019**, 3, 1682-1692 | 5.8 | 10 |

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| 90 | Analysis of atomic oxygen and ultraviolet exposure effects on cycloaliphatic epoxy resins reinforced with octa-functional POSS. *Acta Astronautica*, **2018**, 142, 103-111 | 2.9 | 10 |
| 89 | Studies of polycyanurates based on phenoxy-substituted cyclic phosphazenes: Synthesis of the monomer and a preliminary study of its thermal properties in binary blends. *Polymer Degradation and Stability*, **2012**, 97, 679-689 | 4.7 | 10 |
| 88 | ToF SIMS and XPS Studies of Carbon Fiber Surface during Electrolytic Oxidation in 17O/18O Enriched Aqueous Electrolytes. *Chemistry of Materials*, **1997**, 9, 1972-1977 | 9.6 | 10 |
| 87 | Synthesis and characterisation of novel methyl methacrylate-2-(dimethylamino)ethyl methacrylate copolymer salts containing polymerisable anions. *Polymer*, **2003**, 44, 3775-3784 | 3.9 | 10 |
| 86 | Kinetic and simulation studies of linear epoxy systems. *Journal of Materials Chemistry*, **1994**, 4, 385 | | 10 |
| 85 | Reactive Molecular Dynamics Study of the Thermal Decomposition of Phenolic Resins. *Journal of Composites Science*, **2019**, 3, 32 | 3 | 9 |
| 84 | The development of controllable complex curing agents for epoxy resins. *Journal of Materials Chemistry*, **2006**, 16, 255-265 | | 9 |
| 83 | New force-field parameters for use in molecular simulations of s-triazine and cyanurate-containing systems. 1 Derivation and molecular structure synopsis. *Computational and Theoretical Polymer Science*, **2001**, 11, 467-473 | | 9 |
| 82 | Development of Cycloaliphatic Epoxy-POSS Nanocomposite Matrices with Lambas Enhanced Resistance to Atomic Oxygen. *Molecules*, **2020**, 25, | 4.8 | 9 |
| 81 | Examining the nature of network formation during epoxy polymerisation initiated with ionic liquids. *Polymer*, **2018**, 150, 318-325 | 3.9 | 8 |
| 80 | Studying the effect of the chloral group on the thermal and physical properties of aromatic cyanate esters. *Polymer Degradation and Stability*, **2014**, 110, 435-446 | 4.7 | 8 |
| 79 | Molecular modelling of interactions at the composite interface between surface-treated carbon fibre and polymer matrices: the influence of surface functional groups. *Journal of Materials Chemistry*, **1998**, 8, 1333-1337 | | 8 |
| 78 | N-(2-biphenylenyl)-4-[2?-phenylethynyl]phthalimide New monomer synthesis, cure and thermal properties of resulting high temperature polymer. *Polymer*, **2002**, 43, 1717-1725 | 3.9 | 8 |
| 77 | The application of molecular simulation to the rational design of new materials: 1. Structure and modelling studies of linear epoxy systems. *Polymer*, **1994**, 35, 4326-4333 | 3.9 | 8 |
| 76 | Developing toughened bismaleimide-clay nanocomposites: Comparing the use of platelet and rod-like nanoclays. *Reactive and Functional Polymers*, **2019**, 134, 10-21 | 4.6 | 8 |
| 75 | Tuning the properties for the self-extinguishing epoxy-amine composites containing copper-coordinated curing agent: Flame tests and physical mechanical measurements. *Reactive and Functional Polymers*, **2018**, 129, 95-102 | 4.6 | 8 |
| 74 | Using QSPR techniques to predict char yield arising from the thermal degradation of polybenzoxazines. *Polymer Degradation and Stability*, **2013**, 98, 446-452 | 4.7 | 7 |
| 73 | Structure of 2,2?-bis(4-cyanatophenyl)isopropylidene. *Journal of Crystallographic and Spectroscopic Research*, **1990**, 20, 285-289 | | 7 |

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|---|---|---|---|
| 72 | Prediction of selected physical and mechanical properties of a telechelic polybenzoxazine by molecular simulation. *PLoS ONE*, **2013**, 8, e61179 | 3.7 | 7 |
| 71 | Liquid Processable, Thermally Stable, Hydrophobic Phenolic Triazine Resins for Advanced Composite Applications. *ACS Applied Polymer Materials*, **2019**, 1, 1458-1465 | 4.3 | 6 |
| 70 | Improving Dispersion of Recycled Discontinuous Carbon Fibres to Increase Fibre Throughput in the HiPerDiF Process. *Materials*, **2020**, 13, | 3.5 | 6 |
| 69 | Validation of a smoothed particle hydrodynamics model for a highly aligned discontinuous fibre composites manufacturing process. *Composites Science and Technology*, **2020**, 196, 108152 | 8.6 | 6 |
| 68 | Examining the kinetics of the thermal polymerisation behaviour of epoxy resins initiated with a series of 1-ethyl-3-methylimidazolium based ionic liquids. *Thermochimica Acta*, **2018**, 663, 19-26 | 2.9 | 6 |
| 67 | Water-based fractionation of a commercial humic acid. Solid-state and colloidal characterization of the solubility fractions. *Journal of Colloid and Interface Science*, **2017**, 508, 28-38 | 9.3 | 6 |
| 66 | Dramatic reductions in water uptake observed in novel POSS nanocomposites based on anhydride-cured epoxy matrix resins. *Materials Today Communications*, **2015**, 4, 186-198 | 2.5 | 6 |
| 65 | Using Molecular Simulation to Predict the Physical and Mechanical Properties of Polybenzoxazines **2011**, 127-142 | | 6 |
| 64 | Methods for process-related resin selection and optimisation in high-pressure resin transfer moulding. *Materials Science and Technology*, **2019**, 35, 327-335 | 1.5 | 6 |
| 63 | Investigation of structure property relationships in liquid processible, solvent free, thermally stable bismaleimide-triazine (BT) resins. *Reactive and Functional Polymers*, **2016**, 102, 110-118 | 4.6 | 5 |
| 62 | Effects of thermal history on the polymerisation mechanism and network development in aromatic polybenzoxazines. *Reactive and Functional Polymers*, **2013**, 73, 1612-1624 | 4.6 | 5 |
| 61 | Quantifying the effect of polymer blending through molecular modelling of cyanurate polymers. *PLoS ONE*, **2012**, 7, e44487 | 3.7 | 5 |
| 60 | Probing the cure of 13C labelled bisphenol A dicyanate ester in carbon fibre reinforced composites using solid state 13C NMR, SEM and FTIR. *Polymer Bulletin*, **1997**, 38, 433-438 | 2.4 | 5 |
| 59 | The computer modelling and the chemical kinetics of the rate of cure of epoxy resins. *Journal of Coatings Technology and Research*, **1998**, 81, 68-71 | | 5 |
| 58 | Modelling the structural and physicomechanical properties of substituted poly(p-phenylene)s using molecular mechanical and molecular orbital methods. *Polymer*, **2002**, 43, 4103-4110 | 3.9 | 5 |
| 57 | Predicting glass transition temperatures of polyarylethersulphones using QSPR methods. *PLoS ONE* , **2012**, 7, e38424 | 3.7 | 5 |
| 56 | Modification of stress-strain behaviour in aromatic polybenzoxazines using core shell rubbers. *Reactive and Functional Polymers*, **2016**, 103, 117-130 | 4.6 | 5 |
| 55 | Examining the influence of carboxylic anhydride structures on the reaction kinetics and processing characteristics of an epoxy resin for wind turbine applications. *Reactive and Functional Polymers*, **2019**, 144, 104353 | 4.6 | 4 |

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| 54 | Examining the Influence of Anion Nucleophilicity on the Polymerisation Initiation Mechanism of Phenyl Glycidyl Ether. *Polymers*, **2019**, 11, | 4.5 | 4 |
| 53 | What are we going to do about a problem like polymer chemistry? Develop new methods of delivery to improve understanding of a demanding interdisciplinary topic. *Chemistry Education Research and Practice*, **2015**, 16, 293-301 | 2.1 | 4 |
| 52 | Examining the thermal degradation behaviour of a series of cyanate ester homopolymers. *Polymer International*, **2019**, 68, 1666-1672 | 3.3 | 4 |
| 51 | Designing thermoplastic oligomers with programmed degradation mechanisms using a combined empirical and simulation approach. *Polymer Degradation and Stability*, **2013**, 98, 829-838 | 4.7 | 4 |
| 50 | Examining the kinetics of the thermal polymerization of commercial aromatic bis-benzoxazines. *Journal of Polymer Science Part A*, **2014**, 52, 2068-2081 | 2.5 | 4 |
| 49 | A systematic examination of colour development in synthetic ultramarine according to historical methods. *PLoS ONE*, **2013**, 8, e50364 | 3.7 | 4 |
| 48 | Simulation of the free energy of mixing for blend components in a new family of flexible polycyanurates. *Polymer*, **2010**, 51, 5857-5868 | 3.9 | 4 |
| 47 | Preparation of metal-aromatic diamine complexes and their influence on the cure of a commericial epoxy resin. *Polymer Bulletin*, **1996**, 36, 295-302 | 2.4 | 4 |
| 46 | Structure of 2,2?-bis(3-allyl-4-cyanatophenyl)isopropylidene. *Journal of Crystallographic and Spectroscopic Research*, **1992**, 22, 101-108 | | 4 |
| 45 | On the use of benzaldehyde to improve the storage stability of one-pot, epoxy ionic liquid formulations. *European Polymer Journal*, **2019**, 112, 126-136 | 5.2 | 4 |
| 44 | The use of thermosets in modern aerospace applications **2018**, 303-340 | | 4 |
| 43 | Pseudo-ductile behaviour in fibre reinforced thermoplastic angle-ply composites. *Composites Science and Technology*, **2020**, 197, 108261 | 8.6 | 3 |
| 42 | Prediction of the char formation of polybenzoxazines: The effect of heterogeneities in the crosslinked network to the prediction accuracy in quantitative structure-properties relationship (QSPR) model. *Reactive and Functional Polymers*, **2018**, 129, 129-137 | 4.6 | 3 |
| 41 | Improving the hydrolytic stability of aryl cyanate esters by examining the effects of extreme environments on polycyanurate copolymers. *Reactive and Functional Polymers*, **2016**, 109, 104-111 | 4.6 | 3 |
| 40 | Examining structure property relationships in coatings based on substituted linear aromatic polycyanurates. *Reactive and Functional Polymers*, **2013**, 73, 1046-1057 | 4.6 | 3 |
| 39 | The effect of pH on the functionalization of nylon fabric with carbon nanotubes. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 84-90 | 1.3 | 3 |
| 38 | Inverse Gas Chromatography Characterization of Carbon Fiber Surfaces - Effects of Applied Surface Treatment. *High Performance Polymers*, **2005**, 17, 561-574 | 1.6 | 3 |
| 37 | Computer modelling and chemical kinetics of the cure of aerospace resin systems. *Aircraft Engineering and Aerospace Technology*, **1999**, 71, 470-478 | 5 | 3 |

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| 36 | Development and application of radio-size-exclusion chromatography. *Journal of Chromatography A* , **1996**, 727, 61-70 | 4.5 | 3 |
| 35 | A study of the polymerization behaviour of N-(4-phenoxy)-phenylmaleimide using DSC analysis. *Polymer Bulletin*, **1993**, 30, 521-527 | 2.4 | 3 |
| 34 | Natural Fibres as a Sustainable Reinforcement Constituent in Aligned Discontinuous Polymer Composites Produced by the HiPerDiF Method. *Materials*, **2021**, 14, | 3.5 | 3 |
| 33 | Developing (Quantitative Structure Property Relationships) QSPR Techniques to Predict the Char Formation of Polybenzoxazines. *Polymers*, **2016**, 8, | 4.5 | 3 |
| 32 | Examining the thermal behaviour of novel aromatic polybenzoxazine blends containing an organophosphorous compound and polyhedral oligomeric silsesquioxane reagents. *Polymer International*, **2016**, 65, 1015-1023 | 3.3 | 3 |
| 31 | Positioning and aligning CNTs by external magnetic field to assist localised epoxy cure. *Open Physics*, **2016**, 14, 508-516 | 1.3 | 3 |
| 30 | Exploring Structure?Property Relationships in Aromatic Polybenzoxazines Through Molecular Simulation. *Polymers*, **2018**, 10, | 4.5 | 3 |
| 29 | A Novel Approach to Atomistic Molecular Dynamics Simulation of Phenolic Resins Using Symthons. *Polymers*, **2020**, 12, | 4.5 | 2 |
| 28 | Developing toughened aromatic polybenzoxazines using thermoplastic oligomers and telechelics, part 1: Preparation and characterization of the functionalized oligomers. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a | 2.9 | 2 |
| 27 | At the Limits of Simulation: A New Method to Predict Thermal Degradation Behavior in Cyanate Esters and Nanocomposites Using Molecular Dynamics Simulation. *Macromolecular Theory and Simulations*, **2014**, 23, 369-372 | 1.5 | 2 |
| 26 | Studying structure□property relationships in oligomeric engineering thermoplastics by controlled preparation of low molecular weight polymers. *Reactive and Functional Polymers*, **2014**, 81, 22-32 | 4.6 | 2 |
| 25 | A Tritium□Hydrogen Exchange Procedure for Determining the Concentration of Exchangeable Sites on PAN Based Carbon Fibres. *High Performance Polymers*, **1997**, 9, 281-290 | 1.6 | 2 |
| 24 | Assessment of two methods for application in the prediction of the infrared spectra of polymers. *Computational and Theoretical Polymer Science*, **2001**, 11, 287-302 | | 2 |
| 23 | Examining the Influence of Organophosphorus Flame Retardants on the Thermal Behavior of Aromatic Polybenzoxazines. *Macromolecular Chemistry and Physics*, **2019**, 220, 1800282 | 2.6 | 2 |
| 22 | SPH Simulation for Short Fibre Recycling Using Water Jet Alignment. *International Journal of Computational Fluid Dynamics*, **2021**, 35, 129-142 | 1.2 | 2 |
| 21 | Delivering interlaminar reinforcement in composites through electrospun nanofibres. *Advanced Manufacturing: Polymer and Composites Science*, **2019**, 5, 155-171 | 0.6 | 1 |
| 20 | Examining thermal stability and structure property relationships in coatings based on linear aromatic poly(methoxy-thiocyanurate)s. *Polymer Degradation and Stability*, **2013**, 98, 2201-2207 | 4.7 | 1 |
| 19 | A Novel Phenylethynyl-terminated Siloxane: Synthesis and Electron Beam Cure. *High Performance Polymers*, **2003**, 15, 143-154 | 1.6 | 1 |

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|---|---|---|---|
| 18 | Life Cycle Assessment of the High Performance Discontinuous Fibre (HiPerDiF) Technology and Its Operation in Various Countries. *Sustainability*, **2022**, 14, 1922 | 3.6 | 1 |
| 17 | Experimental characterisation and micromechanical models for luminescent phosphors incorporated with nonwoven veil-polymer composites. *Composites Part B: Engineering*, **2020**, 202, 108444 | 10 | 1 |
| 16 | Measurement of the glass transition temperature of an epoxy resin using principal components of Raman spectra. *Composites Part B: Engineering*, **2020**, 200, 108210 | 10 | 1 |
| 15 | An automated in-situ polymerisation procedure for multi-functional cyanate ester resins via ring formation. *Polymer*, **2021**, 228, 123938 | 3.9 | 1 |
| 14 | Phoenix polymers: fire induced nanohardness in fibril-forming aromatic cyanate esters.. *RSC Advances*, **2018**, 8, 36264-36271 | 3.7 | 1 |
| 13 | A Route to Sustainable Aviation: A Roadmap for the Realization of Aircraft Components With Electrical and Structural Multifunctionality. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 3032-3049 | 7.6 | 1 |
| 12 | AutoMapper: A python tool for accelerating the polymer bonding workflow in LAMMPS. *Computational Materials Science*, **2022**, 205, 111204 | 3.2 | 0 |
| 11 | Recycling of fiber reinforced thermosetting composites **2021**, 561-595 | | 0 |
| 10 | Batch production and fused filament fabrication of highly aligned discontinuous fibre thermoplastic filaments. *Additive Manufacturing*, **2021**, 102359 | 6.1 | 0 |
| 9 | Modern Developments Using Molecular Simulation to Predict the Physical and Mechanical Properties of Polybenzoxazines **2017**, 111-129 | | |
| 8 | Predictive Methodology and Properties of Polybenzoxazines **2017**, 131-145 | | |
| 7 | Synthesis and characterization of organosoluble radiation-resistant composite materials from octa(maleimidophenyl)silsesquioxane and aryldiamines. *Polymers for Advanced Technologies*, **2018**, 29, 1261-1270 | 3.2 | |
| 6 | Examining the preparation and characterization of coatings based on linear aromatic terpoly(methoxy-cyanurate-thiocyanurate)s. *Polymer International*, **2014**, 63, 60-71 | 3.3 | |
| 5 | N-(2-biphenylenyl)-4-[2?-phenylethynyl] phthalimide: 2. Detailed study of the monomer cure and properties of the resulting polymer. *Polymer International*, **2004**, 53, 877-884 | 3.3 | |
| 4 | Hydrotreating Catalysts and Processes **2005**, 1357-1365 | | |
| 3 | Radiochemical studies of the leaching of primary scintillator molecules from within sol–gel glasses. *Journal of Materials Chemistry*, **2000**, 10, 1761-1764 | | |
| 2 | Using Molecular Simulation to Explore Unusually Low Moisture Uptake in Amine-Cured Epoxy Carbon Fiber Reinforced Nanocomposites. *Macromolecular Chemistry and Physics*, **2016**, 217, 1282-1292 | 2.6 | |
| 1 | Exploring the thermal degradation mechanisms of some polybenzoxazines under ballistic heating conditions in helium and air. *Polymer Degradation and Stability*, **2018**, 156, 180-192 | 4.7 | |