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# Chemical amplification in the design of dry developing resist materials

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| # | Paper | IF | Citations |
|---|---|---|---|
| 397 | Advances in the design of organic resist materials. **1983**, 1, 269-293 | | 34 |
| 396 | Resist materials. **1985**, 3, 277-278 | | 1 |
| 395 | Analysis of Chemical Amplification Resist Systems Using a Kinetic Model and Numerical Simulation. *Japanese Journal of Applied Physics*, **1989**, 28, 2104-2109 | 1.4 | 4 |
| 394 | Dissolution Behavior of Novolak/Dissolution Inhibitor Resist Systems in an Aqueous Base Developer. *Japanese Journal of Applied Physics*, **1989**, 28, 2114-2119 | 1.4 | 9 |
| 393 | Highly sensitive novolak-based X-ray positive resist. *Polymer Engineering and Science*, **1989**, 29, 874-877 | 2.3 | 5 |
| 392 | Photochemical and Radiation Sensitive Resists. **1989**, 193-225 | | 0 |
| 391 | A New Negative Deep UV Resist Based on an Alternating CopolymerOnium Salt System. Synthesis and Property of a 1:1 Alternating Copolymer ofN-Vinylcarbazole with Ethyl Glycidyl Fumarate. **1989** , 18, 1013-1016 | | 0 |
| 390 | Opportunities and needs in photosensitive materials. **1990**, 33, 223-231 | | 1 |
| 389 | Novel Process for Direct Delineation of Spin on Glass (SOG). *Japanese Journal of Applied Physics*, **1990**, 29, 2653-2656 | 1.4 | 9 |
| 388 | Cationic Photoinitiators: Solid State Photochemistry of Triphenylsulfonium Salts. **1990**, 183, 505-511 | | 3 |
| 387 | Photosensitive polymers: current status, problems and prospects. Review. **1990**, 32, 1725-1758 | | |
| 386 | Airborne chemical contamination of a chemically amplified resist. **1991**, 1466, 2 | | 51 |
| 385 | Plasma developable photoresist systems based on chemical amplification.. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **1991**, 4, 487-495 | 0.7 | 3 |
| 384 | Highly sensitive positive deep-UV resist utilizing a sulfonate acid generator and a tetrahydropyranyl inhibitor. **1991**, 14, 227-236 | | 6 |
| 383 | Highly sensitive positive deep UV resist utilizing a sulfonate acid generator and a tetrahydropyranyl inhibitor. **1991**, 13, 33-36 | | 5 |
| 382 | A novel silicon containing chemical amplification resist for electron beam lithography. **1991**, 13, 69-72 | | 8 |
| 381 | Determination of Acid Diffusion in Chemical Amplification Positive Deep-UV Resists. *Japanese Journal of Applied Physics*, **1991**, 30, 3132-3137 | 1.4 | 26 |

| | | | |
|---|---|---|---|
| 380 | Effect of Acid Diffusion on Resolution of a Chemically Amplified Resist in X-Ray Lithography. *Japanese Journal of Applied Physics*, **1991**, 30, 2619-2625 | 1.4 | 60 |
| 379 | Patterning Characteristics of a Chemically-Amplified Negative Resist in Synchrotron Radiation Lithography. *Japanese Journal of Applied Physics*, **1992**, 31, 2954-2958 | 1.4 | 47 |
| 378 | Study of Radiation-Induced Reactions in Chemically Amplified Resists for Electron Beam and X-Ray Lithography. *Japanese Journal of Applied Physics*, **1992**, 31, L1574-L1576 | 1.4 | 2 |
| 377 | Influence of Acid Diffusion on the Lithographic Performance of Chemically Amplified Resists. *Japanese Journal of Applied Physics*, **1992**, 31, 4294-4300 | 1.4 | 34 |
| 376 | Sensitive resist systems based on acid-catalyzed polymer reactions. **1992**, 53, 139-149 | | 5 |
| 375 | Synthesis and applications of acid-labile acrylic polymers. **1992**, 64, 137-149 | | 4 |
| 374 | Radiation-Induced Acid Generation Reactions in Chemically Amplified Resists for Electron Beam and X-Ray Lithography. *Japanese Journal of Applied Physics*, **1992**, 31, 4301-4306 | 1.4 | 200 |
| 373 | Acid formation from various sulfonates in a chemical amplification positive resist. *Polymer Engineering and Science*, **1992**, 32, 1511-1515 | 2.3 | 12 |
| 372 | Aqueous base developable deep-UV resist based on chemically amplified crosslinking of phenolic resin. *Polymer Engineering and Science*, **1992**, 32, 1523-1529 | 2.3 | 1 |
| 371 | Tetrahydropyranyl protected polyhydroxy-styrene for a chemically amplified deep u.v. resist. *Polymer*, **1992**, 33, 1583-1588 | 3.9 | 7 |
| 370 | Acidity of lithographic materials: Characterization by colorimetric titration. **1992**, 17, 279-282 | | 4 |
| 369 | Lithographic technologies for future ULSI. *Applied Surface Science*, **1993**, 70-71, 603-612 | 6.7 | 13 |
| 368 | Photochemical reaction of halogenated xanthene dye with diaryliodonium salts. **1993**, 74, 221-230 | | 17 |
| 367 | Resist alternatives for sub-0.35-μm lithography by using highly attenuated radiation. **1993**, 32, 7032-5 | | 1 |
| 366 | Novel Silicon-Containing Negative Resist for Bilayer Application in Electron Beam Direct Writing. *Japanese Journal of Applied Physics*, **1993**, 32, 3317-3320 | 1.4 | 1 |
| 365 | Poly(siloxane)-Based Chemically Amplified Resist Convertible into Silicate Glass. *Japanese Journal of Applied Physics*, **1993**, 32, 6052-6058 | 1.4 | 6 |
| 364 | Pattern Fabrication of Chemically Amplified Resist on an Interdigitated Array Electrode. *Japanese Journal of Applied Physics*, **1993**, 32, L813-L815 | 1.4 | 2 |
| 363 | Processes amplifying the effects of light on polymer layers. *Russian Chemical Reviews*, **1993**, 62, 35-49 | 6.8 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 362 | Correlation of Nano Edge Roughness in Resist Patterns with Base Polymers. *Japanese Journal of Applied Physics*, **1993**, 32, 6065-6070 | 1.4 | 70 |
| 361 | Direct Formation Of Silicon Dioxide Mask Using A Novel Radiation-Sensitive Spin-on-Glass. **1993**, | | |
| 360 | Advances in the Chemistry of Resists for Ionizing Radiation. **1993**, 252-281 | | |
| 359 | The design and performance characteristics of x-ray sensitive resists. **1993**, 306, 35 | | |
| 358 | Synthesis and characterization of silicon-containing graft copolymers. **1994**, 4, 289-299 | | 1 |
| 357 | Applications of lasers in microelectronics and micromechanics. *Applied Surface Science*, **1994**, 79-80, 12-24 | 6.7 | 5 |
| 356 | Functionalization of polysilsesquioxanes. *Polymer*, **1994**, 35, 3131-3132 | 3.9 | 5 |
| 355 | Chemically amplified resists: Chemistry and processes. **1994**, 4, 83-93 | | 14 |
| 354 | Electron beam and X-ray resists. **1994**, 4, 139-153 | | 6 |
| 353 | Origin of delay times in chemically amplified positive DUV resists. **1994**, | | 4 |
| 352 | Influence of acid generator structure on T-top formation in high-temperature bake processes for environmental stabilization. **1995**, 2438, 53 | | 5 |
| 351 | Suppression of Acid Diffusion in Chemical Amplification Resists by Molecular Control of Base Matrix Polymers. *Japanese Journal of Applied Physics*, **1995**, 34, 6786 | 1.4 | 9 |
| 350 | Effect of Overcoats in Chemically Amplified Resists against Water and Organic Bases. *Japanese Journal of Applied Physics*, **1995**, 34, 670-673 | 1.4 | 4 |
| 349 | Aromatic Monoazines as Fluorescent Sensors for Photoacid Generation in Thin Polymer Films. *Chemistry of Materials*, **1996**, 8, 2654-2658 | 9.6 | 32 |
| 348 | Free volume variations during exposure and PEB of DUV positive resists: effect on dissolution properties. **1996**, | | 3 |
| 347 | Synthesis of siloxanes containing acid-sensitive side groups. *Polymer*, **1996**, 37, 847-854 | 3.9 | 3 |
| 346 | Novel chemically amplified imaging materials containing malonate pendant groups. **1996**, 37, 475-482 | | 1 |
| 345 | The Photopolymer Science and Technology Award. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **1997**, 10, 9-12 | 0.7 | |

| | | | |
|---|---|---|---|
| 344 | A Novel Photometric Method for the Determination of Photoacid Generation Efficiencies Using Benzothiazole and Xanthene Dyes as Acid Sensors. *Chemistry of Materials*, **1997**, 9, 3222-3230 | 9.6 | 156 |
| 343 | Application of spin trapping in the study of the electrochemical and photochemical synthesis of phenylated C60 derivatives with iodonium salts. **1997**, 101, 1045-1049 | | 3 |
| 342 | Korean Road Map for micropatterning into the next century. **1997**, 35, 11-20 | | 1 |
| 341 | Highly sensitive resist material for deep X-ray lithography. **1997**, 35, 105-108 | | 7 |
| 340 | Acid-Catalyzed degradation mechanism of poly(phthalaldehyde): Unzipping reaction of chemical amplification resist. *Journal of Polymer Science Part A*, **1997**, 35, 77-89 | 2.5 | 34 |
| 339 | Status and future of DUV photoresists for the semiconductor industry. **1998**, 41-42, 37-40 | | 3 |
| 338 | Synthesis and Nucleophilic Dealkylation of Poly[alkyl-(4-(phenylthio)phenyl)sulfonium trifluoromethanesulfonate]s. *Macromolecules*, **1998**, 31, 1202-1207 | 5.5 | 18 |
| 337 | A Positive-Working Alkaline Developable Photoresist Based on t-Boc-Calix[4]resorcinarene and a Photoacid Generator. **1998**, 27, 865-866 | | 23 |
| 336 | Photoacid and Photobase Generators: Prospects and Their Use in the Development of Polymeric Photosensitive Systems. **1998**, 71, 2483-2507 | | 87 |
| 335 | Effect of Coulomb interaction and pKa on acid diffusion in chemically amplified resists. **1999**, 17, 350 | | 17 |
| 334 | Control of photogenerated acid diffusion and evaporation by copolymerization with a basic monomer. **1999**, 17, 2097 | | 1 |
| 333 | Characteristics for negative and positive tone resists with direct write electron beam and SCALPEL exposure systems. **1999**, 17, 2873 | | 5 |
| 332 | 3-Phenyl-3,3-ethylenedioxy-1-propyl Sulfonates as Acid Amplifiers To Enhance the Photosensitivity of Positive-Working Photoresists. *Chemistry of Materials*, **1999**, 11, 2119-2125 | 9.6 | 28 |
| 331 | Micrometer-Scale Patterning of Multiple Dyes on Hyperbranched Polymer Thin Films Using Photoacid-Based Lithography. **1999**, 15, 7418-7421 | | 33 |
| 330 | A New High Performance CA Resist for E-beam Lithography. **1999**, 584, 147 | | 1 |
| 329 | Development of Resist Materials for EUVL.. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2000**, 13, 385-389 | 0.7 | 3 |
| 328 | A Novel Photoresist Based on Polymeric Acid Amplifiers. **2000**, 29, 1036-1037 | | 8 |
| 327 | An in situ method for measuring acid loss from polymer films. **2000**, 78, 1897-1905 | | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 326 | Organic imaging materials: a view of the future. **2000**, 13, 767-774 | | 24 |
| 325 | Photo-initiated thermal cross-linking behavior of acetophenone O-acryloyloxime-methyl methacrylate copolymer films in the presence of quinones. **2000**, 36, 2395-2402 | | 9 |
| 324 | Lithographic performance and optimization of chemically amplified single-layer resists for EUV lithography. **2000**, 3997, 600 | | 9 |
| 323 | Creation of low-molecular-weight organic resists for nanometer lithography. **2001**, | | 26 |
| 322 | Photoresists. **2001**, 6973-6977 | | 1 |
| 321 | A Novel Electron Beam-Induced Reaction of Sulfonium Salt in the Crystalline State. **2001**, 30, 408-409 | | 7 |
| 320 | Application of the Charlesby model to the radiation-induced chain reaction cross-linking of oxirane functionalised polymers. **2001**, 60, 111-120 | | |
| 319 | New concept of positive photosensitive polyimide: Reaction development patterning (RDP). *Journal of Polymer Science Part A*, **2001**, 39, 3451-3463 | 2.5 | 47 |
| 318 | Novel latent initiator for cationic polymerization of epoxides. **2001**, 80, 181-187 | | 22 |
| 317 | Photoinduced outgassing from the resist for extreme ultraviolet lithography by the analysis of mass spectroscopy. **2001**, 19, 736 | | 26 |
| 316 | Photo-Generation of Acids and its Fluorescence Detection in a Small Area: a Near-Field Write-Once Memory. *Japanese Journal of Applied Physics*, **2001**, 40, 5145-5148 | 1.4 | 4 |
| 315 | Radiation-induced chain reactions in alcohol solutions of diphenyliodonium salts: a high-sensitivity chemical dosimeter. **2002**, 158, 241-6 | | 4 |
| 314 | Study of the acid-diffusion effect on line edge roughness using the edge roughness evaluation method. **2002**, 20, 1342 | | 48 |
| 313 | Negative-working photoresist of methacrylate polymers based on the transesterification of the 2-hydroxyethyl group in the presence of an acid. *Journal of Polymer Science Part A*, **2002**, 40, 1858-1867 | 2.5 | 21 |
| 312 | Chemical amplification resists: Inception, implementation in device manufacture, and new developments. *Journal of Polymer Science Part A*, **2003**, 41, 3863-3870 | 2.5 | 89 |
| 311 | Polymers, Photoresponsive (in Electronic Applications). **2003**, 723-744 | | 1 |
| 310 | Resist Outgassing Characteristics in Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2004**, 43, 3713-3717 | 1.4 | 8 |
| 309 | Polymer Screening Method for Chemically Amplified Electron Beam and X-Ray Resists. *Japanese Journal of Applied Physics*, **2004**, 43, 3971-3973 | 1.4 | 53 |

| | | | |
|---|---|---|---|
| 308 | Proton Dynamics in Chemically Amplified Electron Beam Resists. *Japanese Journal of Applied Physics*, **2004**, 43, L848-L850 | 1.4 | 142 |
| 307 | Dependence of acid generation efficiency on the protection ratio of hydroxyl groups in chemically amplified electron beam, x-ray and EUV resists. **2004**, 22, 3522 | | 33 |
| 306 | High-Resolution Hybrid Lithography with Negative Tone Chemically Amplified Resists. *Japanese Journal of Applied Physics*, **2004**, 43, 3974-3980 | 1.4 | 13 |
| 305 | Characterization of photoresists for ArF-excimer laser lithography using monoenergetic positron beams. **2004**, 42, 341-346 | | |
| 304 | Pyrromethene Dye Sensitized Photopolymer and the Application to Visible Laser Direct Imaging. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2004**, 17, 125-129 | 0.7 | 8 |
| 303 | Basic Aspects of Acid Generation Processes in Chemically Amplified Electron Beam Resist. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2005**, 18, 471-474 | 0.7 | 8 |
| 302 | Novel Photobleachable Deep UV Resists Based on Single Component Nonchemically Amplified Resist System. *Macromolecular Rapid Communications*, **2005**, 26, 1412-1417 | 4.8 | 24 |
| 301 | Synthesis, Characterization and Lithography Performance of Photoacid Generator with Short Perfluoroalkyl Anion. **2005**, 55, 333-340 | | 4 |
| 300 | Synthesis of a highly transparent poly(o-hydroxyamide) in the i-line region and its application to photosensitive polymers. *Journal of Polymer Science Part A*, **2005**, 43, 2527-2535 | 2.5 | 15 |
| 299 | Reaction Mechanisms of Brominated Chemically Amplified Resists. *Japanese Journal of Applied Physics*, **2005**, 44, L842-L844 | 1.4 | 15 |
| 298 | Effects of Dielectric Constant on Acid Generation in Chemically Amplified Resists for Post-Optical Lithography. *Japanese Journal of Applied Physics*, **2005**, 44, 3908-3912 | 1.4 | 17 |
| 297 | Potential Cause of Inhomogeneous Acid Distribution in Chemically Amplified Resists for Post Optical Lithography. *Japanese Journal of Applied Physics*, **2005**, 44, 5836-5838 | 1.4 | 111 |
| 296 | Outgassing Characteristics of Low-Molecular-Weight Resists for Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2005**, 44, 5824-5828 | 1.4 | 11 |
| 295 | Dependence of Acid Yield on Acid Generator in Chemically Amplified Resist for Post-Optical Lithography. *Japanese Journal of Applied Physics*, **2005**, 44, 5832-5835 | 1.4 | 12 |
| 294 | Development of Fast-Photospeed Chemically Amplified Resist in Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2005**, 44, 5866-5870 | 1.4 | 10 |
| 293 | Nanopatterning of polyfluorene derivative using electron-beam lithography. **2005**, 23, 2051 | | 13 |
| 292 | Study on acid generation from polymer. **2005**, 23, 2728 | | 22 |
| 291 | Full three-dimensional characterization of 25nm lines for chemically amplified resist simulation. **2005**, 23, 2733 | | 2 |

| # | Title | IF | Citations |
|---|---|---|---|
| 290 | Quantifying acid generation efficiency for photoresist applications. **2005**, 23, 224 | | 4 |
| 289 | Lithographic Resists. **2005**, | | |
| 288 | Molecular Glass Resists for High-Resolution Patterning. *Chemistry of Materials*, **2006**, 18, 3404-3411 | 9.6 | 92 |
| 287 | Resolution blur of latent acid image and acid generation efficiency of chemically amplified resists for electron beam lithography. **2006**, 99, 054509 | | 44 |
| 286 | Degradative Behaviour of Cellulose Acetate Film in the Presence of Photoacid Generator. **2006**, 42, 350-355 | | 5 |
| 285 | Evaluation of High and Low Activation Resists for EUV Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2006**, 19, 525-531 | 0.7 | 12 |
| 284 | Pyrromethene dye sensitized photopolymerphotochemical behavior in polymer matrix and application to photoresist for printed circuit board. *Polymers for Advanced Technologies*, **2006**, 17, 348-353 | 3.2 | 6 |
| 283 | Interaction mechanism in pyrromethene dye/photoacid generator photosensitive system for high-speed photopolymer. **2006**, 181, 60-66 | | 18 |
| 282 | Hybrid lithography process for nano-scale devices. **2006**, 83, 1761-1766 | | 11 |
| 281 | Relationship between Acid Generator Concentration and Acid Yield in Chemically Amplified Electron Beam Resist. *Japanese Journal of Applied Physics*, **2006**, 45, 5735-5737 | 1.4 | 15 |
| 280 | Novel electron-beam-induced reaction of a sulfonium salt in the solid state. **2006**, 24, 2337 | | 3 |
| 279 | Correlation between proton dynamics and line edge roughness in chemically amplified resist for post-optical lithography. **2006**, 24, 3066 | | 15 |
| 278 | Line edge roughness of a latent image in post-optical lithography. **2006**, 17, 1543-6 | | 33 |
| 277 | Variation of absorption coefficient and determination of critical dose of SU-8 at 365 nm. **2006**, 88, 024107 | | 57 |
| 276 | Measurements of acid generation by extreme ultraviolet irradiation in lithographic films. **2007**, 25, 2496 | | 15 |
| 275 | Sub-30-nm hybrid lithography (electron beamdeep ultraviolet) and etch process for fully depleted metal oxide semiconductor transistors. **2007**, 25, 2030 | | 12 |
| 274 | Polymer-Structure Dependence of Acid Generation in Chemically Amplified Extreme Ultraviolet Resists. *Japanese Journal of Applied Physics*, **2007**, 46, L142-L144 | 1.4 | 63 |
| 273 | Extreme Ultraviolet Resist Development at the University of Hyogo. *Japanese Journal of Applied Physics*, **2007**, 46, 6118-6123 | 1.4 | 2 |

# (2008-2007)

| | | | |
|---|---|---|---|
| 272 | Single-Component Chemically Amplified Resist Based on Dehalogenation of Polymer. *Japanese Journal of Applied Physics*, **2007**, 46, L648-L650 | 1.4 | 7 |
| 271 | Effect of Acid Diffusion and Polymer Structure on Line Edge Roughness. *Japanese Journal of Applied Physics*, **2007**, 46, 6187-6190 | 1.4 | 13 |
| 270 | Depth profile of acid generator distribution in chemically amplified resists. **2007**, | | |
| 269 | A Simple Method for Measurement of Photoacid Generator Photoreaction Kinetics in Formulated, Chemically Amplified Photoresist Films. **2007**, 10, H273 | | 2 |
| 268 | Exposure dose dependence on line edge roughness of a latent image in electron beam/extreme ultraviolet lithographies studied by Monte Carlo technique. **2007**, 6, 043004 | | 11 |
| 267 | Thin Microcellular Plastic Sheet Incorporating Designed Foaming Patterns Made by Photochemical Foaming Technology. **2007**, 43, 103-109 | | 5 |
| 266 | Development of EUV Resists in University of Hyogo. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2007**, 20, 373-382 | 0.7 | 7 |
| 265 | Progress in EUV Resist Development. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2007**, 20, 423-428 | 0.7 | 39 |
| 264 | Pathway to sub-30nm Resolution in EUV Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2007**, 20, 411-418 | 0.7 | 26 |
| 263 | Photoresist Materials and Processing. **2007**, 19-1-19-57 | | |
| 262 | Photosensitivity and line-edge roughness of novel polymer-bound PAG photoresists. **2007**, | | 6 |
| 261 | Novel anionic photoacid generators (PAGs) and corresponding PAG bound polymers for sub-50 nm EUV lithography. **2007**, 17, 1699 | | 35 |
| 260 | Chemically Selective Soft X-ray Direct-Write Patterning of Multilayer Polymer Films. **2007**, 111, 16330-16338 | | 18 |
| 259 | The Precursor Approach to Patterned Fluorescence Images in Polymer Films. *Macromolecular Rapid Communications*, **2007**, 28, 1191-1212 | 4.8 | 44 |
| 258 | Photosensitive Polyesterimides Based on Reaction Development Patterning. *Polymer Journal*, **2007** , 39, 129-137 | 2.7 | 18 |
| 257 | Synthesis and characterization of hyperbranched polymers with increased chemical versatility for imprint lithographic resists. *Journal of Polymer Science Part A*, **2008**, 46, 6238-6254 | 2.5 | 34 |
| 256 | The effect of direct PAG incorporation into the polymer main chain on reactive ion etch resistance of 193nm and EUV chemically amplified resists. **2008**, 85, 963-965 | | 7 |
| 255 | Chemistry of photolithographic imaging materials based on the chemical amplification concept. **2008**, 8, 157-157 | | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 254 | A comparative thermogravimetric study of polymers designed as dry-developing photoresists. **2008** , 44, 4129-4138 | | 3 |
| 253 | Simulation of amine concentration dependence on line edge roughness after development in electron beam lithography. **2008**, 104, 024303 | | 6 |
| 252 | Incorporation of ionic photoacid generator (PAG) and base quencher into the resist polymer main chain for sub-50 nm resolution patterning. **2008**, 18, 2704 | | 14 |
| 251 | Holographic Recording in Cross-Linked Polymeric Matrices through Photoacid Generation. *Chemistry of Materials*, **2008**, 20, 3669-3674 | 9.6 | 5 |
| 250 | Acid-Labile, Chain-Scission Polymer Systems Used as Positive-Tone Photoresists Developable in Supercritical CO2. *Chemistry of Materials*, **2008**, 20, 2932-2936 | 9.6 | 11 |
| 249 | A new technique for studying photo-acid generator chemistry and physics in polymer films using on-wafer ellipsometry and acid-sensitive dyes. **2008**, | | 1 |
| 248 | Ellipsometry studies of the kinetic of deprotection of thin 193 nm positive tone resist film. **2008**, | | 1 |
| 247 | Feasibility Study of Chemically Amplified Extreme Ultraviolet Resists for 22 nm Fabrication. *Japanese Journal of Applied Physics*, **2008**, 47, 4465-4468 | 1.4 | 22 |
| 246 | Theoretical Study on the Dependence of Acid Distribution on Material Properties of Chemically Amplified Extreme Ultraviolet Resists. *Japanese Journal of Applied Physics*, **2008**, 47, 6288-6292 | 1.4 | 18 |
| 245 | Understanding the effects of photoacid distribution homogeneity and diffusivity on critical dimension control and line edge roughness in chemically amplified resists. **2008**, 26, 2276-2280 | | 6 |
| 244 | Dependence of Acid Generation Efficiency on Molecular Structures of Acid Generators upon Exposure to Extreme Ultraviolet Radiation. **2008**, 1, 027004 | | 56 |
| 243 | X-ray Reflectivity Study on Depth Profile of Acid Generator Distribution in Chemically Amplified Resists. **2008**, 1, 065004 | | 30 |
| 242 | Relationship between Sensitivities of Chemically Amplified Resist Based on Adamantane Derivatives upon Exposure to ArF Excimer Laser, Electron Beam, and Extreme Ultraviolet Radiation. **2008**, 1, 067001 | | 12 |
| 241 | Theoretical Study on Difference between Image Quality Formed in Low- and High-Activation-Energy Chemically Amplified Resists. **2008**, 1, 107001 | | 22 |
| 240 | Line edge roughness after development in a positive-tone chemically amplified resist of post-optical lithography investigated by Monte Carlo simulation and a dissolution model. **2008**, 19, 015705 | | 14 |
| 239 | PAG Study of PAG Bonded Resist for EUV and EB Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2008**, 21, 465-468 | 0.7 | 2 |
| 238 | Development of New Advanced Resist Materials for Microlithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2008**, 21, 475-491 | 0.7 | 29 |
| 237 | A Research on Polymerization of o-, m-, and p-Vinylphenol. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2008**, 21, 711-717 | 0.7 | 5 |

# (2010-2008)

| No. | Publication | IF | Citations |
|---|---|---|---|
| 236 | Difference in Reaction Schemes in Photolysis of Triphenylsulfonium Salts between 248 nm and Dry/Wet 193 nm Resists. **2008**, 1, 036001 | | 6 |
| 235 | Achieving small dimensions with an environmentally friendly solvent: photoresist development using supercritical CO2. **2008**, | | 0 |
| 234 | Effect of PAG and matrix structure on PAG acid generation behavior under UV and high-energy radiation exposure. **2008**, | | 2 |
| 233 | Submillisecond post-exposure bake of chemically amplified resists by CO2 laser spike annealing. **2009**, 27, 3020 | | 5 |
| 232 | Effect of Molecular Structure on Depth Profile of Acid Generator Distribution in Chemically Amplified Resist Films. *Japanese Journal of Applied Physics*, **2009**, 48, 06FC03 | 1.4 | 6 |
| 231 | Nanometer-scale dynamics of charges generated by radiations in condensed matter. **2009**, 81, 45-60 | | 7 |
| 230 | Towards X-ray induced transient grating methods for nanometer scale dynamics: Diffraction on transient structures induced by extreme ultraviolet radiation from FLASH. **2009**, 169, 123-128 | | 1 |
| 229 | Acid-diffusion behaviour in organic thin films and its effect on patterning. **2009**, 19, 2986 | | 16 |
| 228 | Extension Options for 193nm Immersion Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2009**, 22, 625-634 | 0.7 | 6 |
| 227 | Effect of Polymer Protection and Film Thickness on Acid Generator Distribution in Chemically Amplified Resists. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2009**, 22, 105-109 | 0.7 | 5 |
| 226 | Radiation Chemistry in Chemically Amplified Resists. *Japanese Journal of Applied Physics*, **2010**, 49, 030001 | 1.4 | 176 |
| 225 | Fluorine-free Photoacid Generators for 193nm Lithography Based on Non-Sulfonate Organic Superacids. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2010**, 23, 173-184 | 0.7 | 2 |
| 224 | Development of Novel Engineering Plastics Based on Reaction Development Patterning. **2010**, 67, 477-488 | | |
| 223 | Trends in photolithography materials. 369-387 | | 2 |
| 222 | Probe-based 3-D nanolithography using self-amplified depolymerization polymers. *Advanced Materials*, **2010**, 22, 3361-5 | 24 | 123 |
| 221 | Development of chemically amplified reaction development patterning. *Polymer Journal*, **2010**, 42, 86-94 | 1.7 | 11 |
| 220 | Sub-millisecond post exposure bake of chemically amplified resists by CO 2 laser heat treatment. **2010**, | | 9 |
| 219 | Fluorinated-Polymer Based High Sensitivity Extreme Ultraviolet Resists. *Japanese Journal of Applied Physics*, **2010**, 49, 06GF01 | 1.4 | 3 |

| | | | |
|---|---|---|---|
| 218 | Patterned plastics that change physical structure in response to applied chemical signals. *Journal of the American Chemical Society*, **2010**, 132, 9234-5 | 16.4 | 126 |
| 217 | Probe-Based Nanolithography: Self-Amplified Depolymerization Media for Dry Lithography. *Macromolecules*, **2010**, 43, 572-574 | 5.5 | 70 |
| 216 | Formation and decay of fluorobenzene radical anions affected by their isomeric structures and the number of fluorine atoms. **2010**, 114, 8069-74 | | 19 |
| 215 | Geminate charge recombination in liquid alkane with concentrated CCl4: effects of CCl4 radical anion and narrowing of initial distribution of Cl-. **2011**, 115, 10166-73 | | 7 |
| 214 | High-sensitivity EUV Resists based on Tetrafluoroethylene contained Fluoropolymers. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2011**, 24, 165-172 | 0.7 | 5 |
| 213 | Time Dependent Behavior of Chemically Amplified Resist Characterized under Sub-millisecond Post Exposure Bake. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2011**, 24, 487-490 | 0.7 | 6 |
| 212 | Acid formation in polymer solids by radiation-induced chain reactions of diphenyliodonium salts. **2011**, 80, 190-195 | | 0 |
| 211 | Photoresist latent and developer images as probed by neutron reflectivity methods. *Advanced Materials*, **2011**, 23, 388-408 | 24 | 15 |
| 210 | Nonchemically amplified resists possessing cholate moiety for micropatterning of biomolecules. **2011**, 88, 93-98 | | 3 |
| 209 | Absorbing photonic crystals for silicon thin-film solar cells: Design, fabrication and experimental investigation. **2011**, 95, S32-S38 | | 49 |
| 208 | Dissociative electron attachment to triflates. **2011**, 135, 214309 | | 6 |
| 207 | Fundamental study on reaction mechanisms in chemically amplified extreme ultraviolet resists by using 61nm free-electron laser. **2011**, | | |
| 206 | LWR reduction and flow of chemically amplified resist patterns during sub-millisecond heating. **2011**, | | 10 |
| 205 | Analysis of the generating action of the acid from PAG using acid sensitive dyes. **2011**, | | |
| 204 | Addressing challenges in lithography using sub-millisecond post exposure bake of chemically amplified resists. **2011**, | | 4 |
| 203 | Wavelength Dependence of Lithography Resolution in Extreme Ultraviolet Region. **2011**, 4, 126501 | | 4 |
| 202 | Zone plate focused soft x-ray lithography for fabrication of nanofluidic devices. **2012**, | | 2 |
| 201 | Study on Resist Performance of Polymer-Bound and Polymer-Blended Photo-Acid Generators. *Japanese Journal of Applied Physics*, **2012**, 51, 086503 | 1.4 | 2 |

| No. | Publication | IF | Citations |
|---|---|---|---|
| 200 | Resist Properties Required for 6.67 nm Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2012**, 51, 106701 | 1.4 | 2 |
| 199 | Deprotection reaction kinetics in chemically amplified photoresists determined by sub-millisecond post exposure bake. **2012**, | | 1 |
| 198 | Analysis of the Generating Action of the Acid from PAG using Acid Sensitive Dyes (2). *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2012**, 25, 473-480 | 0.7 | 2 |
| 197 | Chemical Reaction Analysis of EUV CA Resist using SR Absorption Spectroscopy. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2012**, 25, 569-573 | 0.7 | 6 |
| 196 | Dissolution Kinetics in Polymer-Bound and Polymer-Blended Photo-Acid Generators. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2012**, 25, 693-698 | 0.7 | 3 |
| 195 | Latest Technology of Stress Buffer Material for Semiconductor Application. **2012**, 85, 40-45 | | 2 |
| 194 | Neutron reflectivity characterization of the photoacid reaction-diffusion latent and developed images of molecular resists for extreme ultraviolet lithography. **2012**, 28, 7665-78 | | 12 |
| 193 | Comparison of acid generation in EUV lithography films of poly(4-hydroxystyrene) (PHS) and noria adamantyl ester (Noria-AD(50)). **2012**, 116, 6215-24 | | 8 |
| 192 | Pressure-sensitive adhesion system using acrylate block copolymers in response to photoirradiation and postbaking as the dual external stimuli for on-demand dismantling. *ACS Applied Materials & Interfaces*, **2012**, 4, 2124-32 | 9.5 | 49 |
| 191 | Controlled Depolymerization: Stimuli-Responsive Self-Immolative Polymers. *Macromolecules*, **2012**, 45, 7317-7328 | 5.5 | 170 |
| 190 | Photoresists and Advanced Patterning. **2012**, 37-76 | | 3 |
| 189 | Design and preparation of porous polybenzoxazole films using the tert-butoxycarbonyl group as a pore generator and their application for patternable low-k materials. *Polymer Chemistry*, **2012**, 3, 369-376 | 4.9 | 37 |
| 188 | Polyaldehydes: homopolymers, block copolymers and promising applications. **2012**, 61, 1221-1227 | | 25 |
| 187 | Self-Powered Microscale Pumps Based on Analyte-Initiated Depolymerization Reactions. **2012**, 124, 2450-2454 | | 8 |
| 186 | Self-powered microscale pumps based on analyte-initiated depolymerization reactions. **2012**, 51, 2400-4 | | 83 |
| 185 | Dynamic Covalent Macrocyclic Poly(phthalaldehyde)s: Scrambling Cyclic Homopolymer Mixtures Produces Multi-Block and Random Cyclic Copolymers. *Macromolecules*, **2013**, 46, 8121-8128 | 5.5 | 27 |
| 184 | Stimuli-Responsive Core�Shell Microcapsules with Tunable Rates of Release by Using a Depolymerizable Poly(phthalaldehyde) Membrane. *Macromolecules*, **2013**, 46, 3309-3313 | 5.5 | 72 |
| 183 | Photolithographic olefin metathesis polymerization. *Journal of the American Chemical Society*, **2013** , 135, 16817-20 | 16.4 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 182 | Novel ester acetal polymers and their application for positive-tone chemically amplified i-line photoresists. **2013**, 1, 1160-1167 | | 11 |
| 181 | Fabrication of sealed nanofluidic channels using site-selective direct write (maskless) X-ray lithography. **2013**, 15, 509-518 | | 2 |
| 180 | Reproducible and Scalable Synthesis of End-Cap-Functionalized Depolymerizable Poly(phthalaldehydes). *Macromolecules*, **2013**, 46, 2963-2968 | 5.5 | 70 |
| 179 | Resist Materials and Processes for Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2013**, 52, 010002 | 1.4 | 102 |
| 178 | Nitroxide mediated synthesis of low dispersity random copolymers for low-loss optical waveguides. *Journal of Polymer Science Part A*, **2013**, 51, 2970-2978 | 2.5 | 5 |
| 177 | Functional Phthalaldehyde Polymers by Copolymerization with Substituted Benzaldehydes. *Macromolecules*, **2013**, 46, 608-612 | 5.5 | 44 |
| 176 | Accessibility of Responsive End-Caps in Films Composed of Stimuli-Responsive, Depolymerizable Poly(phthalaldehydes). *Macromolecules*, **2013**, 46, 7257-7265 | 5.5 | 37 |
| 175 | End group characterization of poly(phthalaldehyde): surprising discovery of a reversible, cationic macrocyclization mechanism. *Journal of the American Chemical Society*, **2013**, 135, 12755-61 | 16.4 | 99 |
| 174 | Theoretical Study on Acid Diffusion Length in Chemically Amplified Resists Used for Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2013**, 52, 016501 | 1.4 | 4 |
| 173 | Resonances for activity waves in spherical mean field dynamos. **2013**, 553, A37 | | 6 |
| 172 | Deprotonation of Poly(4-hydroxystyrene) Intermediates: Pulse Radiolysis Study of Extreme Ultraviolet and Electron Beam Resist. *Japanese Journal of Applied Physics*, **2013**, 52, 06GC04 | 1.4 | 5 |
| 171 | Theoretical Relationship between Quencher Diffusion Constant and Image Quality in Chemically Amplified Resists Used for Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2013**, 52, 076504 | 1.4 | |
| 170 | Analysis of acid-generating action of PAG in an EUV resist using acid-sensitive dyes. **2013**, | | |
| 169 | Photochromic Characteristic of Cationic Photoinitiator and Fluorane Dye System Microencapsulated in Sub-micrometre Scale. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2013**, 26, 453-458 | 0.7 | 2 |
| 168 | Super High Sensitivity Enhancement by Photo-Sensitized Chemically Amplified Resist (PS-CAR) Process. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2013**, 26, 825-830 | 0.7 | 22 |
| 167 | 4.3: Novel Photosensitive Organic Insulator for High Definition FPD Applications. **2014**, 45, 24-27 | | |
| 166 | Effects of effective reaction radius for neutralization on performance of chemically amplified resists. *Japanese Journal of Applied Physics*, **2014**, 53, 06JC02 | 1.4 | 1 |
| 165 | Relationship between stochasticity and wavelength of exposure source in lithography. *Japanese Journal of Applied Physics*, **2014**, 53, 066505 | 1.4 | |

| | | | |
|---|---|---|---|
| 164 | Feasibility study of sub-10-nm half-pitch fabrication by chemically amplified resist processes of extreme ultraviolet lithography: I. Latent image quality predicted by probability density model. *Japanese Journal of Applied Physics*, **2014**, 53, 106501 | 1.4 | 7 |
| 163 | Effect of polymer matrix and photoacid generator on the lithographic properties of chemically amplified photoresist. **2014**, 43, 392-400 | | 3 |
| 162 | Novel polymeric sulfonium photoacid generator and its application for chemically amplified photoresists. **2014**, | | |
| 161 | Chemistry and processing of resists for nanolithography. **2014**, 194-286 | | 1 |
| 160 | Amplified responses in materials using linear polymers that depolymerize from end-to-end when exposed to specific stimuli. **2014**, 131, n/a-n/a | | 37 |
| 159 | Theoretical relationship between quencher diffusion constant and effective reaction radius for neutralization in contact hole imaging using chemically amplified extreme ultraviolet resists. *Japanese Journal of Applied Physics*, **2014**, 53, 066502 | 1.4 | |
| 158 | Effect of photodecomposable quencher on latent image quality in extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2014**, 53, 066508 | 1.4 | 1 |
| 157 | Visible and Ultraviolet Light. **2014**, 109-224 | | 1 |
| 156 | Divergent Macrocyclization Mechanisms in the Cationic Initiated Polymerization of Ethyl Glyoxylate. *Macromolecules*, **2014**, 47, 3603-3607 | 5.5 | 19 |
| 155 | Controlled roughness reduction of patterned resist polymers using laser-induced sub-millisecond heating. **2014**, 2, 9115-9121 | | 4 |
| 154 | Depolymerizable, adaptive supramolecular polymer nanoparticles and networks. *Polymer Chemistry*, **2014**, 5, 3788-3794 | 4.9 | 44 |
| 153 | Polyphthalaldehyde-block-polystyrene as a nanochannel template. **2014**, 2, 3578-3581 | | 12 |
| 152 | Chemically amplified phenolic fullerene electron beam resist. **2014**, 2, 1505 | | 20 |
| 151 | Control over molar mass, dispersity, end-groups and kinetics in cyclopolymerization of ortho-phthalaldehyde: adapted choice of a phosphazene organocatalyst. *Polymer Chemistry*, **2014**, 5, 706-711 | 4.9 | 17 |
| 150 | The preparation of a novel polymeric sulfonium salt photoacid generator and its application for advanced photoresists. **2014**, 4, 21093 | | 9 |
| 149 | Copolymerization of o-Phthalaldehyde and Ethyl Glyoxylate: Cyclic Macromolecules with Alternating Sequence and Tunable Thermal Properties. *Macromolecules*, **2014**, 47, 5509-5513 | 5.5 | 24 |
| 148 | Laser-induced sub-millisecond heating reveals distinct tertiary ester cleavage reaction pathways in a photolithographic resist polymer. *ACS Nano*, **2014**, 8, 5746-56 | 16.7 | 22 |
| 147 | Engineering topochemical polymerizations using block copolymer templates. *Journal of the American Chemical Society*, **2014**, 136, 13381-7 | 16.4 | 55 |

| # | Citing article | IF | Citations |
|---|---|---|---|
| 146 | EUV Resist Chemical Analysis by Soft X-ray Absorption Spectroscopy for High Sensitivity Achievement. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2014**, 27, 631-638 | 0.7 | 9 |
| 145 | Deprotonation mechanism of ionized poly(4-hydroxystyrene). **2014**, | | 1 |
| 144 | Depolymerizable polymers: preparation, applications, and future outlook. **2015**, 5, 191-204 | | 42 |
| 143 | High-resolution line and space pattern fabrication by electron beam lithography using NEB-22 resist. *Japanese Journal of Applied Physics*, **2015**, 54, 118004 | 1.4 | 4 |
| 142 | Study on radiation chemistry of fluorinated polymers for EUV resist. *Japanese Journal of Applied Physics*, **2015**, 54, 06FE03 | 1.4 | 1 |
| 141 | Theoretical study of fabrication of line-and-space patterns with 7 nm quarter-pitch using electron beam lithography with chemically amplified resist process: III. Post exposure baking on quartz substrates. *Japanese Journal of Applied Physics*, **2015**, 54, 096703 | 1.4 | 4 |
| 140 | Optimum concentration ratio of photodecomposable quencher to acid generator in chemically amplified extreme ultraviolet resists. *Japanese Journal of Applied Physics*, **2015**, 54, 126501 | 1.4 | 5 |
| 139 | Self-Immolative Polymers. **2015**, 1-35 | | 5 |
| 138 | Dynamics of radical ions of fluorinated polymer for Extreme Ultraviolet (EUV) lithography. **2015**, | | |
| 137 | Shot noise limit of sensitivity of chemically amplified resists used for extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2015**, 54, 116501 | 1.4 | 6 |
| 136 | Relationships between quencher diffusion constant and exposure dose dependences of line width, line edge roughness, and stochastic defect generation in extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2015**, 54, 016502 | 1.4 | 6 |
| 135 | Feasibility study of sub-10-nm-half-pitch fabrication by chemically amplified resist processes of extreme ultraviolet lithography: II. Stochastic effects. *Japanese Journal of Applied Physics*, **2015**, 54, 036507 | 1.4 | 8 |
| 134 | End-capped poly(4,5-dichlorophthalaldehyde): a stable self-immolative poly(aldehyde) for translating specific inputs into amplified outputs, both in solution and the solid state. *Polymer Chemistry*, **2015**, 6, 3252-3258 | 4.9 | 28 |
| 133 | Effects of diffusion constant of photodecomposable quencher on chemical gradient of chemically amplified extreme-ultraviolet resists. *Japanese Journal of Applied Physics*, **2015**, 54, 056502 | 1.4 | 1 |
| 132 | Resist material options for extreme ultraviolet lithography. **2015**, 4, | | |
| 131 | Pulse radiolysis study of polystyrene-based polymers with added photoacid generators: Reaction mechanism of extreme-ultraviolet and electron-beam chemically amplified resist. *Japanese Journal of Applied Physics*, **2015**, 54, 026501 | 1.4 | 16 |
| 130 | Modeling and simulation of acid generation in anion-bound chemically amplified resists used for extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2015**, 54, 036506 | 1.4 | 5 |
| 129 | Alternating Sulfone Copolymers Depolymerize in Response to Both Chemical and Mechanical Stimuli. *ACS Macro Letters*, **2015**, 4, 907-911 | 6.6 | 16 |

| | | | |
|---|---|---|---|
| 128 | Relationship between information and energy carried by photons in extreme ultraviolet lithography: Consideration from the viewpoint of sensitivity enhancement. *Japanese Journal of Applied Physics*, **2015**, 54, 086502 | 1.4 | 4 |
| 127 | Acid-amplifying polymers: synthesis, characterization, and application to environmentally stable chemical amplification positive (ESCAP) resists. **2015**, 5, 80311-80317 | | 3 |
| 126 | Theoretical study of fabrication of line-and-space patterns with 7 nm quarter-pitch using electron beam lithography with chemically amplified resist processes: II. Stochastic effects. *Japanese Journal of Applied Physics*, **2015**, 54, 096501 | 1.4 | 6 |
| 125 | Study on resist performance of chemically amplified molecular resists based on cyclic oligomers. **2015**, 133, 16-22 | | 15 |
| 124 | High resolution optical lithography or high throughput electron beam lithography: The technical struggle from the micro to the nano-fabrication evolution. **2015**, 133, 23-35 | | 41 |
| 123 | EUV lithography process challenges. **2016**, 11, 135-176 | | 8 |
| 122 | Overview of materials and processes for lithography. **2016**, 11, 1-90 | | 4 |
| 121 | The chemistry and application of nonchemically amplified (non-CA) chain-scission resists. **2016**, 11, 193-210 | | |
| 120 | Alternative resist approaches. **2016**, 447-478 | | |
| 119 | Thermal scanning probe lithography. **2016**, 11, 543-561 | | 1 |
| 118 | Decomposable and Template Polymers: Fundamentals and Applications. **2016**, 138, | | 20 |
| 117 | Water Soluble Onium Salt Type Photo Amphoteric Compound Generators. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2016**, 29, 617-622 | 0.7 | 2 |
| 116 | Challenges in Development of Sub-10 nm Resist Materials. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2016**, 29, 717-723 | 0.7 | 2 |
| 115 | EUVL Research Activity at Center for EUV Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2016**, 29, 737-744 | 0.7 | 1 |
| 114 | Chemically amplified molecular resists based on noria derivatives containing adamantyl ester groups for electron beam lithography. **2016**, 34, 041606 | | 1 |
| 113 | Synthesis of Polyphthalaldehyde-Based Block Copolymers: Utilization of a Thermo-Sacrificial Segment for an Easy Access to Fine-Tuned Poly(3-hexylthiophene) Nanostructured Films. *Macromolecules*, **2016**, 49, 3001-3008 | 5.5 | 12 |
| 112 | Theoretical study of fabrication of line-and-space patterns with 7 nm quarter-pitch using electron beam lithography with chemically amplified resist process: IV. Comparison with experimental results. *Japanese Journal of Applied Physics*, **2016**, 55, 056503 | 1.4 | 6 |
| 111 | Synthesis of chemically amplified photoresist polymer containing four (Meth)acrylate monomers via RAFT polymerization and its application for KrF lithography. **2016**, 23, 1 | | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 110 | Dynamics of radical cations of poly(4-hydroxystyrene) in the presence and absence of triphenylsulfonium triflate as determined by pulse radiolysis of its highly concentrated solution. **2016**, 657, 44-48 | | 4 |
| 109 | Investigations in Fundamental and Applied Polymer Mechanochemistry. **2016**, 217, 354-364 | | 30 |
| 108 | Accelerated Amidization of Branched Poly(ethylenimine)/Poly(acrylic acid) Multilayer Films by Microwave Heating. **2016**, 32, 9118-25 | | 9 |
| 107 | Analysis of stochastic effects in chemically amplified poly(4-hydroxystyrene-co-t-butyl methacrylate) resist. *Japanese Journal of Applied Physics*, **2016**, 55, 076501 | 1.4 | 1 |
| 106 | Photopatterning of Block Copolymer Thin Films. *ACS Macro Letters*, **2016**, 5, 460-465 | 6.6 | 20 |
| 105 | Update and challenges in organo-mediated polymerization reactions. **2016**, 56, 64-115 | | 226 |
| 104 | Dendritic, Oligomeric, and Polymeric Self-Immolative Molecular Amplification. *Chemical Reviews*, **2016**, 116, 1309-52 | 68.1 | 162 |
| 103 | Stable, High-Molecular-Weight Poly(phthalaldehyde). *Journal of Polymer Science Part A*, **2017**, 55, 1166-1172 | 2.5 | 28 |
| 102 | Synthesis of Metal Nanoparticles and Patterning in Polymeric Films Induced by Electron Nanobeam. **2017**, 121, 5335-5340 | | 2 |
| 101 | Shot noise limit of chemically amplified resists with photodecomposable quenchers used for extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2017**, 56, 066501 | 1.4 | 3 |
| 100 | Transient Fiber Mats of Electrospun Poly(Propylene Carbonate) Composites with Remarkable Mechanical Strength. *ACS Applied Materials & Interfaces*, **2017**, 9, 25495-25505 | 9.5 | 10 |
| 99 | (Gordon E. Moore Medal for Outstanding Achievement in Solid State Science and Technology Address) Transient Polymers for Low-k Dielectrics and Vaporizing Devices. **2017**, 77, 165-170 | | |
| 98 | Phototriggerable Transient Electronics: Materials and Concepts. **2017**, | | 3 |
| 97 | Phototriggerable, Fully Transient Electronics: Component and Device Fabrication. **2017**, | | 1 |
| 96 | Sensitivity enhancement of chemically amplified EUV resists by adding acid-generating promoters. *Japanese Journal of Applied Physics*, **2017**, 56, 06GD01 | 1.4 | 6 |
| 95 | Current status and prospect for EUV lithography. **2017**, | | 0 |
| 94 | Theoretical study on relationship between exposure pattern width and chemical gradient of 16 nm half-pitch line-and-space patterns in electron beam lithography used for photomask and nanoimprint mold production. *Japanese Journal of Applied Physics*, **2017**, 56, 076501 | 1.4 | 1 |
| 93 | Theoretical study on sensitivity enhancement in energy-deficit region of chemically amplified resists used for extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2017**, 56, 106503 | 1.4 | 1 |

| | | | |
|---|---|---|---|
| 92 | Photosensitive engineering plastics based on reaction development patterning. *Polymer Journal*, **2018**, 50, 419-429 | 2.7 | 6 |
| 91 | Electron□ole pairs generated in ZrO2nanoparticle resist upon exposure to extreme ultraviolet radiation. *Japanese Journal of Applied Physics*, **2018**, 57, 026501 | 1.4 | 2 |
| 90 | Cyclic Poly(phthalaldehyde): Thermoforming a Bulk Transient Material. *ACS Macro Letters*, **2018**, 7, 47-52 | 6.6 | 33 |
| 89 | Determination of ceiling temperature and thermodynamic properties of low ceiling temperature polyaldehydes. *Journal of Polymer Science Part A*, **2018**, 56, 221-228 | 2.5 | 14 |
| 88 | Polyphthalaldehyde: Synthesis, Derivatives, and Applications. *Macromolecular Rapid Communications*, **2018**, 39, 1700519 | 4.8 | 23 |
| 87 | Resist image quality control via acid diffusion constant and/or photodecomposable quencher concentration in the fabrication of 11 nm half-pitch line-and-space patterns using extreme-ultraviolet lithography. *Japanese Journal of Applied Physics*, **2018**, 57, 056501 | 1.4 | 1 |
| 86 | Development of Dissolution Inhibitor in Chemically Amplified Positive Tone Thick Film Resist. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2018**, 31, 399-402 | 0.7 | 1 |
| 85 | Conversion of a Patterned Organic Resist into a High Performance Inorganic Hard Mask for High Resolution Pattern Transfer. *ACS Nano*, **2018**, 12, 11152-11160 | 16.7 | 12 |
| 84 | Synthesis of hyperbranched polyacetals containing C-(4-t-butylbenz)calix[4]resorcinarene: Resist properties for extreme ultraviolet (EUV) lithography. *Reactive and Functional Polymers*, **2018**, 131, 361-367 | 4.6 | 2 |
| 83 | Effects of Chain Ends on Thermal and Mechanical Properties and Recyclability of Poly(□butyrolactone). *Journal of Polymer Science Part A*, **2018**, 56, 2271-2279 | 2.5 | 21 |
| 82 | KrF Photoresist Profile Modulation by NH3 Plasma Treatment for 28 nm SRAM. *IEEE Transactions on Semiconductor Manufacturing*, **2018**, 31, 266-269 | 2.6 | 2 |
| 81 | UV-Triggered Transient Electrospun Poly(propylene carbonate)/Poly(phthalaldehyde) Polymer Blend Fiber Mats. *ACS Applied Materials & Interfaces*, **2018**, 10, 28928-28935 | 9.5 | 4 |
| 80 | Controlled Polymerization of Ethyl Glyoxylate Using Alkyllithium and Alkoxide Initiators. *Macromolecules*, **2018**, 51, 5501-5510 | 5.5 | 14 |
| 79 | Accelerated Thermal Depolymerization of Cyclic Polyphthalaldehyde with a Polymeric Thermoacid Generator. *Macromolecular Rapid Communications*, **2018**, 39, e1800046 | 4.8 | 10 |
| 78 | Approaches to Sustainable and Continually Recyclable Cross-Linked Polymers. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11145-11159 | 8.3 | 196 |
| 77 | Polyelectrolyte multilayer-like films from layer-by-layer processing of protected polyampholytic block copolymers. *Chemical Communications*, **2018**, 54, 9478-9481 | 5.8 | 2 |
| 76 | Triggering Depolymerization: Progress and Opportunities for Self-Immolative Polymers. *Macromolecules*, **2019**, 52, 6342-6360 | 5.5 | 59 |
| 75 | Synthesis of Unzipping Polyester and a Study of its Photochemistry. *Journal of the American Chemical Society*, **2019**, 141, 14736-14741 | 16.4 | 8 |

| | | | |
|---|---|---|---|
| 74 | Light to Shape the Future: From Photolithography to 4D Printing. *Advanced Optical Materials*, **2019**, 7, 1900598 | 8.1 | 88 |
| 73 | Cationic Copolymerization of o-Phthalaldehyde and Functional Aliphatic Aldehydes. *Macromolecules*, **2019**, 52, 4020-4029 | 5.5 | 13 |
| 72 | Stochastic simulation of pattern formation for chemically amplified resist in electron beam lithography. *Japanese Journal of Applied Physics*, **2019**, 58, SDDB01 | 1.4 | 3 |
| 71 | Pulse radiolysis of methacrylic acid ligand for zirconia nanoparticle resist. *Japanese Journal of Applied Physics*, **2019**, 58, 036503 | 1.4 | 1 |
| 70 | Photodegradable transient bilayered poly(phthalaldehyde) with improved shelf life. *Polymers for Advanced Technologies*, **2019**, 30, 1198-1204 | 3.2 | 6 |
| 69 | Computational Study of Pattern Formation for Chemically Amplified Resists in Extreme Ultraviolet Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2019**, 32, 339-343 | 0.7 | 2 |
| 68 | Photochemical Fragmentation of Irgacure PAG 103. *ACS Omega*, **2019**, 4, 19875-19879 | 3.9 | 0 |
| 67 | Backbone Degradable Poly(aryl acetal) Photoresist Polymers: Synthesis, Acid Sensitivity, and Extreme Ultraviolet Lithography Performance. *Macromolecules*, **2019**, 52, 886-895 | 5.5 | 10 |
| 66 | Processing-dependent mechanical properties of solvent cast cyclic polyphthalaldehyde. *Polymer*, **2019**, 162, 29-34 | 3.9 | 6 |
| 65 | Reflections on the Evolution of Smart Polymers. *Israel Journal of Chemistry*, **2020**, 60, 75-85 | 3.4 | 11 |
| 64 | Designing with Light: Advanced 2D, 3D, and 4D Materials. *Advanced Materials*, **2020**, 32, e1903850 | 24 | 81 |
| 63 | Influence of material and process parameters in the dry-development of positive-tone, polyaldehyde photoresist. *Journal of Materials Research*, **2020**, 35, 2917-2924 | 2.5 | 2 |
| 62 | Improvement in the transience and mechanical performance of flexible Poly(phthalaldehyde) substrates. *Polymer*, **2020**, 202, 122588 | 3.9 | 1 |
| 61 | Synthesis and Property of Tellurium-Containing Molecular Resist Materials for Extreme Ultraviolet Lithography System. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2020**, 32, 805-810 | 0.7 | 2 |
| 60 | Resist thickness dependence of line width roughness of chemically amplified resists used for electron beam lithography. *Japanese Journal of Applied Physics*, **2020**, 59, 086501 | 1.4 | 1 |
| 59 | Residue analysis of thermally depolymerized phthalaldehyde-based polymer thin films. *Polymers for Advanced Technologies*, **2021**, 32, 2142-2150 | 3.2 | 0 |
| 58 | Effect of initial molecular weight distribution on pattern formation of main-chain-scission-type resists. *Japanese Journal of Applied Physics*, **2021**, 60, 056501 | 1.4 | |
| 57 | Estimation of electron affinity of photoacid generators: density functional theory calculations using static and dynamic models. *Japanese Journal of Applied Physics*, **2021**, 60, SCCC03 | 1.4 | 0 |

| | | | |
|---|---|---|---|
| 56 | Clip Chemistry: Diverse (Bio)(macro)molecular and Material Function through Breaking Covalent Bonds. *Chemical Reviews*, **2021**, 121, 7059-7121 | 68.1 | 19 |
| 55 | Theoretical study of interfacial effects on low-energy electron dynamics in chemically amplified resist processes of photomask fabrication. *Japanese Journal of Applied Physics*, | 1.4 | 0 |
| 54 | Effects of acid diffusion and resist molecular size on line edge roughness for chemically amplified resists in EUV lithography: Computational study. *Japanese Journal of Applied Physics*, | 1.4 | 2 |
| 53 | Photoresists and Their Development. **1995**, 368-403 | | 2 |
| 52 | New Reactions of Cationic Photoinitiators. **1993**, 473-504 | | 7 |
| 51 | Insolubilisation and Fluorescence, Induced by Laser Diode Irradiation of IR-Dyes Embedded in Polymer Films. **1998**, 287-305 | | 1 |
| 50 | The Chemistry of Polymers for Microlithographic Applications. **1993**, 67-117 | | 8 |
| 49 | Mechanistic insights of Sn-based non-chemically-amplified resists under EUV irradiation. *Applied Surface Science*, **2020**, 533, 146553 | 6.7 | 6 |
| 48 | Photoacid generators. Application and current state of development. *Russian Chemical Reviews*, **2020**, 89, 173-190 | 6.8 | 17 |
| 47 | Heating effect of the radiation chemistry of polyhydroxystyrene-type chemically amplified resists. *Japanese Journal of Applied Physics*, **2020**, 59, 086506 | 1.4 | 2 |
| 46 | Changes in molecular weight distribution caused by main-chain scission of electron beam resists. *Japanese Journal of Applied Physics*, **2020**, 59, 126506 | 1.4 | 1 |
| 45 | Photoinduced Fluorescence Patterning with a t-Boc Protected Dihydroxyphenylene Derivative. *Bulletin of the Korean Chemical Society*, **2010**, 31, 2755-2756 | 1.2 | 2 |
| 44 | Addition of Photosensitivity to Engineering Plastics by a Novel Pattern-forming Method using Reactions of the Polymers with Developers: Reaction Development Patterning. *Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry*, **2010**, 68, 802-813 | 0.2 | 0 |
| 43 | Lower Limit of Line Edge Roughness in High-Dose Exposure of Chemically Amplified Extreme Ultraviolet Resists. *Japanese Journal of Applied Physics*, **2012**, 51, 06FC01 | 1.4 | 25 |
| 42 | Study on Resist Performance of Polymer-Bound and Polymer-Blended Photo-Acid Generators. *Japanese Journal of Applied Physics*, **2012**, 51, 086503 | 1.4 | 2 |
| 41 | Theoretical study of fabrication of line-and-space patterns with 7 nm quarter-pitch using electron beam lithography with chemically amplified resist process: V. Optimum beam size. *Japanese Journal of Applied Physics*, **2016**, 55, 106502 | 1.4 | 2 |
| 40 | Relationship between sensitizer concentration and resist performance of chemically amplified extreme ultraviolet resists in sub-10 nm half-pitch resolution region. *Japanese Journal of Applied Physics*, **2017**, 56, 016501 | 1.4 | 1 |
| 39 | Excluded volume effects caused by high concentration addition of acid generators in chemically amplified resists used for extreme ultraviolet lithography. *Japanese Journal of Applied Physics*, **2017** , 56, 086502 | 1.4 | 1 |

| | | | |
|---|---|---|---|
| 38 | Stimuli-responsive temporary adhesives: enabling debonding on demand through strategic molecular design.. *Chemical Science*, **2021**, 12, 15183-15205 | 9.4 | 3 |
| 37 | Techniques and Tools for Optical Lithography. **2001**, 472-643 | | 0 |
| 36 | Charged Particle and Photon-Induced Reactions in Polymers. **2003**, | | |
| 35 | Radiation Chemistry of Resist Materials and Processes in Lithography. **2010**, 711-736 | | |
| 34 | Resist Properties Required for 6.67 nm Extreme Ultraviolet Lithography. *Japanese Journal of Applied Physics*, **2012**, 51, 106701 | 1.4 | |
| 33 | Positive Photoresists. **1988**, 29-79 | | |
| 32 | Radiation Exposure. **1988**, 409-458 | | |
| 31 | ?????????. *Kobunshi*, **1989**, 38, 948-948 | | |
| 30 | Lithography for High Energy Technology in Microelectronics. **1990**, 3-17 | | |
| 29 | ?????????. *Kobunshi*, **1990**, 39, 218-218 | | |
| 28 | Visible Light Photoinitiation Systems Based on Electron and Energy Transfer Processes. **1995**, 111-169 | | |
| 27 | A New Trend in Polymer Science and Technology for Humanity. **1996**, 22-28 | | |
| 26 | Theoretical study of relationships among resolution, line width roughness, and sensitivity of chemically amplified extreme ultraviolet resists with photodecomposable quenchers. *Japanese Journal of Applied Physics*, **2016**, 55, 116501 | 1.4 | 1 |
| 25 | 20 Lithography and Radiation Chemistry□Radiation-induced Reaction Mechanisms of Resist Materials□*Radioisotopes*, **2017**, 66, 549-556 | 0.1 | |
| 24 | Polymer Resist Technology in Lithography. **2017**, 331-369 | | |
| 23 | A Study of Image Contrast, Stochastic Defectivity, and Optical Proximity Effect in EUV Photolithographic Process Under Typical 5 nm Logic Design Rules. **2020**, | | 0 |
| 22 | The Law that Guides the Development of Photolithography Technology and the Methodology in the Design of Photolithographic Process. **2020**, | | 0 |
| 21 | Synthesis and Photo-degradation of Polyphthalaldehydes with Oxime Ether Terminals. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2020**, 33, 269-278 | 0.7 | 3 |

| | | | |
|---|---|---|---|
| 20 | Relationship between blurring factors and interfacial effects in chemically amplified resist processes in photomask fabrication. *Japanese Journal of Applied Physics*, | 1.4 | 0 |
| 19 | Flexible Cyclic-Poly(phthalaldehyde)/Poly(ε-caprolactone) Blend Fibers with Fast Daylight-Triggered Transience. *Macromolecular Rapid Communications*, **2021**, 42, e2000657 | 4.8 | 2 |
| 18 | Photo-Induced Bacisity Control of A DBU-Diarylethene Complex. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2020**, 33, 85-90 | 0.7 | |
| 17 | Stochastic Simulation of Pattern Formation for Negative-Type Chemically Amplified Resists in Extreme Ultraviolet Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2020**, 33, 53-56 | 0.7 | 0 |
| 16 | Synthesis of Photo-degradable Polyphthalaldehyde Macromonomer and Adhesive Property Changes of its Copolymer with Butyl Acrylate on UV-irradiation. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2021**, 34, 219-224 | 0.7 | 1 |
| 15 | Improvement of Resist Characteristics by Synthesis of a Novel Dissolution Inhibitor for Chemically Amplified Three-Component Novolac Resist. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2021**, 34, 491-494 | 0.7 | |
| 14 | The Evolution of Photolithography Technology, Process Standards, and Future Outlook. **2020**, | | 0 |
| 13 | Resist Thickness Dependence of Latent Images in Chemically Amplified Resists Used for Electron Beam Lithography. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2021**, 34, 17-25 | 0.7 | 0 |
| 12 | Process Model Guided Photoresist Formulation Optimization. **2021**, | | |
| 11 | Self-Immolative Polymers: An Emerging Class of Degradable Materials with Distinct Disassembly Profiles.. *Journal of the American Chemical Society*, **2021**, 143, 21177-21188 | 16.4 | 8 |
| 10 | Potential soluble substrates for transient electronics applications: A review. *AIP Advances*, **2022**, 12, 050701 | 1.5 | 0 |
| 9 | Recent advances in self-immolative linkers and their applications in polymeric reporting systems. *Polymer Chemistry*, | 4.9 | 2 |
| 8 | High-Performance Chain Scissionable Resists for Extreme Ultraviolet Lithography: Discovery of the Photoacid Generator Structure and Mechanism. *Chemistry of Materials*, **2022**, 34, 6170-6181 | 9.6 | 2 |
| 7 | Synthesis of End-Cap Enabled Self-Immolative Photoresists For Extreme Ultraviolet Lithography. 1049-1054 | | 1 |
| 6 | Protected unit distribution near interfaces of chemically amplified resists used for extreme ultraviolet lithography. | | 0 |
| 5 | Chemical Mechanisms of Metal-Based Extreme Ultraviolet Resists. **2022**, 35, 81-86 | | 0 |
| 4 | Resist Alternatives for Sub-0.35-µm Lithography Using Highly Attenuated Radiation. **1992**, | | 0 |
| 3 | The Synthesis of the High Resolution i Line Novolak Resist. **2022**, 35, 327-335 | | 0 |

| | | |
|---|---|---|
| 2 | Development of Selenonium PAGs in EUV Lithography toward High Sensitivity Achievement. **2022**, 35, 55-59 | 0 |
| 1 | Photo-degradation of Di- and Trifunctional Oxime Ethers Bearing Polyphthalaldehyde Arms. **2022**, 35, 171-177 | 0 |