

# Hatsuo Ishida

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/3636002/hatsuo-ishida-publications-by-citations.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

306  
papers

18,196  
citations

77  
h-index

122  
g-index

311  
ext. papers

19,509  
ext. citations

4.3  
avg, IF

7.11  
L-index

#	Paper	IF	Citations
306	Phenolic materials via ring-opening polymerization: Synthesis and characterization of bisphenol-A based benzoxazines and their polymers. <i>Journal of Polymer Science Part A</i> , <b>1994</b> , 32, 1121-1129	2.5	811
305	Physical and mechanical characterization of near-zero shrinkage polybenzoxazines. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1996</b> , 34, 1019-1030	2.6	659
304	A Study on the Volumetric Expansion of Benzoxazine-Based Phenolic Resin. <i>Macromolecules</i> , <b>1997</b> , 30, 1099-1106	5.5	422
303	The structure of $\gamma$ -aminopropyltriethoxysilane on glass surfaces. <i>Journal of Colloid and Interface Science</i> , <b>1980</b> , 74, 396-404	9.3	382
302	Mechanical characterization of copolymers based on benzoxazine and epoxy. <i>Polymer</i> , <b>1996</b> , 37, 4487-4495	3.9	380
301	Very high thermal conductivity obtained by boron nitride-filled polybenzoxazine. <i>Thermochimica Acta</i> , <b>1998</b> , 320, 177-186	2.9	368
300	General Approach to Nanocomposite Preparation. <i>Chemistry of Materials</i> , <b>2000</b> , 12, 1260-1267	9.6	317
299	Spectroscopic Studies of Poly[N,NSbis(phenoxyphenyl)pyromellitimide]. 1. Structures of the Polyimide and Three Model Compounds. <i>Macromolecules</i> , <b>1980</b> , 13, 826-834	5.5	308
298	Phenolic materials via ring-opening polymerization of benzoxazines: Effect of molecular structure on mechanical and dynamic mechanical properties. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1994</b> , 32, 921-927	2.6	260
297	A review of recent progress in the studies of molecular and microstructure of coupling agents and their functions in composites, coatings and adhesive joints. <i>Polymer Composites</i> , <b>1984</b> , 5, 101-123	3	230
296	Structural effects of phenols on the thermal and thermo-oxidative degradation of polybenzoxazines. <i>Polymer</i> , <b>1999</b> , 40, 4365-4376	3.9	213
295	Molecular characterization of the polymerization of acetylene-functional benzoxazine resins. <i>Polymer</i> , <b>1999</b> , 40, 1815-1822	3.9	201
294	Synthesis and properties of a new crosslinkable polymer containing benzoxazine moiety in the main chain. <i>Polymer</i> , <b>2006</b> , 47, 7664-7669	3.9	189
293	Thermal study on the copolymers of phthalonitrile and phenylnitrile-functional benzoxazines. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 73, 2937-2949	2.9	186
292	Synthesis and characterization of maleimide and norbornene functionalized benzoxazines. <i>Polymer</i> , <b>2005</b> , 46, 5588-5595	3.9	183
291	Comparison among Several Numerical Integration Methods for Kramers-Kronig Transformation. <i>Applied Spectroscopy</i> , <b>1988</b> , 42, 952-957	3.1	182
290	An Investigation of Hydrogen Bonding in Benzoxazine Dimers by Fast Magic-Angle Spinning and Double-Quantum $^1\text{H}$ NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 11784-11795	16.4	179

289	Reaction of benzoxazine-based phenolic resins with strong and weak carboxylic acids and phenols as catalysts. <i>Journal of Polymer Science Part A</i> , <b>1999</b> , 37, 1913-1921	2.5	179
288	A Study on Hydrogen-Bonded Network Structure of Polybenzoxazines. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 3271-3280	2.8	178
287	Development and characterization of high-performance polybenzoxazine composites. <i>Polymer Composites</i> , <b>1996</b> , 17, 710-719	3	157
286	Mechanistic study on the thermal decomposition of polybenzoxazines: Effects of aliphatic amines. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1998</b> , 36, 1935-1946	2.6	154
285	Cationic Ring-Opening Polymerization of 1,3-Benzoxazines: Mechanistic Study Using Model Compounds. <i>Macromolecules</i> , <b>2010</b> , 43, 4562-4572	5.5	152
284	Improved thermal and mechanical properties of polybenzoxazines based on alkyl-substituted aromatic amines. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2000</b> , 38, 3289-3301	2.6	152
283	Concentration-Dependent Conformation of Alkyl Tail in the Nanoconfined Space: Hexadecylamine in the Silicate Galleries. <i>Langmuir</i> , <b>2003</b> , 19, 2479-2484	4	150
282	Oxazine Ring-Related Vibrational Modes of Benzoxazine Monomers Using Fully Aromatically Substituted, Deuterated, N Isotope Exchanged, and Oxazine-Ring-Substituted Compounds and Theoretical Calculations. <i>Journal of Physical Chemistry A</i> , <b>2017</b> , 121, 6269-6282	2.8	143
281	Synthesis and Properties of New Thermoplastic Polymers from Substituted 3,4-Dihydro-2H-1,3-benzoxazines. <i>Macromolecules</i> , <b>2000</b> , 33, 2839-2847	5.5	143
280	Synthesis and characterization of polyfunctional naphthoxazines and related polymers. <i>Journal of Applied Polymer Science</i> , <b>1996</b> , 61, 1595-1605	2.9	142
279	Synthesis, characterization, and properties of new thermally curable polyetheresters containing benzoxazine moieties in the main chain. <i>Journal of Polymer Science Part A</i> , <b>2008</b> , 46, 414-420	2.5	140
278	Synthesis and Characterization of Highly Fluorinated Polymer with the Benzoxazine Moiety in the Main Chain. <i>Macromolecules</i> , <b>2008</b> , 41, 9704-9714	5.5	139
277	Thermal properties of phthalonitrile functional polybenzoxazines. <i>Thermochimica Acta</i> , <b>2000</b> , 357-358, 195-203	2.9	139
276	Thermal decomposition processes in aromatic amine-based polybenzoxazines investigated by TGA and GC-MS. <i>Polymer</i> , <b>2002</b> , 43, 4391-4402	3.9	138
275	Physical and mechanical properties of flexible polybenzoxazine resins: Effect of aliphatic diamine chain length. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 101, 2798-2809	2.9	137
274	Regioselectivity and Network Structure of Difunctional Alkyl-Substituted Aromatic Amine-Based Polybenzoxazines. <i>Macromolecules</i> , <b>2000</b> , 33, 8149-8157	5.5	137
273	Fourier transform infrared spectroscopic study of the silane coupling agent/porous silica interface. <i>Journal of Colloid and Interface Science</i> , <b>1978</b> , 64, 555-564	9.3	134
272	Synthesis of linear polymers containing benzoxazine moieties in the main chain with high molecular design versatility via click reaction. <i>Polymer</i> , <b>2009</b> , 50, 382-390	3.9	133

271	Overview and Historical Background of Polybenzoxazine Research <b>2011</b> , 3-81		127
270	Fourier transform infrared spectroscopic study of the structure of silane coupling agent on E-glass fiber. <i>Journal of Colloid and Interface Science</i> , <b>1978</b> , 64, 565-576	9.3	127
269	1,3,5-Triphenylhexahydro-1,3,5-triazine as active intermediate and precursor in the novel synthesis of benzoxazine monomers and oligomers. <i>Macromolecular Chemistry and Physics</i> , <b>1999</b> , 200, 1745-1752	2.6	125
268	Poly(aryl-ether-ether-ketone) and its advanced composites: A review. <i>Polymer Composites</i> , <b>1987</b> , 8, 57-73		123
267	Dynamic mechanical and thermal characterization of high-performance polybenzoxazines. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1999</b> , 37, 3257-3268	2.6	122
266	Carbon Aerogels with Excellent CO <sub>2</sub> Adsorption Capacity Synthesized from Clay-Reinforced Biobased Chitosan-Polybenzoxazine Nanocomposites. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 1286-1295	8.3	118
265	Use of renewable resource vanillin for the preparation of benzoxazine resin and reactive monomeric surfactant containing oxazine ring. <i>Polymer</i> , <b>2014</b> , 55, 1443-1451	3.9	118
264	A Smart Latent Catalyst Containing o-Trifluoroacetamide Functional Benzoxazine: Precursor for Low Temperature Formation of Very High Performance Polybenzoxazole with Low Dielectric Constant and High Thermal Stability. <i>Macromolecules</i> , <b>2017</b> , 50, 6552-6560	5.5	116
263	A new synthetic approach for difficult benzoxazines: Preparation and polymerization of 4,4'-diaminodiphenyl sulfone-based benzoxazine monomer. <i>Polymer</i> , <b>2009</b> , 50, 5940-5944	3.9	116
262	Biobased chitosan hybrid aerogels with superior adsorption: Role of graphene oxide in CO <sub>2</sub> capture. <i>RSC Advances</i> , <b>2013</b> , 3, 16011	3.7	111
261	Asymmetric mono-oxazine: an inevitable product from Mannich reaction of benzoxazine dimers. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 9947-55	16.4	111
260	Surface induced crystallization in ultrahigh-modulus polyethylene fiber-reinforced polyethylene composites. <i>Macromolecules</i> , <b>1991</b> , 24, 3569-3577	5.5	111
259	Molecular origin of unusual physical and mechanical properties in novel phenolic materials based on benzoxazine chemistry. <i>Journal of Applied Polymer Science</i> , <b>1998</b> , 70, 1299-1306	2.9	110
258	Primary Amine-Functional Benzoxazine Monomers and Their Use for Amide-Containing Monomeric Benzoxazines. <i>Macromolecules</i> , <b>2010</b> , 43, 2748-2758	5.5	107
257	Benzoxazine oligomers: evidence for a helical structure from solid-state NMR spectroscopy and DFT-based dynamics and chemical shift calculations. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 5792-800	16.4	106
256	Effect of Polymerizing Diacetylene Groups on the Lowering of Polymerization Temperature of Benzoxazine Groups in the Highly Thermally Stable, Main-Chain-Type Polybenzoxazines. <i>Macromolecules</i> , <b>2009</b> , 42, 5121-5127	5.5	102
255	Bis(benzoxazine-maleimide)s as a novel class of high performance resin: Synthesis and properties. <i>European Polymer Journal</i> , <b>2010</b> , 46, 354-363	5.2	101
254	Synthesis of benzoxazine functional silane and adhesion properties of glass-fiber-reinforced polybenzoxazine composites. <i>Journal of Applied Polymer Science</i> , <b>1998</b> , 69, 2559-2567	2.9	100

253	A Fourier-transform infrared spectroscopic study of the hydrolytic stability of silane coupling agents on E-glass fibers. <i>Journal of Polymer Science, Polymer Physics Edition</i> , <b>1980</b> , 18, 1931-1943		100
252	Thermal decomposition processes in polybenzoxazine model dimers investigated by TGA and FTIR and GC-MS. <i>Polymer Degradation and Stability</i> , <b>2002</b> , 76, 1-15	4.7	97
251	Optical theory applied to infrared spectroscopy. <i>Vibrational Spectroscopy</i> , <b>1994</b> , 8, 1-36	2.1	96
250	Study on the chemical stability of benzoxazine-based phenolic resins in carboxylic acids. <i>Journal of Applied Polymer Science</i> , <b>2001</b> , 79, 1207-1219	2.9	94
249	Natural-sourced benzoxazine resins, homopolymers, blends and composites: A review of their synthesis, manufacturing and applications. <i>Progress in Polymer Science</i> , <b>2019</b> , 99, 101168	29.6	93
248	Polymerization of linear aliphatic diamine-based benzoxazine resins under inert and oxidative environments. <i>Polymer</i> , <b>2007</b> , 48, 6763-6772	3.9	91
247	The structure of aminofunctional silane coupling agents: 1. $\gamma$ -Aminopropyltriethoxysilane and its analogues. <i>Polymer</i> , <b>1982</b> , 23, 251-257	3.9	91
246	Low-Viscosity Polyether-Based Main-Chain Benzoxazine Polymers: Precursors for Flexible Thermosetting Polymers. <i>Macromolecules</i> , <b>2010</b> , 43, 7122-7127	5.5	90
245	Study of hydrogen bonding and thermal properties of polybenzoxazine and poly( $\epsilon$ -caprolactone) blends. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2001</b> , 39, 736-749	2.6	90
244	Molecular analysis of the melting behaviour of poly(aryl-ether-ether-ketone). <i>Polymer</i> , <b>1986</b> , 27, 1400-1405	5.9	90
243	Main-chain benzoxazine oligomers: A new approach for resin transfer moldable neat benzoxazines for high performance applications. <i>Polymer</i> , <b>2010</b> , 51, 5688-5694	3.9	89
242	Development of low-viscosity benzoxazine resins and their polymers. <i>Journal of Applied Polymer Science</i> , <b>2002</b> , 86, 2953-2966	2.9	87
241	Benzoxazole Resin: A Novel Class of Thermoset Polymer via Smart Benzoxazine Resin. <i>Macromolecules</i> , <b>2012</b> , 45, 8991-8997	5.5	86
240	Synthesis and Characterization of Cyanate Ester Functional Benzoxazine and Its Polymer. <i>Macromolecules</i> , <b>2015</b> , 48, 8412-8417	5.5	84
239	Mechanistic Pathways for the Polymerization of Methylol-Functional Benzoxazine Monomers. <i>Macromolecules</i> , <b>2012</b> , 45, 8119-8125	5.5	82
238	Quantitative monomolecular coverage of inorganic particulates by methacryl-functional silanes. <i>Surface Science</i> , <b>1984</b> , 148, 601-622	1.8	82
237	Smart, Sustainable, and Ecofriendly Chemical Design of Fully Bio-Based Thermally Stable Thermosets Based on Benzoxazine Chemistry. <i>ChemSusChem</i> , <b>2016</b> , 9, 1921-8	8.3	82
236	Novel benzoxazine monomer containing diacetylene linkage: An approach to benzoxazine thermosets with low polymerization temperature without added initiators or catalysts. <i>Polymer</i> , <b>2009</b> , 50, 3153-3157	3.9	80

235	Poly(benzoxazine-co-urethane)s: A new concept for phenolic/urethane copolymers via one-pot method. <i>Polymer</i> , <b>2011</b> , 52, 307-317	3.9	80
234	An investigation of the coupling agent/matrix interface of fiberglass reinforced plastics by fourier transform infrared spectroscopy. <i>Journal of Polymer Science, Polymer Physics Edition</i> , <b>1979</b> , 17, 615-626		80
233	Effect of phenol substitution on the network structure and properties of linear aliphatic diamine-based benzoxazines. <i>Polymer</i> , <b>2009</b> , 50, 613-626	3.9	79
232	Model Compounds Study on the Network Structure of Polybenzoxazines. <i>Macromolecules</i> , <b>2003</b> , 36, 8329-8329	3.9	79
231	Development of Fully Biobased High-Performance Bis-Benzoxazine under Environmentally Friendly Conditions. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 5485-5494	8.3	78
230	Biobased chitosan/polybenzoxazine cross-linked films: preparation in aqueous media and synergistic improvements in thermal and mechanical properties. <i>Biomacromolecules</i> , <b>2013</b> , 14, 1806-15	6.9	77
229	Substrate effects on the chemisorbed and physisorbed layers of methacryl silane-modified particulate minerals. <i>Macromolecules</i> , <b>1984</b> , 17, 1659-1666	5.5	76
228	Dynamic mechanical analysis on highly thermally stable polybenzoxazines with an acetylene functional group. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 73, 857-862	2.9	74
227	High-performance maleimide and nitrile-functionalized benzoxazines with good processibility for advanced composites applications. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 101, 548-558	2.9	72
226	Making Benzoxazines Greener: Design, Synthesis, and Polymerization of a Biobased Benzoxazine Fulfilling Two Principles of Green Chemistry. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 13096-13106	8.3	70
225	Synergism and multiple mechanical relaxations observed in ternary systems based on benzoxazine, epoxy, and phenolic resins. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2000</b> , 38, 1687-1698	2.6	68
224	A Study of Morphology and Intercalation Kinetics of Polystyrene-Organoclay Nanocomposites. <i>Macromolecules</i> , <b>2005</b> , 38, 6513-6519	5.5	67
223	Anomalous Isomeric Effect on the Properties of Bisphenol F-based Benzoxazines: Toward the Molecular Design for Higher Performance. <i>Macromolecules</i> , <b>2014</b> , 47, 5682-5690	5.5	65
222	Intrinsic self-initiating thermal ring-opening polymerization of 1,3-benzoxazines without the influence of impurities using very high purity crystals. <i>Journal of Polymer Science Part A</i> , <b>2017</b> , 55, 3434-3445	2.5	64
221	Effect of hydrolysis and drying on the siloxane bonds of a silane coupling agent deposited on E-glass fibers. <i>Journal of Polymer Science, Polymer Physics Edition</i> , <b>1980</b> , 18, 233-237		64
220	Improved thermal stability of polybenzoxazines by transition metals. <i>Polymer Degradation and Stability</i> , <b>2006</b> , 91, 805-815	4.7	63
219	Gelation behavior of near-zero shrinkage polybenzoxazines. <i>Journal of Applied Polymer Science</i> , <b>2001</b> , 79, 406-417	2.9	63
218	A review on the very high nanofiller-content nanocomposites: Their preparation methods and properties with high aspect ratio fillers. <i>Progress in Polymer Science</i> , <b>2018</b> , 86, 1-39	29.6	62

217	Synthesis, characterization and thermal degradation of functional benzoxazine monomers and polymers containing phenylphosphine oxide. <i>Polymer Degradation and Stability</i> , <b>2006</b> , 91, 1166-1178	4.7	61
216	An investigation of the thermal and thermo-oxidative degradation of polybenzoxazines with a reactive functional group. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1999</b> , 37, 647-659	2.6	61
215	Intramolecular Hydrogen Bonding in Benzoxazines: When Structural Design Becomes Functional. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 2691-707	4.8	60
214	Quantitative Surface FTIR Spectroscopic Analysis of Polymers. <i>Rubber Chemistry and Technology</i> , <b>1987</b> , 60, 497-554	1.7	60
213	Synthesis of high thermal stability polybenzoxazoles via ortho-imide-functional benzoxazine monomers. <i>Journal of Polymer Science Part A</i> , <b>2015</b> , 53, 1330-1338	2.5	58
212	An Ultrahigh Performance Cross-Linked Polybenzoxazole via Thermal Conversion from Poly(benzoxazine amic acid) Based on Smart o-Benzoxazine Chemistry. <i>Macromolecules</i> , <b>2014</b> , 47, 8674-8681	5.5	58
211	A study on hydrogen bonding in controlled-structure benzoxazine model oligomers. <i>Macromolecular Symposia</i> , <b>2003</b> , 195, 123-140	0.8	58
210	Synthesis and properties of new crosslinkable telechelics with benzoxazine moiety at the chain end. <i>Polymer</i> , <b>2009</b> , 50, 2688-2695	3.9	57
209	Investigation of the boron nitride/polybenzoxazine interphase. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1999</b> , 37, 2360-2372	2.6	57
208	Thermally stable polybenzoxazines via ortho-norbornene functional benzoxazine monomers: Unique advantages in monomer synthesis, processing and polymer properties. <i>Polymer</i> , <b>2015</b> , 66, 240-248	3.9	56
207	Studies of the simulation of silane coupling agent structures on particulate fillers; the pH effect. <i>Polymer Composites</i> , <b>1984</b> , 5, 18-28	3	56
206	Resveratrol-based tri-functional benzoxazines: Synthesis, characterization, polymerization, and thermal and flame retardant properties. <i>European Polymer Journal</i> , <b>2019</b> , 116, 526-533	5.2	55
205	A study on the orientation of imidazoles on copper as corrosion inhibitor and possible adhesion promoter for electric devices. <i>Journal of Chemical Physics</i> , <b>1983</b> , 78, 6960-6969	3.9	55
204	A Differential Scanning Calorimetry Study of the Assembly of Hexadecylamine Molecules in the Nanoscale Confined Space of Silicate Galleries. <i>Chemistry of Materials</i> , <b>2002</b> , 14, 1398-1404	9.6	54
203	Toughening composites by fiber coating: a review. <i>Composite Interfaces</i> , <b>1994</b> , 2, 199-234	2.3	54
202	The structure of an aminosilane coupling agent in aqueous solutions and partially cured solids. <i>Journal of Polymer Science, Polymer Physics Edition</i> , <b>1982</b> , 20, 701-718		53
201	An anomalous trade-off effect on the properties of smart ortho-functional benzoxazines. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 2541-2550	4.9	52
200	Structure Property Relationships and the Role of Processing in the Reinforcement of Nylon 6-POSS Blends. <i>Macromolecules</i> , <b>2012</b> , 45, 4650-4657	5.5	52

199	Synthesis and Characterization of Structurally Uniform Model Oligomers of Polybenzoxazine. <i>Macromolecules</i> , <b>1998</b> , 31, 2409-2418	5.5	52
198	Resin transfer molding of natural fiber reinforced polybenzoxazine composites. <i>Polymer Composites</i> , <b>2002</b> , 23, 352-360	3	51
197	Solution intercalation of polystyrene and the comparison with poly(ethyl methacrylate). <i>Polymer</i> , <b>2003</b> , 44, 6571-6577	3.9	51
196	Mechanical property improvement of carbon fiber reinforced polybenzoxazine by rubber interlayer. <i>Polymer Composites</i> , <b>2003</b> , 24, 597-607	3	51
195	Methacryloyl-Functional Benzoxazine: Photopolymerization and Thermally Activated Polymerization. <i>Macromolecules</i> , <b>2011</b> , 44, 767-772	5.5	50
194	Partially miscible blends of epoxy resin and epoxidized rubber: Structural characterization of the epoxidized rubber and mechanical properties of the blends. <i>Journal of Applied Polymer Science</i> , <b>1994</b> , 53, 441-454	2.9	50
193	Adsorption behavior of a silane coupling agent on colloidal silica studied by gel permeation chromatography. <i>Journal of Colloid and Interface Science</i> , <b>1991</b> , 143, 146-156	9.3	49
192	Structure of cyclohexylsilanetriol: The first x-ray crystal structure of a silanetriol. <i>Journal of Chemical Physics</i> , <b>1982</b> , 77, 5748-5751	3.9	49
191	Silicon-29 solid-state nuclear magnetic resonance spectroscopy of composite interfaces. <i>Polymer Composites</i> , <b>1990</b> , 11, 121-125	3	48
190	Latent Catalyst-Containing Naphthoxazine: Synthesis and Effects on Ring-Opening Polymerization. <i>Macromolecules</i> , <b>2016</b> , 49, 7129-7140	5.5	48
189	Synthesis of Sulfonic Acid-Containing Polybenzoxazine for Proton Exchange Membrane in Direct Methanol Fuel Cells. <i>Macromolecules</i> , <b>2014</b> , 47, 1039-1045	5.5	47
188	Investigation of an N-H hydrogen bond in a solid benzoxazine dimer by $1\text{H}\alpha\text{5N}$ NMR correlation techniques under fast magic-angle spinning. <i>Magnetic Resonance in Chemistry</i> , <b>2001</b> , 39, S5-S17	2.1	46
187	Characterization of silane-treated glass fibers by diffuse reflectance Fourier transform spectrometry. <i>Analytical Chemistry</i> , <b>1984</b> , 56, 773-778	7.8	46
186	Benzoxazine Atropisomers: Intrinsic Atropisomerization Mechanism and Conversion to High Performance Thermosets. <i>Macromolecules</i> , <b>2018</b> , 51, 7574-7585	5.5	46
185	Crosslinked polyamide based on main-chain type polybenzoxazines derived from a primary amine-functionalized benzoxazine monomer. <i>Journal of Polymer Science Part A</i> , <b>2011</b> , 49, 4335-4342	2.5	45
184	Thermal analysis and mechanical characterization of maleimide-functionalized benzoxazine/epoxy copolymers. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 101, 1670-1677	2.9	45
183	Interpretation of Reflection and Transmission Spectra for Thin Films: Reflection. <i>Applied Spectroscopy</i> , <b>1994</b> , 48, 775-787	3.1	45
182	Molecular analysis of the crystallization behavior of poly(aryl-ether-ether-ketone). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1986</b> , 24, 1079-1091	2.6	45

181	Low temperature polymerization of novel, monotropic liquid crystalline benzoxazines. <i>Journal of Polymer Science Part A</i> , <b>2009</b> , 47, 5871-5881	2.5	44
180	Infrared and thermal analyses of polybenzoxazine and polycarbonate blends. <i>Journal of Applied Polymer Science</i> , <b>2001</b> , 81, 1021-1034	2.9	44
179	A review on the structure and characterization techniques of silane/matrix interphases. <i>Macromolecular Symposia</i> , <b>1996</b> , 108, 19-53	0.8	43
178	Unique self-catalyzed cationic ring-opening polymerization of a high performance deoxybenzoin-based 1,3-benzoxazine monomer. <i>Polymer</i> , <b>2019</b> , 168, 8-15	3.9	42
177	Fourier transform ir reflection techniques for characterization of polyimide films on copper substrates. <i>Thin Solid Films</i> , <b>1987</b> , 154, 271-279	2.2	42
176	Spectroscopic Studies of Poly[N,NSbis(phenoxyphenyl)pyromellitimide]. 2. Structural Changes of Polyimide upon Yielding. <i>Macromolecules</i> , <b>1980</b> , 13, 834-839	5.5	42
175	Behavior of a bisphenol-A-based polybenzoxazine exposed to ultraviolet radiation. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2000</b> , 38, 2687-2701	2.6	41
174	Composition of the continuous phase in partially miscible blends of epoxy resin and epoxidized rubber by dynamic mechanical analysis. <i>Polymer</i> , <b>1994</b> , 35, 956-966	3.9	41
173	Study of the characterization and curing of a phenyl benzoxazine using 15N solid-state nuclear magnetic resonance spectroscopy. <i>Journal of Applied Polymer Science</i> , <b>1998</b> , 70, 1401-1411	2.9	40
172	Quantitative intermolecular reaction of hydrolyzed trialkoxysilanes at submonolayer, monolayer, and multilayer surface coverages. <i>Langmuir</i> , <b>1986</b> , 2, 127-131	4	39
171	Enhanced Thermal Property and Flame Retardancy via Intramolecular 5-Membered Ring Hydrogen Bond-Forming Amide Functional Benzoxazine Resins. <i>Macromolecules</i> , <b>2018</b> , 51, 9982-9991	5.5	39
170	Effect of fiber surface modification on the mechanical properties of sisal fiber-reinforced benzoxazine/epoxy composites based on aliphatic diamine benzoxazine. <i>Journal of Applied Polymer Science</i> , <b>2007</b> , 106, 2925-2935	2.9	38
169	Dynamic mechanical properties of epoxy resin/epoxidized rubber blends: Effect of phase separated rubber. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1994</b> , 32, 647-657	2.6	38
168	Molecular organization of the coupling agent interphase of fiber-glass reinforced plastics. <i>Journal of Polymer Science, Polymer Physics Edition</i> , <b>1979</b> , 17, 1807-1813		37
167	Study of the Effects of Intramolecular and Intermolecular Hydrogen-Bonding Systems on the Polymerization of Amide-Containing Benzoxazines. <i>Macromolecular Chemistry and Physics</i> , <b>2017</b> , 218, 1600562	2.6	35
166	Preparation and thermal properties of graphene oxide/main chain benzoxazine polymer. <i>European Polymer Journal</i> , <b>2013</b> , 49, 3825-3833	5.2	35
165	Smart chemical design incorporating umbelliferone as natural renewable resource toward the preparation of thermally stable thermosets materials based on benzoxazine chemistry. <i>RSC Advances</i> , <b>2015</b> , 5, 97855-97861	3.7	35
164	A study of corrosion protection on copper by new polymeric agents: silane-modified imidazoles. <i>Corrosion Science</i> , <b>1992</b> , 33, 1053-1066	6.8	35

163	Poly(benzoxazine-f-chitosan) films: The role of aldehyde neighboring groups on chemical interaction of benzoxazine precursors with chitosan. <i>Carbohydrate Polymers</i> , <b>2019</b> , 209, 122-129	10.3	35
162	Tailor-made and chemically designed synthesis of coumarin-containing benzoxazines and their reactivity study toward their thermosets. <i>Journal of Polymer Science Part A</i> , <b>2016</b> , 54, 1428-1435	2.5	34
161	Effect of CaCO <sub>3</sub> on the mechanical and rheological properties of a ring-opening phenolic resin: Polybenzoxazine. <i>Polymer Composites</i> , <b>1998</b> , 19, 126-132	3	34
160	1,3-bis(benzoxazine) from cashew nut shell oil and diaminodiphenyl methane and its composites with wood flour. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 127, 2710-2714	2.9	33
159	Hydrogen-bonding characteristics and unique ring-opening polymerization behavior of Ortho-methylol functional benzoxazine. <i>Journal of Polymer Science Part A</i> , <b>2016</b> , 54, 3635-3642	2.5	32
158	Simple and low energy consuming synthesis of cyanate ester functional naphthoxazines and their properties. <i>Polymer Chemistry</i> , <b>2016</b> , 7, 2245-2252	4.9	32
157	Microwave-assisted solvent-free synthesis of novel benzoxazines: A faster and environmentally friendly route to the development of bio-based thermosetting resins. <i>Journal of Polymer Science Part A</i> , <b>2017</b> , 55, 3534-3544	2.5	31
156	A new theoretical equation for thermal conductivity of two-phase systems. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 72, 1689-1697	2.9	31
155	Grazing Angle Metal-Overlayer Infrared ATR Spectroscopy. <i>Applied Spectroscopy</i> , <b>1988</b> , 42, 1296-1302	3.1	31
154	Non-flammable thiazole-functional monobenzoxazines: Synthesis, polymerization, thermal and thermomechanical properties, and flammability studies. <i>Polymer</i> , <b>2018</b> , 157, 38-49	3.9	31
153	Quantitative studies on the p-substituent effect of the phenolic component on the polymerization of benzoxazines. <i>Polymer Chemistry</i> , <b>2018</b> , 9, 4194-4204	4.9	30
152	Surface study of hexagonal boron nitride powder by diffuse reflectance Fourier transform infrared spectroscopy. <i>Surface and Interface Analysis</i> , <b>2005</b> , 37, 621-627	1.5	30
151	Quantitative Two-Dimensional Infrared (2D IR) Spectroscopy: Theoretical Development for General and Specific Cases. <i>Applied Spectroscopy</i> , <b>1995</b> , 49, 1243-1253	3.1	30
150	Spectral simulation of uniaxially oriented monolayers in the infrared. <i>Langmuir</i> , <b>1988</b> , 4, 1341-1346	4	30
149	Incorporation of Natural Renewable Components and Waste Byproducts to Benzoxazine Based High Performance Materials. <i>Current Organic Chemistry</i> , <b>2013</b> , 17, 913-925	1.7	30
148	Polymerization of an AB-Type Benzoxazine Monomer toward Different Polybenzoxazine Networks: When Diels-Alder Reaction Meets Benzoxazine Chemistry in a Single-Component Resin. <i>Macromolecules</i> , <b>2019</b> , 52, 7386-7395	5.5	29
147	Quantifying Dispersion in Graphene Oxide/Reactive Benzoxazine Monomer Nanocomposites.. <i>Macromolecules</i> , <b>2014</b> , 47, 3685-3692	5.5	29
146	Synthesis and characterization of highly fluorinated diamines and benzoxazines derived therefrom. <i>Journal of Fluorine Chemistry</i> , <b>2009</b> , 130, 573-580	2.1	29

145	Gelation study of high processability and high reliability ternary systems based on benzoxazine, epoxy, and phenolic resins for an application as electronic packaging materials. <i>Rheologica Acta</i> , <b>2002</b> , 41, 1-9	2.3	29
144	Cure behavior of very thin epoxy resin films on steel. <i>Journal of Applied Polymer Science</i> , <b>1989</b> , 38, 2191-2204	2.9	29
143	Side-chain type benzoxazine-functional cellulose via click chemistry. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 125, 1346-1351	2.9	28
142	The use of pyrolysis mass spectrometry to investigate polymerization and degradation processes of methyl amine-based benzoxazine. <i>Polymer Testing</i> , <b>2010</b> , 29, 520-526	4.5	28
141	Theoretical Development for Depth Profiling of Stratified Layers Using Variable-Angle ATR. <i>Applied Spectroscopy</i> , <b>1993</b> , 47, 1237-1244	3.1	28
140	Synthesis, polymerization kinetics and thermal properties of para-methylol functional benzoxazine. <i>Reactive and Functional Polymers</i> , <b>2018</b> , 129, 23-28	4.6	27
139	Investigation of polymerization of benzoxazines and thermal degradation characteristics of polybenzoxazines via direct pyrolysis mass spectrometry. <i>Polymer International</i> , <b>2012</b> , 61, 1532-1541	3.3	27
138	Synthesis and ring-opening polymerization of 2-substituted 1,3-benzoxazine: the first observation of the polymerization of oxazine ring-substituted benzoxazines. <i>Polymer Chemistry</i> , <b>2016</b> , 7, 7177-7184	4.9	26
137	Synthesis and evaluation of novel anionic polymeric surfactants based on polybenzoxazines. <i>Journal of Colloid and Interface Science</i> , <b>2013</b> , 407, 339-47	9.3	26
136	Optical Depth Profiling by Attenuated Total Reflection Fourier Transform Infrared Spectroscopy: A New Approach. <i>Applied Spectroscopy</i> , <b>1996</b> , 50, 1187-1195	3.1	26
135	Cyclization of methacrylate-functional silane on particulate clay. <i>Journal of Polymer Science, Polymer Physics Edition</i> , <b>1985</b> , 23, 2227-2242		26
134	Polymerisation and degradation of an aromatic amine-based naphthoxazine. <i>Polymer Degradation and Stability</i> , <b>2008</b> , 93, 2096-2103	4.7	25
133	A novel ion extraction material using host-guest properties of oligobenzoxazine local structure and benzoxazine monomer molecular assembly. <i>Journal of Applied Polymer Science</i> , <b>2000</b> , 77, 2561-2568	2.9	25
132	Influence of Exothermic Interaction on the Morphology and Droplet Coalescence of Melt-Mixed Immiscible Polymer Blends Containing a Block Copolymer. <i>Macromolecules</i> , <b>1998</b> , 31, 5383-5390	5.5	25
131	Interactions, morphology and thermal stability of graphene-oxide reinforced polymer aerogels derived from star-like telechelic aldehyde-terminal benzoxazine resin. <i>RSC Advances</i> , <b>2015</b> , 5, 92719-92731	3.7	24
130	Benzoxazines with enhanced thermal stability from phenolated organosolv lignin. <i>RSC Advances</i> , <b>2016</b> , 6, 107689-107698	3.7	24
129	Polymerization behavior of methylol-functional benzoxazine monomer. <i>Reactive and Functional Polymers</i> , <b>2013</b> , 73, 360-368	4.6	24
128	Methylol-functional benzoxazines as precursors for high-performance thermoset polymers: Unique simultaneous addition and condensation polymerization behavior. <i>Journal of Polymer Science Part A</i> , <b>2012</b> , 50, 2275-2285	2.5	24

127	Multi-Nuclear NMR spectroscopic and proton NMR imaging studies on the effect of water on the silane coupling agent/matrix resin interface in glass fiber-reinforced composites. <i>Polymer Composites</i> , <b>1990</b> , 11, 192-199	3	24
126	Quantitative analysis of covalent bonding between substituted silanes and inorganic surfaces. <i>Journal of Chemical Physics</i> , <b>1987</b> , 86, 1593-1600	3.9	23
125	Synthesis and thermally induced structural transformation of phthalimide and nitrile-functionalized benzoxazine: toward smart -benzoxazine chemistry for low flammability thermosets.. <i>RSC Advances</i> , <b>2019</b> , 9, 1526-1535	3.7	22
124	Effect of rubber reactivity on the morphology of polybenzoxazine blends investigated by atomic force microscopy and dynamic mechanical analysis. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 100, 2443-2454	2.9	22
123	Study of exchange reaction in polycarbonate-modified polybenzoxazine via model compound. <i>Journal of Applied Polymer Science</i> , <b>2002</b> , 83, 1848-1855	2.9	22
122	Chemical Reactions of an Epoxy-Functional Silane in Aqueous Solutions. <i>Rubber Chemistry and Technology</i> , <b>1991</b> , 64, 162-171	1.7	22
121	Fourier transform infrared ellipsometry of thin polymer films. <i>Analytical Chemistry</i> , <b>1986</b> , 58, 64-68	7.8	22
120	High-resolution carbon-13 nuclear magnetic resonance study of conjugation in solid polyimides. <i>Macromolecules</i> , <b>1981</b> , 14, 1327-1333	5.5	22
119	Laponite/multigraphene hybrid-reinforced poly(vinyl alcohol) aerogels. <i>Polymer</i> , <b>2016</b> , 91, 180-186	3.9	21
118	Novel template confinement derived from polybenzoxazine-based carbon xerogels for synthesis of ZSM-5 nanoparticles via microwave irradiation. <i>Microporous and Mesoporous Materials</i> , <b>2012</b> , 156, 7-15	5.3	21
117	Highly Improved Thermal Properties of Hydroxyl-Containing Polymers via Modification by Benzoxazine Groups. <i>Macromolecular Chemistry and Physics</i> , <b>2013</b> , 214, 1629-1635	2.6	21
116	Synthesis of spiro-silicates directly from silica and ethylene glycol/ethylene glycol derivatives. <i>Tetrahedron</i> , <b>2001</b> , 57, 3997-4003	2.4	21
115	Interplay between rheological and structural evolution of benzoxazine resins during polymerization. <i>Polymer</i> , <b>2013</b> , 54, 1880-1886	3.9	20
114	A New Concept for Nanoparticle Distribution in SBR/NBR Blend Solution and Films via Molecular Confinement. <i>Macromolecules</i> , <b>2008</b> , 41, 2931-2937	5.5	20
113	High Yield Synthesis of Fluorinated Benzoxazine Monomers and Their Molecular Characterization. <i>Polymers and Polymer Composites</i> , <b>2002</b> , 10, 191-204	0.8	20
112	Metal Ion Guest Responsive Benzoxazine Dimers and Inclusion Phenomena of Cyclic Derivatives. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , <b>2003</b> , 47, 179-185		20
111	Polymerization of poly(p-phenylene sulfide) from a cyclic precursor. <i>Polymer</i> , <b>1996</b> , 37, 3111-3116	3.9	20
110	Fourier transform infrared surface electromagnetic wave spectroscopy of polymer thin films on metallic substrate. <i>Analytical Chemistry</i> , <b>1986</b> , 58, 2448-2453	7.8	20

109	Self-formation of 3D interconnected macroporous carbon xerogels derived from polybenzoxazine by selective solvent during the sol-gel process. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 4946-4961	4.3	19
108	Polarization-Modulation FT-IR Reflection Spectroscopy Using a Polarizing Michelson Interferometer. <i>Applied Spectroscopy</i> , <b>1987</b> , 41, 1288-1294	3.1	19
107	Controlling and monitoring interfacial reactions in composites of azidosilane modified glass filled polyethylene. <i>Polymer Composites</i> , <b>1988</b> , 9, 12-19	3	19
106	Fourier transform infrared spectroscopic study of transitions above T <sub>g</sub> in atactic polystyrene. <i>Polymer Engineering and Science</i> , <b>1979</b> , 19, 756-759	2.3	19
105	Intrinsically noncombustible polymers without flame retardant additives: Sulfur-containing and bio-based benzoxazines. <i>European Polymer Journal</i> , <b>2020</b> , 133, 109770	5.2	19
104	Chitosan/polybenzoxazine/clay mixed matrix composite aerogels: preparation, physical properties, and water absorbency. <i>Applied Clay Science</i> , <b>2020</b> , 184, 105403	5.2	19
103	Examining the effect of hydroxyl groups on the thermal properties of polybenzoxazines: using molecular design and Monte Carlo simulation.. <i>RSC Advances</i> , <b>2018</b> , 8, 18038-18050	3.7	19
102	Kramers-Kronig analysis applied to reflection-absorption spectroscopy. <i>Vibrational Spectroscopy</i> , <b>1997</b> , 15, 27-36	2.1	18
101	The Effect of Polymerization Conditions on the Density and T <sub>g</sub> of Bisphenol-A and Hexafluoroisopropylidene-Containing Polybenzoxazines. <i>Polymers and Polymer Composites</i> , <b>2001</b> , 9, 367-376	0.8	18
100	Dynamic Mechanical and Thermal Analysis of Reactive Poly (Butadiene-Co-Acrylonitrile) Rubber-Modified Polybenzoxazine Resin. <i>Polymers and Polymer Composites</i> , <b>2001</b> , 9, 121-134	0.8	18
99	Depth Profiling of Stratified Layers Using Variable-Angle ATR. <i>Applied Spectroscopy</i> , <b>1996</b> , 50, 1082-1088	3.1	18
98	The effect of chain length on the thermal stability of 2-alkylimidazoles on copper and 2-alkylimidazolato copper(II) complexes. <i>Applications of Surface Science</i> , <b>1985</b> , 20, 497-511		18
97	The inhibition of copper corrosion byazole compounds in humid environments. <i>Corrosion Science</i> , <b>1986</b> , 26, 657-667	6.8	18
96	A truly bio-based benzoxazine derived from three natural reactants obtained under environmentally friendly conditions and its polymer properties. <i>Green Chemistry</i> , <b>2021</b> , 23, 4051-4064	10	18
95	Advanced and economical ambient drying method for controlled mesopore polybenzoxazine-based carbon xerogels: Effects of non-ionic and cationic surfactant on porous structure. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 459, 241-249	9.3	17
94	Examining the influence of bisphenol A on the polymerisation and network properties of an aromatic benzoxazine. <i>Polymer</i> , <b>2016</b> , 88, 52-62	3.9	17
93	Triggering effect caused by elemental sulfur as a mean to reduce the polymerization temperature of benzoxazine monomers. <i>RSC Advances</i> , <b>2016</b> , 6, 35144-35151	3.7	17
92	Application of a New Quantitative Optical Depth Profiling Technique for the Diffusion of Polymers. <i>Applied Spectroscopy</i> , <b>1997</b> , 51, 461-465	3.1	17

91	New Optical Depth-Profiling Technique by Use of the Multiple-Frequency Approach with Single ATR FT-IR Spectrum: Theoretical Development. <i>Applied Spectroscopy</i> , <b>1997</b> , 51, 1488-1495	3.1	17
90	Effects of Phenolic Substitution on the Photooxidative Degradation of Polybenzoxazines. <i>Macromolecular Chemistry and Physics</i> , <b>2001</b> , 202, 2351-2359	2.6	17
89	Influence of Segmental Swelling Ratio of a Symmetric Block Copolymer on the Morphology of Melt-Mixed Immiscible Polymer Blends. <i>Macromolecules</i> , <b>1999</b> , 32, 4582-4587	5.5	17
88	Dynamic mechanical analysis of RIM nylon-6. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1991</b> , 29, 1479-1492	2.6	17
87	FT-IR External Reflection Spectroscopy at Brewster's Angle. <i>Applied Spectroscopy</i> , <b>1992</b> , 46, 504-509	3.1	17
86	Copolymers based on telechelic benzoxazine with a reactive main-chain and anhydride: monomer and polymer synthesis, and thermal and mechanical properties of carbon fiber composites. <i>RSC Advances</i> , <b>2015</b> , 5, 16785-16791	3.7	16
85	Design, Synthesis, Characterization, and Polymerization of Fused-Ring Naphthoxazine Resins. <i>Macromolecules</i> , <b>2017</b> , 50, 9249-9256	5.5	16
84	Fourier transform infrared studies on the thermal degradation of polyvinylimidazoles: Part I. <i>Journal of Applied Polymer Science</i> , <b>1986</b> , 32, 5021-5034	2.9	16
83	Electronic effects of asymmetric and meta-alkoxy substituents on the polymerization behavior of bis-benzoxazines. <i>Polymer Chemistry</i> , <b>2020</b> , 11, 800-809	4.9	16
82	Ablation behavior of boron-modified phenolic resin irradiated by high-energy continuous-wave laser and its evolution of carbon structure. <i>Materials and Design</i> , <b>2019</b> , 180, 107954	8.1	15
81	Laser ablation behavior of nano-copper particle-filled phenolic matrix nanocomposite coatings. <i>Composites Part B: Engineering</i> , <b>2018</b> , 155, 62-68	10	15
80	Use of allyl-functional benzoxazine monomers as replacement for styrene in vinyl ester resins. <i>Polymer International</i> , <b>2013</b> , 62, 71-78	3.3	15
79	Smart Synthesis of High-Performance Thermosets Based on ortho-Amide-imide Functional Benzoxazines. <i>Frontiers in Materials</i> , <b>2015</b> , 2,	4	15
78	An investigation of the thermal stability of undecylimidazole on copper by FT-IR reflection-absorption spectroscopy. <i>Applied Surface Science</i> , <b>1995</b> , 89, 39-47	6.7	15
77	The first observation on polymerization of 1,3-benzothiazines: synthesis of mono- and bis-thiazine monomers and thermal properties of their polymers. <i>Polymer Chemistry</i> , <b>2021</b> , 12, 379-388	4.9	15
76	Effect of degree of cure and fiber content on the mechanical and dynamic mechanical properties of carbon fiber reinforced PMR-15 polyimide composites. <i>Polymer Composites</i> , <b>1999</b> , 20, 515-523	3	14
75	Review on the Accelerated and Low-Temperature Polymerization of Benzoxazine Resins: Addition Polymerizable Sustainable Polymers. <i>Polymers</i> , <b>2021</b> , 13,	4.5	14
74	Development of Hydrogen-Rich Benzoxazine Resins with Low Polymerization Temperature for Space Radiation Shielding. <i>ACS Omega</i> , <b>2018</b> , 3, 11569-11581	3.9	14

73	Triggered Precision Benzoxazine Film Formation by Thermally Induced Destabilization of Benzoxazine Nanodroplets Using a LCST-Bearing Surfactant. <i>Macromolecules</i> , <b>2014</b> , 47, 3297-3305	5.5	13
72	Synthesis, characterization, and thermal properties of alkyl-functional naphthoxazines. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 127, 3114-3123	2.9	13
71	Probing the properties of particle-matrix interphase in reactive rubber-grafted polybenzoxazine resins by atomic force microscopy. <i>Composite Interfaces</i> , <b>2005</b> , 12, 481-499	2.3	13
70	Kramers-Kronig analysis of infrared reflection spectra with parallel polarization for isotropic materials. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , <b>1994</b> , 50, 2079-2090		13
69	Kinetics of the Condensation Reaction of Epoxide with Phenol: Linear Chain Growth versus Branching. <i>Macromolecules</i> , <b>1994</b> , 27, 2701-2707	5.5	13
68	Epitaxial polymerization of (SN) <sub>x</sub> : Lattice effects on structures and topochemistry. <i>Journal of Applied Physics</i> , <b>1980</b> , 51, 5194	2.5	13
67	A thermo-rheological study on the structure property relationships in the reinforcement of nylon 6/BOSS blends. <i>Polymer</i> , <b>2014</b> , 55, 860-870	3.9	12
66	High performance crosslinked polyimide based on main-chain type polybenzoxazine. <i>RSC Advances</i> , <b>2014</b> , 4, 62550-62556	3.7	12
65	Microphase and Macrophase Transitions in Binary Blends of Diblock Copolymers. <i>Macromolecules</i> , <b>1999</b> , 32, 1803-1808	5.5	12
64	Interphase compatibilization of composites with immiscible blends as matrix: Glass beads filled nylon 6 / polypropylene blend-composite. <i>Makromolekulare Chemie Macromolecular Symposia</i> , <b>1991</b> , 50, 157-170		12
63	RIM-pultrusion of nylon-6 and rubber-toughened nylon-6 composites. <i>Polymer Engineering and Science</i> , <b>1991</b> , 31, 632-637	2.3	12
62	Polymerization of styrene oxide with pyridine. <i>Die Makromolekulare Chemie Rapid Communications</i> , <b>1986</b> , 7, 37-41		12
61	Improvement in the pore structure of polybenzoxazine-based carbon xerogels through a silica templating method. <i>Journal of Porous Materials</i> , <b>2014</b> , 21, 401-411	2.4	11
60	Probing friction and adhesion properties of poly(vinyl methylether) homopolymer and blend films under nano-confinement using atomic-force microscopy. <i>Comptes Rendus Chimie</i> , <b>2006</b> , 9, 90-98	2.7	11
59	Critical gel phenomena in the rheology of epoxide network formation. <i>Journal of Applied Polymer Science</i> , <b>1999</b> , 73, 593-600	2.9	11
58	Infrared Mapping of Surface-Modified Kevlar Fiber-Reinforced Epoxy Systems. <i>Applied Spectroscopy</i> , <b>1995</b> , 49, 149-155	3.1	11
57	Chemical Depth Profiling Analysis of Polyvinylimidazole Film on Copper. <i>Journal of the Electrochemical Society</i> , <b>1988</b> , 135, 603-609	3.9	11
56	Acceleration of silanol condensation of a methacryl-functional silane in the model sizing system. <i>Composite Interfaces</i> , <b>2005</b> , 12, 769-785	2.3	10

55	Nondestructive Evaluation of the Three-Dimensional Morphology of Polyethylene/Polystyrene Blends by Thermal Conductivity. <i>Macromolecules</i> , <b>2001</b> , 34, 7392-7402	5.5	10
54	Silane-modified poly(vinylimidazole) corrosion inhibitors for copper. <i>Polymer</i> , <b>1994</b> , 35, 4780-4786	3.9	10
53	Silane-modified polyvinylimidazole(1) for corrosion protection on copper at elevated temperatures. <i>Journal of Applied Polymer Science</i> , <b>1993</b> , 49, 1957-1962	2.9	10
52	Reinforcement mechanism of polyester-fiber-reinforced rubber— model study. <i>Journal of Applied Polymer Science</i> , <b>1983</b> , 28, 2633-2646	2.9	10
51	Towards the Development of Green Flame Retardancy by Polybenzoxazines. <i>Progress in Polymer Science</i> , <b>2021</b> , 121, 101435	29.6	10
50	Dielectric Properties at Microwave Frequency in Barium Strontium Titanate/Poly(benzoxazine/urethane) Composite Films. <i>Ferroelectrics</i> , <b>2013</b> , 452, 84-90	0.6	9
49	Polymerization of p-cresol, formaldehyde, and piperazine and structure of monofunctional benzoxazine-derived oligomers. <i>Polymer</i> , <b>2011</b> , 52, 3897-3904	3.9	9
48	<sup>31</sup> P NMR spectroscopy in benzoxazine model compounds and benzoxazine chemistry —main chain and end group studies. <i>European Polymer Journal</i> , <b>2009</b> , 45, 1493-1505	5.2	9
47	Effect of the miscibility between a silane and a sizing agent on silanol condensation. <i>Journal of Applied Polymer Science</i> , <b>2003</b> , 87, 589-598	2.9	9
46	Polybenzoxazine resins: Aspects of interaction and adsorption behavior. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1999</b> , 37, 1441-1447	2.6	9
45	Fourier transform infrared studies on the thermal degradation of polyvinylimidazoles. Part II. <i>Journal of Applied Polymer Science</i> , <b>1986</b> , 32, 5035-5055	2.9	9
44	Size-exclusion chromatography and size-exclusion chromatography/Fourier transform infrared spectrometry of reacting organofunctional trialkoxysilanes. <i>Analytical Chemistry</i> , <b>1985</b> , 57, 283-288	7.8	9
43	Application of uv resonance raman spectroscopy to the detection of monolayers of silane coupling agent on glass surfaces. <i>Polymer Composites</i> , <b>1981</b> , 2, 75-80	3	9
42	Silica surface modified with benzoxazine-functional silane. <i>Composite Interfaces</i> , <b>2001</b> , 8, 355-366	2.3	8
41	Optical depth profiling by attenuated total reflection Fourier transform infrared spectroscopy using an incident beam with arbitrary degree of polarization. <i>Vibrational Spectroscopy</i> , <b>1996</b> , 13, 1-9	2.1	8
40	Kinetic parameters of the thermoplastic/thermoset epoxy reaction by fourier transform infrared spectroscopy. <i>Polymer Engineering and Science</i> , <b>1992</b> , 32, 136-145	2.3	8
39	Molecular analysis of the interface of poly(ether-ether-ketone) and the basal plane of graphite single crystals. <i>Makromolekulare Chemie Macromolecular Symposia</i> , <b>1986</b> , 5, 135-149		8
38	Preparation and characterization of carbon fiber reinforced polybenzoxazine and polybenzoxazole composites from the same precursor: Use of a smart, ortho-substituted and amide-co-imide functional matrix. <i>Composites Science and Technology</i> , <b>2020</b> , 195, 108205	8.6	7

37	Molecular dynamic simulations of self-assembly of amphiphilic comb-like anionic polybenzoxazines. <i>Langmuir</i> , <b>2014</b> , 30, 11858-65	4	7
36	The effects of processing variables on strength of carbon bonding between carbon/carbon composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 513-514, 138-144	5.3	7
35	Infrared and Raman spectroscopy of cyclohexa(p-phenylene sulfide) and the polymer obtained therefrom. <i>Polymer</i> , <b>1999</b> , 40, 4723-4731	3.9	7
34	Multilayered confinement of IPP/TPOSS and nylon 6/APOSS blends. <i>Polymer</i> , <b>2013</b> , 54, 6992-7003	3.9	6
33	New thermo-oxidative protective coating for carbon/carbon composites in mid-temperature range using a combination of nano-filler and macro-filler with polybenzoxazine as a carbon-forming matrix. <i>Polymer Composites</i> , <b>2011</b> , 32, 1164-1173	3	6
32	Dynamic mechanical characterization of PMR polyimide/carbon fiber composites modified by fiber coating with silicones. <i>Composite Interfaces</i> , <b>1997</b> , 5, 257-275	2.3	6
31	Surface Micro-Scale Semi-Heterogeneous Structures in Compatible Polystyrene and Poly(vinyl methyl ether) Blend Thin Films Investigated by Lateral-Force Microscopy. <i>Macromolecular Chemistry and Physics</i> , <b>2007</b> , 208, 2222-2228	2.6	6
30	Epitaxial polymerization of (SN) <sub>x</sub> : Chemical defects. <i>Journal of Applied Physics</i> , <b>1980</b> , 51, 5188	2.5	6
29	Nacre-Mimetic Green Flame Retardant: Ultra-High Nanofiller Content, Thin Nanocomposite as an Effective Flame Retardant. <i>Polymers</i> , <b>2020</b> , 12,	4.5	6
28	Smart, Sustainable, and Ecofriendly Chemical Design of Fully Bio-Based Thermally Stable Thermosets Based on Benzoxazine Chemistry. <i>ChemSusChem</i> , <b>2016</b> , 9, 1899-1899	8.3	6
27	Ultrahigh-surface-area activated biocarbon based on biomass residue as a supercapacitor electrode material: Tuning pore structure using alkalis with different atom sizes. <i>Microporous and Mesoporous Materials</i> , <b>2021</b> , 326, 111383	5.3	6
26	Zirconium carbide-modified polymer-matrix composites with improved reflectivity under high-energy laser ablation. <i>Ceramics International</i> , <b>2019</b> , 45, 17681-17687	5.1	5
25	Effect of the silicone interlayer on mechanical properties of carbon fiber reinforced PMR-15 polyimide composites. <i>Composite Interfaces</i> , <b>1997</b> , 5, 87-116	2.3	5
24	Adsorption of tetrasulfide-functional silane on high surface area silica treated with aqueous and non-aqueous solutions. <i>Composite Interfaces</i> , <b>1998</b> , 6, 155-167	2.3	5
23	Role of the interface in multicomponent materials. <i>Makromolekulare Chemie Macromolecular Symposia</i> , <b>1988</b> , 22, 191-205		5
22	Structure and Performance of Benzoxazine Composites for Space Radiation Shielding. <i>Molecules</i> , <b>2020</b> , 25,	4.8	5
21	Vinyl ester/clay based nanocomposites: a complementary study of vinyl ester polymerization by hyphenated rheo-Fourier transform infrared and separate rheology/Fourier transform infrared measurements. <i>Polymer International</i> , <b>2014</b> , 63, 521-528	3.3	4
20	Verification of Selective Adsorption of Polymer on Filler Surface in a Binary Immiscible Polymer Solution Blend Based on Nanoconfinement: Changing the Aggregate Structure and the Surface Character of Carbon Black. <i>Macromolecules</i> , <b>2009</b> , 42, 6175-6180	5.5	4

19	Complex Refractive Index Determination for Uniaxial Anisotropy with the Use of Kramers-Kronig Analysis. <i>Applied Spectroscopy</i> , <b>1997</b> , 51, 1287-1293	3.1	4
18	Chemical Reactions of Resorcinol-Formaldehyde Latex and Coupling Agent. <i>Rubber Chemistry and Technology</i> , <b>1991</b> , 64, 172-180	1.7	4
17	Spectral simulation for infrared surface electromagnetic wave spectroscopy. <i>Surface Science</i> , <b>1990</b> , 230, 299-310	1.8	4
16	Developing Further Versatility in Benzoxazine Synthesis via Hydrolytic Ring-Opening. <i>Polymers</i> , <b>2020</b> , 12,	4.5	4
15	Main-Chain Type Benzoxazine Oligomers <b>2011</b> , 355-362		3
14	Evaluation of Space Radiator Performance by Simulation of Infrared Emission. <i>Applied Spectroscopy</i> , <b>1988</b> , 42, 114-120	3.1	3
13	Structural changes of chlorinated paraffins at processing conditions of particulate filled polypropylene. <i>Polymer Composites</i> , <b>1985</b> , 6, 34-40	3	3
12	Very High-Char-Yielding Elastomers Based on the Copolymers of a Catechol/Furfurylamine Benzoxazine and Polydimethylsiloxane Oligomers. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	3
11	Synthesis of a smart bisbenzoxazine with combined advantages of bismaleimide and benzoxazine resins and its unexpected formation of very high performance cross-linked polybenzoxazole. <i>Polymer</i> , <b>2021</b> , 223, 123703	3.9	3
10	Development of a novel, ultra-performance polymer cement: In situ formation of benzoxazine monomer and subsequent formation of polybenzoxazine/cement composites. <i>Polymer Composites</i> , <b>2010</b> , 31, 1995-2006	3	2
9	Application of differential absorption in infrared spectroscopy. <i>Vibrational Spectroscopy</i> , <b>1997</b> , 13, 119-132	3.2	2
8	Polymorphism on the cyclic hexamer of p-phenylene sulfide. <i>Polymer</i> , <b>1998</b> , 39, 4219-4223	3.9	2
7	The effect of addition of poly(propylene-g-acrylic acid) on the morphology of poly(vinyl methylether) and isotactic polypropylene blend. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 101, 4098-4103	2.9	2
6	Effects of carbon fibers on the transcrystalline interphase in poly(phenylene sulfide) of different molecular weights. <i>Composite Interfaces</i> , <b>1994</b> , 2, 351-363	2.3	2
5	Rheology of phenylpropylsilsesquioxane in the fiber-spinning regime. <i>Macromolecules</i> , <b>1990</b> , 23, 5279-5285	3.5	2
4	Highly processible maleimide and nitrile functionalized benzoxazines for advanced composites applications. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 117, NA-NA	2.9	1
3	Toward improving the reflectivity of ablative heat-insulating coating under high-energy laser irradiation. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 15787-15796	4.3	1
2	Effect of surface treated fillers on the flow behavior and morphology of an immiscible blend. System: Polycarbonate/polypropylene. <i>Macromolecular Symposia</i> , <b>1996</b> , 104, 89-111	0.8	

1 Interphase Engineering. *Journal of Fiber Science and Technology*, **1988**, 44, P56-P60

o